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## **Part I**

# **Context of Change**

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# Cultures and Technology: An Analysis of Some of the Changes in Progress—Digital, Global and Local Culture

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## Abstract

The analysis presents some reflections on the changes produced by the use of digital technologies in contemporary Western societies. The scope is to understand the occurrences of the recent past, from the second half of the 1900s, and what is happening in social and individual experiences today. To devise a future, to decide how, when and what to offer in order to transmit to young people the fields of knowledge and skills that will be of use for managing their future successfully in a changing Europe. The prevailing theoretical approach is from an anthropological cultural point of view with interdisciplinary encounters. The chapter is divided into three parts: the first two are general reflections on the role of digital technologies in the past and present and focus on questions, expectations, characteristics that have interested scholars over time. The third level looks at the problematic features of people who were born after 1980, the so-called ‘digital natives’.

The aim of this article is to understand the cultural changes brought about by the rapid diffusion of the new communications technology in the globalized context of the West. The main slant is from a cultural anthropological point of view, but it is inevitably also interdisciplinary due to the common ground shared with philosophy, psychology and sociology. The analysis intends to make some proposals on how to think about a European future, and how to intervene consciously in the current situation so that it keeps pace with the young, the so-called ‘digital natives’ (Prensky 2001). In order to do this, I begin by tracing a brief outline of the reasons why the discipline of cultural anthropology plays such an important role in the understanding of the digital revolution which today is a part of our everyday life.

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The new information technologies and their global diffusion have radically influenced the changes in Western society and locally. The current process of globalization has favoured and has been strengthened by the Internet which has evolved with unprecedented rapidity.

Cultural differences between groups of human beings have always been at the very core of cultural and social anthropology since it became an academic discipline: as Hunnerz (2010) says “diversity is our business”. Initially the discipline was concerned with the study of non-Western, so called ‘primitive’ cultures, which today also have an impact on our own society. Anthropology is characterized by multiple, interconnected fields of study which make up the ‘culture’ of a group of human beings. This anthropological concept helps us understand what we are talking about and consists of a wide range of different realms of knowledge elaborated by all populations, and their resulting actions and behaviours. Such spheres of knowledge are organized into a cognitive structure whose content varies from group to group.

These realms of knowing are considered useful by a society to tackle everyday life, extraordinary events, and problems that give meaning to the world around them. This cultural model is learnt at birth, more or less unconsciously; people make it their own by imitation and example and it is expressed in the local language. This is not a once-and-for-all procedure but a flexible one, subject to continuous change, a life-long learning process influenced by personal experience. Culture is, therefore, essential for creating a sense of belonging and identity for every human being (Combi 2006).

Every cultural model finds its own answers to internal impulses that occur over a period of time, but above all to those produced by encounters with other cultures. The modifications, theoretical or practical, which emerge from the diversity of the fields of knowledge that characterize different societies can be influential to a greater or lesser degree. This is a case in point for changes arising from the introduction of advanced technologies, whether these are felt consciously or unconsciously in our Western culture and in other cultures. When a human group comes into contact with new elements it arranges them inside an already existing pattern, thus modifying the order of what is already known. The introduction of new technologies, for example, has led to changes which required readjustment, or new articulations, of relations between the various fields of knowledge and the daily life of both the individual and the community. Technical revolutions have also turned out to be cultural revolutions, as witnessed by the changes wrought by inventions such as the wheel, the steam engine etc., and also by the passage from an oral culture to a written one (Combi 1992).

Anthropology has the instruments to analyse cultural changes and to understand the current process of globalisation and the effects created by information technology on different societies.

The role of technology in a society shows the indissolubility of the relationships that bind technology, society and the individual as shown by this analysis which identifies the numerous cultural changes caused by the use of information technology (IT). Technology is not only the machine itself but is the whole set of

relationships between human beings, utensils and fields of knowledge. Another important feature of anthropological theory is that it enables us to define culture as a set of communicative acts. Communication is what allows groups and individuals to represent themselves and interact with the world through norms and values.

For years now the mass media have in forecasting a future of homogenization, a levelling-out or even disappearance of cultural differences. Field research and ethnography carried out all over the world by anthropologists have maintained the contrary for decades and this has been confirmed by current trends. For example, the constant rising demand to have own cultural and linguistic features acknowledged within Nations such as the Scots in Great Britain, the Catalans in Spain, etc.

One final general observation: new technologies modify space, time, relationships and types of communication that still continue to co-exist with the other fields of knowledge inherent in a culture. The different pace of development of different societies in the world has been overwhelmed by this innovation, which has caught everyone unaware. The greater our awareness of living in a global world, the more strenuous our defence of local identity is. There is a gap between the speed at which digital technology is developing and the slow pace at which cultural models and their inherent values are changing. For example, time and space are perceived in different ways on the net and in real life, although the perception of the web is slowly influencing the perception in real life.

This push for cultural change greatly stimulated by the web, is present in all societies involved in this technological experience. Therefore, anthropology does not only seek to understand how one learns to become a member of a society, but it also seeks to understand how selection activities and human creativity modify the process of learning in order to open the mind and get to know and learn to respect the world view of others.

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## **1 Changes in Cultural Codes, Behaviours and Fields of Knowledge**

The following analysis is divided into the three periods of our society's time continuum past, present and future. To provide young Europeans with the necessary cognitive abilities to manage their future with greater awareness, it is essential to revise previously-held opinions and, with the benefit of hindsight, to answer questions that had no answers from the second half of the 1900s to the first decade of the twenty-first century, re-analysing the cultural changes that have occurred since then. The past that I am therefore interested in is the recent past. Many of us can hardly remember ever having lived without e-mail, computers, smart phones, all those technological devices that today seem indispensable.

Appadurai (1996) and Lévy (1997) who studied the interdependent phenomena of globalization and the computerization of society in the second half of the twentieth century, considered some aspects of the new instruments of communication problematic. Problems include: the rapidity of the transformations and rhythms

of knowledge acquisition; the ever-increasing number of people who have access to information through computers and who produce it; the instruments of knowledge inherent in the Internet; their influence on the creation of new personal identities and interpersonal relationships. The analysis of these aspects revealed that it was not only a question of technological change in the communications system, but a transformation of knowledge in the whole of Western society. It must be remembered that the situations analysed, then and today, are different in the USA and Europe and these differences are also apparent in the time it took for IT to spread, and the impact on users and on the collective or personal identity styles in the two different linguistic and cultural contexts.

I would like to introduce some features of the new technologies that have elicited various issues in the latter half of the twentieth century. Some have become obsolete or are no longer considered interesting, others remain in the background of some of the research and our perceptions, while others still make their presence felt in the current debate.

In his work *Cyberculture. Rapport au Conseil de l'Europe* published in 1997, the French philosopher Pierre Lévy proposed an analysis of the situation brought about by digital technology and by the theoretical and practical implications on society. He also underlined the main problems linked to current and future changes. The salient aspects of the digital era emerged with the widespread use of personal computers in the home. Above all, Lévy showed that the new technologies were transforming global society, something that had already occurred in the past with the alphabet, the printing press, the telephone, the radio and the television.

All the questions concern the cultural implications of the new technologies, the new relationships with knowledge, the necessary changes in education and training, the conservation of linguistic varieties, problems of social exclusion, and the impact on democracy. He also offers possible lines of intervention. This awareness has prompted questions on the role of IT and the cultural and social effects that the widespread introduction of these technologies is causing and will continue to cause.

Two concepts play a key role in this analysis: cyberspace and cyberculture. The term cyberspace was first coined by William Gibson in his famous science fiction novel *Neuromancer* (1984) and has been successfully adopted by the collective imagination. Lévy (1997) defines it as a space, a new context opened up by the communications network produced by the global interconnection of computers. The symbol of this medium is the Internet. His notion of cyberspace includes the enormous quantity of data circulating and the people who use the Internet and foster its growth. Today cyberspace is a new realm of knowledge. Lévy uses the word cyberculture to mean the set of material and intellectual techniques, practices, attitudes, ways of thinking and values that are expressed and developed in cyberspace. Cyberculture is an enormous problem seeking solutions to constantly changing situations caused by technical developments and collective reactions. Lévy's research, in the period mentioned above, includes six features—which represent also six questions—of the phenomenon which will be described individually below.

The six questions in Lévy's work are: (1) Is there a fear of a new kind of colonization? (2) Does cyberculture encourage exclusion? (3) Is there the

possibility of creating a direct democracy of the masses? (4) How does the transition from a passive reception of communication to an active reception change the content of the information and communication in a society? (5) Is linguistic and cultural diversity threatened in cyberspace? (6) Is cyberculture perhaps a synonym for chaos and confusion? The first of these questions is the fear of a new kind of colonization especially by the United States which is also the creator of these technologies. For example, most discussions and doubts circle around the setting up of data banks: who should insert the data, and which data are important. The worries focus on what information should be made available to everybody, what should be made available partially or not at all, and what kind of expert should be assigned to this task.

The second issue concerns a predictable rise in social inequality, with almost exclusive access by the *élite*. On the one hand, the answers to Lévy's question—does cyberculture encourage exclusion?—refer to the importance of significant economic investments in infrastructure and computers, thus denying parts of the world and groups of people access to cyberspace. While on the other hand the answers reflect the political dimension of institutional, political and cultural resistance to using forms of collective, transnational and interactive communication. Despite the optimistic forecast, due to decreasing costs and the increasing numbers of countries interconnected in different places and cultures, Lévy confirms that any new technological progress brings with it the inevitable exclusion of some. One of the objectives to aim for is the creation of that “collective intelligence” (Lévy 1999), which would increase the value of culture, foster competences, resources, local projects, collegial participation and the fight against inequality. Moreover, the danger of creating new forms of dependence linked to commercial usage and economic and political predominance with regards to the less favoured regions is to be avoided (Lévy 1997).

Access for everyone gave rise to widespread and shared expectations—which lay between the past and the present: Lévy wondered whether it was possible to create a direct democracy of the masses. The myth of equality was based on the public and social potential of communications technology in the political sphere. A virtual *agorà*: where the creation of a collective consciousness and pluralist discussions would give rise to a large scale direct democracy. Decisions would be taken collectively and evaluation would be tailored to the communities that participated. Wolton (1999) criticised these optimistic expectations and based his comments on the fact that without social integration and shared values there could be no direct democracy.

Lévy's approach to another issue—understanding the consequences of the transition from a passive reception of communication—TV, radio, cinema—to an active reception—the web, Internet was completely different and raised further question: How does this change the content of the information and communication in a society? First and foremost, the subject wielding the power over the information changes: as opposed to the mass media which use a system of ‘from a few to many’, Internet users exchange information on the basis of ‘many to many’. People, no longer isolated thanks also to virtual communities, activated this new way of

creating long-distance interpersonal links on the basis of sharing common interests. This innovation of the communication system would lead to a deeper understanding between cultures through virtual encounters with the possibility of gaining greater insight. The rapidity of communicative exchanges in time and space, made possible by the availability of the web everywhere, would lead to an understanding of the systems of symbols, values and politics, religions and philosophies of others. This was an error of judgement which did not foresee any other possible solution, such as, for example, the greater visibility of otherness and its rejection (Wolton 1999). When analysing theoretically the features of the artificial information contained in any linguistic message, it becomes clear that this new society is not at all a society of reciprocal understanding. This excessive communication is too often a symptom of self-expression rather than the desire to really step into the shoes of another person.

Another issue, summarized in Lévy's fifth question—Is linguistic and cultural diversity threatened in cyberspace?—gave rise to further debate. The use of English as the favoured language on the web is a limit for non-English speakers. On the other hand English acts as a mediator in international exchanges. Nevertheless, information had already appeared in hundreds of other languages. As successive developments show, even the technical problems linked to the use of non-Roman alphabets, and non alphabetic script have been solved. The participation of the individual determines what appears on the web, thus it is of utmost importance that people from different linguistic groups, especially those of 'minority' languages, should intervene and keep these languages alive in the virtual world.

In his last question Lévy asks whether cyberculture is perhaps a synonym for chaos and confusion. Cyberculture was considered the system of systems and, therefore, the system of chaos. He interpreted the phenomenon as a disappearance of selection, of hierarchies and of the structures of knowledge that were immutable and addressed to everybody.

The innovative feature of the web is its use as an instrument of communication among individuals which ensures that the community can teach its members what they want to know. Lévy concludes and maintains that the construction of a personal intelligence, fruit of individual effort and the necessary time to learn it, is inevitable. It is not difficult to see even today that the image of the web is chaotic. The setting up of netiquette marks a first initiative to control the lack of discipline on the Internet. Netiquette is the guide to the Internet, which introduces norms that govern issues of legality and good behaviour on the web.

This brief discussion of Lévy's six questions and his future proposals concerning the changes in the cultures only partially reflects the research taking place at the time but is certainly enlightening for today. It is clear that cultural models in the Western world have undergone great changes. Every society elaborates codes of communication that are considered essential for the transmission of knowledge and interpersonal and intercultural encounters—just think of oral, written, non verbal and visual communication. Communication is a kind of reflection of society; in fact every language manages to express all the culture devised by a group of people. Today more than ever, these technological changes must make us aware of the

importance of existing cultural diversity in the European context, its richness and the history that links different countries. It is easier to focus on what individuals and cultures have in common rather than deal with the complexity of their differences.

Although new technologies appear to favour proximity among human beings, in fact the opposite effect is true and much more deceptive. This is why it is so important to be aware of the fact that the differences in the content of knowledge and the actions springing from it, exist beyond the shared use of the communication codes used on the web. This is because behind the software and the hardware there are human beings who decide what a programme should or should not do. Their choices are guided by their personal interests and aims, and their own cultural and emotional experiences. This means that surfing the web is not a neutral or objective experience, but is the result of decisions made by someone who knows how to exploit the expectations of the moment, who means to obtain some economic profit from this activity and who maintains control of the information.

Thus digital technology does not eliminate the inevitable acquisition of a cultural model which gives you the perception of belonging to a society or a real community. It accompanies the latter and modifies it by transforming knowledge, interpersonal relationships and behaviour which apparently connect young people today. Digital technologies are similar round the world but fortunately encounter a diversified cognitive world in the different localities. The local culture acquires the new technologies, re-works them to make them acceptable to the existing culture in that community and sends them back to the global level in a continuous exchange of intercultural influences and in constant transformation. A little like the wearing of jeans: everybody, 'primitive people' and rich Westerners alike, wear them, but the individual wearing them expresses values, concepts, ethics, norms, religious beliefs and images learnt from his own group which differ greatly from all other groups.

The chapter continues with the discussion of cultural changes that have occurred to date because some categories today have become more evident or have changed: they are influencing people's perception of the world stimulated by the use of the web and the Internet. Categories involving more personal attitudes to a 'digital native' will be dealt with in the final part concerning proposal for the future.

The following categories—space-time; values; veracity; transparency; creativity and imagination—involve more general cultural context and will be dealt with below. The space-time category has undergone great changes. Space plays a significant role in all societies, as human beings, always and everywhere, modify the natural environment and transform it into a local cultural environment. Locality reflects the creative solutions that the inhabitants of a particular space have adopted to deal with problems of survival. This process has some implications of power as, for example, in the relationship between the centre and the periphery of the world, of a nation or of a city. Digital technology has made it possible to re-position the two concepts: peripheral places can now influence the centre, make the world aware of their existence. There are two active processes concerning space on the web: deterritorialization and decontextualization. The former implies the knocking down of borders, nomadic movement, going beyond the sense of place and living anywhere in cyberspace. This reminds us also that every local context is really a



temporary form of passage that embraces linguistic experiences and life-styles that vary in the course of time. Decontextualization, the absence or lack of importance of reference points of communication, goes hand in hand with deterritorialization.

In a situation of communication the cultural and temporal context cannot be disregarded because it influences the meaning and enables a correct interpretation of the information. On a general level, even the construction of a local identity and the recognition of otherness needs to be contextualized, to be considered consciously. When space loses its physical nature and changes into a conceptual space it becomes ubiquitous, thanks to new technological devices, and the instantaneous links which cancel the perception of spatial distance. Digital technology connects any point in the world with another and at the same time information can be retrieved from any point in the world in real time so that the traditional spatial-temporal parameters are made obsolete by the global dimension and instant nature of communication on the web.

Traditionally the perception of time is shared by all members of a real community but is at the same time linked to subjective experience. Today, the most significant features of the perception and organization of time in Western online and offline contemporaneity are: the perception of accelerated time and the present lived as if it were a continuous moment which cancels the past and the future; people surf in a present without end. There are no intervals of solitude, silence, or isolation dedicated to reflection and imagination and no opportunity to evaluate the seriousness of a problem and create a hierarchy of priorities. Contrary to what was maintained at the beginning of this technological adventure (you will have more free time . . .) everyday life shows that all of us are always in a hurry, that there is no time.

Also the role played by values in real life, in the virtual sphere and in the education for a future for everyone is changing. As shown by Gardner (2012), a psychologist who works with minds and the cognitive abilities required for the future, in his book *Truth, Beauty, and Goodness Reframed. Educating for the Virtues in the Twenty-first Century*. We must re-educate young people to the values. At this point, we must deal with Lévy's (1997) last question—whether cyberculture breaks with the values of European modernity? This gives the philosopher the opportunity to reply that cyberculture pursues and realizes the progressive ideals of the eighteenth century, which sustained the emancipation of human beings, participation in debate and discussion groups, exchange of information and believed in three values: liberty, equality and fraternity. Despite this continuity, Lévy highlights his expectations of a radical renewal of political and social thought in Europe, a renewal which has not taken place yet.

Another important change in attitude to online communication concern the veracity of information. Internet users do not set great store by truth; do not check or cite the source of information. The very fact that the information appears on the web automatically seems to confer authority on the information and the user can take possession of it with impunity. This lack of discernment, which should differentiate between credible, official or institutional sources and sources such as paedophiles, terrorists, criminals and manipulators, is dangerous. The initial

conviction that the instant distribution of news in all parts of the world would guarantee transparency has faded. Nevertheless, nobody doubts that the goal of transparency and veracity will be reached in the next decades. The main problem is: how will it be achieved? According to Wolton (1999), transparency is impossible as social relationships are never transparent and technical bureaucracy must be added to human bureaucracy, both with their own hierarchies.

Two further categories, creativity and imagination, have undergone great changes on the web. The perception of an image, an element of imagination, is based on the personal history and values of the individual and the new technologies offer an incredible number of incentives and new instruments to give vent to one's imagination and creativity, especially the latest app. However, there are limits to this process set by the specific structure of the application and the codes invented by the designer of the product.

In conclusion: the general characteristics of essential cultural change is being able to do things that were not possible before: the instant circulation of information; the uninterrupted 24-h link with people or software all over the world; the personal presentation of yourself and your own creativity and imagination; the knocking down of real borders; the transnational nature of the circulation of ideas and instruments ever smaller, more powerful and lighter laptops, smart phones, iPods, iPads, tablets, wearable technology etc.—no longer only 'many to many' communication but also 'always-on'. Today communication via the computer occurs in real time, is reciprocal, interactive and non-stop.

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## 2 Some Considerations Concerning 'Digital Natives'

The term 'digital natives' (Prensky 2001) is applied to people born after 1980–1990 when social digital technologies came online. They are young people who have access to networked digital technologies. The use of those technologies have also changed the way they think and process information. An in-depth analysis of the 'digital native' makes it possible to link up with things said at the beginning.

One of the main tasks that awaits anthropological cultural research is that of reflecting on the cultural changes that have been produced by the new technological changes in our society. And make young people aware of the limits of technology into which they place a great part of their lives. Such changes need an educational or, in a broader sense, formative model, which acknowledges the new ways of learning and communicating of the young of the 'app generation' and the social networks. The features of the new media—speed, accessibility, easy acquisition, transfer and transformation of information, possible anonymity, and multiple identity—cannot be ignored especially due to their problematic aspects mentioned above.

This chapter targets these young people who are the focus of European research projects which provide us with a general profile of this generation and cannot ignore the changes in the wider social context discussed above and the positive online experience. Some of the questionable characteristics of a 'digital native' are:

identity problems; narcissism and self-promotion; difficult local/global relation; growing individualism; reluctance to accept responsibility and risk; distorted perception of time. Above all we cannot ignore the great transformation of the web which from information supplier, with web 2.0 has become a social space, highlighting the constant search for social encounters, and contacts like 'anytime anywhere', 'many to many', 'peer to peer' which favour encounters, friendships and virtual and real comparisons.

The research undertaken by Gardner and Davis (2013) offers us an interesting viewpoint on the learning process of young people today and their limits. By analysing the consequences of the general and invasive use of app in everyday life, what does living in a 'world of apps' really mean for the future of our species and our planet? the authors ask themselves. Apps are procedures that allow the user to obtain a result rapidly and pleasantly. However, they have effects that may turn out to be negative, because the invasion of a person's everyday life by apps favours the construction of a worldview based on their codes. They are 'shortcuts' that speed up interaction, simplify them and make them less risky.

From a personal point of view, apps embrace a set of interests, habits and relationships that characterize an individual: it is personal identity revealed to the outside. Their general use influences aspects of a personality which tends to take on the form of a "tailor-made self" (Gardner and Davis 2014) a positive and directed at self-promotion, which is desirable but distracts the attention from the inner self, the deepest feelings and personal projects. Some specific traits linked to self promotion online are encouraged by the presumed anonymity of the web. For example, you do not show how you really live but only how you appear to live, even if the image is not far from reality. Young people do not really consider their online and offline identities as being very different just as the private and public spheres are not really considered separate.

Another new aspect involves the concept of interculturality: the young are aware of a global outlook but often lack a deeper understanding due to a poor cultural background and, the authors add, they speak globally but act locally. The apps provide them with the opportunity to access experiences outside everyday life, but it is not known how much the young really benefit from them even if the acceptance of otherness has increased. This is an aspect of the "respectful mind" (Gardner 2006) which implies an open attitude towards knowledge and an acceptance of people and things that are culturally different.

The new communication technologies also play a role in giving young people a sense of security as they avoid many risks of real life, such as finding their way in unknown places or dealing face to face with the unexpected reactions of a person. Once again the importance of remaining in constant contact with reality and direct relationships emerges as a reference point for experiencing significant relationships thus going against the trend of increasing isolation and decreasing empathy. Many young Europeans share these characteristics described above and are preparing for a future with many uncertainties.

### 3 Looking at the Future

As a conclusion to the above considerations it would be useful to ask ourselves what proposals we can make to prepare young people for the future. Technology influences communication because it offers new elements in the creation of imaginary subjects and worlds. They tend to integrate subvert and transform other contextual forms of learning (Appadurai 2013). That is why thinking about the future means selecting and providing knowledge which will be of use to them in the years to come. To this end I would like to highlight some cultural features which, in my opinion, play an important role in the acquisition of awareness, competences and capabilities to tackle the future. These features, which intend to provide young Europeans with the necessary instruments, should also feature as relevant aspects in any research on young people in Europe. Amongst others these are: acquiring the awareness of one's local and European identity; learning to think in an intercultural and interdisciplinary manner; acquiring the ability to synthesize; overcome the perception of time as one continuous moment.

The proposal relevant to the relationship between local and global culture focuses on the fact that learning about the cultures of other European countries (and not only) helps one to think about one's own culture. The young use technology to communicate but know little or nothing about the countries that youngsters of their own age live in and are full of stereotypes and prejudices. There is no conscious identity without the encounter of otherness, anthropologists say, especially if one focuses on beliefs, traditions, language, myths, rites, tastes, which on first impact are different from one's own. Getting to know others, reflecting and thinking critically about oneself makes one aware that every person is the expression of a cultural model with its own features which only the encounter with otherness brings into evidence. Student exchange programs, for example, provides a practical situation for experiencing otherness, which makes young people aware of the local dimension of their own culture which is a specific expression of knowledge. In fact, we tend to consider our beliefs, behaviour, habits, physical and emotional expressions, which we share with other members of our society, as 'natural'. They are really the expression of that particular culture which we belong to and differ from those of other cultures. Ethnocentrism, which considers one's own culture as superior, is common to all groups of human beings. This mental attitude is at the root of many incomprehensions, also at the communication level in intercultural meetings and makes negotiation difficult if not impossible.

This means that young people must learn to give priority to an intercultural approach fostered by the discovery and the comparison of the features of two or more cultures. This kind of approach must go hand in hand with an interdisciplinary approach. The latter is not simply meant as bringing different realms of knowledge together but also as a meeting place for different theories and methods to create a new point of view, a new approach to problems not achievable through single disciplines. These two approaches require one to select a particular subject matter (anthropology, literature, history, geography, art, the history of religions, etc.) best based on personal interests. In this way it is possible to carve out a mental path,

which guides the forays into the Internet to find what one is looking for without getting lost and constantly returning to the starting point, and consequently stops a person from feeling overwhelmed by the cognitive incongruence of the situation, the fragmentary and superficial nature that is characteristic of many people who surf the web. I am referring to the “disciplined mind”, one of the five minds Gardner (2006) considers essential for the future, which requires in-depth knowledge of the theories, methods and paradigms of a discipline. The other four minds Gardner specifies are: the “synthesizing, creating, respectful (already mentioned) and ethical” briefly summarized below.

The skill of synthesis, the synthesizing mind is fundamental in overcoming the superficial and fragmentary nature of an unconscious personal technological learning process, which favours non-knowledge; without taking anything away from the positive effects of the new technologies and the web 2.0 world, as for example, a greater acceptance of diversity (ethnic, sexual, cultural). Furthermore, synthesis requires greater detail and slow memorization which implies the perception of the difference between quality and the quantity of the data. The latter are characteristics, for example, of multitasking, when people work on various communication fronts at the same time. Once again technology favours the quantity and speed of the passage between different technological supports, but the information that comes into play is superficial to the detriment of quality and analytical correctness.

One important effect of the total immersion in the web is to upset one’s perception of time which is one of the revolutionary changes of information technology. Art and literature, for example, are fitness to the existing relationship between time and contemporaneity. In Augé’s analysis (2015) the latter in particular, is seen as the taking on of the past and the future of the different generations. Behavioural and social sciences, art and literature today have to rise to the same challenge of a world which perceives time as accelerated and sees the present as one continuous, never-ending moment. The trend is to live in one endless moment, an immediate present that cancels the dimensions of the past and thus also precludes the future.

According to Gardner (2006) the ethical and creating minds complete the wealth of intelligence he considers fundamental for the future. They are fundamental as they include the dimension of values. The ethical mind allows a person to reflect on the principal features of the role they play at any particular moment of their life. This is essential as it means that they can recognise the responsibilities inherent in this role and the consequent morally correct behaviour. The creating mind is the most developed in the technological world with particular and endless references to the artistic-literary environment.

Any research attempting to understand a society and foresee its changes in the future must take place in a cultural anthropological context as indicated at the beginning of this chapter. It provides a flexible network of interconnections between the different realms of knowledge that characterize all groups of human beings. That is why it cannot be ignored when analysing the great cultural and technological changes involving all human beings all over the world. Cultural

anthropology provides the methodology for a comparison between different European cultures (and not only) and to analyse cultural changes, wherever these occur. It also provides the opportunity to draw people closer to 'indigenous' cultural products, especially, all artistic expressions. They favour comparisons and the crossing of the borders of local cultures, they make it possible to participate in global creativity starting from taking pride in one's own origin. New technologies, if used properly can help this process and open one's mind to the meeting with expressions of knowledge conceived by other human beings.

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# Interdisciplinary Collaborations in the Creation of Digital Dance and Performance: A Critical Examination

Sarah Whatley and Amalia G. Sabiescu

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## Abstract

This chapter explores the convergence between performance-based cultural heritage and new technologies, with a focus on interdisciplinary collaborations in creation and making processes. These interdisciplinary work spaces present a tremendous potential for innovative art making, as they bring together deep knowledge of the arts and artistic sensibility with a sound understanding of technology languages and possibilities. At the same time, being situated at the confluence of different fields of practice and research dwelling on diverse epistemologies and approaches, interdisciplinary collaborations do more than configure new ways of making art: they contribute to synergies between arts and technology fields, marking places of cross-fertilisation, blurring boundaries and influencing their evolution. Through a close analysis of interdisciplinary undertakings in making digital performance, we show how creative work in mixed teams of performance artists, researchers and practitioners on the one hand, and researchers from technology and design-focused disciplines on the other, is instrumental to the development of what we call ‘interdisciplinary artsapes’ and ‘interdisciplinary knowledgescapes’. These spaces offer a fertile ground for creative initiatives and knowledge advancement drawing on integrated perspectives, theories, methodologies and approaches from arts and technology fields. Together, interdisciplinary artsapes and interdisciplinary knowledgescapes contribute to opening up and pushing the boundaries of thinking and art making, reconsidering taken for granted assumptions and coming up with radically new art forms.

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## 1 Introduction

Performance as cultural practice and performance studies have always been positioned in complex interrelationships with other disciplines. As Dwight Conquergood argues, “(p)erformance studies is uniquely suited for the challenge of braiding together disparate and stratified ways of knowing” (Conquergood 2002: 152). Performance has a multidisciplinary appeal, both as an invitation to study performative acts through the lens of disciplines ranging from history to anthropology, and reversely, lending its own perspectives and paradigms to shed light on processes and phenomena in different fields of study (Madison and Hamera 2005).

This chapter explores the convergence between performance-based cultural heritage and new technologies, with a focus on interdisciplinary collaborations in creation and making processes. Starting from the second half of the twentieth century, when some of the first experiments using computers in performance making were initiated, digital technologies have been employed in different ways to assist, enhance, or completely re-configure the artistic creative process. Artists including choreographers have used digital technologies as choreographic tools, shared working spaces, experimental playgrounds, or have embraced computing languages more broadly to approach their art making, envisaging their artistic work in computational and algorithmic terms. Some of the most innovative creative practices continue to come from interdisciplinary collaborations between performance artists, choreographers, computer scientists, and media artists. These interdisciplinary work spaces present a tremendous potential for innovative art making, as they bring together deep knowledge of the arts and artistic sensibility with a sound understanding of technology languages and possibilities. At the same time, being situated at the confluence of different fields of practice and research dwelling on different epistemologies and approaches, interdisciplinary collaborations do more than configure new ways of making art: they contribute to synergies between arts and technology fields, marking places of cross-fertilisation, blurring boundaries and influencing their mutual evolution.

The chapter offers a critical examination of interdisciplinary collaborations in performance making to shed light on how they are instrumental both for artistic innovation and for fostering knowledge production within and across disciplines. It starts by describing performance and the theorisation of performance as an integrative space, where insights, knowledge, perspectives and approaches from different disciplines can be adopted and employed to enrich understanding of performance acts as well as innovating the art form. This quality of integration is likewise the characteristic feature of interdisciplinarity: ‘making whole’ by weaving together insights and approaches from different disciplines. We show how interdisciplinary undertakings in performance have a dual edge, blending creative acts and knowledge advancement. Through a close analysis of such undertakings in making digital performance, with a particular focus on dance, we demonstrate how creative work in mixed teams of performance artists, researchers and practitioners on the one hand, and researchers from technology and design-focused disciplines on the other, is instrumental to the development of interdisciplinary artscapes and



interdisciplinary knowledgescapes: spaces that offer a fertile ground for creative initiatives and knowledge advancement drawing on integrated perspectives, theories, methodologies and approaches from arts and technology fields. Together, interdisciplinary artsapes and interdisciplinary knowledgescapes contribute to opening up and pushing the boundaries of thinking and art making, reconsidering taken for granted assumptions and coming up with radically new art forms.

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## 2 Performance as an Integrative Space

Performance is a contested concept, one which has been described from multiple and often conflicting viewpoints (Strine et al. 1990). Historically, it has been categorised variously under the headings of entertainment, show making, a leisure activity, but also as a fundamental cultural activity, one which embodies and expresses worldviews, values and intangible cultural assets that represent group, community and national identities (Madison and Hamera 2005). In this chapter, we look at performance as both a cultural practice and a disciplinary field of research. Performance as ‘cultural practice’ refers to the cultural rooting of human action or behaviour that is conceived and presented as a performative act. A performance is the expression of ways of knowing, being and cultural identities, and as such it is a window on to and a means of understanding “how human beings fundamentally make culture, affect power, and reinvent their ways of being in the world” (Madison and Hamera 2005: xii). As Schechner (2013) argues, there is basically no limit to what can be considered a performative act, as long as a human activity is “framed, presented, highlighted, or displayed” as such (p. 3). This situates performance across a wide spectrum of human activities and behaviours, ranging from ritual and play to performing arts such as dance and music (Schechner 2013). The focus in this chapter is on performing arts and particularly dance and body-based performance. These forms of performance are also those that most intensely embody and express human culture, as anthropologist Victor Turner notes:

Cultures are most fully expressed in and made conscious of themselves in their ritual and theatrical performances. . . . A performance is a dialectic of “flow”, that is, spontaneous movement in which action and awareness are one, and “reflexivity”, in which the central meanings, values and goals of a culture are seen “in action”, as they shape and explain behavior. A performance is declarative of our shared humanity, yet it utters the uniqueness of particular cultures. We will know one another better by entering one another’s performances and learning their grammars and vocabularies. (Turner 1990: 1)

Performance studies focuses on the study of performance adopting lenses, theories, approaches and methods from a wide range of disciplines, from performing arts to sociology, anthropology, cultural studies and history. At the core of performance studies is the tight relation between practice and research. Many scholars in performance studies are or have been engaged in some kind of performative practice or are experts in specific forms of performance. An action-oriented perspective is also what characterises investigative approaches in performance studies, where: “whatever is being studied is regarded as practices, events, and behaviors, not as ‘objects’ or ‘things’” (Schechner 2013: 3). This confers upon

performance a “quality of ‘liveness’” (Schechner 2013) which makes it appealing for scholars in other disciplines who can adopt a performance studies stance or approach to make sense of subjects and objects of research in their own disciplines. To these scholars, performance offers a lens to understand cultural acts, meaning, language, and human behaviour as performances (Madison and Hamera 2005; Schechner 2013).

Performance studies stands out in the academia for its key capacity for integration. This can be seen two ways. Firstly, performance scholars find it easy to borrow and seamlessly employ lenses, perspectives, approaches and theories from other disciplines and integrate them in their object of study. The strong interrelationship with other disciplines is at the heart of performance studies. Performance studies is most active and rich in connections and associations with other disciplines, it is fluid and dynamic, and continues to expand by exploiting interdisciplinary interfaces (Schechner 2013). As Conquergood writes:

The ongoing challenge of performance studies is to refuse and supercede this deeply entrenched division of labor, apartheid of knowledges, that plays out inside the academy as the difference between thinking and doing, interpreting and making, conceptualizing and creating. The division of labor between theory and practice, abstraction and embodiment, is an arbitrary and rigged choice (Conquergood 2002: 153).

Second, performance studies is integrative in its epistemological foundations and premises. Quite uniquely among academic disciplines, performance studies departs from Aristotelian and Cartesian paradigms by its refusal to divorce the mind and the body, the psychological and the somatic in its scientific pursuits. This epistemological stance is particularly vibrant in dance and body-based performance. Dancers’ thought processes are intricately bound to a psycho-somatic whole (deLahunta and Zuniga Shaw 2006, 2008). Dancers think through their bodies and can develop and transmit knowledge through gesture and movement. ‘Kinaesthetic intelligence’, ‘physical thinking’ are concepts often adopted in dance making practice (deLahunta and Zuniga Shaw 2006). Performance has its own language, which is expressed in movement and thought and words in a space of vibrant liveness and presence:

As performers you are looking for an ‘action language’: one you can spontaneously ‘speak’.  
 ...So you need to think by performing, instead of trying to complete your thinking prior to the performance (Howell 1999: 46).

The flexibility and openness of performance studies makes it uniquely suited for interdisciplinary work. At the same time, its epistemological premises and knowledge-building approaches distinguish it from other disciplines and can raise barriers to productive interdisciplinary dialogue. Performance studies brings to the table a unique way of thinking and meaning making, languages and vocabularies that can be new, obscure or difficult to grasp when seen from the perspective of other disciplines. In the next sections, we examine the premises for interdisciplinary creative practice for digital dance and performance, how it differs from interdisciplinary practice focused uniquely on knowledge building, and raise attention to the importance of duly acknowledging the dynamic interplay between art making and knowledge advancement.

### 3 The Creative Process for Digital Dance and Performance

The creative process in dance and performance making implies that an idea or a concept is explored creatively. A central creative concept guides choices with respect to movement, performers' exploration of space, the design of costumes, scenic elements, lighting and their evolution in the temporal flow of the performance. Performance creation and production can be described as a 'generative dialogue' between different elements that drive representation and meaning, from movement and lighting to costumes, props and soundscapes (Latulipe et al. 2011). This is a complex and non-linear process in which options and decisions are assessed, taken or refuted until reaching a satisfactory vision. Choreographic thinking underpins rehearsals and devising processes. Ideas are explored and tried out, and changes are brought in a cyclical process to adjust and refine. Handling this complexity requires not only a sense of artistic vision, but also a firm grasp of multiple layers of knowledge covering different aspects of the performance ecology. Even for traditional performances, these knowledges are oftentimes distributed among different individuals who bring their share in the creation and production process. Yet in traditional performances this distributed knowledge ecology is used seamlessly for creative endeavours in a manner which does not reflect the tensions and clashes characteristic of interdisciplinary work. This seamless integration is facilitated by a clear sense of purpose, specific roles and a mutually understood and often taken for granted frame of reference, one which has been established throughout many years of creative practice. For instance, in the Western tradition, the focus of dance performances is on the dancers and their bodily movements as they explore and inhabit the scenic space. Likewise, the creative process is patterned on envisioning and configuring the exploration of space through movement, focusing on the dancers.

With the introduction of digital and interactive technologies, this established process opens up to change. We focus on digital dance and performance in which digital technologies have a pivotal, rather than peripheral role. Examples include virtual reality performances, telematic and distributed performances, online performances, performances which integrate projections, sensing and interactive technologies. Of special interest for our examination are interactive performances, referring broadly to the quality of affording live interaction in the performative space through the mediation of digital technology. The pinnacle of complex interdisciplinary work is interactive performance in which technologies (such as camera tracking and sensor technologies) are used to control or trigger performance components, for instance works where dancers' movements are tracked and generate media projections or sounds in real time (Birringer 2003).

The shifts in the creative process for digital performances are analogous to a changing frame of reference for creative acts. The integration of technology affects the ecosystem in which the performer acts so that spatial connections are reconfigured and, depending on the complexity of the performance, the way bodies and space interact changes fundamentally. Making fairly complex interactive performances requires, therefore, a focus shift from the performer to the

environment in which the piece is performed, on how the performer relates, reacts to and interacts with technology and the space. We can imagine, for instance, how a traditional dance piece where dancers perform patterned movements exploring the scenic space contrasts with an interactive performance where the movements of the dancers activate sensors which then deliver inputs to trigger soundscapes and digital projections on a screen, in real time. In the first case, the choreographic process focuses on the dancer and sequences of movements and gestures. Lighting, costumes, soundscapes are important elements in the performance ecology, yet decisions regarding their appearance, design and flow throughout the performance are taken to complement the dancers, which are central actors. In an interactive performance with sensing technology, on the other hand, technology becomes one of the principal actors, and the interaction between the dancer and the technology is the main driver of action, audio-visual information and meaning. As Johannes Birringer points out:

Addressing ‘interaction’ as a spatial and architectural concept for performance, therefore, means shifting the emphasis away from the creation of steps, phrases, ‘combinations’ or points on the body that initiate movement, away from the dancer’s internal bodily awareness (widely encouraged in today’s practices of yoga, somatics, experiential anatomy, body-mind centering and release techniques) unto her environment, to a not-given space but a constructed, shifting relational architecture that influences her and that she shapes or that in turn shapes her (Birringer 2003: 90).

This implies embracing a novel paradigm for making dance, away from choreography focused on the movements of the performer towards what Johannes Birringer calls “a relational performance architecture” which moves choreographic thinking into “a plastic process of ‘designing’ fluid space and responding to transformative space that allows for integration of ‘nervous’ or sensitive media presences” (2003: 90). The composition process itself is dynamic and evolving, mirroring the emergent nature of the final piece to be developed. Moreover, this process inaugurates a need to access new and complex knowledge about technology, technology design and the interaction paradigms afforded by the technology integration in the scenic space. As performance making becomes entangled with intricate design and engineering processes for designing, testing and integrating seamlessly digital interfaces, interactive systems, and programmed sensors, collaborators develop new vocabularies informed by knowledge of computation capabilities, which can best be advanced by interdisciplinary creative work.

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## 4 Interdisciplinarity in Creative Practice

The literal meaning of ‘interdisciplinary’ is ‘between fields of study’, from the prefix ‘inter’ meaning “between, among, in the midst” and ‘disciplinary’ meaning ‘relating to a particular field of study’” (Stember 1991: 4). The increasing academic interest in interdisciplinarity comes from the necessity to investigate questions or issues that cannot be adequately covered by a single disciplinary lens (Repko 2012), or for studying complex systems whose understanding requires bringing together

diverse analytical perspectives (Newell 2001). An interdisciplinary investigation therefore draws on the outlooks and insights of different disciplines and builds upon them to foster a coherent answer and a comprehensive understanding (Newell 2001; Repko 2012). It is this aspect of integration that distinguishes interdisciplinarity from other investigative approaches that cross the boundaries of a single discipline. Cross-disciplinarity involves the investigation of a phenomenon from the viewpoint and with the tools and approaches of different disciplines, without implying however an integrated approach. One step further, multidisciplinary studies involve scholars from different disciplines working together to achieve a common goal. Their insights and approaches are complementary, without again being necessarily integrated. Interdisciplinarity, on the other hand, refers to a “systematic integration of ideas” (Fiore 2008: 254). Integration, literally “to make whole”, implies that “ideas, data and information, methods, tools, concepts, and/or theories from two or more disciplines are synthesized, connected, or blended” (Repko 2012: 4).

This process of integration is captured in the prefix ‘inter’ and has been interpreted as a three-stage course by Repko (2012):

1. A contested space where issues or problems that cannot be tackled, understood or solved by employing a single disciplinary lens provide the impetus for engaging in interdisciplinary research. The goal is to create something new, whether it is a new theory, a new perspective or a solution to a problem.
2. Acting upon insights, contributions and inputs from various disciplines, in a concurrent, integrative fashion.
3. The result of the integrative process, which can be conceived as an answer, a solution, an intellectual or knowledge advancement.

If interdisciplinary studies focus on the integration of knowledge-related assets and resources, the interdisciplinary work process in the creation of digital dance and performance has a different dynamics, one in which knowledge advancement shadows, supports and uplifts artistic work. We can more closely examine this dynamic by looking further at the three stages outlined above. In the first stage that Repko (2012) identifies, the impetus for collaborative work in interdisciplinary studies can come from the drive to engage with exploring a contested space, find a solution or simply create something new which requires the joint input of people and resources from diverse disciplines. For creative practice, the creation of something new has primacy. Whatever form novelty takes, some instance of knowledge is always involved to make it happen. Some projects may specifically mention knowledge advancement as a specific project goal, along with artistic production. Yet, even when collaborations are uniquely aimed towards art making, knowledge is a pre-requisite, an indispensable ingredient for supporting the foundation of a space of creative possibility. The creative goal and the associated knowledge required further dictates the composition of the teams and the kind of expertise, tools and resources required.

In the second stage, insights from different disciplines are brought together contributing to the creation of the envisaged outcome. In interdisciplinary studies,

the dynamics of integration plays out around knowledge, tools and resources elicited from the diverse disciplinary traditions involved. In creative practice, the centrality of the creative act pushes knowledge into a subsidiary, yet not least important role. Integration in creative practice therefore refers to blending, braiding or bringing together knowledge, tools, and resources from diverse disciplines to the service of a creative idea. This stage is the crux of the collaborative process and will be examined more closely in the forthcoming section.

In the last stage, outputs are produced. Depending on the goals pursued, these can include finite performances, concepts, ideas, technical tools and systems, choreographic software, but also knowledge, new perspectives and theories. Of particular interest is how these outputs serve the advancement of disciplines or configure new interdisciplinary spaces for knowledge pursuit and art creation processes, which will be discussed in the final section.

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## **5 The Integrative Process in the Creation of Digital Performance**

This section examines the activities in which interdisciplinary working teams engage, with a focus on ‘the integrative process’: the moments, approaches and timeframes which delimit the interweaving of interdisciplinary insights and inputs until reaching the desired outcomes. Our goal is to understand what forms, strategies and approaches there are for this process, and further to reflect on how these are instrumental to advancing innovation in art as well as knowledge advancement within and across the disciplines involved. We examine this process by looking at cases from our own research and from the literature, and extracting specific instances to illustrate patterns or strategies for creative work. Some cases are focused on the creation of digital dance and performance, some on the design and development of technology-enhanced tools for creativity, annotation and choreography, while others have a more pronounced knowledge-exchange and sharing component.

The creative process for interactive dance and performance is not unlike non-linear technology design processes, in which conception, design, prototyping and testing are iterated until reaching a satisfactory outcome. The cyclical creation and production pattern is characteristic of highly experimental performances in which very little of the final outcome—concept, choreography, technology, interaction, etc.—is predefined. These types of collaborations have an important exploratory component, and may give equal importance to knowledge advancement as to the actual making of the performance work. *Balletro* is an example of a collaborative project into performance and digital media where the goal was to create a staged performance along with researching the interface between performance and new media. *Balletro* was a collaboration between the project *Assemblages*, run by InterMedia at the University of Oslo and the Department of Ballet and Dance at the Oslo National College of the Arts. It aimed to advance understanding not only in the field of performance, but also in the field of technology and design studies, and how

dance could advance technology design. The creative approach in *Ballettro* is described as “an experimental, ‘free-form’ approach to building a collage-like choreographic process” (Skjulstad et al. 2002: 221), expansive, emerging and democratic in nature. Most creative sessions included improvisation tasks in which dancers experimented with digital tools. Apart from the dancers, all the participants in the creative process were invited to improvise, and this included the media and technology researchers. Improvisation was not only a means to a creative output, but also a way to exchange knowledge and learn by reflective practice. The final performance collated fragments from experimental sessions and learning tasks, guided by an evolving choreographic vision during the project course. The research was conducted on a cyclical model, including iterative learning tasks, improvisation sessions, and reflexive activities (Skjulstad et al. 2002).

Improvisational and experimental approaches like *Ballettro* treat the collaborative space like an experimental playground. The composition process is emergent and dynamic, following the emergent nature of the final piece to be developed. Learning how to work together is a first and vital component. One powerful practice for supporting mutual learning is collaborative rehearsal. The interdisciplinary team assists the enactment of choreographic ideas and concepts, trying out various interaction patterns until configuring desired directions for the composition. Collaborative rehearsals fulfil a variety of learning and creative goals: they enable trying out choreographic ideas, testing technology, and enabling performers to engage with the interactive spaces that are emerging from the composition. As Johannes Birringer comments:

From a choreographic point of view, the dancer within an interactive environment . . . will need to familiarize herself with the response behaviour of the sound and video parameters, and both dancer and composer will strive to create an exponentially more sensitive, articulate and intuitive system. In a shared environment this could mean refinements in sensors, filters, and output processors, but also an attenuation of the performer’s spatial-temporal consciousness. How is the performer-musician-system relationship evolving, emergent? What can we learn from jazz-improvisational structures, from video game structures, from different cultural contextualizations of virtual environments? (Birringer 2003: 93)

In such improvisational and emergent approaches, roles and spaces of intervention are reconfigured and participants may freely step into the area of expertise of another. As Gonzalez et al. (2012) argue, this is a true instance of an ‘integrated process’, when a choreographer may provide vital input for technology design, and in reverse, when technologists may be asked for an opinion regarding the timing of a dance moment. This asks for a continuous process of negotiation, one in which nothing is pre-defined and established hierarchies and role boundaries are blurred. A phenomenon of contagion occurs, new words, phrases, vocabularies and approaches are appropriated and exchanged. This phenomenon enables the configuration of a space of creative possibility from which ideas, concepts and action lines spring forth.

A closer examination of the integrative process in emergent approaches to performance making opens up questions about the interplay between knowledge

production and creative acts: What kind of knowledge(s) are brought to bear? How do they make their way into creative acts and decisions? How are they shared and what traces do they leave? These aspects are examined by looking at a particularly challenging instance of performance making: working in geographically distant teams to produce a distributed performance.

ULTRAORBISM was a distributed performance designed and developed in the frame of the European project RICHES (Renewal, Innovation and Change: Heritage and European Society), in partnership between the Centre for Dance Research at Coventry University and I2CAT Foundation in Barcelona, with the collaboration of Falmouth University, UK. The aim was to examine, through a real life event, how the integration of digital technology affects performance making, the new expressive means it can afford, and how it changes audience engagement and appreciation of the art form. The performance was a distributed event between Centre d'Art Santa Mònica in Barcelona and Falmouth University, taking place in April 2015.

The concept of the performance was ideated by Marcel·lí Antúnez, a Spanish artist with a rich history of blending performance and interactive technologies. Marcel·lí created a narrative inspired by the travel tale *A true story*, by Lucian of Samosata (125–180 AD), a travelling rhetorician and satirist who wrote in Ancient Greek. The tale is considered the first account of science fiction, featuring a travel to the moon, but it is also a subtle satire denouncing the mix of fact and fiction in the works of contemporary historians. On this basis, Marcel·lí created a dream-like narrative unfolding through a variety of expressive media, partly developed before the show and partly resulting from the interaction between performers and technology in real time.

The space had a similar configuration in the two locations: an open stage featured the live performers, while animation and video were featured on screens. The performance narrative was projected on the central screen, and alternated between pre-loaded animation and the live performative acts from both locations, with Marcel·lí Antúnez performing in Barcelona, while three dancers and a storyteller performed in Falmouth. Performance details were projected on two smaller screens. The audience in each location could see the happenings in the other location through real-time video playback. Part of the concept of the performance was to make everything visible. Therefore the team of technicians was present, as well as the lighting, sound and remote connection equipment.

ULTRAORBISM is an illustrative case of a distributed, loosely centralised creative process. Whilst the piece was based on a concept by Marcel·lí Antúnez, the performance was fine-tuned and produced jointly by the Catalan-English team of engineers and performers, and tried out during collaborative rehearsals. Setting up collaborative rehearsals between different locations was challenging, especially since rehearsals were not only meant to stage ideas, but to configure and standardize them. The issues raised by making everything work on a technical level for linking and communicating between the two locations were heightened by the fact that there was no outside creative director to take decisions and ensure a smooth flow. While Marcel·lí Antúnez was regarded as the central creative mind behind the



project, he was also performing, and could not fill the role of a director, able to see the piece unfolding from the outside. A high degree of freedom to propose ideas and make decisions was therefore entrusted to each member of the team. At the same time, the freedom and the lack of hierarchy was demanding, especially for performers, on several levels. Even for decisions that regarded contained actions like the duration of pressing a sensor, performers had to be attentive, aware and knowledgeable of the other elements of the performance and how, together, they created meaning. As one dancer remarked in a post-show focus group, “it is all interconnected”: a simple action such as stamping on a sensor affected the ecology of the performance. Moreover, there was also a lack of hierarchy with respect to the various media and expressive components from movement to lighting and projections that together created and communicated meaning. As a dancer pointed out:

What is more important? Is it more important that we are connected so that everyone watching, even if they're separate from us, they feel this united front-right in front of them? Is it more important that we connect to Marcel·lí? Is it more important that we connect to the audience? . . . A thousand times we came to a point where we [felt] like we could go down any of these roads and at some point someone has to make a decision (Excerpt from focus group with the ULTRAORBISM Falmouth-based team, 9/04/2015, RICHES project archives).

One of the first aspects of interdisciplinarity to examine in ULTRAORBISM regards the nature and the trajectories of the knowledge elicited throughout the creation and production continuum. Both were configured by the central aim of the project: creating an engaging and immersive distributed performance. Similar to technology design, the artistic creative process can be described as an array of choices dotted on a timeline, which continuously open and close the space of creative or design possibility. In design, these decisions can be called ‘framing judgements’, choices that continuously open and close, define and redefine “the space of potential design outcomes” (Nelson and Stolterman 2012: 199). These judgements apply to different components of the product or system to be designed, yet eventually they take effect in configuring the product or system as a whole. Analogously, in interactive performances such as ULTRAORBISM, framing judgements are made that regard specific components of the performance, from movement and the timing of movement phrases to technology interaction and lighting; yet these judgements ultimately affect the performance as a whole. Each framing judgement requires a particular knowledge instance, which can be prompted individually or jointly by different members of the team. Knowledge may be verbalised and shared but, especially for performers, it is often tacit, embodied, or so deeply blended with an impulse to act that it is difficult to separate and share. The process of integration at the creative level only requires a portion of this knowledge to be made explicit and shared among the team. For instance, a dancer may sense rather than mentally formulate the exact moment when she should step away from the sensor to keep the harmony in the collective performative act. If the creative goals for the piece are reached through rehearsals, then an explanation of the thinking underpinning the timing and the decision are not

necessary. Countless decisions such as these are taken during rehearsals—sensed rather than verbalised, and enacted almost at the same time with being thought. If, on the other hand there is a concern with learning and knowledge advancement, then knowledge sharing becomes significant. Instances of tacit knowledge have to be converted in forms that other members of the team can comprehend, while actions and sequences performed spontaneously need to be examined to understand their meaning and significance.

Furthermore, the issue of knowledge traces is significant when considering the legacy of these encounters beyond the lifetime of a project. When used in the service of creative acts, both tacit and explicit knowledge instances have a quality of immediacy, and can be just as ephemeral as the performative act. They are brought into being through experimentation, and may quickly find their way into informing and driving decisions that spur further experimentation until reaching desired forms. Unless purposefully documented, knowledge instances at most echo in the memory of participants, but leave no tangible trace. If the purpose is to encourage joint production and transfer of knowledge among disciplines beyond time-based encounters, then it becomes paramount to document interdisciplinary creative processes. The traces or creative resources resulting from documentation processes are generative, they can be disseminated to inform and inspire future creative and research practice (deLahunta and Zuniga Shaw 2006: 54).

Emergent approaches to making interactive performances can become particularly vital spaces for fostering innovation. Firstly, they foster innovation in the art form, for their capacity to challenge, question and redefine established conventions regarding movement, body, digital media and their interplay. Secondly, they stimulate the production and circulation of knowledge across disciplinary boundaries. By working, experimenting and creating together new perspectives open, and new ways to employ theories, approaches and methodologies come forth. However, to build towards these outcomes, it is necessary to purposefully cultivate knowledge production and sharing along the creative continuum in interdisciplinary practice. In these settings, techniques for knowledge conversion (see for instance Nonaka et al. 2000) and reflection on practice (see Schon 1983) are important for enabling participants to share what they experience and know in tacit ways, and to understand the experience of others. Moreover, documentation of creative practice is important for spreading these knowledges beyond the lifetime of projects and events.

Interdisciplinary collaborations are not restricted to making new performances. A format which recognizes the value of bringing together interdisciplinary experts in performance, dance, media arts and technology design is that of short-term exchange projects, creative and knowledge-exchange workshops and peer to peer labs. These can be called upon to share ideas, reflect upon practice, share works in progress, and devise new concepts and approaches. An early example is the project *Software for Dancers* (London, 2001), funded by the Arts Council of England and organised with the support of Sadler's Wells and Random Dance Company based in London. The project brought together four choreographers and four digital artists with programming skills to generate ideas and concepts for rehearsal tools that

could aid in the choreographic practice. The choreographers who took part were Siobhan Davies, Wayne McGregor, Shobana Jeyasingh and Ashley Page. The project used these encounters as an occasion to envisage creative ideas for choreographic tools, but also to examine computational and choreographic approaches to art making, and the importance of understanding the nature of the materials and structures that are integrated and transformed in these processes. The format involved open sessions of discussion, followed by a closer examination of the methods commonly employed by choreographers in their work. Proposals were therefore developed on the concept of a multimedia notebook as a rehearsal tool, and ideas explored the possibility to use the computer as a generative source for choreographic inspiration. Yet the value of the project was less in the outcomes and more in the occasion for interaction and exchange that it provided. The discussions opened up questions about the choreography, the nature of software and code, and how the computer can assist choreographic practice. What are its promises and what its limits?

More recently, the *Choreographic Coding Labs* (CCLs), initiated in Frankfurt in 2013 and now toured internationally invite creative coders with an interest in movement and choreography to work with dance-related datasets and examine choreographic approaches and structures to advance and innovate their artistic practice. The first CCL was developed through Motion Bank, a 4-year project of the Forsythe Company. The CCLs are invitations to experiment, exchange knowledge and explore new ideas in a stimulating collaborative environment, without aiming for tangible outputs. Despite this open format, outputs are usually produced, ranging from tools for measuring movement qualities to concepts and prototypes for artworks. Some participants come in with works in progress or that they would like to refine, and use the CCL space as an occasion for inspiration and intensive work in a creative atmosphere. A software which grew out of the CCLs and continues to be shaped and refined throughout new editions is PieceMeta, a data management system which enables storing and looping data captured from movement.

The characteristic feature of the CCLs is the peer to peer format, which encourages horizontal learning and exchanges between people who blend technology and arts-related backgrounds and interests. Another aspect is the intensive and concentrated work format. Participants have the chance to explore ideas throughout 5 days against insights and feedback from like-minded peers. Interruptions are occasions for either socialisation or creative input and inspiration. Choreographers and dancers are invited to come and present their work, share their ideas, and be available for questions and discussions. The CCL stands out as a format for dance-related interdisciplinary exchange and creative practice for its focus on the existing community of creative coders. Participants already possess mixed backgrounds and interests at the junction of arts and computing. Through exposure to dance and choreographic material, new approaches, methods, ideas and ways of thinking cross the arts to the technology domain. As one of the CCL coordinators comments in an interview:

The CCLs are consistent with my own interest in bringing a high level of dance practice in conjunction with high level digital media arts practice. And my interest is in bringing them together, not necessarily that they make art together, so the choreographers who come and give a talk, they are not there to collaborate with the digital media artists, the goal is not to produce collaborative artwork, necessarily. I mean, collaborations do emerge out of the project, the goal is to try to inform the work of the media artists to give them inspiration coming from dance practice (Interview, 12/01/15, RICHES project archives).

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## 6 Interdisciplinary Artscapes, Interdisciplinary Knowledgescapes

Intersections and interactions between digital technology and arts fields have now been going on for well over half a century. Impacts on the field of dance and performing arts are notable, yet, some scholars would argue, these are not taking effect at the same rate as for other arts, such as music. As deLahunta (2002) comments, the convergence between performing arts, particularly dance, and technology can be described as *episodic* or *periodic*, lacking the breadth and intensity to reverberate in remarkable, foundation-shattering impacts. In their being episodic and by engaging a finite number of actors, their impacts are reduced in scale. Yet, we argue, there is more to these interdisciplinary encounters than their tangible, project-bound outcomes. To understand how their impact builds up in time it is useful to look at the process of integration, characteristic of interdisciplinary work, not only at micro, but also at macro-scale. At micro-scale, interdisciplinary research is mostly driven forward by teams of researchers belonging to different disciplines working on common subjects, projects or issues. At macro-scale, when consistent and enduring interdisciplinary work gains critical mass, it can lead to the emergence of new, interdisciplinary constructs, theories, approaches and techniques and eventually lay the foundation of new interdisciplines, solidified by the foundation of new professional roles, academic departments and curricula. This process of integration going from the micro to macro-scale has been described by Klein (1996) with reference to three landmark steps: (1) Detaching a research subject from its disciplinary frameworks; (2) completing the gaps left opened by single discipline investigation; and (3) redefining boundaries and founding new “knowledge spaces and new professional roles” (Klein 1996: 36–37). These are processes happening over a long period of time, and demonstrate the high level of fluidity and dynamism of knowledge advancement through interdisciplinary research. Disciplines are not fixed, they grow and change and influence one another and often redefine their boundaries and hierarchies, such that a new interdiscipline can become in time a well established discipline in its own right (Repko 2012).

The process of integration happens simultaneously at micro and macro-scales, influencing and feeding into each other. The more different types of interdisciplinary encounters concentrate on a timeline, the greater impetus and momentum is created for new, interdisciplinary spaces that blend the thinking, resources, theories, and methodologies of diverse fields. The interfaces between arts and technology

fields explored as part of these encounters gradually come to be concretised in spaces rich with potential for creativity, artistic innovation and knowledge advancement. Given the tight interplay between theory and practice, research and arts making, macro-scale developments for arts and technology collaborations can be conceived as the gradual configuration of intertwined and mutually influencing interdisciplinary artsapes and interdisciplinary knowledgescapes. The first concept captures the emergence of spaces of creative possibility that draw insights, resources, tools and inspiration from manifold domains, from performance to design, human-computer interaction and software engineering. The latter are spaces that blend different epistemological and disciplinary approaches, insights and theories in ways that cannot be afforded within specific disciplinary confines.

At present, interdisciplinary artsapes and knowledgescapes for performance and technology intersections exist more as potential than as reality. To come into effect, there is a need to reinforce both their immaterial dimension (made of knowledge, approaches, theories and ways of thinking) and their material dimension (made of physical or represented counterparts of the former, as well as research and practice infrastructures and new generations of practitioners and researchers with an interdisciplinary training). At the moment, most contributions coming from interdisciplinary collaborations are in the field of dance and performance rather than digital media studies, design, and human-computer interaction. One of the most notable impacts involves the adoption of perspectives, frameworks and concepts borrowed from technology disciplines. Technological developments can inform conceptions of the body, movement, and gestuality. In a “technological epistemology of the body”, the metaphor of the machine or computer is used to illustrate how the body functions (deLahunta 2004: 236). Further, new ways of thinking about movement, choreography and composition in media terms emerge. For instance, as early as 1975, the dance pieces *Locus* and *Accumulation* by choreographer Trisha Brown provide instructions for movement which can be seen as a source code, one which can be replicated. The instructions for *Accumulation* read:

The accumulation is an additive procedure where movement 1 is presented; start over. Movement 1; 2 is added and start over. 1, 2, 3 is added and start over, etc., until the dance ends (cited in deLahunta 2003: 306).

Second, the performing arts domain benefits from the creation of software tools that can aid choreographers in their creative process. Such tools were typically created by artists in arts organisations who had programming skills and an early concern with using technology to innovate creative processes (deLahunta 2005). Some of these tools had a short lifespan and were used only experimentally, others provided inspiration for artists to continue to experiment and innovate, while others, such as *Life Forms* (made by a USA-based research team with the contribution of the dancer and choreographer Merce Cunningham), and *Isadora* (a software tool that assists the creation of interactive performances, made by artist-programmer Mark Coniglio) were adopted by artists and continue to be used to this day. These tools are not neutral, they can influence the work and affect the way

the creator is thinking about their own making practice. They are therefore instrumental to adopting and appropriating ways of thinking, meaning making, and composition algorithms that are characteristic of the technology field.

Moreover, collaborations between performance artists and technologists contribute to radical innovation in the art form. The last two decades in particular saw the emergence of new forms of performance, whether theatre (head-phone theatre, installation theatre, digital theatre, Internet theatre) or dance and body-based performance (Wearables for performance, telematics, networked performance, screendance). There are other, more subtle influences migrating from the technology to the arts field, having to do with the endorsement of attitudes, approaches and visions for making art, even philosophical or axiological principles. In his essay *Open source choreography?* deLahunta (2003) comments on the parallels between the Open Source movement and the increasing interest among dance practitioners and choreographers to make available documentation that illustrates their practice and creative work. This interest is driven to some extent by principles that echo those animating the Open Source movement and having to do with an ethos of free sharing and reuse. Yet unlike open software, which is free to use and modify and is effectively a property of the commons, the collective pool of information on dance making, while freely available, is still attached to frameworks and regulations that privilege individual, rather than collective, authorship.

On the other hand, the contribution of performance to technology fields is still underexplored. The potential is there to inform both new ways of thinking about technology, as well as informing methodologies for digital media design and interpretation (Skjulstad et al. 2002). The premises and promises that performing arts paradigms and ways of thinking could bring to computer technologies were sketched more than two decades ago, and found a vibrant expression in Brenda Laurel's book *Computers as theatre* (2013). The book examines how computer activities can be seen from a perspective grounded in theatre and television studies, and envisages how human-computer interaction can cater for more engaging user experiences by looking into approaches to playwriting and audience engagement. The book opened a new page in the interplay between theatre and computing, one which is still being written. As Don Norman points out in the Foreword to the 2013 edition:

Theatre is about interaction, about themes and conflicts, goals and approaches to those goals, frustration, success, tension, and then the resolution of that tension. Theatre is dynamic, changing, always in motion. Our modern technologies with their powerful computers, multiple sensors, communication links, and displays are also about interaction, and treating that interaction as theatre proves to be rich, enlightening and powerful. (Norman 2013: xi).

Still unfolding is also the configuration of the new interdisciplinary spaces of knowledge and art development, which interdisciplinary collaborations in performance making are contributing to. The potential, in these new spaces, is to give rise to new literacies, new ways of imagining interactions between body, movement and computing technologies, and sketching new premises for the creation of innovative

art. While there has been a significant amount of research on new literacies, digital and multimodal, little research exists on the role of dance and performance in informing these new literacies (Skjulstad et al. 2002).

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## 7 Conclusion

This chapter provided a critical examination of interdisciplinary collaborations in making digital performances, seeking to articulate their contribution to advancing both art making and knowledge production within and across disciplines. Such interdisciplinary creative practice is very varied and can be oriented towards making new performances, designing and developing technical systems and tools, coming up with new concepts, ideas, and theories, or sharing and developing knowledge across disciplines. Whilst these encounters are mostly episodic, often organised in the frame of time-bound projects, their impact on disciplinary growth and arts innovation is cumulative. The field of performance, by its nature open to integration and novel perspectives, gains new understandings and approaches to art making through the appropriation of technical or design-informed approaches, methodologies and conceptual lenses. In reverse, technical and design disciplines can be informed by performance studies in their interpretation of technology and human-machine interactions, and in devising new theoretical and methodological pathways for innovative interaction and software design. Moreover, interdisciplinary collaborations contribute to configuring what we have called *interdisciplinary artsapes* and *interdisciplinary knowledgesapes*: spaces in between which offer new premises, resources, tools, theories and methodologies for making and theorising art drawing on integrative perspectives bridging arts and technology fields. Analogous to the tight interplay between theory and practice in performance studies, interdisciplinary artsapes (as integrative spaces of creative possibility) and knowledgesapes (as integrative knowledge and meaning-making spaces) are tightly intertwined, mutually influencing each others' evolution. Because of this quality of integration, their greatest potential is to develop and offer new languages, vocabularies, paradigms, and literacies, and in time configure radically new ways of making and theorising arts and culture.

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# Sound Archives Accessibility

Silvia Calamai, Veronique Ginouvès, and Pier Marco Bertinetto

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## Abstract

The paper analyses the conflicting issues that arise when dealing with Intangible Cultural Heritage (ICH) held in audio digital archives, when the demand for open access conflicts with ownership rights and ethical issues. It describes two case studies in order to evaluate the procedures used for doing research on oral materials while respecting the rights of others. The first refers to the activities carried on at the *Phonothèque de la Maison méditerranéenne des sciences de l'homme*, a French sound archive; the second refers to the solutions envisaged by an Italian research project, *Grammo-foni. Le soffitte della voce (Gra.fo)*, jointly carried out by Scuola Normale Superiore of Pisa and the University of Siena.

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## 1 Introduction

This paper addresses the impact of the computational era on a very peculiar ‘public space’: web portals containing digital audio archives.<sup>1</sup> Digital audio archives are the final outcomes of several disciplines, from oral history to linguistics, from anthropology and ethnography to social sciences. They usually contain a significant variety of research data referring to different textual *genres* (e.g., a sequence of interviews on a particular topic; answers to a *questionnaire*; speech *corpora*; spontaneous or semi-spontaneous speech). But they may also contain public events of many kind (e.g., performing art events like for instance folk drama or folk poetry performances, but also political meetings and assemblies). Although they most frequently arise in academic communities and networks, digital audio archives are also created by heritage communities, informal groups and individuals who are interested in their preservation and accessibility.

The concern about digital audio archives is particularly relevant since it addresses issues such as ownership, distributed and entangled responsibility, open access and privacy. The internet appears to be a significant extension of the public space; nevertheless, the distinction between private and public is more important than ever. In addition, the development of Information Communications Technologies (ICTs) modifies our relationships to cultural heritage and archive maintenance. It ‘democratises’ the access to the data, since it resides and tends to multiply in a throng of repositories and sources. As a consequence, the world of knowledge has become a world of abundance where all pieces of information are always at everybody’s disposal, but at the same time the quantity of available contents exceeds by far, more than ever, our cognitive abilities (Ganascia 2015: 67–68). Given this background, the domains of audio documents stemming from fieldwork and oral data collection—both of which contribute to the creation of audio archives—represent an interesting and under-investigated scenario, where at least three intertwined concerns emerge:

- Use and re-use of research data;
- Ethical questions involved in the re-use of research data;
- Legal questions stemming from online diffusion.

These three issues represent a cross-curricular area concerning researchers, scholars, archivists, librarians, public and research institutions. Research data archiving, accessibility and re-use are nowadays at the centre of scientific debate, among different scientific communities around the world. In this respect, the *data deluge* described in the monographic volume of *Science* 331 (2011) appears to be paradigmatic of the renewed attention towards data collection, curation, and access.

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<sup>1</sup> ‘Oral archives’, ‘sound archives’, ‘audio archives’, ‘speech archives’ are considered as synonymous in the present paper, although they may refer to different traditions, according to different branches of knowledge.

While available data are exponentially growing, it is crucial for many disciplines to decide which data to preserve and which to dismiss, how to access the archived data and how to reuse them in a consistent, sustainable, ethically-correct way. This need has been strongly felt by physicists, who in 2009 created a working group called ‘Data Preservation in High Energy Physics’ (DPHEP). More complex and even contradictory appears to be the debate in the domain of the social sciences:

Although information overload has always been an issue for scholars, today the infrastructural challenges in data sharing, data management, informatics, statistical methodology, and research ethics and policy risk being overwhelmed by the massive increases in informative data. Many social science data sets are so valuable and sensitive that when commercial entities collect them, external researchers are granted almost no access. Even when sensitive data are collected originally by researchers or acquired from corporations, privacy concerns sometimes lead to public policies that require the data be destroyed after the research is completed—a step that obviously makes scientific replication impossible (King 2011: 719).

Methodological obstacles connected to archiving have been extensively discussed e.g. in Britain (Mauthner et al. 1998; Richardson and Godfrey 2003; Parry and Mauthner 2004; Bishop 2009), France (Descamps et al. 2005; Marcadé et al. 2014) and Finland (Kuula 2010/2011). Communities of practice like, for instance, those of the Presto4U EU project dealing with ‘Research and Scientific Collections’ and with ‘Music and Sound Archives’ gathered from all around Europe in order to identify useful research parameters in the digital audio-visual preservation domain, to raise awareness and improve the adoption of these results by technology and service providers as well as media owners (PRESTO4U 2014). Research networks were born, especially in France (e.g. *réseau Quetelet*), whose mission is the preservation of fieldwork surveys consisting of questionnaires. More recently, several research groups have appeared (among them, *beQuali*), whose aim is to collect, digitise, and spread qualitative interview data. It is important to underline that such initiatives can be very useful from a scientific and educational point of view, regardless of which method and research style have been used. First, they show the variety of methods and devices used by different researchers. Second, they can be used as a didactic tool for students and fieldwork novices in order to better explain different methods for collecting and gathering data; for creating a corpus; and for reporting the research work according to the principle of accountability.

The paper is organised as follows. Section 2 presents the relationships between digital audio archives and Intangible Cultural Heritage. In Sects. 3 and 4 two case studies are described in order to evaluate the procedures used for doing research on oral materials so as to respect the rights of others. Both cases represent different but intertwined examples of accessibility in relation to digital audio archives: the first refers to the activities carried on at the *Phonothèque de la Maison méditerranéenne des sciences de l’homme* of Aix-en-Provence; the second refers to the solutions envisaged by the Italian research project called *Grammo-foni. Le soffitte della voce* (Gra.fo). The first one is an institution also devoted to preservation and

conservation, while the second is the outcome of a research call. The final section presents some closing observations associated to the accessibility of digital audio archives.

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## 2 Audio Archives and Intangible Cultural Heritage

Digital audio archives are not peculiar to a single branch of knowledge. On the contrary, they appear to be a virtual space in which different kinds of expertise convene and deal with unusual, original research questions concerning audio preservation, cataloguing, transcription, analysis, data re-using, and access rights management. Oral historians, linguists, and anthropologists have often underlined the urgent need to protect analogue and born-digital audio archives collected by professional scholars and ordinary people interested in languages, dialects, tradition, popular music, and ethnology. In every respect, audio archives are a precious resource: linguists, anthropologists, ethnographers, oral historians have spent years collecting materials that deserve safeguarding and circulation. However thousands of hours of speech recordings collected for different purposes, despite having been digitally preserved, are still inaccessible to the communities for which they have been produced, not to speak of the wider audience. In most cases, audio archives collected in the humanities and social sciences are still in the hands of the original researchers. It can even be very difficult to get the basic datasets documentation and even more difficult to persuade researchers and private citizens to provide open information about their data. Crucially, the UNESCO *Convention for the Safeguarding of the Intangible Cultural Heritage*, Article 2 defines this material as belonging to Intangible Cultural Heritage domains, which include:

- oral traditions and expressions, including language as a vehicle of intangible cultural heritage;
- performing arts;
- social practices, rituals and festive events;
- knowledge and practices concerning nature and the universe;
- traditional craftsmanship.

It is widely known that conflicting issues arise when dealing with Intangible Cultural Heritage, since the demand for open access conflicts with ownership rights and ethical issues (Lixinski 2013; Tucci 2013; Farah and Tremolada 2014). It is therefore urgent to identify the possibility of reaching a balance between two conflicting demands: the need for Intangible Cultural Heritage openness and accessibility vs. the respect of all rights related to Intangible Cultural Heritage, e.g. copyright, intellectual property, privacy. In this respect, special attention must be devoted to the dissemination of oral heritage via new technologies, which requires a thorough reflection not only from the technological point of view, but also from the legal one. In fact, most of the analogue recordings that constitute oral heritage were collected at a time when little or no attention was

paid to the legal aspects related to Intangible Cultural Heritage. Thus the need for the open circulation of documents can clash with some inviolable rights (copyright, right to privacy, right to individual oblivion) that can be claimed by those whose voices have been recorded or even by those who have been simply mentioned. Not long ago, it was impossible to imagine that the recorded voices could be accessed via the internet. In this respect, archivists have a new responsibility: they are the 'guardians' of the witnesses' personal data and e-reputation. In order to develop a set of best practices for dealing with the legal aspects related to handling, cataloguing, using, and disseminating oral heritage documents, it is necessary to analyse the European panorama, emphasising the differences, but also trying to find points of convergence among the countries under civil law and those under common law system, in order to make accessible this common heritage beyond national boundaries.

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### 3 The Phonothèque de la Maison Méditerranéenne des Sciences de l'Homme

The *Phonothèque de la Maison Méditerranéenne des Sciences de l'Homme* (Mediterranean Research Centre for the Humanities; henceforth MMSH) is an archival research centre created in Aix-en-Provence (France) at the end of the 1960s by Philippe Joutard, a contemporary historian, and Jean-Claude Bouvier, a dialectologist, both researchers at the *Centre de recherches méditerranéennes sur les ethnotextes, l'histoire orale et les parlers régionaux* of Aix-en-Provence (CREHOP). The collections consist of deposits made by scholars working with oral inquiries or by associations dedicated to heritage preservation. Wishing not only to preserve their recordings and to have their field interviews published, they strived to make their sources available to the general public. In connection with MMSH researchers, CREHOP holds field recordings collections in the domains of anthropology, sociology, linguistics, political sciences, history, music and literature, all focused on the Mediterranean area. It illustrates fields poorly covered by conventional sources or complements them with the point of view of real actors and witnesses.

In 1997, CREHOP integrated MMSH creating a research and training campus including 11 research laboratories, all based in the South of France and specialising in Mediterranean culture. In 2015, the collection held more than 7000 h of speech/sound recorded from the late 1970s around four main topics:

- Oral literature, ethnomusicology, techniques and know-how;
- Life experiences, oral history, collective memory;
- Language and cultural identity;
- Epistemology and methodology: workshops, seminars, courses.

The audio collections have been digitised since January 2000 and include 6000 h of recordings, listed on an online catalogue, while the audio archives are

editorialised on a scholarly blog called *Les carnets de la phonothèque*, where it is possible to enjoy the so-called ‘veille active’ organised by the Phonothèque working group, whose aim is also to disseminate the contents of the recordings via the World Wide Web. The next section presents two different examples of dissemination the first refers to the European project *Europeana Sounds*, while the second deals with the procedures envisaged by the MMSH audio archive in order to facilitate each scholar to disseminate his/her research archives.

### 3.1 Dissemination in Networks: The Example of *Europeana Sounds*

The MMSH audio archive centre takes part in several projects supporting the dissemination of the materials. In 2010, the catalogue has joined the *Portail du patrimoine oral (Oral Heritage Portal)*, a collective catalogue of audio and audiovisual archives on oral tradition in France. The portal, launched in 2011, contains audio and video documents such as songs, tales, traditional music, life stories, recorded *in situ*. At the moment, nine different databases are accessible through this portal: the MMSH audio archive, the Office of Auvergne’s Territories Music at Riom (Auvergne), the Centre for study, research and documentation of the spoken word (Poitou-Charentes-Vendée), the Museum of instruments at Céret (Catalogne), the Occitan centre of music and traditional dance at Toulouse, the Regional centre for traditional music (Limosin), the Archives for spoken word heritage (Bretagne), the Music and oral traditions centre (Normandie), and the Bourgogne Centre for spoken word heritage. In 2011, the MMSH audio archive catalogue was integrated into the portal *Isidore*, which provides access to digital and digitised research data in humanities and social sciences in French-speaking countries internationally.

In February 2013, the MMSH Sound Archives Centre was involved in the *Europeana* and *Europeana Sounds* project coordinated by the British Library, which brings together 7 national libraries, 5 archive and research centres, 2 other public bodies, 4 non-profit organisations, 3 universities, and 3 companies in 12 - European countries. The *Europeana Sounds* project deserves special attention because of its innovative potential for audio archives: not only does it allow access to one million audio documents, but it is also focused on promoting a creative re-use of the recordings. Scheduled to run from February 2014 to January 2017, *Europeana Sounds* is co-funded by the European Commission and the Europeana Sounds consortium. The activities of the project are organised in seven thematic work packages: aggregation, enrichment and participation, licensing guidelines, channels development, technical infrastructure, dissemination and networking, project management and sustainability. The majority of these activities depend on Workpackage 3 “Rights Labelling Guidelines”, headed by the Netherlands non-profit organisation Kennisland. It provides legal guidelines for integrating audio content into *Europeana Sounds* based on the current status of the Europeana Licensing Framework, including the results of the rights survey. This survey addressed the barriers to online access and proposed guidelines in order to disseminate online audio data. It involved all the European countries participating

in the project and produced a comparative assessment on how legal issues are faced within the different European research communities. In 2014, among other deliverables, the *Europeana Sounds* consortium published an open access best practice guide on the following theme: *Rights Labelling Guidelines. Guidelines for Contributing Audio Content Into Europeana*.

This guide presents a complete survey of all the obstacles relating to online access, proposing solutions for use concerning audio content. Its main key points can be summarised as follows. First, it is necessary to detect the different types of Intellectual property rights (IPR) which may affect a certain audio work from three different points of view: the composition, the performances and the recordings. As for the composition, copyright protection has a time limit, usually 70 years after the death of the creator. Once such time limit has expired, the work enters the public domain. In the case of audio material, the so-called ‘related rights’ appear to be very relevant too: they warrant a different term of protection and are given to performers, producers, recordists and broadcasters. Therefore, although a composition may be in the public domain, the related digital object may not enjoy the same status, exactly because of the related rights. The time limit concerning the related rights is 50 or 70 years after the first publication or the first communication to the public. A rather different case is represented by the database rights, whose time limit is 15 years after creation: they turn out to be very relevant in case an institution receives digital sound archives from another institution. Second, after a very careful analysis of Intellectual property rights, in case one or more of these rights applies to a certain digital work, it is important to obtain permission from all the rights’ holders before publishing and reproducing it. Finally, the guide provides a detailed account of the *Europeana* licensing framework, in order to facilitate *Europeana*’s activities and, in particular, data ingestion into *Europeana* space.

Although ‘spoken word digital audio’ objects are specifically mentioned in the *Guidelines* when describing the possible Intellectual property rights involved, the extraordinary variety of practices in fieldwork in oral history, linguistics, anthropology, and sociology certainly requires a more in-depth analysis, in order to both cover unpublished audio archives and consider the ethical issues involved in their dissemination (Zeytlin 2012). This is why the MMSH Sound Archive Centre is at present engaged in a project that focuses more directly on the dissemination of research data in the social sciences and humanities: a working group under the auspices of the DARIAH (Digital Research Infrastructure for the Arts and Humanities) consortium is elaborating a best practice document entirely dedicated to ethical and legal issues. The French version of the text (whose English provisional title is “Good practice guide for disseminating digital resources in the Humanities and Social Sciences. Legal and ethical issues in digital research”) has been written by different stakeholders (interviewers, interviewees,<sup>2</sup> researchers, archivists) and is now available on a scholarly blog named *Questions d’éthique et de droit en SHS*. The working group produced several tools: specimens for the legal

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<sup>2</sup> ‘Interviewee’, ‘informant’, and ‘witness’ are considered as synonymous in the present paper, although they may refer to different traditions, according to different branches of knowledge.



agreement between interviewees and researchers, between researchers and institutions, and between researchers, interviewees, and Heritage institutions.

### 3.2 Ethical and Legal Issues: An Example from the MMSH Audio Archive

In partnership with the team of the MMSH Sound Archives Centre, and according to the topics explored, the researchers choose the terms of access to their data at the moment in which they create the deposit. The MMSH Sound Archive Centre offers the scholars a set of tools (e.g. legal agreements, classification and cataloguing templates) to help them disseminate their research in accordance with best practices and ethical and legal guidelines. As a result, around 2000 h of audio recordings are directly accessible online.

From the ethical and scientific viewpoint, field recordings cannot be disseminated as standalone materials, i.e. without any contextual information. Audio documents in archives need to be carefully interpreted in order to be understood, and any relevant note, drawing, or diary produced by the researcher before, during and after the fieldwork constitutes a precious resource for correctly interpreting the documents. In this respect, the contextualisation of field recordings is a thorny issue: each recorded document collected during fieldwork has to be used and re-used together with all the different elements of the scientific research from which it originates (Descamps et al. 2005). It is very important to clarify that these recordings are not ‘the truth’. Indeed, they refer to the witnesses’ representation of the given situation. For this reason, sound archives centres usually make sure that they embed as much contextual information as possible into the digital materials.

At the MMSH Sound Archives Centre, the sound archives can be harvested in Dublin Core (DC) on Isidore, a platform allowing access to the digital data of Humanities and Social Sciences, in Europeana Data Model (EDM) on *Europeana*, or in Encoded Archival Description (EAD) on *Calames*, i.e. the online catalogue describing archives and manuscripts held by French universities and research libraries and institutions (*Catalogue en ligne des archives et des manuscrits de l’enseignement supérieur et de la recherche*), administered by the *Agence bibliographique de l’enseignement et de la recherche* (Bibliographic Agency for Higher Education—*ABES*). Affiliation to the national platform, *Calames*, in 2013 represented a relevant turning point for the MMSH Sound Archive Centre. Most importantly, through *Calames*, the MMSH Sound Archive Centre has access to IdRef (Identifiants et Référentiels), the French system for reference identification in research, which is linked to the Virtual International Authority File (VIAF) Project and used by Worldcat, the world’s largest network of library content and services, dedicated to providing access to library resources on the Web. The matched use of VIAF and Worldcat ensures two intertwined properties first, informants are no longer hidden in archive databases, and second, their contribution is held in academic databases throughout the world. Furthermore, once the informants’ names have been identified, they are given an international identifying number and thus benefit from the standard features ensured by the *International Standard*

**Name Identifier** (ISNI): uniqueness, stability, visibility, sustainability, interoperability, and independence (Angjeli et al. 2014). Uniqueness comes from the fact that a name is unique and duplication is not allowed. Stability derives from the fact that ISNI is an ISO standard (ISO 27729:2012). As for visibility, ISNI facilitates the process of Search Engine Optimization in order to identify the informants' names. Sustainability is a consequence of the ISNI commitment towards the long-term preservation of the data. Interoperability of all the identified names derives from the fact that ISNI works together with VIAF, IdRef, Open Researcher and Contributor ID (ORCID). Finally, the National Library of France and the British Library, being the coordinators of the ISNI International Authority (ISNI-IA), the ISO registration authority of ISNI, are the guarantors of ISNI's independence.

The example referred to in the title of the present subsection stems from the *repertoire* of tales and songs from the Cevennes area given by a privileged witness, the late Marcel Volpilière, who provided more than 20 h of recorded interviews with three separate researchers who deposited their archive material in MMSH Sound Archives Centre and probably in other centres. This repertoire has also been published in a series of audio cassettes and reissued on CDs and in a book. Identifying this witness like a 'real' author helps us identifying other archives containing documents linked to Marcel Volpilière (e.g. recordings of interviews with Marcel Volpilière, other related documents). In this respect, inclusion of the informants' name is an effective contribution to the information-gathering process. Indeed, one can find things such as: unpublished interviews relating to the life of Volpilière as a Cevenol farmer; legends of Mont Lozère; the importance of the chestnut tree for Volpilière himself and for the community's identity; and fantasies of Cevenol farmers in their daily life. Via inclusion in IdRef, one can:

- provide this witness with a unique, stable and long-term international identifier, covering all interviews recorded by several interviewers in a single village in the Cévennes between 1970 and 1990;
- establish links between his publications and the recordings of his interviews by confronting the various forms of materials that he provided, thus underlining the importance of interoperability;
- give greater visibility to a Cevenol farmer, through *WorldCat Identities*.<sup>3</sup>

Before ethical and legal issues were at the centre of the scientific debate, the voices of the witnesses recorded in fieldwork were not integrated in academic databases. Finding a way to face ethical and legal issues might ensure that the sound archives' voices be listened online as a part of our common cultural heritage. Clarifying these issues is crucial in order to reach the main objectives of dissemination, crowdsourcing, creative re-use, discovery and referencing of sound data, as also the *Grafo* project proves.

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<sup>3</sup> <https://www.worldcat.org/identities/lccn-n87107956>. Accessed November 10, 2015.

## 4 The Project *Grammo-foni. Le soffitte della voce (Gra.fo)*

The project *Grammo-foni. Le soffitte della voce (Gra.fo)*, jointly carried out by Scuola Normale Superiore of Pisa and the University of Siena, and financially supported by Regione Toscana (PAR FAS 2007–2013), detected and preserved a large number of audio (speech and music) recordings collected on the Tuscan territory, making them publicly available via a dedicated online archive (GRAFO 2011–2014).

The project included five stages:

- fostering the awareness level on the importance of preserving this valuable (but largely invisible) product of cultural heritage;
- contacting the audio recordings' owners to legally agree for the temporary borrowing of the materials;
- collecting, digitising, and (when necessary) restoring the audio materials;
- systematically cataloguing and partially transcribing the speech documents;
- offering the opportunity for online accessibility of digitised content for a large audience.

This large and still growing repository provided the opportunity to discover audio texts which, until now, have been known to a very limited number of possible users, thus ensuring the safeguarding of a specific type of endangered intangible cultural heritage. Besides, the *Grafo* archive offers a vast quantity of (mostly unpublished) documents for further linguistic, economic, social, political, historical, and cultural analysis. Until now, the project digitized more than 2800 h of Tuscan speech, and a large part of the data are accessible for download through the web portal, as explained below.

### 4.1 The Preliminary Stages: Census and Collection

Besides its wealth in paper documents (Petrucci 1994), Tuscany also is a privileged area for collecting and working with oral documents, as it abounds with both public and private audio archives, collected by scholars as well as amateurs. In the effort to produce a census of the Tuscan audio archives, the already existing censuses (Andreini and Clemente 2007) have been used and integrated with information about oral archives collected for linguistic and dialectological research purposes, such as *Carta dei Dialetti Italiani* and *Atlante Lessicale Toscano*. Subsequently, a priority list was created according to three main criteria:

- relevance and antiquity of the materials (older materials might witness disappeared or disappearing language varieties);
- state of preservation of the materials (priority should be given to those materials which look more damaged and whose content, therefore, is more likely to be lost in the near future);
- geographic representativeness (so that every area of Tuscany can be represented in the archive).

Following the above-reported priority list, the audio archives' owners were directly contacted to illustrate the aims and organization of the project. The *Grafo* staff then worked with the interested archives to facilitate the project, in collecting the material, and signing legal agreement for the temporary borrowing and future dissemination of the materials. In addition, the owners of the archives with no proper bibliography or accompanying materials were interviewed in order to explain the motivation and aims of the research that inspired the creation of their own archives. Indeed, unlike other kinds of materials, the motivation behind audio documents is often only known to the researcher(s) who collected them. Such interviews (called 'Tell something about your archive') are crucial, as they provide the key for correctly interpreting and cataloguing the archive and thus offer the user an appropriate guide. In some cases, the owners actively helped in the description of their own archives, and the cataloguing could be directly taken care of by someone who had been active in the actual collection of the recordings.

Both the digitization process and the cataloguing stages fall outside the topic of the present paper: the reader is referred to Bressan and Canazza (2013), Calamai et al. (2013), Calamai and Bertinetto (2014), and Calamai et al. (2014)—where some drawbacks associated with the conversion of analogically recorded speech and music to digits are also addressed. Indeed, as claimed in the aforementioned paper from a documental/ecdotic point of view, the act of 'disembodying' the original information inevitably involves a new reconstruction of the content.

## 4.2 From the Database to the Website

The *Grafo* database uses the MySQL system and consists of 59 interconnected tables, some of which have specific constraints. The tables contain information on the fields created for cataloguing and for the creation of the preservation copies, stored in a specific server archive with Raid 5 configuration. The collaborators devoted to digitizing and cataloguing interact with the database through specific applications, respectively called *Audiografo PP* and *Audiografo CP*, with user-friendly interfaces consisting of drop-down menus, checkboxes and open fields.

The web portal is a technological interface which, by querying the database and the server archive containing the preservation copies, allows the end user to search all documents collected in *Grafo* (cataloguing records, .mp3 files, transcriptions and the pdf files of the accompanying materials). The website contains the description of the project, as well as the archives and the cataloguing records. The page devoted to the archives lists their names and descriptions, the subsections names, and the 'Tell something about your archive' interview. As for the search, two distinct types are supported:

- by linguistic area (an interactive map allows the users to click on the area of interest and access the corresponding records);
- by content (i.e.: topic, *genre* and type of document, date and place of the recording, language variety).

The cataloguing record of each document provides the following information:

- name and description of the archive (and subsections) to which the document belongs
- conditions of access (i.e. whether the document undergoes access restrictions for privacy reasons—see *infra*)
- title (and alternative title, if present)
- content
- keywords
- researcher's name
- informant(s) name, sex, date and place of birth, education level and profession
- date, place and setting of recording
- typology
- topic
- *genre*
- language variety
- aim of the recording
- bibliography
- type of carrier
- recording (downloadable in .mp3 format)
- accompanying audio-related material (downloadable in .pdf format)
- transcriptions (downloadable in .pdf format).

In addition, all documents concerning the conventions adopted within *Grafo* with respect to digitization, restoring, cataloguing and transcription protocols are available on-line. The website and the cataloguing records are openly accessible but, in order to prevent improper use, user authentication is required for the downloading of .mp3 files, transcriptions and accompanying materials.

### 4.3 Ethical and Legal Issues

One of the major problems faced by the *Grafo* project was the treatment of confidential information. Many archives were recorded before approval of the national law on privacy rights (Personal Data Protection Code-2003),<sup>4</sup> so that the informants were not asked to give their authorization for future dissemination. As a consequence, *Grafo* only provides the initials (rather than the full names) of the informants and of the people mentioned in the recordings. Their full names together with other personal information are shielded in the *Grafo* repository. Considering

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<sup>4</sup>Personal Data Protection Code-2003, English version available at <http://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/2427932>. Accessed November 10, 2015.

the extremely different types of oral material collected inside the project, three different types of access are made possible, depending on the presence of confidential data in the documents:

- *Full access via web portal*—with documents that do not contain any confidential information, one can be read the summaries and download the full audio documents, the accompanying audio-related materials and the transcriptions (if available).
- *Partial access via web portal*—documents containing some confidential data (less than 90 % of the total recording time) are edited in two different versions: a full version, only available for consultation in the *Grafo* physical location, and a partial version, with edited summary and partially obscured mp3 file, available on the web portal.
- *Access in the Grafo physical location*—documents mostly consisting of confidential data (over 90 % of the total recording time) are accessible on the web portal only through an edited summary, while the mp3 file is only available for direct consultation in the *Grafo* Laboratory.

If the accompanying audio-related material contains confidential data, it is only available for consultation in the *Grafo* laboratory, while the transcriptions (if available), are accessible on the web portal after removal of the confidential data.

The right to individual oblivion, something Laouris calls “the right to digital euthanasia” (2015: 124), is another important issue in the digital era and it is not only a mere technical problem, as Laouris above claims. The *Grafo* project takes this issue into consideration in two different clauses of the portal policies.<sup>5</sup> First, it is possible to ask the portal administrator to remove particular data from the web. However, it is undeniable that legal problems cannot be solved by merely technical solutions (Hildebrandt 2015: 179). This is especially true in the domain of oral history and intangible cultural heritage. Let us take a more detailed look at the Italian case. In the 2001 *Code of Conduct and Professional Practice Regarding the Processing of Personal Data for Historical Purposes* no more than five lines are devoted to ‘oral sources’, namely:

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<sup>5</sup> See Art. 10—Segnalazioni and Art. 11—“Norme riguardanti la riservatezza” at the following url: <http://grafo.sns.it/web/guest/policy>: “La pubblicazione dei contenuti del portale è effettuata secondo il principio della buona fede e secondo regole di massima correttezza, diligenza e perizia. Chiunque, nonostante l’applicazione di questi principi da parte di *Grafo*, ravvisi la violazione di un diritto di cui sia titolare (es: diritto di autore, diritto all’immagine, diritto alla riservatezza), potrà segnalarlo all’indirizzo [grafo@sns.it](mailto:grafo@sns.it). Qualora sia accertato che la segnalazione ha un valido fondamento giuridico, i Proprietari del Portale si impegnano a rimuovere tempestivamente il contenuto dal portale, dandone comunicazione al reclamante nel più breve tempo possibile”.

interviewees: Oral Sources

1. With regard to processing of oral sources [of information], it will be necessary for the interviewees to give their express consent, whether orally or not, even based on summarized information including at least the interviewer's identity and activity and the purpose of the data collection.
2. If an Archive acquires oral sources, the interviewer will be requested to produce a written statement to the effect that the purposes of the interview have been notified and the relevant consent has been obtained from the interviewees.<sup>6</sup>

Secondly, given this rather thorny framework, the key word of the *Grafo* staff has been 'transparence', specifically by making the project's aims explicit—either by a face-to-face communication or by letter—to all persons involved: interviewees, interviewers, archive owners, but also archive curators, and—if possible—the descendants of interviewees and interviewers.

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## 5 Conclusion

The theme of accessibility of digital audio archives, as discussed so far, is quite problematic. It involves both developing a code of conduct with respect to professional ethics, and facing legal issues. Several researchers internationally involved in the domain of audio archives feel the need to better spell out their responsibilities with respect to the Digital Era. The importance of all accompanying materials and contextual information associated to each archive has been emphasized above, with respect to both French and Italian case studies (Sects. 3 and 4). This is the pre-condition for a proper re-use of research data. However, such theme goes beyond the scope of academic groups, universities and research centres. Finding the guidelines for accessibility of audio archives is a cultural operation. There are several reasons for it. First, this involves building, promoting and reinforcing an 'open' culture. In many cases, digital audio archives lodge intangible cultural heritage content. It is thus important to foster everyone's awareness that intangible cultural heritage refers to crucial themes for the European digital agenda, including: authorship, copyright, copyleft, and creative commons. In this respect, folklore data—one of the most prototypical examples of intangible cultural heritage—can be considered as a kind of 'open source' product (Bertolotti 2011: 68). In the words of Roman Jakobson and Pëtr Bogatyrev, writing in 1929:

An item of folklore begins its existence only after it has been adopted and sanctioned by the community. As in the development of *langue*, the environment prunes a created work to fit its taste; if the community rejects it, it simply dies out. A community retains only those items of folklore which have a functional value for it. Like *langue*, the work of folklore is

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<sup>6</sup> The English version of the Code can be accessed at the following url: <http://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/1565819>. Accessed November 10, 2015.

extrapersonal and leads only to a potential existence; it is only a complex of certain norms and impulses, the canvas of the actual tradition, which the tellers revive with the embellishment of their individual creation.<sup>7</sup>

Second, defining the guidelines for accessing audio archives allows the researchers to create the condition for returning their contents to the communities and the individuals that produced them. This reinforces the mutual relationship between interviewee and interviewer that comes about during fieldwork with oral sources, whatever the actual domain in which the given oral sources are collected and investigated. A restitution act has the additional advantage of promoting the engagement and the participation of small communities and private citizens. Scientific communities are increasingly concerned with community engagement and empowerment, in order to enhance good behavioural norms inside the communities themselves. As claimed in Art. 15 of the UNESCO *Convention for the Safeguarding of the Intangible Cultural Heritage*, heritage communities, groups and, where appropriate, individuals are asked to create, maintain and transmit such heritage, and to be actively involved in its management.

Finally, the issue of audio archives accessibility has encouraged the rethinking of personal data protection. This should be viewed as a renewed impulse to re-define the privacy value, considering the need to rethink what people consider really worth of protection (Dewandre 2015: 203). As Oates (2015: 225) claims:

The online agora is a precious public resource. Currently, it is being colonized by corporations and states, in ways that asymmetrically reassign the power of information and personal data to the elites. What is needed is an understanding that a public agora should be conceptualized and protected in a way that tips the balance away from the elites and toward the citizens.

In the realm of the digital sound archive, ethical and legal issues are no longer themes for bureaucrats. Asking all stakeholders involved in the process of building digital audio archives (from individual researchers, to archives' owners, from interviewees and interviewers and their descendants to public and private institutions) what can be freely accessed on the web (and with what kind of constraints) amounts to setting the ethical issues at the foreground of research. In order to obtain useful answers, and positive attitudes towards web diffusion, it is necessary to clearly and honestly explain the reasons behind accessibility. In other words, communication of research results becomes an essential task for scholars. In this respect, the most crucial topic with respect to accessibility concerns the legal issues related to the digital archives that were produced when the web did not yet exist and legal agreements during fieldwork were the exception rather than the rule. A large amount of such data could run the risk of remaining forever inaccessible on the web, unless adequate and careful balance is found between open access on the one side, and ownership rights and ethical issues on the other side. Digital audio

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<sup>7</sup> Jakobson and Bogatyřev (1929), English translation by J.M. O'Hara, at <https://scholarworks.iu.edu/dspace/bitstream/handle/2022/1711/13%281%291-21.pdf?sequence=1>. Accessed November 10, 2015.



archives can thus offer a valuable contribution in establishing rights, duties and ways to access important pieces of the European Intangible Cultural Heritage.

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# Technology and Public Access to Cultural Heritage: The Italian Experience on ICT for Public Historical Archives

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## Abstract

The introduction and diffusion of digital technologies have had a tremendous impact on the production, preservation and utilisation of cultural heritage. In Italy, the Ministry for Cultural Heritage and Activities and Tourism (MiBACT) has undertaken several programs involving the use of digital technology to promote a larger access to cultural heritage, through the collection of metadata on cultural products preserved in the country and the provision of digital cultural products. Digitisation techniques and web infrastructures affect most activities carried out by such institutions: the production of cultural goods, the use and valorisation of cultural heritage, as well as the costs of preservation. This study analyses the digital projects carried out by the MiBACT for the preservation and utilisation of cultural heritage that is managed by public historic archives so as to evaluate their impact on the access to cultural products.

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## 1 Introduction

Digital technologies have determined a rapid and substantial change in the practices of utilisation, supply, and conservation of cultural heritage. Some studies analysed the general impact of digitisation on cultural policy (see Flew and Swift 2013), and on museums and libraries in particular (Navarrete 2013a, b; Paolini et al. 2013; Salaün 2013). This blooming literature, however, has so far neglected, with a few exceptions (Borowiecki and Navarrete 2015), to investigate the implications of digitisation for public archives that store and preserve cultural heritage.

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From a theoretical point of view, digitisation techniques and web infrastructures affect all activities carried out by such institutions. Firstly, digitisation stimulates the production of cultural goods. Secondly, management and valorisation may improve, since institutions may easily handle acquisition, exchange and exhibition of products through digital catalogues, while a single web portal collecting metadata on the country's cultural heritage may help its promotion. Lastly, digitisation of cultural goods combined with the spread of web connections reduce access costs and overcome geographical and time constraints.

This chapter studies the extent to which the introduction of digital technology affects the production, valorisation and utilisation of cultural heritage existing in public historical archives in Italy, comparing it to its European counterparts from theoretical and empirical perspectives. With this aim, we study the actual extent to which European and national level projects are involving the use of digital technologies, with specific attention to the degree of digital indexing, digitisation, and the use of internet websites. We find that the introduction of different digital technologies occurs only partially in parallel, that is, more complex procedures are introduced only after the basic ones. Although digital indexing has substantially spread, digitisation is at an initial stage and the same can be said about digital access. This is true for the EU as well as Italy, which is also characterized by persistent geographical differences across its regions. In addition, the full implementation of websites seems to have no relevant effects on physical access. The chapter is organised as follows. In Sect. 2, we analyse theoretical aspects related to the introduction of digital technologies in the preservation and utilisation of cultural objects. Section 3 provides a general review of the digital projects carried out so far at European and Italian levels and analyses the current scope of these projects. Section 4 focuses on Italian public historical archives and includes an extensive analysis of the magnitude of digital projects in Italy. Some comments conclude the chapter.

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## 2 Economic Implications of Digitisation

### 2.1 Digital Heritage

Digitisation implies the adoption of technology to store and transfer content. It therefore influences considerably the costs of access and preservation. This circumstance is particularly relevant for cultural heritage where digitisation means making heritage objects and services digital. As for the objects, such a process entails some form of representation (or visualization) as well as description (or contextualization); thus, digitisation of heritage refers to the 'object' as well as to its documentation.

In the literature, a wide definition of digital heritage goods is provided. For instance, according to Navarrete (2013a), we can identify three types of digital heritage goods: digitised goods, metadata and born-digital goods. Digitisation usually refers to the generation of a copy of a physical original, e.g. the scan of an

archival document or the digital image of a painting. The digitisation of information (such as size, date, origin, title, description, context) resulting from earlier documentation (e.g. paper archive, object registration cards) or from personal knowledge generated metadata which are useful to identify, describe, understand and value heritage objects. In other cases, for instance, digital (video) art, content is generated in digital form from the beginning, e.g. born-digital goods. To investigate the economic implications of digitisation, it is important to recall that heritage objects can be movable and immovable, tangible and intangible and housed in different type of cultural institutions such as archives, libraries, museums, historical buildings or archaeology sites. As described further in detail, these differences are bound to influence the effects of digitisation on the supply and demand of heritage.

## 2.2 Supply and Demand of Heritage

Digitisation affects the supply and demand of heritage and the economic nature of heritage goods and services, since it influences two crucial economic characteristics of their consumption: rivalness and excludability.<sup>1</sup>

The effects of digitisation differ substantially depending on the heritage item. For libraries and archives, access to hard copies of books and documents is fully rival, while in the case of museums, historical buildings or archaeological sites rivalness occurs only in case of congestion and, therefore, it hardly emerges in the less popular heritage. Thus, for the first category of goods, digitisation allows for joint consumption, also when this would not be possible for the original items.<sup>2</sup>

From a different perspective, the application of technology might be helpful in reducing the conflict between the objectives of preservation vs. utilisation.<sup>3</sup> In other words, technology generates positive effects on the sustainability of heritage. At a site with problems of extreme decay and deterioration, virtual visits can substitute real ones. Of course, this also applies to archives especially when very old paper documents are involved and their inspection is very risky. Indeed, in the case of extreme decay, which would prevent usage anyway, digitisation generates private benefits, which would not occur otherwise because of the risks connected to the direct use of the item.

The digital access to heritage sites is generally more public than the 'real' one. In fact, even though web access could be easily restricted technically, the large availability of images and information on the web makes such limitation pointless in many instances. Moreover, a decision to limit access (for example, making it on-demand) may well contrast with the institutional mission of museums or

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<sup>1</sup> More in general, the effects of technology on the demand and supply of heritage goods are investigated by Giardina et al. (2015).

<sup>2</sup> However, digitisation lowers the access cost as it can be accessed from remote location.

<sup>3</sup> An interesting example is the Mayan archaeological site of Calakmul in Mexico, which UNESCO declared as a World Heritage site in 2002 (Peacock and Rizzo 2008).

archives for open access. Websites of those cultural institutions have the goal of enlarging the number of users, allowing anyone to visit virtually while being at home, expanding the range of sources of information about heritage, increasing consumers' knowledge and, therefore, improving their critical appraisal.

Differences occur across different institutions also in relation to the distinctiveness and costs of the service. The digital service is commonly directed to satisfy a demand for 'virtual' visits in the form of entertainment. On the contrary, a specific demand that asks for a high standard of precision, completeness and swiftness, coming from researchers or professionals, may induce price exclusion. This occurrence may be more frequent in case of archives or libraries. For instance, Navarrete (2013a) recalls that the city of Amsterdam's archive offers digitisation on demand and charges a higher price for higher image resolution, a rush fee for processing requests in less than 2 weeks and a fee for access from home.

Digitisation, then, broadens the set of users but also causes an overlapping supply of two rather different cultural good or service, of 'hard' (real) and 'digital' kind. This phenomenon raises the question whether digitisation exerts either a substitution effect on real visits or a complementary one. This question has no univocal answer, as it very much depends on the type of good under consideration. After all, the enjoyment deriving from the real experience of visiting a museum or a heritage site can hardly be substituted by a digital copy of a painting or by a virtual tour. Therefore a relationship of complementarity between the 'hard' and 'digital' is more likely to arise.<sup>4</sup> A rather different situation emerges in the case of other cultural institutions such as archives or libraries. Access to a digitised document may be understood as more equivalent to the vision of the original document, depending on the quality of the digitisation and the goals of the research. However, it is worth mentioning that the use of 'virtuality' as a tool for the valorisation of heritage is not unanimously accepted by experts who claim that it might downgrade the 'high' character of heritage.

### 2.3 The Case of Public Archives

In general, we could say that digital environment enhances the economic potentialities of the cultural sector. Bakhshi and Throsby (2012) emphasize the creation of new and diversified cultural products, the development of new cultural heritage experiences. The digital world improves the possibilities of contextualising cultural heritage, which has always been important for understanding its impact. Technology makes this contextualizing easier and wider in scope. Furthermore, the availability of metadata allows users to create their own virtual collection and learn the stories related to the items. In addition, other benefits arise from knowledge

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<sup>4</sup> In presence of visits motivated by entertainment, Peacock (2006: 1138) argues that technological changes are likely to create a 'globalization of culture', generating international mobility of artistic production and exhibition, as well as of tourists and increasing the demand for heritage.

transfers and from a technologically dynamic creative economy. For example, some museums, such as the Metropolitan Museum of Art in New York or the Rijksmuseum in Amsterdam, provide open access to content (text, video, photo, music) generated by museum visitors in social networks, encouraging exchanges and communication among people. As Clough (2013) suggests, cultural institutions also face a big opportunity, using their content and new technologies to reduce the increasing disparity between the educational opportunities available to children in upper income groups and those of lower income groups.

This brief analysis suggests that archives are the form of cultural heritage that is likely to benefit most from digitisation for several reasons. Leaving aside the benefits deriving from the improvement in preservation and the reduction of costs for maintenance (which have to outweigh the costs of digitisation), which are fairly common issues for all forms of cultural heritage although with a different scope, there are some matters that distinguish public archives from others in terms of digitisation. First, regarding the consumption of their services, digitisation transforms a substantially private service (rival and excludible) into a collective one available to anyone at the same time. A digitised archive then requires the application of different efficiency conditions with respect to its 'real' counterpart. Second, an archive is likely to be used by experts, such as researchers and professionals. They may however have different expectations about the quality of the digitised documents. A lawyer, for example, may be interested in the pure content of the text, whereas a researcher may also be interested in a detailed high-quality reproduction of the whole document. This suggests that, digitisation allows for product differentiation, with more definite images available upon request. Finally, the problem of the prevalence between substitution and complementary effects is somewhat more marginal for the archives than for the contents of museums or archaeological sites. In fact, this problem is practically non-existent for those who are concerned just with the content of the text. A digital copy is fully equivalent to the original for their purposes, whereas it may be relevant for the usage of images contained in the document. On the one hand, the original prevails for the more comprehensive enjoyment of the artwork; on other hand, the intelligibility of small miniatures is improved by a digital image able to magnify small details.

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### **3 Digital Projects on Cultural Heritage: An Overview**

#### **3.1 Background**

After having highlighted some theoretical issues concerning the impact of digitisation on the supply, utilisation and conservation of cultural heritage, especially for the case of public archives, this section reviews the main digital projects in Europe and Italy that are related to the issues investigated here. Digital technologies have become increasingly important in the field of preservation and utilisation of cultural goods. Recently, the EU has undertaken several projects involving the application of such technologies, which include the digitisation of



tangible and intangible cultural heritage and the use of Information and Communication Technologies (ICT) to improve: the conservation and preservation of cultural products; the digital and physical access as well as tourism; and the management of heritage throughout Europe. Following this example, many countries have adopted formal strategies and new practises to enhance the use of new technologies and, as far as Italy is concerned, the MiBACT introduced several programs accordingly. In this Section, we provide a brief overview of these projects, starting at European level programs, and show their state of the art, including details on the degree of digitisation, with a specific focus on Public Historical Archives (PHAs).

### 3.2 European Projects

By the end of the 1990s, the use of digital technologies to cultural heritage has spread in Europe and has resulted in several projects developed at national and continental levels. The *European Library* (2005) represented the first large program involving the collection of metadata belonging to several institutions (national libraries) across Europe. Following that, in 2008, the European Commission launched the first version of *Europeana*, the internet portal collecting metadata on cultural heritage preserved by several institutions.

*Europeana* aims at enhancing the spread of culture throughout Europe by storing in a single portal all the contextual information related to the cultural products preserved by all its cultural institutions. The ambition is to allow the public (i.e. students, researchers, tourists, etc.) to easily find any item they are searching, and to promote programs of digitisation of cultural resources. The process of digital indexing and metadata production moves from cultural institutions, which in turn provide such data to *Europeana*, and it is currently far from being complete. Yet, the portal provides access to about 40 million digitised items of different types, including images, text, audio, and 3D files from all European countries. Since digitisation procedures are not straightforward, international standards have been applied to have homogeneous metadata, thus forcing institutions to use common procedures. Moreover, *Europeana* uses the Linked Open Data (LOD) paradigm, a technique for publishing data on the internet that allows to connect related data and make them freely accessible.<sup>5</sup> Through digital projects such as *Europeana*, the EU aims at promoting universal access to cultural heritage,<sup>6</sup> leading providers of cultural goods across Europe to change their practices according to international standards for data indexing and storage.

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<sup>5</sup>This is in line with European Commission Recommendation of 27 October 2011 ‘on the digitisation and online accessibility of cultural material and digital preservation’, which stresses the importance of re-using digitised material as a tool for economic and cultural development in the EU.

<sup>6</sup>See on this point the European Commission Recommendation of 27 October 2011.

### 3.3 Italian Projects

In line with the above mentioned European programs, several projects have been carried out in Italy by the MiBACT, involving the use of ICT to improve the management of public institutions devoted to the preservation and conservation of cultural products and lessening the digital divide across cultural institutions within the country,<sup>7</sup> and favour the utilisation of cultural products by the public. Such projects include the introduction of common procedures for information technology management; the use by the MiBACT and other cultural institutions of website and social media to facilitate and promote cultural events, the physical and digital access to cultural products as well as tourism; the digitisation of tangible and intangible heritage and the production of new digital products; the use of digital technologies (such as photo stitching and time lapse) to create digital representation of cultural sites to be browsed online; and the creation of national aggregators, in line with the abovementioned *Europeana*.<sup>8</sup>

In 2008, the MiBACT launched the *CulturaItalia* portal, which is held by the Union Catalogue of Italian Libraries (ICCU). *CulturaItalia* is integrated in *Europeana*, following the same mission at the national level: it aims at promoting Italian cultural heritage, providing a virtual access point to all the cultural products held by Italian institutions, and enhancing the process of digitisation of cultural resources. It is a national aggregator, which includes about 2.5 million items from 32 public and private partners, including other aggregators, as well as editorial articles where items, collections, cultural events and providers are described (Caffo 2014). It is an 'open' system since partners continuously upload digitised products which are in turn exported into *Europeana* (Di Giorgio 2014). Following the LOD paradigm, metadata is also available through a data management project run in 2012, the *dati.culturaItalia.it*, which is still under development, and includes metadata from a selected number of providers associated to *CulturaItalia*.<sup>9</sup> As well as its continental level counterpart, *Europeana*, the amount of available resources depends on indexing and digitisation procedures run by its thematic partners and cultural institutions that own the original items. So far the extent of metadata provided by *CulturaItalia* is rather limited compared with the original ambitions of the project.

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<sup>7</sup> In general terms, digital divide is the structural geographical difference in the use of digital technologies both on the supply and demand. Evidence of such a phenomenon within Europe and Italy, can be found in Vicente and Lopez (2011).

<sup>8</sup> A comprehensive overview of such projects, including related links to all the programs can be found in MiBACT (2015).

<sup>9</sup> Other relevant related programs are: the *Internet Culturale* (IC), a web portal, online since 2005, held by Union Catalogue of Italian Libraries (ICCU), which provides access to digital material and catalogue databases from Italian libraries and other relevant cultural institutions; and *MuseiD-Italia* program, which aims at building an analogous portal including metadata on Italian museums. All these projects are, in turn, integrated in the national and European level aggregators, *CulturaItalia* and *Europeana*.

In this chapter, we focus attention on Italian Public Historical Archives (PHAs). According to the latest edition of the *Culture in Italy basic figures 2014* (MiBACT, 2014), the annual report of summary statistics on cultural utilisation and preservation in Italy, archivist institutions in Italy include: 100 PHAs, one Central State Archive and other 34 historical archives under the MiBACT, 8250 local authorities archives, about 50,000 other archives held by public institutions and 4609 state-controlled private archives.

PHAs preserve 1,352,185 parchments and 13,805,410 folders, volumes, registers, etc. To promote the digitisation of such a robust quantity of cultural heritage and the digital access to the products conserved by all archivist institutions, the MiBACT supported the creation of state archives websites, which have been gathered in the MiBACT web-domain ([beniculturali.it](http://beniculturali.it)). It also established the Central Institute of Archives (ICAR), which is devoted to the management, development and harvesting of the archival information systems and run the *National Archivist System* (SAN), a national web aggregator which collects metadata in line with the abovementioned European protocols and is integrated within the national aggregator *CulturalItalia*, the European archivist aggregator *Archives Portal Europe* (APEX) and *Europeana*.<sup>10</sup> The SAN is an open system which is uploaded as soon as the indexing and digitisation of cultural resources carried on by any archivist institutions progress. PHAs represent the most relevant sources of the whole archivist heritage and in recent times have been driven to improve their practices moving towards the use of digital technologies. They have been compelled to create and hold their websites, within the MiBACT's domain, and to proceed with the digitisation of the documents that they preserve. The progress of such new practices is still heterogeneous. While almost all the PHAs run a website, which include basic information such as opening times, and a list of provided services, the digitisation process is still at the beginning. The next section provides an overview of digitisation programs in cultural institutions in Europe and Italy with a specific focus on PHAs (Fig. 1).

### 3.4 Digital Projects for Public Historical Archives

We draw data from *Enumerate Core Survey 3*, a database founded by the European Commission to collect data on digitisation programs, digital preservation and digital access to cultural heritage in Europe, to compare the extent of digitisation

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<sup>10</sup>The SAN includes about 800,000 archivist resources. It was been instituted in 2011 in order to: (i) offer a unique online access point to the Italian archivist heritage and a digital library, which provide digital products and all the metadata; (ii) make available to the general public complete information on the cultural products held by archives, on their producers and providers as well as on their accessibility; (iii) guarantee the use of common protocols for indexing, description and photographic reproduction of cultural products; (iv) produce integrate archivist thematic portals and the harvesting of all the archivist systems.



**Fig. 1** Visual representation of Italian aggregators. *Notes:* IC stands for Internet Culturale, the librarian resources aggregator, SAN is the archives' resources aggregator and Museid Italia is the aggregator for museums' resources

in Italy and in EU.<sup>11</sup> The dataset suffers from missing values and the sample itself is not representative, thus findings reported in the next sections have to be considered cautiously. Moreover, there are no available data for several countries with respect to archives. In what follows we consider the subsample of those countries for which there are at least two archives in the sample.

Sixty percent of the institutions collect born digital material, while this percentage was barely above 50 % in the two previous surveys. The survey also included information on digital access. It emerges that web statistics are the primary means used by institutions to monitor the access to their metadata and digital objects. Table 1 shows the average data for all of the sample and the subsample of archives and allow us to draw some preliminary insights in a comparative perspective on the use of digital technologies and, more in particular, on digital indexing (which is connected to the development of *Europeana* and parallel national level projects) and digitisation. On average, the 58 % of collections has been digitally catalogued. Moreover, only the 22 % (12 % in the subsample of archives) of collections have

<sup>11</sup> More in depth, Enumerate Core Survey 3 is the third edition of a European survey monitoring the status of cultural heritage in Europe. One thousand and thirty institutions belonging to 32 European countries participated to this third round (participants to Core Survey 2 are about 1400). The dataset includes information for each institution in 2015 with respect to: the state of digitisation activity, the dimension and characteristics of collections, digital access, preservation strategy and expenditure. Institutions are distinguished in four types (Museum, 34.47 %; library, 33.59 %; Archive/record office, 21.12 %; other type, 10.78 %). Almost all institutions have collections to be preserved and 84 % have a digital collection (this percentage was 83 % in Core Survey 1 and 87 % in Core Survey 2). See Stroeker and Vogels (2014) and Nauta & van den Heuvel (2015) for a detailed analysis on the extent of digitisation in Europe and on latest versions of Enumerate Core Survey.

**Table 1** Impact of digitization on archives

Country	Collection already indexed (%)		Collection already digitised (%)		Collection to be digitised (%)	
	All sample	Archives	All sample	Archives	All sample	Archives
Austria	60.15	50.63	24.46	27.63	49.15	38.00
Belgium	64.29	56.67	23.86	5.67	45.00	25.00
Czech Republic	69.29	57.50	22.86	22.50	49.29	42.50
Estonia	74.00	71.50	15.89	10.75	65.44	71.50
Finland	53.77	64.60	28.60	45.00	36.33	16.40
Germany	51.29	55.11	15.71	14.05	39.54	33.84
Hungary	47.91	15.00	13.87	2.00	44.09	25.60
Iceland	57.63	50.00	24.63	20.00	56.44	36.40
Italy	54.95	54.00	31.50	11.50	45.21	63.50
Lithuania	19.82	22.00	15.19	2.88	67.91	70.13
Netherlands	75.30	72.67	29.74	8.87	41.70	31.77
Portugal	56.12	49.00	20.64	13.86	71.22	83.83
Slovenia	61.82	51.25	19.98	2.00	50.31	16.25
Spain	63.35	56.42	27.06	16.78	51.39	63.78
Sweden	47.83	48.75	14.97	8.00	52.70	44.15
Switzerland	70.29	63.33	17.90	4.67	35.15	31.50
<i>Sample average</i>	58.29	55.00	22.85	12.81	48.98	45.45

National level average—year 2015

Source: Enumerate Core Survey 3

been digitised so far and more than 49 % of preserved heritage has to be digitised. Thus, in spite of the several projects, the digitisation process is still in its early stages and its scope is heterogeneous, ranging between 2 and 31 %. Interestingly, different digital procedures are not introduced at the same time. This is not surprising since digital indexing is required for digitisation; however, it also indicates that the introduction of new technologies is a stepwise process, which gradually involves more complex practices. The adoption of digital technologies on the management of archives is slightly lower (55.00 % of collections are already indexed and 12.81 % are digitised) and more heterogeneous than overall average in terms of indexing.<sup>12</sup>

As far as Italy is concerned, only five (anonymous) archives are included in the *Enumerate Core Survey 3*, an even smaller sample than in *Core Survey 2*, which included nine Italian archives.

An extensive analysis of the actual magnitude of the use of digital technology in Italian archives is performed in the next section using a larger and more

<sup>12</sup>This is consistent with Borowiecki and Navarrete (2015)'s empirical findings based on the *Enumerate Core Survey 2* data.

comprehensive dataset. However, some preliminary findings can be drawn by comparing Italian data with European counterparts. According to this survey, indexing and digitisation in Italian archives are close to the sample average. With respect to the previous survey edition (Core Survey 2: 38.56 % already indexed and 8.00 % already digitised), Italy reduces the distance to its counterparts. However, it must be noted that Core Survey 2 included a larger number of observations.

The Italian archives' average share of collections already indexed is lower than 54 % (it was 40 % in Core Survey 2), and more than half of collections have to be digitised in the future. Such preliminary findings highlights that, although Italy was one of the first countries in Europe in developing digital projects, the actual extent of the adoption of such technologies in archives is lower than other European countries. The question is to ascertain whether such a gap is homogeneous or depends on the digital divide that characterizes Italy. To analyse this issue the next section will present results drawn from an original survey conducted on Italian PHAs as well as on data on digital access to Italian PHAs' websites. The extent of digital consumption (digital access) is reported in Table 2. Again, apart from the substantial heterogeneity in Europe, only offline procedures for digital access have been developed so far, while online access is still at the beginning. Italy shows, in this case, levels of provision in line with the European average.

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#### **4 Use and Drivers of Digital Technologies Diffusion: A Survey of Italian Public Historical Archives**

As previously illustrated, digital technologies can be applied for different purposes, and to a different extent in the preservation and utilisation of cultural goods. The range goes from: the use of personal computers for administration purposes; to the application of the most advanced photographic technologies in order to obtain high resolution; to digital scans of paintings and drawings; or to 3D virtualisation of archaeological sites; or to the use of advanced software for in-time data collecting data and monitoring.

In this section, we focus on two specific applications of these technologies in Italian public historical archives: the use of internet websites; and the digitisation of documents. These two applications are of primary importance in the context of conservation, preservation and utilisation of collections held by PHAs. The use of a website guarantees publicity of basic information (opening times, address, provided services, index of preserved material) and prompts the diffusion of advanced services, including digital access. Digitisation of documents prompts the development of the abovementioned national and European-level projects (*CulturalItalia*, *Europeana*, etc). To analyse the scope of these two applications we conducted an empirical analysis for PHAs operating in Italy by using different data sources: data on physical access and PHAs characteristics was drawn from the *Sistema Statistico Nazionale* (SISTAN) that include official statistics; data on the year of foundation of PHAs' websites was drawn from the *Internet Archive—Wayback Machine*, a web repository including snapshots of websites and by browsing archives' websites;

**Table 2** Extent of digital access in archives

Country	Offline	Institutional website	National aggregator	Europeana	Other aggregators	Wikipedia	Other social media
Austria	49.04	51.21	9.50	9.69	25.83	2.08	10.50
Belgium	54.67	32.00	0.00	12.50	15.00	2.50	2.50
Czech Republic	53.57	70.00	35.00	41.50	14.00	1.00	1.00
Estonia	50.33	67.43	39.63	11.29	17.17	3.83	5.50
Finland	54.25	53.35	25.26	7.86	10.94	2.00	3.33
Germany	32.79	36.39	17.21	21.34	19.80	0.24	0.33
Hungary	35.90	65.22	14.67	4.30	20.56	2.86	8.83
Iceland	6.62	46.00	16.83	2.50	2.50	0.00	0.17
Italy	32.38	72.61	20.53	12.25	14.17	1.94	9.89
Lithuania	44.58	17.41	21.96	21.04	1.71	1.15	2.43
Netherlands	36.56	53.34	21.24	16.41	10.67	1.11	2.44
Portugal	37.34	53.83	31.25	20.89	8.67	20.00	16.56
Slovenia	60.29	49.31	32.14	20.89	11.60	5.38	7.62
Spain	27.55	61.16	38.14	38.22	24.98	0.92	5.09
Sweden	47.49	64.64	35.18	28.63	10.02	3.40	2.29
Switzerland	51.50	47.63	25.00	2.56	0.08	1.13	0.77
<b>Sample average</b>	35.74	54.78	21.93	16.14	15.46	0.96	2.30

Estimated percentage of all digital objects available for type of access. National average

Source: Enumerate Core Survey 3

data on the use of internet was drawn from access statistics of all available Italian websites (83 websites in 2013), provided by the MiBACT; data for the analysis on digitisation was drawn from an original survey of 31 PHAs and local sections operating in Italy. The survey was carried out in 2014 and targeted managers of all Italian PHAs. Although the sample is larger than *Enumerate*, it is still partial and all findings reported have to be considered cautiously.<sup>13</sup> This survey provides information on the characteristics of PHAs (i.e. size, type of activity, location), typology of digital project, as well as on how decisions eventually leading to adoption were made and so on.

## 4.1 Some Preliminary Findings

We start by showing general data on PHAs (Table 3), which indicates relevant differences at the regional level in terms of dimension, thus confirming structural geographical differentiation within the country (data reported in relative terms, that is, per PHA): in general, PHAs located in the North and in the Centre of Italy are larger in terms of surface area and shelving provision, but have, on average, a lower number of workers. At the same time, the number of items per inhabitant varies across regions, showing the highest value in the Centre.<sup>14</sup> An analogous geographical divergence emerges on the demand side by comparing the number of visitors and consultations and these are considerably lower in the South. The average values for the number of years since a website has been used seem, conversely, to deny the presence of a strong digital divide on the supply side, although the average value, in this case, hides a very large variability in the sample.

## 4.2 The Use of Internet Websites

We used data drawn from website statistics to analyse the extent of the use of websites by Italian PHAs. The dataset included information on all the available PHAs websites in the MiBACT's web domain in the period 2010–2013 and several PHAs websites with different domains. Although websites are a low cost technology which spread very fast in the last decades, relatively few PHAs used them in 2010. In fact, in 2012, the MiBACT undertook several projects to support the adoption of digital technologies, including the usage of websites by PHAs. The large majority of websites have been then included in the MiBACT's domain,

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<sup>13</sup> We thank the General Direction for Italian Archives for the support in the collection of the data used in Sect. 4.

<sup>14</sup> Items include, in this Table, the number of manuscripts and documents, which represent the core of Italian archives' collection and provide a measure of the quantity of objects preserved by such institutions. PHAs conserve also negatives, microfilms, pictures, etc. and several copies and backups of the same item, which we do not consider in order to avoid biased evaluations.



**Table 3** Information on Italian PHAs' characteristics

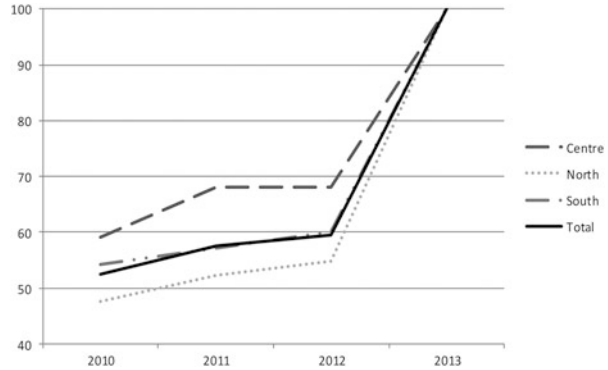
Regions and area	Number of PHAs	Number of subsections	Shelf per PHA (linear meters)	Personnel per PHA	Items (number of manuscripts and documents) per PHA	Number of visitors per PHA	Consultations per PHA	Number of years since website	Items per 1000 inhabitants
Emilia-Romagna	8	3	20,990.75	19.38	138,028.75	2659.63	740.63	4.25	254.31
Friuli VG	4	0	11,003.50	12.00	80,747.25	1565.75	714.25	4.50	264.97
Liguria	4	2	9588.75	16.75	105,583.75	2066.50	503.75	3.00	268.88
Lombardia	9	0	13,517.56	15.00	141,663.11	2843.44	915.00	1.22	131.38
Piemonte	8	1	20,206.25	17.75	146,760.50	4440.75	4426.63	4.50	269.04
Trentino-Alto Adige	2	0	7454.00	8.00	56,531.50	921.50	361.00	5.50	109.83
Veneto	7	1	19,889.43	23.29	152,576.57	4711.00	1461.71	4.00	219.89
<b>North</b>	<b>42</b>	<b>7</b>	<b>16,374.69</b>	<b>17.29</b>	<b>130,469.17</b>	<b>3136.74</b>	<b>1557.12</b>	<b>3.57</b>	<b>201.36</b>
Lazio	5	1	12,981.80	32.00	257,528.80	3723.40	1137.00	5.20	233.99
Marche	5	4	12,657.40	21.20	109,077.60	2201.80	599.60	2.00	353.84
Toscana	10	2	16,423.40	20.30	140,040.10	3093.40	1293.10	9.10	381.35
Umbria	2	5	19,609.50	54.00	153,600.50	4885.00	1176.50	1.50	347.41
<b>Centre</b>	<b>22</b>	<b>12</b>	<b>15,074.95</b>	<b>26.23</b>	<b>160,937.91</b>	<b>3196.82</b>	<b>1089.41</b>	<b>5.91</b>	<b>305.21</b>
Abruzzo	4	3	11,703.25	27.25	103,896.75	2050.25	910.25	5.50	317.90
Basilicata	2	0	9511.50	24.50	94,595.50	1653.00	493.50	0.00	327.30
Calabria	4	4	9195.00	44.50	86,820.75	2357.75	1140.50	7.75	177.27
Campania	5	0	19,803.40	39.60	165,055.60	2359.00	1392.20	7.20	143.11
Molise	2	0	5912.50	36.00	66,251.50	1143.00	470.00	0.00	422.44
Puglia	5	3	16,744.20	47.60	152,301.80	3051.80	1536.80	7.60	187.91
Sardegna	4	0	4031.75	15.50	86,124.00	1590.50	431.75	6.50	210.14

Sicilia	9	5	13,092.33	27.44	114,337.89	1381.89	494.89	0.44	205.69
<i>South</i>	<b>35</b>	<b>15</b>	<b>12,318.20</b>	<b>32.94</b>	<b>115,568.23</b>	<b>1973.63</b>	<b>884.46</b>	<b>4.49</b>	196.17
All sample	<b>99</b>	<b>34</b>	<b>14,651.75</b>	<b>24.81</b>	<b>131,971.99</b>	<b>2738.89</b>	<b>1215.37</b>	<b>4.41</b>	219.83

Regional and Macro-area average—year 2013

Source: SISTAN

**Fig. 2** Percentage of PHAs having websites. 2010–2013.  
 Source: our computation



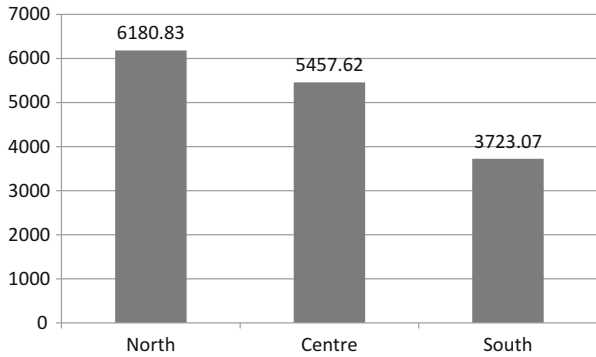
*beniculturali.it*. As a consequence, the number of PHAs using website dramatically increased after 2012 (Fig. 2).<sup>15</sup>

However, the presence of a website is only a rough measure of the use of digital technologies for at least two reasons: it does not say anything about the extent of digitisation or digital indexing; and a website can be used to provide a potentially wide range of services, from general information on the archive (address, opening times, etc.) to the direct provision of services such as digital access. In fact, strong geographical differences emerge in the website usage as shown in Fig. 3, which displays the number of website visitors per PHA in the three areas in 2013: visitors are defined as uniquely identified client (IP) who accessed at least a page in that period. Although it represents a demand-side measure, it should be noted that it depends strictly on the amount and quality of pages and services provided by the website.

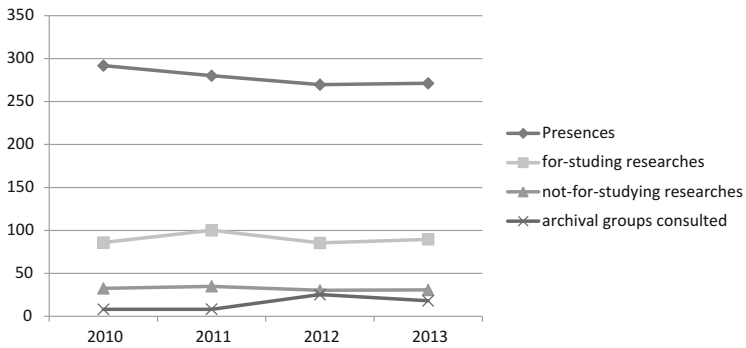
As previously mentioned, digital projects undertaken by European and national institutions aim to enhancing universal access to cultural goods, through increasing physical and digital access. To analyse whether the introduction of digital technologies has been effective in this sense we look at the dynamics of physical (Fig. 4) and digital (Fig. 5) access in Italian archives.

We use four measures of physical access: number of presences, number of for-studying and not-for-studying consultations and number of archival groups consulted; and two measures of digital access: the abovementioned number of visitors and the number of visits, the latter referring to visitors accessing at least a page and who did not access other website pages in the previous 60 min. Comparing Figs. 4 and 5, it appears that physical access did not change notably while digital access increased dramatically in total values. One may claim that such dynamics imply a more diffuse access to cultural products preserved by Italian PHAs. However, the reader should be reminded that online access to cultural material is still rather limited. Therefore, the results could be due to the increasing number of websites rather than an increasing supply of digitised material.

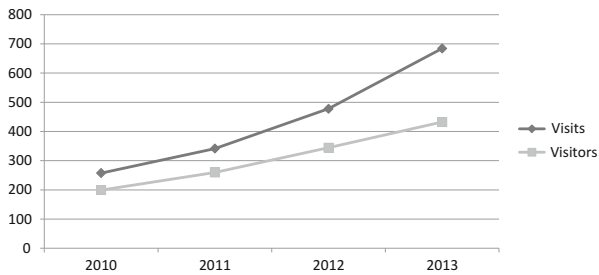
<sup>15</sup> Note that the number of PHAs did not change in this interval.



**Fig. 3** Website visitors per PHA—PHA average value per area—2013. *Source:* our computation on websites’ access statistics

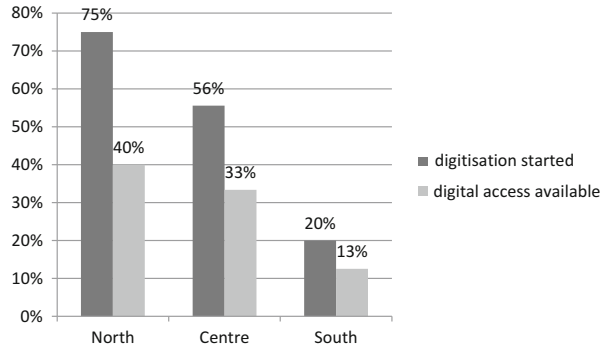


**Fig. 4** Physical access—2010–2013—Total values in thousands. *Source:* our computation on SISTAN data



**Fig. 5** Digital access—2010–2013—Total values in thousands. *Source:* our computation on websites’ access statistics

**Fig. 6** Digitisation and digital access. Percentage by area. *Source:* our computation



### 4.3 The Extent of Digitisation in Italian Archives

To investigate the actual scope of content digitisation in Italian archives, we use data drawn by the original survey that we conducted in 2014 that includes 31 observations. Respondents are quite homogeneously distributed in the three geographical macro-areas and represent 23 % of PHAs and local subsections in Italy (24 % of the PHAs in the North, 26 % of those located in the Centre, and 20 % of those in the South). Figure 6 shows the percentage of PHAs that started a process of digitisation and allows for digital access online as area percentage. The adoption of digital technologies in Italian PHAs clearly appears not to be homogeneous between these areas: digitisation reaches 75 % in the Northern area but digital access is still very limited in the country overall.

A digital divide therefore exists in the provision of digital services and, more significantly, in the progress that PHAs have made in starting the process of digitisation of the items they preserve. Note that this is consistent with previous findings on geographical differences across areas in website visits (Fig. 3). At the same time differences also occur in physical access (see columns seven and eight in Table 3). Not only the quality of PHAs collections and the extent of their digitization but also the education level, income and social capital are relevant to explain the above differences.

## 5 Conclusions

This chapter highlights several aspects concerning the introduction of digital technologies in the management of Italian PHAs and in the conservation, preservation and utilisation of their cultural heritage. From a theoretical point of view, the characteristics of PHAs raise interesting questions regarding the definition of efficiency condition transforming a rival and excludible good into a potentially pure public good. An additional important issue is whether digital access is either a complement or substitute to the real one.

Here we also investigate issues related to ICT for Italian PHAs. The analysis does not allow us to draw clear-cut conclusions because of the quantity and the quality of available data but, nevertheless, some tentative conclusions can be drawn. In general, the spread of ICT in European cultural institutions is still limited although the first projects started several years ago and several programs at continental and national level have been launched since then. The absence of an adequate system of incentives may help to explain the slow advance in the production of metadata by cultural institutions and their provision to national aggregators and from them to *Europeana*. Moreover, from a different perspective, recent severe budget constraints in the public sectors in the EU may have played a relevant role in slowing down ICT implementation that, conversely, would require substantial investments. Furthermore, the fragmentation of available resources across several programs, not always sufficiently coordinated, may undermine their effectiveness.

The impact of the abovementioned issues is likely to be even more critical if we consider the peculiarities of the ICT implementation. In fact, our analysis highlights that the introduction of ICT is a long-term stepwise process involving the coordination of several actors operating in different institutions and levels. This is particularly true for PHAs, which were shown to be resistant to adapting their practises to a changing environment of ICT. Regarding this issue, we find that only basic technologies, such as indexing, have been introduced in the management of PHAs while more complex advancements, such as digitisation and on-line access are still at a preliminary stage. This happened in Europe as much as in Italy, where the MiBACT supported the spread of ICT in PHAs, leading mainly to the general adoption of some unsophisticated practices, such as basic websites.

However, Italy is characterized by considerable geographical differences in supply and demand. Differences emerge on the demand side, in terms of number of visits and visitors to archives' websites. This might be just partially connected with geographical gaps in economic and social conditions, with a relevant role played by human capital accumulation, but also with the differences in the provision of digital services and in the extent of digitisation of PHAs' collections. These differences call for enhancing the effectiveness of the existing programs and strengthening the system of incentives toward digitisation. Furthermore, consumption of digital services has not increased substantially whereas the intensity of usage has indeed grown, mainly because of the proliferation of websites. As for physical consumption, this stays virtually unaffected. The fact that digital services are yet to be developed in a meaningful way does not allow us to draw conclusions on the relationship between physical and digital utilisation for Italian archives.

As a final point we would stress the importance of data collection as a tool for monitoring the progress in the implementation of ICT in the field of cultural heritage management. As ICTs requires a radical change in practises and considerable investments, policy-makers need to have complete and up-to-date information to fine-tune policies and develop effective programs. The limited participation to *Enumerate*, even reduced in the last edition, suggests that voluntary provision of data is not effective, at least in the absence of a system of incentives. This calls for incorporating data collection in the design of new programs to guarantee a complete flow of information during the implementation stage.

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# Copyright, Cultural Heritage and Photography: A Gordian Knot?

Frederik Truyen and Charlotte Waelde

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## Abstract

EuropeanaPhotography was a project funded by the European Commission with the remit to digitise photographic collections from museums, libraries, archives and photograph agencies, and to make the digitised images available via the European portal, Europeana. The collections spanned 100 years of photography from 1839 to 1939 and many of the photographs depicted individuals and family life during these 100 years. In this contribution we explore the experiences of members of the consortium as they sought to navigate what are considered to be the complexities of copyright as it applies to digital photography. Of particular concern to many members of the consortium was (a) the desire to protect (family) privacy against commercial exploitation; (b) a concern to safeguard the authenticity and integrity of our cultural heritage; and (c) the perceived need to protect existing business models. This chapter discusses the challenges that members of the consortium faced and how they dealt with the challenges as they arose. Finally, the chapter suggests that the copyright strategy developed for the RICHES project that encourages cultural heritage institutions to think about their digitisation programmes first through the human rights lens to culture and cultural rights, and then ask how copyright may be used as a tool to meet those aims. While it is not suggested that such an approach could resolve all of the copyright conundrums that arise in this sector, what it could do is to help stakeholders to think differently about issues involved.

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## 1 Introduction

Copyright law underpins a host of creative activities. From artworks through to photographs and computer software, copyright laws have been developed over many years with a view to incentivising creative activities. The theory is that because the author is given exclusive rights over exploitation of the subject matter of the right, so she can trade those rights with others in return for financial or other gain. So, according to Anglo-American theory, she has the economic incentive to create and invent more. While continental Europe also sees the economic incentive of copyright to be important, equally, if not more important are the moral rights—*droit moral* in France and *Urheberpersönlichkeitsrecht* in Germany—which spring not from economic concerns, but from the inalienable link between the work and the personality of the author and which reflect that inalienable link.

While the true effect of the economic incentive embedded in copyright may be debated among scholars, there is concern over the reality of the ways in which the law impacts on activities within its purview, including those undertaken by libraries, museums and archives, organisations which face specific challenges most particularly when seeking to digitise cultural heritage collections and to make them available for re-use. These challenges will be investigated in this paper with specific reference to the activities undertaken by a European funded project: *EuropeanaPhotography*.<sup>1</sup> *EuropeanaPhotography* (EUROPEAN Ancient PHOTOgraphic vintaGe repositoRies of DigitAized Pictures of Historic qualitY) was a project with 19 members from 13 member states of the EU encompassing highly prestigious photographic collections from museums, libraries, archives and photograph agencies. The collections covered 100 years of photography from 1839 to 1939. The project was funded within the European Competitiveness and Innovation framework programme 2007–2013 and ran for 36 months, from 1 February 2012 to 31 January 2015. Its activities continue under the *Photoconsortium* banner.<sup>2</sup>

*EuropeanaPhotography* is not the only publicly funded project to have encountered challenges with copyright law. Other EC-funded projects also aimed at the creative reuse of cultural heritage have tackled copyright related issues. These include *EuropeanaSpace*<sup>3</sup> and *RICHERS*<sup>4</sup> both of which have interesting experiences to bring to the copyright and cultural re-use debate and both of which will be noted at appropriate points in this chapter.

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<sup>1</sup> <http://www.europeana-photography.eu>

<sup>2</sup> <http://www.photoconsortium.net>

<sup>3</sup> <http://www.europeana-space.eu>

<sup>4</sup> <http://riches-project.eu>

## 2 The Copyright Framework

There is not one single international copyright law, but a web of laws at international, regional and domestic levels. At international level, the oldest treaty is the Berne Convention for the Protection of Literary and Artistic works 1886. This treaty, which specifies certain minimum standards of copyright protection which signatory states must implement in their domestic laws, was agreed by the international community in response to the ‘pirating’ of the works of, among others, Charles Dickens.<sup>5</sup> Dickens, whose works were protected in the UK, found that copies were being made in the US. Dickens could not stop these copies being made because copyright law is territorial: in other words, copyright law is only effective in the territory in which it is enacted. So the current UK copyright law—the Copyright Designs and Patents Act 1988 (as amended) (CDPA) is only effective in the UK (and the territories to which it is extended by statutory instrument); the French Intellectual Property Code of 1 July 1992 extends to French territory; the German Copyright Act of 9 September 1965 (as amended) extends to Germany. The Berne Convention introduced the principle of national treatment. This means that every state that signs up to the Convention will treat the nationals of every other signatory state in the same way as they treat their own nationals. So, for example, both France and the UK are signatories to Berne. Therefore a French national, with regard to their copyright, will be treated in the same way in the UK as a UK national. So if a French author has her copyright infringed in the UK, she can sue in the UK in the same way that a UK national can. There are currently 168 countries signatory to the Berne Convention and who must incorporate the minimum standards of protection of copyright into their laws as mandated by the Convention. In this way there is a web of similar laws around the world for the protection of authors and their copyrights.

The Berne Convention is not the only international instrument. Other important treaties include the WIPO Copyright Treaty 1996 (WCT) and the Agreement on Trade Related Aspects on Intellectual Property Rights 1994 (TRIPs). The WCT was negotiated and agreed in response to the advent of digitisation and the internet and the challenges that brought for new ways in which works protected by copyright could be disseminated and the attendant difficulties for enforcement of rights. The Treaty includes a new ‘communication to the public’<sup>6</sup> right for rights holders, and introduced technical protection measures and anti-circumvention rules.<sup>7</sup> TRIPs is a trade treaty which, for the first time, linked copyright with trade. Perhaps the most graphic example of this is the absence of moral rights from its provisions and the focus on economic rights.

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<sup>5</sup> Peter K. Yu, *Intellectual Property at a Crossroads: Why History Matters*, 38 *Loy. L.A. L. Rev.* 1 (2004)

<sup>6</sup> WCT Article 8.

<sup>7</sup> WCT Articles 11, 12.

At European level there is a range of Directives applicable to copyright,<sup>8</sup> the most important of which for the purposes of this chapter are the Information Society Directive<sup>9</sup> (Infosoc Directive) and the Orphan Works Directive.<sup>10</sup> The Infosoc Directive among other things contains the European interpretation of the provisions of the WCT including measures relating to the new economic right of communication to the public and the protection of technological protection measures. The Orphan Works Directive is the European response to the challenges posed by works protected by copyright, but for which the owner of the copyright cannot be found even after a diligent search.

The obligations to be found in International Treaties and Conventions are generally implemented into national legislation via national law. So for example in the US there is the general US Copyright Law<sup>11</sup> as well as the Digital Millennium Copyright Act of 1998.<sup>12</sup> (DMCA). The US implemented the provisions of the WCT in the DMCA. In Europe, the obligations to be found in international instruments are often translated into a Directive that in turn is implemented into national law. So the provisions of the WCT, for example, were incorporated in the Infosoc Directive which member states then implement in domestic legislation. In the UK for example, this was done by amendments to the CDPA.

There are a number of notable points that arise from this web of international, European and national measures relating to copyright. The first is that while economic rights are present in all of the measures, moral rights are not. TRIPs, as noted, has no provisions on moral rights within its Articles. Moral rights also differ markedly as between territories. While the US has some rights within its domestic law that are akin to copyright, the general consensus is that its domestic law does not contain even the minimum standards in relation to moral rights that are found in the Berne Convention. These are found in Article 6 bis of Berne and are:

*Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation*

These rights are to last at least as long as economic rights in works.<sup>13</sup> Similar to the US, the moral rights in UK domestic legislation are generally considered to be

<sup>8</sup> There are copyright directives on: Management of Copyright and Related Rights; Copyright in the Information Society; Orphan works; Rental and lending rights; Term of Protection; Satellite and Cable; Resale right; Protection of Computer Programs; Protection of Databases; Protection of semi-conductor topographies; Enforcement.

<sup>9</sup> The Directive on the harmonisation of certain aspects of copyright and related rights in the information society (2001/29/EC).

<sup>10</sup> Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on certain permitted uses of orphan works.

<sup>11</sup> <http://copyright.gov/title17/>

<sup>12</sup> <http://www.copyright.gov/legislation/dmca.pdf>

<sup>13</sup> Berne Convention Article 6 bis.

weak. They include the right to object to derogatory treatment and to claim authorship.<sup>14</sup> However, they have to be asserted and may be waived. Other countries laws contain moral rights provisions that go well beyond the standards in these measures—France and Germany being examples. In France moral rights include the rights of divulgation, attribution and integrity,<sup>15</sup> while in Germany they include right of dissemination<sup>16</sup>; the right of attribution<sup>17</sup>; the right of integrity<sup>18</sup>; and the right to access copies of the work.<sup>19</sup> One of the prime results of this is the enduring ‘split’ ownership of works protected by copyright where there are both economic and moral rights. Economic rights can be assigned and/or licensed: that is the way in which the incentive operates as described above. But moral rights cannot be assigned as they attach only to the author. Furthermore, in many countries moral rights last as long as the economic rights,<sup>20</sup> while in other countries, moral rights are perpetual.<sup>21</sup> All of this means that in a work protected by copyright there is ‘split’ ownership: the moral rights in a work vest only in the author while the economic rights may initially vest in the author but then can belong to a third party through assignation or licensing. If one then considers that ownership of the tangible work—the book; the painting; the film;—may then belong to someone else, so there may be three rights in a single work: the copyright owner, the moral rights belonging to the author; the tangible copy to a third party. Having split ownership, most particularly as between the economic and moral rights, means that the economic rights could be challenging to exploit as the moral rights of the author must always be considered on commercial exploitation. These thorny issues go some way to explaining why there has been no attempt at European level at harmonisation of moral rights. The passion generated by moral rights—and moral right like considerations—is well illustrated in the EuropeanaPhotography study discussed below.

A final introductory point needs to be made about the copyright framework: although the international and regional legislative instruments serve to approximate laws as between different territories and members states, the laws within individual territories do differ in form, substance and interpretation. The copyright laws—which are territorial as explained above—are interpreted and litigated before national courts where interpretations can and do vary. Certainly there are centralising influences: the Court of Justice of the EU (CoJ) for instance is the superior court in matters of interpretation of European Directives, but that court only has a say when a question is referred to it.<sup>22</sup> And when the CoJ has interpreted

<sup>14</sup> See Generally CDPA Chapter IV Moral Rights.

<sup>15</sup> French Intellectual Property Code Art. L. 111-1.

<sup>16</sup> German Copyright Act Art 12.

<sup>17</sup> German Copyright Act Art 13.

<sup>18</sup> German Copyright Act Art 14.

<sup>19</sup> German Copyright Act Art 25.

<sup>20</sup> e.g. in the UK CDPA s 86.

<sup>21</sup> e.g. in France, French Intellectual Property Code Art. L. 121-1.

<sup>22</sup> When that happens is the subject of carefully crafted rules.

any particular question, the judgment often then has to be implemented by the national court. The way the judgment is implemented nationally may vary as between jurisdictions. All of this means that copyright law can and does vary not insignificantly as between territories, including those of Member States of the EU. This Gordian Knot of copyright laws and underlying cultural and socio-economic differences make pan-European projects which have high dependency on copyright—such as EuropeanaPhotography—challenging to implement in practice.

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### 3 Copyright, Cultural Heritage and Photographs

Three broad themes recur in the discussion around the re-use of digitised photographs that contain family stories and which are considered to be a part of our cultural heritage.

These are concerns for the protection of:

- (a) (family) privacy against commercial exploitation;
- (b) the authenticity and integrity of our cultural heritage;
- (c) existing business models of cultural institutions.

In each case copyright is used as the means to control the re-use of the digitised photographic image albeit for different purposes. In the case of a and b, and even where the image might be in the public domain, commercial re-use is often prohibited to meet these goals and moral rights may be claimed; in the case of c. the business model is often the means through which the digitisation and curation of photographs is paid for and copyright may be claimed in the digitisation process. Each of these will be further explored below by reference to the experience of EuropeanaPhotography.

#### 3.1 Copyright and Photography

The interrelationship between copyright and photographs in the cultural heritage sector raises two key questions. The first is as to whether copyright protects photographs. As will be seen, the question is not as straightforward as might be expected. The second key question is as to whether the digitisation processes results in a new copyright in the digitised photograph.

Copyright and photographs have something of an uneasy relationship. While photographs are often included in domestic legislation in the list of works that are protected by copyright<sup>23</sup> what has troubled policy-makers, commentators and

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<sup>23</sup> e.g. CDPA s 4.2 which defines photograph as 'a recording of light or other radiation on any medium on which an image is produced or from which an image may by any means be produced, and which is not part of a film.'

courts over the years is the level of originality that the law requires for the subsistence of copyright and how this applies to photographs. While common law countries such as the UK have historically had a very low standard of originality for the subsistence of copyright in photographs,<sup>24</sup> this has changed, at least within Europe, where the standard for protection is now one of ‘intellectual creation’. This standard has been harmonised in Europe as a result of measures introduced in the Term Directive in 1993.<sup>25</sup>

Article 6 of that Directive provides that:

*Photographs which are original in the sense that they are the author's own intellectual creation shall be protected ... No other criteria shall be applied to determine their eligibility for protection.*

Article 6 however goes on to provide that Member States may provide for the protection of other photographs. So there may be protection for two levels of photographs in Member States—ones that meet the standard of intellectual creation and are thus protected by copyright, and ones that do not but can be protected by some other unspecified (*sui generis*) regime. The level of originality required in a portrait photograph was considered by the CoJ in *Eva-Maria Painer v Standard VerlagsGmbH*.<sup>26</sup> Here the issue concerned photographs of a child who was abducted in 1998 when she was 10—Natascha K. Photographs of Natascha, taken by Ms Panier, were used in connection with an extensive police search. When Natascha escaped her captor in 2006 Ms Panier’s photographs were used, without her permission, by a number of newspapers. One argument by the newspapers was that no permission was needed for their use because there was no originality, in the European sense, in portrait photographs. The CoJ disagreed. The Court pointed to the requirement of intellectual creativity in Article 6 of the Term Directive and stated that an intellectual creation is an author’s own if it reflects the author’s personality. That would be the case if the author were able to express her creative abilities in the production of the work by making free and creative choices. In a portrait photograph this would be shown at various points: in the preparation phase the photographer could choose the background, the pose and the lighting. When taking the photograph she could choose the framing, the angle of view and the atmosphere. And when selecting shot the photographer could choose from a variety of developing techniques and software programs. In so doing the photographer can stamp her personal touch on the work.<sup>27</sup> Portrait photographs can thus be protected by copyright, as can other photographs be so long as the necessary element of intellectual creativity is present.

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<sup>24</sup> *University of London Press Ltd v. University Tutorial Press Ltd* ([1916] 2 Ch. 601).

<sup>25</sup> Council Directive 93/98/EEC of 29 October 1993 harmonizing the term of protection of copyright and certain related rights.

<sup>26</sup> Case C-145/10.

<sup>27</sup> *ibid* paras 85–93.

But what of a photograph that seeks to replicate exactly existing artifacts which may themselves be in the public domain? This question is also the subject of quite some debate (and controversy). A key US case, *Bridgeman Art Library v. Corel Corp.*,<sup>28</sup> concerned photographic images of public domain works made by Bridgeman and in which Bridgeman claimed it owned the copyright. These were copied by Corel. Kaplan, the judge in the case, cited the main copyright treatise by Nimmer in the US that stated that a photograph lacks originality where ‘a photograph of a photograph or other printed matter is made that amounts to nothing more than slavish copying’. Unsurprisingly there was an outcry from many cultural heritage institutions after this finding and many attempts to limit its impact because of the reliance that such institutions place on the licensing of digital images for revenue. The situation may be different in Europe although it is far from clear especially where the intent is to make a ‘true’ copy of the original. In a judgment of the Austrian Supreme Court concerning photographs of grape varieties, the court said:

*What is decisive is that an individual allocation between photograph and photographer is possible in so far as the latter’s personality is reflected by the arrangements (motif, visual angle, illumination, etc.) selected by him. Such freedom of creation does certainly exist not only for professional photographers with regard to works claiming a high artistic level, but also for a lot of amateur photographers, who take pictures of everyday scenes in the form of photos of landscapes, persons and holiday pictures; also, such photographs shall be deemed photographic works, as far as the arrangements used cause distinctiveness. This criterion of distinctiveness is already met, if it can be said that another photographer may have arranged the photograph differently [. . .]. The two-dimensional reproduction of an object found in nature is considered to have the character of a work in the sense of copyright law, if one’s task of achieving a representation as true to nature as possible still leaves ample room for an individual arrangement [. . .].*<sup>29</sup>

What is going to be key in deciding the originality—and thus the copyrightability—of photographs which seek to replicate faithfully public domain artifacts, is whether there is room for intellectual creativity allowing the author to stamp her own personal touch on the work.

So what of the digitisation process? Does this give rise to a new copyright in the digitised photograph? The majority of the partners in EuropeanaPhotography argued that the high-end digitisation techniques that were applied to the original photographs did create a new copyright. Their view was that the digital master obtained from the original yields an object with distinctive new properties. Given the effort required in the digitisation process—for instance manipulating the glass plates in such a way that the maximum amount of information is captured and rendered—substantial investment in equipment and expertise is necessary, all of which add to the costs of digitisation.

<sup>28</sup> 36 F. Supp. 2d 191 (S.D.N.Y. 1999).

<sup>29</sup> *O (Peter) v F KG* ([2006] ECDR 9) para 2.1.



But this argument seems to conflate two legal tests. One is the originality requirement for the subsistence of copyright as discussed above. The other is the investment criterion that is at the heart of other—mostly *sui generis*—intellectual property rights. The main one is the *sui generis* database right,<sup>30</sup> where there exists the right to control extraction and re-utilisation of the whole or a substantial part of the contents of a database where there has been investment in the obtaining, verification or presentation of the content.<sup>31</sup> What this right seeks to protect is the investment that goes into the compilation of the database<sup>32</sup>: the level of originality is irrelevant. However, and while an investment right may seem the most appropriate form of right for the digitisation of photographs, it is not one that is currently available in all countries. Some Member States have included measures protecting non-original photographs under the *sui generis* provisions discussed above,<sup>33</sup> which may help to protect the investment in digitisation.

So for EuropeanaPhotography, the position as regards copyright in photographs may be one that seems unanticipated by the team. The assumption is that some of the ‘original’ photographs used in the project are in the public domain. In other words, the author will have died more than 70 years ago and copyright will have ceased to exist in the photographs. Where photographs were taken of the original, and the intention was to be as faithful as possible to the original, then no copyright would subsist in the copy. The digitisation process would not result in a new copyright. The position with moral rights will differ depending on the jurisdiction. As noted above, in some jurisdictions moral rights last only as long as the copyright; in others they are perpetual.

How then can EuropeanaPhotography meet the three strategic goals outlined above—those of protecting (family) privacy against commercial exploitation; the authenticity and integrity of our cultural heritage; and existing business models? In the next section Europeana’s rights labelling campaign will be noted along with the EuropeanaPhotography strategy of using these labels to meet these aims and the problems as they emerged in the project.<sup>34</sup>

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<sup>30</sup> Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases (Database Directive).

<sup>31</sup> Database Directive Art 7.

<sup>32</sup> Database Directive Recital 7.

<sup>33</sup> Germany, Austria, Spain, Italy and the Scandinavian countries. See T Margoni, ‘The digitisation of cultural heritage: originality, derivative works and (non) original photograph’, Institute for Information Law (IViR)—Faculty of Law University of Amsterdam available at <http://www.ivir.nl/publicaties/download/1507>.

<sup>34</sup> The final report of EuropeanaPhotography can be found here: [http://www.photoconsortium.net/wp-content/uploads/2015/04/D1-2-EuropeanaPhotography-Final-Report\\_DEF\\_revised.pdf](http://www.photoconsortium.net/wp-content/uploads/2015/04/D1-2-EuropeanaPhotography-Final-Report_DEF_revised.pdf)

## 4 Rights Labelling

Europeana is the publicly funded portal that gives access to digital images of cultural heritage resources from throughout Europe. It describes itself as ‘the trusted source of cultural heritage brought to you by the Europeana Foundation and a large number of European cultural institutions, projects and partners.’<sup>35</sup>

One of the essential steps in making digital objects available is the need to associate metadata with the object. Metadata are descriptive data about the primary object; they are the ‘glue’ that links digital data. Metadata ensure that objects can be identified, retrieved and shared. Metadata would include information such as the creator of the object—in the case of EuropeanaPhotography a photograph, a description of its subject, the time when the photograph was taken, the place, possibly geolocation references, and perhaps some photographic qualities of the image, such as the ISO value, the diaphragm of the camera and the shutter speed. This could go as far as including the serial number of the camera.

For information systems to manage those who are given permission to use the images, and under what conditions, it is increasingly important to codify this information as metadata. This was the route taken by Europeana in its approach to rights labelling.

For ICT automation and interoperability, software must be permitted to access the databases holding the objects to query for specific content. In this way the user can discover the rights status and permissions. Application developers can then create new functionalities using the collections made available through Europeana and on other platforms knowing the copyright permissions being granted. Museums and archives can enhance the findability and visibility of their collections which could in turn attract extra footfall to the institution.

Europeana’s Rights Labelling Campaign<sup>36</sup> was launched to ensure that digital objects found on and via on Europeana have a clear rights status. One reason for this campaign was to support Europeana’s change of strategic direction from a portal to a re-use platform the aim of which is to encourage creative reuse of the content. Where the access and reuse is partly automated, such as in applications that would integrate this content, software developers need a simple way to determine which content is freely available for (commercial) reuse.<sup>37</sup>

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<sup>35</sup> <http://www.europeana.eu/portal/aboutus.html>

<sup>36</sup> <http://pro.europeana.eu/blogpost/europeana-launches-rights-labelling-campaign>

<sup>37</sup> <http://pro.europeana.eu/publication/make-the-beautiful-thing-business-plan-2015>

The labels (or rights statements<sup>38</sup>) were developed in collaboration with Creative Commons.<sup>39</sup> In addition to the seven CC licenses,<sup>40</sup> a Public Domain Mark<sup>41</sup> (PDM) has been added to indicate that a work is in the public domain. This differs from the CC0 license in that when a work is in the public domain, no-one can claim the copyright. It would thus make no sense for the work to be dedicated to the public domain. In addition there are the following labels: out of copyright—non-commercial reuse label for those collections which may be in the public domain but have been digitised under arrangements which give exclusive use for a set period; rights reserved—free access where it does not cost to access content but copyright may restrict re-use; rights reserved—paid access where access has to be paid for; orphan work—where the right owner cannot be located after a diligent search; and unknown—where the content provider does not know the copyright status of the work.

Europeana gives instructions as to the metadata to be added about the rights status of the object (in the edm:rights field). For example, for the public domain mark the metadata reads: <edm:rightsrdf:resource=["http://creativecommons.org/publicdomain/mark/1.0/"](http://creativecommons.org/publicdomain/mark/1.0/)>

The metadata themselves are CC0 as laid down in the Data Exchange Agreement entered into with contributors before Europeana accepts content.<sup>42</sup> Contributors also grant Europeana the right to publish an image preview.<sup>43</sup>

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## 5 The Public Domain Mark (PDM)

An attempt to value the public domain has been documented in the work of Simon Tanner, 'Measuring the Impact of Digital Resources: The Balanced Value Impact Model'.<sup>44</sup> In this study, Tanner shows how giving public access to holdings by publishing them as digital resources can create new business models for museums, creative industries, heritage organisations and archives. The study also highlights the often hidden costs of charging for the licensing of digitised works.

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<sup>38</sup> <http://pro.europeana.eu/web/guest/available-rights-statements>

<sup>39</sup> <http://creativecommons.org/>

<sup>40</sup> The Creative Commons CC0 1.0 Universal Public Domain Dedication (CC0); Creative Commons—Attribution (BY); Creative Commons—Attribution, ShareAlike (BY-SA); Creative Commons—Attribution, No Derivatives (BY-ND); Creative Commons—Attribution, Non-Commercial (BY-NC); Creative Commons—Attribution, Non Commercial, ShareAlike (BY-NC-SA); Creative Commons—Attribution, Non-Commercial, No Derivatives (BY-NC-ND).

<sup>41</sup> <http://creativecommons.org/publicdomain/mark/1.0/>

<sup>42</sup> <http://pro.europeana.eu/page/the-data-exchange-agreement>

<sup>43</sup> Note also the Out of Copyright Calculator which helps to determine whether a work is in the public domain <http://www.outofcopyright.eu>

<sup>44</sup> Simon Tanner, 'Measuring the Impact of Digital Resources: The Balanced Value Impact Model.' King's College London, October 2012. Available at: [www.kdcs.kcl.ac.uk/innovation/impact.html](http://www.kdcs.kcl.ac.uk/innovation/impact.html)

With the PDM, Europeana aims to encourage contributors to share their content in ways that it can be freely re-used. In EuropeanaPhotography, more than 95,500 of the 450,000 images contributed to Europeana are labelled with the PDM, representing more than 20 % of the overall number. The project experienced excellent exposure of these collections through the Europeana platform, notably with the Lithuanian Art Museum collection.<sup>45</sup> This experience bears out the findings of work done by Tanner noted above.

Despite these successes, members of the EuropeanaPhotography consortium were hesitant about using the PDM. As noted above, monetising images, including public domain images, through licensing, is often the means through which the digitisation and curation of photographs is paid for by heritage institutions. In addition, family photographs, which are of the utmost importance in building histories of how people lived, are often donated with a condition prohibiting commercial re-use, their donors fearful of seeing ancestors images used in advertising campaigns.

## 5.1 Monetising Images

As noted above, licensing of digital images from photographic collections is one way in which the collections can be maintained. In addition, many photographic agencies depend on licensing digital copies for their livelihood. Bearing in mind that the images collected and made available by EuropeanaPhotography mostly have people as their subject matter, meaningful re-use of the images generally requires direct contact with the archives in which the photographs are kept, and with the relatives of the subjects of the photographs with the aim of gathering the stories of and behind the people. In other words, re-use often requires a relationship between the re-user of the photograph and the organisation and the individuals who have knowledge of its subject matter. A concern of EuropeanaPhotography is that app developers working with content sourced via Europeana would be unlikely to spend time cultivating these relationships, and that any re-use may be as background material only, unlikely to generate significant value.

For EuropeanaPhotography, and its successor, Photoconsortium, one of the main advantages of making content available via Europeana is to develop the profile of their organisation through which relations can be built with researchers, the general public, developers and other industries. When access to their content is anonymous and automated, this negates this potential advantage, and adds to the concern that any benefit to come from new business models to emerge from developing apps would be for the app developers and not for the content providers that make their content freely accessible. EuropeanaPhotography thus saw limited return on the investment expended in developing metadata for rights labelling, it being unclear

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<sup>45</sup> <http://pro.europeana.eu/blogpost/how-the-lithuanian-art-museum-shares-their-culture-with-the-world>

what this process added to the business model of the organisations involved, nor to end users who may re-use content irrespective of the licence associated with it. The clear message to come from EuropeanaPhotography was that to stimulate reuse that adds economic value, business models should be developed in which current copyright holders and cultural heritage institutions that care for the content can participate. Through participating in EuropeanaSpace, and engaging in pilot demonstrators, hackathons, incubators and monetising events, EuropeanaPhotography is aiming to develop just such participatory models.

## 5.2 Control by Heirs and Third Parties

It was noted above that moral rights exist in most jurisdictions, and in some countries are perpetual and so can be called upon by the heirs of the author to, among other things, exert control over certain uses that might be considered derogatory to the reputation of the author. Furthermore, in other countries special rules—beyond moral rights—exist to protect valuable works of art, including major photographic collections.<sup>46</sup> The aim of this type of legislation is to protect the cultural and moral integrity of important works that are kept in national collections. This was the law that was called on by an Italian minister in response to a commercial company's use of a photograph in an advertisement of Michelangelo's David carrying an assault rifle.<sup>47</sup> The limitation of these 'special' laws is that they will be enforceable only in the territory in which they are enacted. Unlike copyright, they are not a part of the 'international' web of laws discussed above.

It can be seen from this discussion that using a PDM mark could cause users to erroneously believe that a work can be re-used without limitation: which is not the case. The PDM mixes two concepts: a legal fact attached to the digitised work, that a work is in the public domain; and reuse permission, the possibility of reusing the digital object without restriction. This may be misleading because the work may continue to be subject to the moral rights of the author. It is notable that the PDM rights label associated with Europeana states that 'Works that are labeled as being in the public domain can be used by anyone without any restrictions.' In addition there is a link to the CC public domain mark which states 'In some jurisdictions moral rights of the author may persist beyond the term of copyright. These rights may include the right to be identified as the author and the right to object to derogatory treatments.' In addition Europeana has guidelines on the use of public domain works that include such exhortations to 'give credit where credit is due', and 'protect the reputation of creators and providers'.<sup>48</sup> Thus the PDM licence is subject to moral rights, but the bare statement on free-re-usability by Europeana

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<sup>46</sup> Articles 10 and ff. Legislative Decree 42/2004 of the Italian Code of Cultural Heritage and Landscape under Legislative Decree No. 42, dated January 22, 2004 as amended.

<sup>47</sup> <http://ipkitten.blogspot.be/2014/03/exclusive-rights-in-classical-art-works.html>

<sup>48</sup> <http://www.europeana.eu/portal/rights/pd-usage-guide.html>

could be misleading for the user if she does not follow the links to the fuller explanations.

There are other challenges with the PDM mark. Given the general rule that published works come into the public domain after the death of the author plus 70 years, works keep falling into the public domain, which then becomes a moving target. Information systems that indicate the rights status of a work need to recalculate once a year to decide whether a work should be relabelled with the PDM. The task is not helped by the complexity of the legislation meaning that there is no algorithmically certain way to determine this status (tools like *outofcopyright.eu* are not 100 % accurate). There is also the philosophical question of who should take responsibility of attributing the PDM, if no one owns the copyright. If Europeana develops an algorithm that can determine which works are in the public domain, would Europeana have the authority to attach the PDM to works, even if the provider attached another label? If no-one owns the rights, who should care for them? Is this a task for public museums and institutions?

For a consortium as diverse as EuropeanaPhotography, one of the strengths is that it gathers organisations of different forms and with a range of differing core missions such as universities, photo agencies, museums and archives. These organisations, united by the common goal of caring for photographic heritage, found that it was not possible to have a ‘one-size-fits-all’ solution to rights management. It was accordingly decided that the choice of the rights label would remain with every partner, and would not be made or enforced at the consortium level with many in the consortium noting a preference for a label that precludes commercial reuse explicitly.<sup>49</sup>

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## 6 Out of Copyright: No Commercial Reuse

Along with the launch of the rights labelling campaign, Europeana introduced a new label, tagged OOC—NC, for Out Of Copyright—No Commercial Reuse.<sup>50</sup> Such a label is a solution for those libraries and archives that have made an agreement with private organisations which gives to the private partner exclusive exploitation rights for a specific duration in exchange for making the digitisation investment. This is precisely the arrangement that has been made possible by the Re-Use of Public Sector Information Directive 2015.<sup>51</sup> Generally, the aim of this Directive (and the earlier Directive which it amends<sup>52</sup>) is to liberalise the use by third parties of public sector information. This now includes information developed by libraries, museums and archives. In general, exclusive licensing is not permitted by the Directive, except in exceptional circumstances. Exceptional circumstances

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<sup>49</sup> <http://www.europeana-photography.eu/getFile.php?id=298> for further information.

<sup>50</sup> <http://www.europeana.eu/portal/rights/out-of-copyright-non-commercial.html>

<sup>51</sup> Council Directive 2013/37/EU3 on re-use of public sector information.

<sup>52</sup> Council Directive 2003/98/EC1 on the re-use of public sector information.

would include those instances where, without any form of exclusivity, the institution would not be able to carry out a digitisation project. Where a third party makes a substantial investment in a digitisation project, then an exclusive arrangement is permitted for up to a maximum of 10 years. It is said that this deal structure has mostly been used over the past few years for agreements between Europeana and Google. As Google has large quantities of digitised content, Europeana was eager to publish it and so this label was made available under conditions that fit the Google case. As noted, the arrangement should equally be available to other institutions under the conditions in the Directive. Indeed, Europeana does make the label available to institutions that can show existing contracts that indicate, to Europeana's satisfaction, that the partner does not own the full rights to publish these works unconditionally.<sup>53</sup>

Europeana does not allow use of this label for providers who, for the reasons outlined above, do not want commercial reuse of the public domain works that they provide to Europeana. EuropeanaPhotography, in their contacts with (smaller) archives, noticed an enthusiastic willingness to share content with Europeana, but on condition there would not be any commercial reuse. EuropeanaPhotography would therefore argue that there is a need for a label that does exactly that: indicate that the work is legally in the public domain, while at the same time precluding commercial reuse.

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## 7 Orphan Works

One major recurrent issue remains around the digitisation and making available of our photographic heritage, and that is with orphan works. Orphan works are those works whose owners cannot be identified, or if identified cannot be traced even after a diligent search.<sup>54</sup> Most archives, including photographic archives, hold many such works. However, and without the requisite permission built into copyright law, these archives are not legally in a position to publish them—a clear conflict with their public sector mission to make such works accessible to the public and for which digitisation would be an obvious strategy. Some jurisdictions contain a library exception within their law<sup>55</sup> that makes it possible for libraries and archives

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<sup>53</sup> As is stated on the Europeana website: 'Before applying this rights statements to digital objects that you intend to make available via Europeana, please consult the ingestion team to see if your digital objects qualify for this rights statement.' <http://pro.europeana.eu/share-your-data/rights-statement-guidelines/available-rights-statements>

<sup>54</sup> Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on certain permitted uses of orphan works, Article 2.

<sup>55</sup> Such as §108 in US Copyright law. See also the most recent proposals from the US Copyright Office for the establishment of an extended collective licensing scheme 'Orphan Works and Mass Digitisation' A Report of the Register of Copyrights, June 2015. <http://copyright.gov/orphan/reports/orphanworks2015.pdf>

to digitise those works for preservation. In Europe an Orphan Works Directive<sup>56</sup> was introduced in 2012 to be implemented into national legislations by October 2014.<sup>57</sup> However, even where a work is deemed to be orphan, only limited uses may be made of it. It may be made available to the public, and may be reproduced, but only for the purposes of indexing, cataloguing, restoration or preservation.<sup>58</sup> Furthermore only certain works are covered. These include published works, first published in a member state; cinematographic and audio-visual works and phonograms.<sup>59</sup> Stand-alone photographs are not covered by the Directive.<sup>60</sup> Article 10 of the Directive requires the Commission to keep the functioning of the Directive under review, and in particular the exclusion of certain works including photographs. Despite the date for submission of this report being 29 October 2015, it seems that it has not yet been made publicly available—if drafted.<sup>61</sup>

Many in the cultural heritage sector lament the lack of a unified and robust orphan works system in Europe, and believe the Directive to be a missed opportunity to enhance the opening up the collections of archives in general and community archives in particular. While, and as has been noted above, developing relations with the communities whose history is told through these photographs is a central to the work of many archives, from a copyright perspective it is ironic that those people will not be the owners of the copyright in the photographs. Ownership of the copyright will generally reside with the individual who took the photograph; this person may have few or no connections with the community.

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## 8 Cultural Rights and the Right to Culture

RICHES, Renewal, Innovation and Change: Heritage and European Society, is a European funded project<sup>62</sup> in which a strategy has been developed to reassess the basics of the intellectual property legal environment in the heritage sector in the wake of co-creation and of the move from analogue to digital.

*The last two decades have witnessed significant changes to the ways in which our cultural heritage (CH) is created, used and disseminated. Intellectual Property Rights (IPR) in general and copyright in particular impacts on how cultural heritage is produced and*

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<sup>56</sup> Note 54 above.

<sup>57</sup> Note the EIFL guide to the Orphan Works Directive <http://www.eifl.net/resources/european-orphan-worksdirective-eifl-guide>

<sup>58</sup> Orphan Works Directive Article 6.

<sup>59</sup> Orphan Works Directive Article 1.

<sup>60</sup> Orphan Works Directive Article 10.

<sup>61</sup> There are a number of orphan works databases. For the European registry see <https://oami.europa.eu/orphanworks/>. For the UK database see <https://www.orphanworkslicensing.service.gov.uk/view-register>

<sup>62</sup> The project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 612789.



*consumed, developed, accessed and preserved in this digital world. New practices such as collaboration and co-creation of CH and changes in how we engage, alter, communicate and participate in CH require appropriate IPR laws for the digital economy.*<sup>63</sup>

Research has been done that seeks to reconcile the need for public access to grow the space for creative reuse of heritage on the one hand, and the protection of cultural rights on the other. While in EuropeanaPhotography one of the issues with the rights labelling campaign was the perception that use of the PDM would lead to unwarranted, unwanted reuse that could harm the integrity of the works, the work in RICHES stresses the positive outcomes that could flow when intellectual property strategies are developed that seek to place cultural rights and the right to culture at their heart.

RICHES explores how the public and private perspectives on heritage can be merged to give new dynamics to the reuse of cultural heritage in the digital context:

*The starting point is to recognise that cultural heritage can be thought of in two ways by policymakers and cultural heritage institutions. It can be thought of as an asset belonging to the nation or institution, or it can be thought of as a right or heritage belonging to the community or group. These perspectives are not mutually exclusive, but give useful points of reference when developing copyright policies and strategies.*<sup>64</sup>

This quote reflects the problems that emerged during the EuropeanaPhotography project part of the remit of which was to deliver access to cultural heritage for the public. For the participating partners, this cultural heritage is part of their assets. As noted above, while they were eager to obtain, through Europeana, exposure of their collections, the partners were also wary of relinquishing control of copyright as its management and exploitation is at the heart of the way they do business and fund the preservation of their collections. However, and as the RICHES strategy suggests, these perspectives need not be mutually exclusive:

*Where the starting point is to think of cultural heritage as an asset, then, within the legal framework, it is generally first considered through the lens of copyright. When this is the case, culture becomes commodified. In other words, culture becomes bound up in notions of private property, ownership and control. If, on the other hand, culture is first considered as a right or heritage belonging to the community, then it is looked at first through the lens of human rights, notably the rights to culture and cultural rights. When this is the case, emphasis is placed on public goods, access and cultural communication. Copyright can be used as a tool to attain these goals.*<sup>65</sup>

<sup>63</sup> See C Waelde and C Cummings RICHES: Digital Copyrights Framework, 2015 available at [http://www.digitalmeetsculture.net/wp-content/uploads/2015/09/RICHES-D2.2-DigitalCopyrightsFramework\\_public.pdf](http://www.digitalmeetsculture.net/wp-content/uploads/2015/09/RICHES-D2.2-DigitalCopyrightsFramework_public.pdf)

<sup>64</sup> Note 63 p. 2–3.

<sup>65</sup> Note 63 p. 3.

There is much to say for this approach. It aligns well with other open movements, such as the open access movement<sup>66</sup> which seeks to ensure that access can be gained to the fruits of scientific and cultural research.<sup>67</sup> As the RICHES strategy notes, taking such an approach does not thereby mean that all content has to be made immediately open. It might however contribute to persuading decision makers within cultural organisations that research should be funded that might reinforce that carried out by Tanner noted above. Taking such an open approach may ultimately not only lead to increased downstream revenues but in addition it would give unprecedented opportunities to individuals and communities to interact with, and co-create new forms of heritage.<sup>68</sup>

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## 9 Conclusion

Intellectual property remains a legal core as the cultural heritage sector moves from curating and preserving analogue objects to making available digital representations of them. Digitised content becomes at once intangible, and fixed in digital objects protected by copyright. Theory tells us that copyright laws are essential to stimulate new creations from which the authors can obtain financial return. But these same laws are challenged by digital working practices and seem to hamper innovative creation. Rights labelling is an important development, allowing search engines to find content, and users to see how it may be re-used. However the experience of EuropeanaPhotography shows that the area is more complex than it might first seem. The names of labels and licences may not be straightforward, and it is not easy to determine with confidence if a work is in the public domain, and even if it is, moral rights may still attach to the work, and personal and cultural sensitivities may demand that a work be dealt with respectfully. There is much to be said for rethinking the place of copyright within this melee. Many attempts have been made over the years to reform copyright laws in order to make them 'fit' for the digital age. At the time of writing (December 2015) there is yet another copyright reform package under consideration in Europe. Yet experience shows that meaningful reform is hard to achieve in practice because of the vested interests and lobbying powers in the copyright sector. The Orphan Works Directive is a good example: there were high hopes that the implementation of measures relating to orphan works in Europe would help to make available digital representations of millions of analogue artefacts 'locked up' within cultural institutions and unable to be used because of the unknown copyright status of the works. But because of the sensitivities of the subject, and because of fears of trammelling on intangible property rights, so the measure as ultimately enacted has proved to be less helpful

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<sup>66</sup> <https://www.plos.org/open-access/>

<sup>67</sup> <http://www.law.yale.edu/intellecualife/7072.htm>

<sup>68</sup> Dow Wasiksiri transforms old Dutch colonial photography by making photographic artworks <http://www.2902gallery.com/index.php/artists/dow-wasiksiri/>

than hoped to the cultural heritage sector. Furthermore, the differences in laws as between member states of the EU despite the harmonising and approximating influences of the copyright directives, and the further differences as between those laws, and the laws of countries furth of the EU despite the minimum standards to be found in international instruments, makes cross border management of copyright and works protected by copyright within the cultural heritage sector highly challenging: the copyright space is highly contested. The strategy therefore of revisiting how we think about the copyright framework and implement its provisions holds much promise for the sector. By emphasising the importance of cultural rights and the right to culture—which are fundamental building blocks of the public interest mission embedded within the cultural heritage sector—and using the proprietary rights embedded within copyright to meet those goals, so this could help to ‘unloose’ the Gordian knot that is, at present, seen as serving to hamper development within the field.

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## **Part II**

# **Mediated and Unmediated Heritage**