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# pca

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## EDITORIAL

*Rivers have always been a great opportunity for communication, commerce, sources of energy and resources. Around them real economic landscapes have developed, such as those in England analyzed with GIS techniques by Eljas Oksanen. A paper that shows – as many others in this volume – how well established today are spatial, temporal and statistical analyses among archaeologists, offering novel perspectives on traditional topics. At the same time rivers connect and divide, representing frontiers and obstacles, as well as a continuous threat for those living at the waterfront (as was the case with the River Trent in England analyzed by Richard Jones, Rebecca Gregory, Susan Kilby, Ben Pears), navigating or crossing them. In the drainage basin, more than elsewhere, it is possible to measure the ability to adapt and the resilience of the local communities, using remote sensing techniques and geoarchaeological surveys. These tools have been used to reconstruct ancient river paths, flow rate variations, and man-induced hydraulic modifications in the Lower Tiber valley (Antonia Arnoldus-Huyzendveld) and along the Tirso River near Oristano (Pier Giorgio Spanu). These techniques can also be used to investigate the evolution of agrarian landscapes near rivers, which in the low plain can be heavily transformed by the abandonment of agrarian landscapes, formation of marshy areas, and land reclamations (such as in the Lower Adige basin: Gian Pietro Brogiolo, Julia Sarabia). Furthermore, archaeological methods also can identify channels, such as the Fossa Carolina, an excavated unfinished channel about 5 meters wide, with a minimum water depth of about 50 cm (Lukas Werther, Lars Kröger). Beyond channels, consolidation and precautionary measures, specific building techniques in wetlands, drainage systems in areas affected by stagnation or flooding hazards, and transports also can be analyzed.*

*Rivers can tell many stories, sometimes being enemies and other times resource donors, but they are always incentives to create new social and political groups able to cope with them.*

*Cécile Rivals, winner of the 2017 PCA Award, proposes the use of the graph theory applied to urban landscape, to transform the fiscal appraisal notes, dated to the 15<sup>th</sup> century, into developmental planimetries of the blocks. New perspectives in the study of ceramics, especially for those still without conclusive chronology, are offered by the rehydroxylation dating method (RHX) for the dating of early medieval ceramics from southern Apulia in Italy (Paul Arthur, Alessandro Buccolieri, Marco Leo Imperiale). These methodological issues, as well as the paleopathological and anthropological analyses (here proposed by Jesús Herrerin, Lucía Muñoz, Natasa Sarkic, Rosa Dinarés on the necropolis of Viana de Duero in Spain), can be considered part of "traditional" archaeology. A different research line, with political implications, follows the archaeological study of English colonization in Ireland (imposed to punish a rebellion) between 1595 and 1643: an excellent paper describes a recent project developed by David Edwards and Colin Rynne.*

*Massimiliano Granieri's dossier about the legal framework of cultural heritage raises issues about political choices. Among the different countries, Italy stands out negatively, because of its elitist ideas on heritage, which result in restrictions and economic problems for researchers. A more open and democratic access to research is inspiring some of the recent projects developed in Padova, such as the participatory processes of research and heritage valorisation presented by Alexandra Chavarría, Francesca Benetti, Francesca Giannetti, Vito Santacesaria. The Council of Europe legislated these themes in different years with antithetic conventions: initially with the repressive Valletta Convention, which reaffirmed a bureaucratic idea of heritage management; later with the Faro Convention, inspired by the concept of a shared understanding and protection of heritage. This latter concept should be followed to give impulse to a discipline in crisis. A traditional understanding of archaeology (as Enrico Gianichedda highlighted) was used instead by the panel of the recent exam for archaeologists of the Italian Soprintendenza. In fact ignoring the real state of the art of a multidisciplinary and diachronic science, no trace of the methodological or transchronological aspects of archaeology appeared in the final oral exam used to discard 23 candidates out of the last 226.*

*A trend towards a focus on chronological specialisations and ignoring the real state of the art of a multidisciplinary and diachronic science that also reflects current programs in many Italian universities, condemning our academic and management systems to isolation from the exciting future perspectives which European archaeology is offering abroad.*

*The objective of PCA, now arrived to its 7<sup>th</sup> volume, is to open a window to this forward-looking international perspective.*

# Anticommons in cultural heritage

**MASSIMILIANO GRANIERI**

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## 1. Cultural heritage and access to national resources

This paper aims at investigating one fundamental aspect of the legal framework around cultural heritage in its widest meaning. The main question is whether the current framework favors access to cultural heritage for research purposes or rather hampers the efforts of people engaged in research through obligations and bureaucratic burdens that only apparently serve a protective purpose, while causing drawbacks and discouraging individual research efforts.

The legal framework can prove intricate and a host of laws and regulations at various level concur in the definition of rights and duties of public and private institutions as well as individuals involved in cultural heritage research, protection, conservation and diffusion. While regulation is somehow necessary to ensure an adequate level of protection of the cultural heritage, the issue becomes one of quantity and quality of such rules and their ability to maintain an equilibrium between two seemingly opposite requirements, one of control and one of access. In the attempt to provide a critical review of such framework, several warnings are in order.

To begin with, the impact of state regulation on cultural heritage is not necessarily only a national (meaning Italian) issue, as many other

countries are confronted with the same policy arguments and dilemmas. Yet, since legal systems are still largely national, any answer depends on the standpoint and any effort to come up with a final and general view can result shallow and defective. Moreover, because of the magnitude of its cultural heritage, Italy becomes a privileged observatory for such interaction and the Italian legal framework is the main focus. As a consequence, this paper will mainly concentrate on the Italian case and will try to make sense of the national situation.

The choice does not mean that other countries do not face the problem, neither that there cannot be a supranational answer or that other legal systems cannot become a source of inspiration of solutions to be introduced at national level<sup>1</sup>. Indeed, there are international conventions that try to address commonly felt problems in the field of art and many other countries strive to find the right balance between concurring and sometimes opposite views and values. The need to focus on the national system is rather demanded by the influence that constitutional texts and values can have both on protection and valorization of cultural heritage as elements of national identity and on the importance of scientific research.

## 2. Cultural heritage and the constitutional design

Cultural heritage in Italy enjoys constitutional relevance. Article 9 of the Italian Constitution entrusts the Republic (meaning the Parliament, the government and the judiciary altogether) with the role of promoting the development of culture and of scientific and technological research, as well as with the task of protecting the landscape and the national and historical heritage. This provision is complemented by article 117, that, on the one side, reserves to the central government the legislative function with respect of, *inter alia*, cultural heritage while, on the other side, creates a concurrent legislative competence of regional governments for the «valorization» of cultural heritage and environment.

Article 117 tries to reach a difficult equilibrium between the need of centralized policies for the protection and decentralized actions for promotion and valorization, as recently reaffirmed by the Constitutional Court. At the same time, this model increases the level of control by public authorities (both in number and intensity of procedures) and can

<sup>1</sup> An example of regulation (limited to archeological resources) of cultural heritage is the Archaeological Resources Protection Act of 1979 (ARPA), that extends the powers of the US federal authorities on public lands and Indian lands where archaeological resources and sites are located.



give rise to additional obstacles for researchers struggling with administrative procedures to have access to items that are part of our cultural heritage, including libraries, archives, museums and archeological sites. Such resources can be under control of state authorities, local authorities or ecclesiastic authorities, as far as churches and other sacred places are concerned.

Notwithstanding the difficulties in striking the right balance between centralized and decentralized level of regulation, the Italian constitutional framework is clear and it should be influencing at all levels the legislation, the administrative regulations and actual practices, by favoring and facilitating scientific research. The immediate consequence of such institutional design resulted in the adoption of the Code of cultural goods and the landscape, that was passed into law (as a legislative decree n. 42) on January 22, 2004, and that stands now as the main body of primary rules concerning cultural heritage.

The perception of an effort of pervasive regulation can be easily grasped by the inclusive definition of cultural goods and cultural heritage adopted by the Code. A definition that the Constitutional Court has recently considered compelling for the purpose of ensuring the widest protection of cultural heritage (Constitutional Court July 17, 2013, n. 194). While this approach is certainly consistent with the constitutional design, it is worth underlying that the expansion of a notion of cultural heritage should go hand in hand with the acknowledgement of increased access rights for research purposes, that would maximize the dissemination of knowledge and strengthen a national identity based more on culture embedded in the national heritage than on ephemeral political values.

As a consequence, it becomes utterly important to take a closer look to the legislative system and ascertain if and how access rights for researchers are granted consistently with the constitutional landscape and if the system unfolded in a practical way that allows access to cultural heritage not just for the end-users (e.g., tourists and visitors) but for those who have devoted their professional lives to discovery and research and that become eventually responsible for making cultural heritage open to fruition and to transmission across generations.

### **3. The current Italian regulatory framework. The Code**

The Italian Constitutional Court in at least one case recognized the Code as an instrument for the full implementation of article 9 of the Italian Constitution. Such interpretation bears serious consequences, as it lays ground for a Code that becomes immediately applicable to all possi-

ble resources “of artistic, historical, archeological and ethno-anthropological interest” (Constitutional Court, July, 17, 2013, N. 194).

The Code is a bulky set of rules aimed at governing comprehensively cultural goods and cultural heritage. Among its countless provisions, there is a set of articles which is relevant for scientific activities that require access to cultural goods. For the purposes of this paper, access also refers to activities that are aimed at discovering goods and archeological resources, which includes conducting archeological excavations and groundworks, together with documenting activities, taking pictures, creating inventories and adopting all instrumental and preparatory activities ordinarily required for research of this kind.

As to the relationship between the Republic (to use the same term as the Constitution), the inspiring principle of the Code seems to be one of property rights. By legislative will, the state owns or controls all cultural goods and elements of cultural heritage, both those existing and those which are brought to light by archeologists and other researchers during their investigations. Even when cultural goods and parts of cultural heritage are in the hands of private individual or entities (e.g., archives or collections), the power of the state is truly pervasive.

In this vein, article 88 of the Code sets forth a principle concerning research activities, by saying that archeological researches and in general any research aimed at finding cultural goods everywhere on the national territory is reserved to Ministry of Culture (hereinafter “MiBACT”). Public or private entities, including firms, can conduct such activities only to the extent they receive a permit by MiBACT. Importantly, regardless the individual that conducts, or is authorized to conduct, research and explorative activities, articles 91 reinforces the notion that any cultural good found, whether movable or immovable, falls into the property of the State.

Because of this institutional layout, the state (including its central and decentralized structures, such as regional authorities, provinces, and municipalities) is eventually the exclusive gatekeeper to access any element of cultural heritage, whether museums, archives, inventories, archeological sites, libraries. Consultation of documents in public and private archives that have been declared of cultural interest and access to bibliographic material is subject to authorization of MiBACT. Article 38 of the Code further states that all cultural goods that have been renovated or have been subject to other conservative activities, funded or co-funded by the State, are made accessible to the public and, if necessary, an agreement can be entered by MiBACT and the private parties that are in control of such goods, so the ensure access.

One main set of very controversial articles of the Code is of interest for researchers. Such provisions relate to temporary use, functional use of cultural goods and their reproduction. Such activities are all subject to the authorization by MiBACT, regional or other local authorities that have custody of such goods, although reproduction has to be compliant with other requirements and with copyright provisions (article 107). In particular, reproduction of cultural goods is not allowed when it requires physical contact (moulding) but, even more importantly, any kind of reproduction (including xeroxcopies or pictures) are subject to a fee (to be paid in advance), that is determined by the custodian of the good, taking into account also the purpose of the copy, the intended use and the way the reproduction is performed (Barbati 2008).

Recent amendments to the Code made things even more complex. Reproductions requested by public or private individuals for valorization purposes (as long as for non-profit) are exempted by any fee, but the applicant has to reimburse the costs. Moreover, a number of specific activities are now considered free, as long as carried out without any commercial aim, for study and research purpose, freedom of expression and creativity, diffusion of knowledge about the cultural heritage. Such activities are limited to reproductions of cultural goods, with the (inexplicable) exclusion of archival and bibliographic resources, under the conditions that there is no physical contact, no exposure to flashing lights and no use of stands or tripods. It is also free the diffusion with any means of images (lawfully acquired) of cultural goods, such that they cannot be further reproduced for profit (a provision that shall strongly limit the use of digital images).

The Code goes on with a very detailed set of provisions considering procedures, guarantees, division of proceeds and the involvement of private and public entities that might be in control of the cultural goods that are the subject of requests for access<sup>2</sup>. Everything concurs to the increase in the number of bureaucratic steps and the intricacies that are required to have access to cultural goods and to have copies of those, which are necessary to conduct studies and researches, while little relevance is given to the potentials of digital technologies to increase diffusion and reduce costs (Gallo 2014).

Archival documents have a special position within the Code. They are made generally accessible and freely consulted, with the exclusion of

<sup>2</sup> The ministerial decree 20.4. 2005, "Indirizzi, criteri e modalità per la riproduzione di beni culturali, ai sensi dell'articolo 107 del decreto legislativo 22 gennaio 2004, n. 42", has further amended administrative rules that govern reproduction.

those declared classified or those including particular categories of personal data, pursuant to privacy laws (such as private letters). Importantly, even private archives are subject to access by researchers, upon motivated request to the person in charge (archival supervisor). At the same time, the discipline of reproduction for archival resources is unjustifiably restrictive and a source of frustration for researchers. The situation has been strongly criticized in the past and there have been proposals to amend the Code. Authors have even provided evidence of how difficult the situation can be for researchers and how the legislative framework gives rise to bureaucratic hurdles without bringing significant financial resources to the state (Modolo, Tomicelli 2016).

The same proprietary approach is maintained by the Code for landscape and archeological sites, which leads to the paradox that even taking pictures for research purposes to the Flavian Amphitheatre or to the hills around Volterra would require a formal authorization, while the same picture taken by a tourist is allowed. Any activity is subject to authorization and there are even criminal sanctions for violation of conducts prescriptions. Of course, there are fees all along the way, that have to be paid.

The experience so far concerning reproduction of cultural goods has been problematic in a number of cases, particularly as far as notions of intellectual property are concerned (indeed, article 10 of the Code introduces a reference to copyright). One recent controversy involved the reproduction of the skull of the Altamura Man, which is embedded in stalactites in the Lamalunga cave, in the Apulia region.

The Altamura Man is technically speaking an archeological good, part of the national cultural heritage. As such, the skeleton and the skull are property of the State. A private company had created a copy of the skull based on anthropometric samples and reconstructive hypotheses on its configuration. MiBACT brought an action for violation of the provisions that subject reproduction to ministerial authorization. The Court of Cassation ruled in favor of the private company, since the private work found inspiration but was not a copy and it was the genuine outcome of autonomous creativity, that did not justify control by the state (Court of Cassation April 23, 2013, n. 9757). What the decision implies is that any other copy that relies more strongly on the image of the skull must be authorized and subject to whichever condition MiBACT – through its local offices – would impose.

Even more controversial was the case of the Riace bronzes. The Calabria Region, where the two warriors were found and where are cur-

rently located, aimed at making a 1:1 copy, with the use of high-resolution sampling technology. MiBACT refused the authorization, under the assumption that such kind of reproduction cannot be considered one of those small-scale copies (such as photos, sculptures, drawings) that favor the diffusion of the good among the public and stimulate the interest to watch the original. In all possible respects, the case involved not just reproduction, but clones, that would have been used by the Region for marketing and advertising purposes by sending them around the world. The administrative court in this case sided with MiBACT, supporting the view that there was no public interest in such kind of copies and the decision would have caused economic harm to the Region, by decreasing the number of tourists willing to visit the original bronzes (Tribunale Amministrativo Regionale Calabria October 10, 2013, n. 1285).

The two cases just mentioned might not have strict nexus with problems related to access for scientific purposes, but are revealing nonetheless. The primary purpose of giving control to ensure conservation of cultural goods and resources soon mingles with economic arguments that might be eventually overwhelming and lead to final arrangements that are not consistent with the original aim of legal provisions. When looking not just to the black letter rules, but to the law in action, the situation is different and the quest for the right equilibrium between access and control becomes inevitably more problematic. Hence, one preliminary observation could be that the relationship between cultural heritage and the national regulatory framework cannot be thought of in the abstract, by looking exclusively to the legislative texts. No matter how nicely they have been written, a careful observation of practices and real-life situations is nonetheless in order to assess policy choices that should conform to constitutional values.

Importantly, it has to be seen whether the proprietary approach followed by the Code is one that better balances the opposite needs. Not because the state itself cannot be a private owner of assets, but for the current critical views that have been expressed around the notion of private property when this legal solution is used to control assets that have supra-individual use and benefit the public at large through positive externalities. In this respect, what is further worth investigating is the role of intellectual property as private property in the field of cultural heritage, since also intellectual property is amidst a vibrant debate and challenged by economists and policy makers as a construct that causes more harms than benefits and should be repealed altogether or strongly reconsidered.

#### 4. The Italian regulatory framework continued. Copyright laws

Surprisingly, the use of intellectual property in the field of art and cultural heritage is not an absolute novelty. Paola Torniai has documented that in the case of *munitioii sanpietrine* the Reverenda Fabbrica of San Peter already in the 17<sup>th</sup> century resorted to the “privative” (certificates of exclusive rights that bear resemblance to modern patents) to retain control of the technical improvements that the workers at the Fabbrica would arrive at while working on the Vatican mosaics and experimenting new materials and colored matters (Torniai 2015, p. 208).

Contemporary history is full of examples of authors and artists that proved good entrepreneurs while leveraging on their exclusive rights supplied by the intellectual property system. In that respect the intellectual property legal framework is still performing its economic function; in a world where patronage is no longer the main funding scheme for artistic creations and socially enhancing activities, an *ex post* incentive to individual creativity for new, useful or beautiful goods is strongly needed. It is not by coincidence that the U.S. Constitution features the so called intellectual property clause, under which the Congress of the United States has the power to «promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries».

The inner relationship between intellectual property rights and cultural goods is way more complex than what this paper can tell. Among jurists there is a debate on the immaterial nature of cultural goods, which are tangible goods but convey a wealth of intangible values embedded in the cultural heritage, that justify for them a privileged position at constitutional level.

The shaping principles that inspire all intellectual property systems worldwide – and copyrights among those – are clear. An exclusive right, for a limited period of time, is a precondition for anyone investing her own time and resources to receive a compensation for such efforts and continue the beneficial activities that lead to new inventions in the field of technical sciences and to new aesthetic creations in a variety of situations that include books, pamphlets and other writings, lectures, addresses, sermons, dramatic or dramatico-musical works, choreographic works and entertainments in dumb show, musical compositions with or without words, cinematographic works, works of drawing, painting, architecture, sculpture, engraving and lithography, photographic works, works of applied art, illustrations, maps, plans, sketches and three-dimensional works relative to geography, topography, architecture or science, up to the modern urban graffiti of Banksy and beyond.

Ever since, the policy behind the recognition of exclusive rights of authors clashes with the compelling need that eventually all human creations benefit the mankind. Lord Mansfield, one of the most famous English judges, had warned that «We must take care to guard against two extremes equally prejudicial; the one, that men of ability who have employed their time for the service of the community, may not be deprived of their just merits, and the reward of their ingenuity and labor; the other, that the world may not be deprived of improvements, nor the progress of the arts be retarded» (case *Sayre v. Moore*, 1785).

The intensity of the current scholarly and policy debate around intellectual property rights reveals how the warning of Lord Mansfield was necessary, but also how it went largely unheard. Indeed, in several instances the balance tipped in favor of intellectual property owners and very complex equilibrium between access to the public and control of the privates is continuously lost and hardly regained. In many fields – and cultural heritage might well be one of those – there is a serious risk that a massive and uncontrolled resort to intellectual property rights becomes an obstacle, rather than a driving force, to science, research and progress.

Yet, this latter point must be unequivocal. Since intellectual property protection only accrues to new creations and for a limited period of time, the vast majority of cultural heritage and cultural goods are no longer subject to intellectual property rights. According to the universal principle that informs any system, once protection expires the corresponding good falls into public domain and it becomes immediately open to universal and free use by anyone. Intellectual property rights, and copyright first and foremost, can be re-created once items of cultural heritage become the subject matter of reproduction activities, such as photocopies or pictures, although the protection does not apply to the cultural heritage per se, but to the ‘copies’ that are created (and to the extent they can be created). Such copies become of huge practical importance, because they allow access to knowledge when direct access to the protected good is technically impossible or economically unaffordable.

The emergence of copyright on reproductions of goods that are part of cultural heritage, such as books, sculptures, archival documents in general, creates difficulties, since fruition is typically allowed through the work of intermediaries (publishing companies) that demand assignments of rights and eventually become large owners of intellectual property, positioning themselves as gatekeepers for those requiring access. The decentralized creation of new copyrighted works, which is part of the daily job of people doing research at academic level, ends up giving way to centralized ownership and management, which is becoming even more prominent due to the progressive concentration of the publishing industry.



Everyone engaged in research and publishing activities has experience about the considerable efforts (and frustration sometimes) to identify the copyright owner and manage authorization processes to reproduce images or data from external sources.

Part of the scholarly and policy debate – driven by neoliberal economists – leans easily in favor of a radical elimination of any form of intellectual property protection, widely considered as a form of monopoly that stands in the way of genuine market forces and, as far as research activities are concerned, of free access. Unfortunately, the conclusion cannot be that simplistic for a number of reasons, including the fact that removal of protection would harm significantly authors and creators, that still avail themselves of exclusive rights to secure somehow sources of revenues and incentives. To be sure, the core of the problems does not seem to be residing with authors, but rather with intermediaries, that is to say the host of institutional and market players that build their business models around exclusivity, such as publishing companies, newspapers, and the media industry in general.

The emergence of digital technology has brought a significant challenge to copyright and forced authors and intermediaries to rethink their traditional channels of distribution. After all, the open access movement is becoming an alternative model of production and fruition of digital content that can have an impact also on cultural heritage and scientific dissemination in general (Caso 2013).

The ease of high-definition reproductions and the lower marginal costs of making copies in a digital world represent a terrific opportunity in terms of knowledge diffusion and decentralized access. Furthermore, the availability of digital images and copies of cultural goods and items of the cultural heritage can enhance scientific researches without jeopardizing the integrity of such goods and limiting the need for a physical exposure to them. For people engaged in research and for the public at large, there are enormous opportunities (Spedicato 2011), although the same researchers are exposed to risks of hacking and easy copying of their digital works and have to resort to protection techniques such as watermarking (Cappellini *et al.* 2011). The same view is not necessarily shared by publishers and other intermediaries, whose role is strongly challenged (if not set aside) by digital technologies and the internet.

Notwithstanding the increasing opportunities offered by digital technologies (including 3D printing) and the pervasive use of the internet, there have not been significant changes to copyright laws to ease access by decreasing control of the owners. Quite the contrary, since the end of last century in the U.S. first, and in Europe later, there have been



increasing lobbyists pressures on parliaments to strengthen protection and reduce spaces of freedom. The outcome of such changes is that intermediaries tend to be paradoxically even stronger and access to knowledge progressively more difficult.

Once again, the proprietary paradigm (now under the shape of intellectual property rights) proves not entirely adequate as such to reconcile public and private interests when they converge over resources such as cultural heritage.

## **5. Copyright protection, access and responses from within**

Copyright laws provide themselves remedies to reconcile control and access. Indeed, a number of human activities, often related to public and socially useful functions, imply access to copyrighted materials. An enforcement of copyright based on absolute control by the owner (which is not always the author) would result in enormous social costs. In all such situations, identified by statute, access is typically granted to third parties with vested interests and the control rights of the owners are limited.

Limitations in copyright laws are momentous, as they are supposed to keep the balance between the two intrinsically opposed interests of public access and private control (Finocchiaro 2009). The advent of digital technologies is posing a serious challenge to copyright limitations, since technology can be used to restrict freedom and this is the case for digital rights management systems, that limit what users can do with copyrighted materials. While the most straightforward example of such techniques is in the fruition of music, the multimedia industry and the publishing industry are also fond of using DRM for movies, databases, pictures, archives and many more resources.

Nonetheless, limitations are an initial and significant remedy against excess in copyright protection and reading again copyright laws can provide room for unexpected spaces of freedom. For instance, the Italian copyright law (Law on April 22, 1941, n. 633) holds a set of provisions that allow certain copying activities for research purposes when there is no direct or indirect commercial purpose (see articles 65 and following). Furthermore, under specific conditions, they authorize libraries and archives to give unrestricted access for research and private studies purposes of individuals.

Copyright limitations notwithstanding, reality can be much different from the very same balance that copyright laws strike in favor of re-

searchers. The reason lies not necessarily in copyright laws, but in their sham interpretation when copying can be subject to payments by the institution that has control of protected and unprotected materials. As a matter of fact, if public laws other than copyright regulation empower an institution or an individual with the duty to regulate access to a given resource, there can be an easy departure from the original purposes of the empowerment. Any time barriers to cultural heritage are heightened also for those aiming at research purposes only, a suspect arise that such departure is taking place, both for *bona fide* interpretation of the laws or for utilitarian reasons, that have much to do with make up for cuts in budget and reduced resources for cultural heritage protection and maintenance.

## 6. Unintended consequences of (excessive) state regulation

The combination of two property regimes in the Italian regulatory framework for cultural heritage creates a situation that can be featured as one of anticommons.

Regulation is instrumental in maintaining control over critical resources and cultural goods are, with no doubts, in need for protection and controlled access. Sometimes, as it is the case for intellectual property protected goods, the rationale for protection lies in the need to provide incentives for the creation of goods that would be otherwise under-supplied. When the level of protection exceeds a given threshold and access becomes difficult or impossible, an anticommons is created, that dooms the protected resource to underuse.

The anticommons is a paradigm that in legal and economic literature has been employed in multiple contexts to describe a situation that can jeopardize the functioning of many areas of social and economic life (Heller 2008). Its root is in the congestion brought about by the concurrence of a plurality of exclusive and uncoordinated rights that increase the level of insecurity and costs, thus causing a reduction of individual value-enhancing activities. Heller and Eisenberg have observed an anticommons in biomedical research, due to the thicket of patent rights over biotechnological resources (Heller, Eisenberg 1998). *Mutatis mutandis*, the same actual risk seems to be unfolding for cultural heritage in Italy, thus possibly contradicting the institutional aims expressed by article 9 of the Italian Constitution and limiting the overall impact that cultural heritage should have on development, identity and intellectual growth.

The problem with anticommons is that its creation is very often the unintended outcome of regulation, when different sources of rules are enabled to govern the same situation by means of analogue techniques, such as proprietary or quasi-proprietary rights assigned to different owners. That is the case for cultural heritage in Italy. The state, through MiBACT and its local offices and officers, is extending its publicly-conferred rights on cultural heritage and dictating restrictive conditions to access cultural goods, even if only for research purposes. On a parallel basis, the concentration of intellectual property rights on scientific tools aimed at disseminating knowledge on cultural heritage further raises barriers and creates hurdles.

Taken by itself, none of the regulatory means used by the state can be dangerous or harmful. There can be extremely valid justification that support the adoption of some rules. But they must work in context and in connection with other rules and the final outcome can result in intended and unintended consequences.

## **7. A perspective of regulatory competition and a quest for deregulation in the field of access to cultural heritage**

Against the excess of regulation in cultural heritage and the possible abuse of copyright protection with discouraging effects on research much has been said and by time to time there are attempts to influence legislation. Unfortunately, privileges and control rights conferred upon individuals and institutions by law create small or larger groups of power that can exert their pressure as a lobby and impede or delay change. Other times, an inevitable status quo bias prevents legislators to leave their comfort zone and experiment alternative frameworks, unless evidence is provided that a legal change would result in noticeable advantages both for the public at large and for the groups of power in control of a given resource.

The kind of legal change that cultural heritage requires in Italy leads to a good deal of deregulation or different regulation and easier access to cultural goods when research purposes are at stake. One way to provide compelling evidence of a need for legal change and deregulate the field of cultural heritage is to adopt the same arguments that are made by economists for the attraction of foreign direct investments among states.

In economic theory and in the legal discourse there is general consensus to see legal rules as products of states, that compete each other

to attract customers to their undertakings and within their territories. A state is not an enterprise and members of the parliament are not entrepreneurs, but in a globalized economy legal systems are in competition to attract foreign firms willing to establish locally, invest, hire people, pay taxes, contribute to the general welfare, concur to the GDP.

Some states are in a position of advantage, because they have natural resources that are to be exploited in their territories; some other states do use rules to achieve results that increase the general welfare, even if they lack natural resources or do not enjoy prominent geographic positions. Resort to legal rules by states to attract investments has been characterized as regulatory competition and it is a powerful paradigm that explains and justify legal change in the contemporary legal order. The World Bank has been a very active interpreter of such model, through the Doing Business project (World Bank 2017), although limited to analyzing those aspects of the legal system which are closer to starting and running companies.

Against regulatory competition, critics have pointed out that an unfettered international contest by states to attract a finite number of companies or to prevent national enterprises to move to more favorable places would bring to a race to the bottom, where eventually important values, such as environmental protection, human rights, labor safety will be sacrificed by business-as-usual policies where deregulation becomes the quick recipe for success. This argument of the race to the bottom forces a conclusion: regulatory competition can be a paradigm of positive analysis, but becomes a very bad policy yardstick when it is passively accepted as a normative value, that recommends directions state should take.

It can be assumed for a moment that the regulatory competition can be applied to cultural heritage. Italy, as a nation, has an undisputable competitive advantage with respect to other countries. It can be bare of raw materials, but is sumptuous in terms of natural resources and its cultural heritage is unmatched. This proves the ultimate resource to attract tourists. But it is also key to become a place where Italian and foreign researchers will have enormous opportunities to study cultural heritage, create and disseminate knowledge about it; they need to become the target of any welfare-enhancing policy that relies on regulation. After all, this is an economic goal, that underlies an alternative notion of growth, one based on culture, science and technology, rather than just manufacture and finance. And for those skeptical about possible implications of such alternative model, suffices it to recall how many services can prosper around a smart exploitation of the cultural heritage.

If all this can be assumed as true, then regulation becomes instrumental in creating the framework conditions to enable researchers and to attract scholars from other countries to come and invest their intellectual resources in Italy. This new model of regulatory challenge does not necessarily entail that cutting down rules is the final solution, since rules also serve the primary purpose to ensure cultural heritage is preserved over time. It rather suggests that when access to cultural heritage is qualified by a scientific interest and non-commercial purposes, some restrictions that would be otherwise justified should leave way to simplified and cost-free access, as a regime of public domain typically is. There is room for promotional regulation, rather than just restrictive prohibitions and countless bureaucratic steps.

Such result inevitably requires a revision of the normative *acquis*, but not radical changes that would demand extensive political debate or consensus. Out of the thousands minimal legal changes that are introduced every year to make the system more competitive, acting on the Code and on copyright statutes can result in a wonderful and advantageous situation. At the same time, streamlining administrative procedures becomes necessary, to ensure the benefits created at normative level are not shattered by artificial and redundant bureaucratic steps.

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## References

- C. BARBATI 2008, *La valorizzazione: gli artt. 101, 104, 107, 112, 115, 119*, "Aedon", 3. Online in: [www.aedon.it](http://www.aedon.it) (accessed February 20, 2017).
- V. CAPPELLINI, R. CALDELLI, A. DEL MASTIO, F. UCCHEDDU 2011, *Copyright protection of digital images of cultural heritage*, in F. STANCO, S. BATTIATO, G. GALLO (eds), *Digital Imaging for Cultural Heritage Preservation. Analysis, Restoration, and Reconstruction of Ancient Artworks*, Boca Raton, pp. 451-482.
- R. CASO 2013, *La legge italiana sull'accesso aperto agli articoli scientifici: una prima panoramica*, "Aedon", 3. Online in: [www.aedon.it](http://www.aedon.it) (accessed February 20, 2017).
- G. FINOCCHIARO 2009, *La valorizzazione delle opere d'arte on-line e in particolare la diffusione on-line di fotografie di opere d'arte. Profili giuridici*, "Aedon", 2. Online in: [www.aedon.it](http://www.aedon.it) (accessed February 20, 2017).
- G. GALLO 2014, *Il decreto Art Bonus e la riproducibilità dei beni culturali*, "Aedon", 3. Online in: [www.aedon.it](http://www.aedon.it) (accessed February 20, 2017).
- M.A. HELLER 2008, *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*, New York.
- M.A. HELLER, R.S. EISENBERG 1998, *Can patents deter innovation? The anticommons in biomedical research*, "Science", 280, pp. 698-701.
- M. MODULO, A. TUMICELLI 2016, *Una possibile riforma sulla riproduzione dei beni bibliografici ed archivistici*, "Aedon", 3. Online in: [www.aedon.it](http://www.aedon.it) (accessed February 20, 2017).
- G. SPEDICATO 2011, *Digitalizzazione di opere librerie e diritti esclusivi*, "Aedon", 2. Online in: [www.aedon.it](http://www.aedon.it) (accessed February 20, 2017).
- P. TORNIAI 2015, *Le munizioni sanpietrine tra il XVII e XVIII secolo: Scipione Santucci, Alessio Mattioli e la stipula della privativa dei documenti dell'Archivio della Fabbica di San Pietro*, in M. NICOLACCI, M. PICCIONI, L. RICCIARDI (eds), *In corso d'opera. Ricerche dei dottorandi in Storia dell'Arte della Sapienza*, Roma, pp. 207-215.
- WORLD BANK 2017, *About Doing Business*, online in <http://www.doingbusiness.org/> (accessed February 1, 2017).