The ailment that the medicine is intended to treat remains classified as an Epidemic Ailment.

Art. 83:

Non-Circumvention and Active Implementation Declaration

(a) WTO member states undertake not to circumvent or forfeit rights arising from this Part VIII in any future trade agreement. Furthermore, each member state undertakes to revise any existing free trade agreement, to which it is a member, and to amend any provision that negates, undermines, or nullifies this chapter.

(b) Member states also undertake to revise duly any existing trade agreement the terms and conditions of which are counter to the provisions of this Part VIII.

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INTRODUCTION

Memory institutions are social entities that select, document, contextualize, preserve, index, and thus canonize elements of humanity’s culture, historical narratives, individual, and collective memories. Archives, museums, and libraries are paradigmatic examples for traditional memory institutions. Content-sharing platforms, social networks, peer-to-peer file-sharing infrastructures, digital images agencies, online music stores, and search engines’ utilities represent emerging novel entities with a de facto derivative function as networked memory institutions.

This article conducts an in-depth inquiry regarding the manners in which digitization and networked communication technologies implicate on the identity, structure, and attributes of society’s memory institutions. More specifically, I focus on the privatization processes that networked memory institutions are increasingly undergoing. My basic hypothesis is that the transformation from tangible or analog preservation to digitized cultural retrieval tends to result in partial and gradual privatization of society’s memory institutions. Among other factors, copyright law functions as a focal element that stimulates and supports dynamics of privatization. It does so by making both the inputs and the outputs of networked memory institutions tradable goods – commodities. Copyright law is also responsible for the dynamics of evolution that may gradually change the cultural DNA of traditional memory institutions while making them more inclined to adopt proprietary practices. Privatization of memory institutions thus marks a shift from the centrality of the political and civic spheres in the construction of cultural/social memories to the centrality of markets in this context.

Current scholarly literature does not include a full and
A comprehensive discussion of memory institutions. My purpose in this article is to begin filling in this gap. I argue that digitization and networked communication platforms involve two conflicting layers of transformations in the political economy of social remembering. The first layer is one of prospects and hopes that are signified by the transformation from a control paradigm of tangible cultural preservation to a paradigm of digital distribution and redundancy. At least potentially, digitization can decentralize and democratize memory institutions and social remembering practices. This somewhat utopian vision, however, takes a turn once the second layer of transformations, dealing with the gradual privatization of networked memory institutions, are identified.

Commercialization and unequal participation are two elements that characterize the privatization of memory institutions and that may conflict with a democratic vision of social remembering. Privatized memory institutions also avoid institutional separation between the social function of cultural production and the social function of cultural preservation. The resulting outcome is that groups and sectors with dominant positions in contemporary media are able to reproduce, leverage, and manipulate their social dominance from one generation to another. The power to remember, as well as the power to forget, are thus gradually being concentrated in clusters of commercial enterprises with very particular interests, beliefs, ideologies, and preferences.

In order to fully grasp the consequences of these processes, one must go back to the functions of memory institutions in a democratic culture. I discuss this issue in Part IV(A). Overall, throughout this article, I demonstrate the value and importance of institutional diversity in social remembering practices. I argue that a democratic culture of memory institutions focuses on two key dimensions. The first dimension is intergenerational and it refers to the importance of providing future generations with as many landscapes of culture and history as possible. The second dimension refers to the right of individuals to participate in contemporary landscaping of culture and history for future generations.

Social remembering has a fundamental role in people's life-hoods and well-being as well as in the formation of beliefs and ideas. In their broader meaning, the landscapes of history and social remembering are also major forces in the construction of ideologies and people's preferences. "Knowledge," "information," and "culture" are concepts that influence the future while corresponding with and being influenced by "the past" (or more precisely, narratives of the past). At the end of the day, this is what networked memory institutions are very much about. This is also the reason why processes of privatizing social remembering require special attention by regulators and policy makers. The purpose of this article is to draw such attention and set the grounds for future discussions.

Before commencing, I wish to emphasize two caveats that will continuously reappear throughout this article. First, my following discussion by no means presumes an idealized image of memory institutions in prior decades. To the contrary, both governmental and public-oriented memory institutions may suffer from failures and disruptions, which burden their selection and access policies. Among other elements, my analysis thus attempts to highlight the prospects of networked social remembering when compared to its predecessors. Second, I do not aim to portray a dystopian collapse and diminishment of public-oriented memory institutions in a networked environment. Even when considering the privatization processes that I will describe in the following parts, in many occasions, traditional public-oriented memory institutions are very likely to continue and reinforce their public-oriented functions also in a networked environment. I do argue, however, that in a long-term perspective, dynamics and developments, such as the ones to be described throughout this article, might have gradual negative impacts on social remembering practices. These impacts are prominent enough to be considered and analyzed. My purpose, therefore, is to offer a framework that enables to endorse the prospects of networked social remembering while overcoming emerging novel pitfalls in this context that require the attention of policy makers.

Structurally, the article consists of five parts. Part II outlines the main paradigm shifts in social remembering for which digitization and networked communication technologies are responsible. My focus here is on the transformation of a paradigm of preservation through controlling authentic tangible cultural objects to a paradigm of preservation through distribution and redundancy of digital artifacts. I then examine the implications of this shift on the attributes of networked memory institutions and

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8 See infra notes 141-152 and accompanying text.
9 See infra Part II.
10 See infra Part IV(A).
11 See infra Part IV(C).
12 See infra Part IV(D).
13 See infra Part IV(A).
on their relationship with broader contemporary frameworks of cultural production and cultural exchange.

Part III outlines, demonstrates, and analyzes the privatization processes that both traditional and novel memory institutions are undergoing due to digitization and the emergence of networked communication platforms. I particularly focus on the fundamental role of copyright law as a mechanism that facilitates and supports the dynamics of privatization.

Part IV continues by analyzing the consequences of privatizing memory institutions. I begin by highlighting the unique social functions of memory institutions in a democratic culture. I then examine the consequences of commercialization and unequal participation — two elements that unsurprisingly characterize the privatization of social remembering. Part IV also examines the consequences of the gradual convergence between institutions of cultural production and institutions of cultural preservation for which privatization may be responsible.

Part V concludes with several reform proposals for de-privatizing networked memory institutions. I argue that, as a general matter of policy, reduced copyright protection is likely to result in an equilibrium that strengthens the capacities of public-oriented memory institutions while reducing the incentives — and therefore the dominance — of commercial intermediaries entering this field. More specifically, Part V focuses on two distinct types of reform. The first type involves reforming ex-ante copyright privileges for networked memory institutions. I argue that copyright law must include a revisited framework of exemptions, limitations, and compulsory licenses that together are able to support independent ubiquitous activity by public-oriented memory institutions. The second type of reform introduces my novel proposal to impose ex-post obligations on networked memory institutions. I argue that de-privatization of memory institutions also requires regulation that accounts for and moderates imbalanced proprietary regimes of networked memory institutions. Based on this argument, I offer a complementary set of reciprocal share-alike obligations that in addition to general ex-ante privileges, from which memory institutions should benefit.

PART II — PARADIGMS SHIFTS IN THE POLITICAL ECONOMY OF MEMORY INSTITUTIONS

Memory institutions have always been an integral part of societies. Archives, libraries, museums, private collections, and cultural artifacts canonize the pasts and presents of individuals and communities. Throughout history, memory institutions have been replicating a social contradiction between an acknowledgement in the value of public access to the remains of the past and a de facto institutional bias toward practices of enclosure, gate-keeping, and manipulations in social remembering practices. Digitization and networked communication technologies represent several paradigm shifts in the social conditions of memory institutions. The purpose of this Part is to provide a brief outline of these paradigm shifts and then to examine their relation to the privatization of networked memory institutions in Part III.

A. From Control to Distribution

In tangible realms, traditional memory institutions were governed mostly by a paradigm of control over original authentic tangible cultural objects. Museums gather and preserve art works as well as other types of works with cultural significance. Archives collect and conserve documents. Libraries function similarly with regard to books and manuscripts. Thus, one could go on with the central function of physical possession and control as forms of regulation on which traditional memory institutions rely in order to preserve, prevent injuries, and provide confined access to tangible works of cultural and historical significance.

See Archives, Documents and Institutions of Social Memory: Essays from the Sawyer Seminar, supra note 1 (providing a collection of essays surveying and analyzing this tension in the history of archives and memory institutions).

See infra Part III.


See the sources cited in supra note 14.

20 Indeed, the tragedy of the commons, as well as the Domesday argument for property rights, seem to apply quite effectively in the context of tangible cultural preservation, as exclusive control is a prerequisite for both the prevention of harm and the provision of incentives to invest resources in the preservation and the provision of regulated public access to works of cultural significance. See Garrett Hardin, The Tragedy of the Commons, 162 SCIENCE 1243, 1243-48 (1968); Harold Demsetz, Toward a Theory of Property Rights, 57 AM. ECON. REV. 547 (1967). See also Yoram Barzel, Economic Analysis
Digital preservation operates in a reverse mode. It is best served through dissemination and distribution. Regarding digital artifacts, preservation and access are carried out by distribution of multiple copies from (and to) different sources rather than through centralized control. Compare, for example, the traditional television archives of the BBC\(^1\) with Flickr\(^2\), an open-access photo-sharing website, or with YouTube\(^3\), the popular video-sharing website. The traditional analog memory institution functioned as a repository of audio-visual materials by physically securing and preserving them. Newly emerging networked memory institutions are based on a reverse paradigm of distribution. Examples like the Internet Archive\(^4\) and the Google Books Library Project\(^5\) demonstrate how long-term conservation and access are accomplished by distributing and making available digital copies of cultural artifacts. And if one returns now to the example of the BBC, indeed, the BBC represents one of several examples for this paradigm shift. In its novel Creative Archive initiative, the BBC implements new practices of content-sharing and distribution as another path for its long-standing function as a memory institution.\(^6\)

I am not arguing for a full dichotomy between preservation and social remembering practices before and after the emergence of networked communication platforms. Preservation through reproductions of cultural works existed long before the Internet. André Malraux’s *Museum Without Walls*,\(^7\) and Walter Benjamin’s *The Work of Art in the Age of Mechanical Reproduction*\(^8\) are two examples of canonic scholarly works regarding the influence of photographic reproductions on cultural discourses.\(^9\) The invention of print, photography, sound recording, motion-pictures, and subsequently television all represent landmarks in the continuous evolution of new communication tools for social remembering. I do argue, however, that the scale, scope, easiness, and decreased costs of producing and distributing digital artifacts\(^10\) are radical enough to signify a paradigm shift in cultural preservation—from control to distribution.

B. Redundancy and Information Flow as New Forms of Cultural Preservation

The shift toward a paradigm of preservation through distribution emphasizes the fundamental role of redundancy and information flow in digitized preservation. The nature of information networks and the Internet in particular is such that multiple digital artifacts of cultural works are concurrently being relocated, duplicated, and situated through many different sources—both inputs and outputs—that refer, document, recontextualize, and provide access to artifacts of cultural works.\(^11\)

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\(^{4}\) The Internet Archive is a non-profit internet library that documents, preserves, and provides access to archived web pages of the entire Internet at any given date. Internet Archive, http://www.archive.org (last visited Feb. 26, 2008).

\(^{5}\) Google Books Library Project, http://books.google.com/googleprint/library.html (last visited Feb. 26, 2008). This initiative, which was announced in conjunction with the University of Michigan, Harvard University, Stanford University, the New York Public Library, and Oxford University, endeavors to digitize and make searchable the contents of millions of books in the libraries’ collections, some of which are in the public domain and some that are still under copyright. For books in the public domain, users would have free access to the books’ full text. As for copyrighted books, the Google Library would digitize the full text unless publishers object to the digitization of specific works, but searches would only retrieve limited samples, so that the searcher would still need to go to the book. Helpfully, Google plans to provide links to sites offering books for purchase alongside the search results. For a description of the Google Library Project, see Tushnet, supra note 19, at 1018.

\(^{6}\) See the Digital Archives of the BBC, described and presented at: http://www.bbc.co.uk/cult/treasurehunt (last visited Feb. 25, 2008). The recently created Creative Archive License Group makes the BBC’s and other institutions’ archives’ material available for download and secondary use under the Creative Archive License. Creative Archive License Group, http://creativearchive.org (last visited Feb. 25, 2008).


\(^{9}\) Benjamin argues that in the face of photographic reproduction, the original art work can no longer retain the special value and authority it traditionally possessed (its "aura"). *Id*. Two decades later, Malraux took a somewhat opposite direction while writing about the "Museum without Walls" and the fact that in the age of reproduction, theready accessibility of cultural artifacts in a variety of contexts, styles and mediums far overcomes the limited revelation of tangible art that museums can offer within their physical walls. *Id*. It should be added, however, that along with his observation regarding the decline in the "aura" of the original art work, at least implicitly, Benjamin also acknowledges prospects of democratization. *Id*. In the age of reproduction, copies of art works, as well as other types of content, are now becoming commodities that are traded in mass markets. *Id*. see also Hal Foster, *Archives of Modern Art*, in *DESIGN AND CRIME* (AND OTHER DIABETES) 81-95 (Verso 2002).

\(^{10}\) For the radical prospects of digital preservation, see DANIEL J. COHEN & ROY KORNENWEG, *DIGITAL HISTORY*, 5-9 (2006) (mentioning seven qualities of digital media and networks that are responsible for the revolutionary characters of digital preservation: capacity, accessibility, flexibility, diversity, manipulability, interactivity, and heterogeneity (or nonlinearity)). See also Jack M. Balkin, Comment, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society*, 79 N.Y.U. L. REV. 1 (2004) (arguing that digital technologies alter the social conditions of speech while making possible widespread cultural participation and interactions that previously could not have existed on the same scale). Balkin also emphasizes the fact that the digital revolution has: (1) drastically lowered the costs of copying and distributing information; (2) made it easier for content to cross cultural and geographical borders; and (3) lowered the costs of transmission, distribution, appropriation, and alteration of content while commenting and building upon it. *Id*. 79.

\(^{11}\) Peer-to-peer file sharing networks, which allow direct exchange of content files among users of compatible applications without any central management and control, are one example of the nature of information flow as a decentralized-distributed form of
C. The Convergence of Communicative Spheres – Cultural Production and Cultural Exchange as Derivative Memory Institutions:

The accumulation of the above-mentioned attributes explains why networked memory institutions are no longer prescribed only through clusters of static institutions and organizations. Rather, digitized cultural preservation is becoming more dynamic and multidimensional. Digitized cultural preservation and networked social remembering are both a form and outcome of ongoing discourses, manifestations, and exchanges of information and cultural artifacts between organizations, groups, and individuals. Examples like YouTube, iTunes (Apple’s online music store),

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Flickr and social networking websites like MySpace all emphasize one central virtue of digital domains: there are no clear-cut boundaries between the creation of cultural artifacts, their distribution, and their preservation between “past” and “present.”

It is in this sense that, in a networked environment, cultural production becomes a form of cultural preservation and social remembering. Society’s new memory institutions are less isolated and marked from contemporary communicative spheres. The fact that digitized preservation is best served by distribution and diffusion stimulates a reality in which preservation is being merged into people’s ongoing cultural engagements – commercial, civic, and private. Indeed, many of these novel frameworks (e.g., content-sharing platforms), do not target cultural preservation, or even archiving, as an explicit area of activity. Yet digitized archiving, knowledge, and cultural retrieval/preservation are integral derivative elements within them.

By making this observation, I am not attempting to portray networked memory institutions as mere digital warehouses for cultural works. Memory institutions select and canonize elements of communities’ cultures. By selecting, organizing, indexing, and contextualizing cultural materials, memory institutions function as landscapers of social remembering and architects of historical narratives. Concurrently and derivatively, memory institutions are also gatekeepers that determine and construct the remains of the past for future generations. As Jacques Derrida articulated, “there is no political power without the power to control the archive.” Memory institutions are about forgetting just as much as about remembering. Nevertheless, it is exactly at this juncture that digitization invokes a paradigm shift in the political economy of memory institutions. The transformation from a model of preservation attained through control to a model of preservation attained through distribution and the resulting convergence of communicative spheres is fundamental. It potentially decentralizes social processes of individual and collective social
D. The Decentralized Dynamism of Networked Memory Institutions

Networked memory institutions carry decentralized, participatory, and dynamic attributes. The power to take part in cultural retrieval and cultural preservation processes is distributed among individuals and organizations of different types: (1) commercial (e.g., commercial digital images agencies like Getty Images); (2) public (e.g., the Library of Congress’s digital cultural heritage projects); (3) individual-based user-generated (e.g., Flickr); and (4) not-for-profit civic-oriented (e.g., the Internet Archive). The preservation of digital artifacts now much more than the scope of tangible preservation by traditional memory institutions (museums, archives, libraries, and private collectors).

Individuals are now taking a more active role in retrieval and distribution of works with cultural and historical significance. To begin with, individuals use networked infrastructures in order to upload and distribute copies of cultural materials, including some that were transferred from other mediums (e.g., chapters of old television programs or scanned copies of old comic books). In addition, content-sharing platforms, social networks and other Web 2.0 applications enable individuals to add one’s personal imprint through the organization, selection, reference, adaptation and re-contextualization of cultural materials. When an individual selects and classifies cultural materials (e.g., music, pictures and video-clips), which she then uploads onto her social network’s personal web-page (e.g., Facebook), she is engaged in an activity that enables her to take part in the landscaping of history and the formation of cultural memories.

The resulted outcome is a kaleidoscope of individuals working through culture and creating a bricolage of new paths and directions in social remembering. Just enter YouTube, search a newsworthy entry, or any other type of cultural item, and immediately you will notice the novel frameworks and mechanisms through which the various layers of life and people’s experiences are being documented, narrated, situated, contextualized, indexed, classified, and, at least potentially, preserved for future generations. Wars, disasters, political events, public affairs, popular culture, personal items, as well as many other fractions of people’s experiences, encounters, and life-hoods, are now being assembled into a network of networks, in which individuals are active participants in the construction of future’s past.

Finally, networked social remembering practices are decentralized in the sense that they constantly blur the boundaries between private and public spheres. In many occasions public networked spheres are no longer “just public.” Concurrently, they are also extensions of individuals’ private experiencing in self-realization and self-manifestation. Take, for example, a personal webpage on a social networking site with one’s favorite cultural items “ripped and mixed.” It is publicly available, yet it is also a corridor to the personal miscellaneous of one’s cultural lives. Networked memory practices are more reflective and transparent of personal materials and narratives that are not filtered through institutional gate-keeping processes. Using collections of personal materials as a form of social remembering is not novel. Memory institutions used this practice long before the emergence of networked communication platforms. Nevertheless, the...
distributed decentralized characteristics of networked infrastructures seem to make the differences in the scale, scope, and accessibility of such materials quite radical.

E. Summation

Together, these paradigm shifts imply a potentially radical transformation in the political economy of memory institutions; that is, the allocation of incentives, resources, and powers to shape the landscapes of history, social remembering, and cultural heritage. Historical truthfulness and social memory, in turn, are elements that influence people’s livelihoods and well-being, as well as the formation of beliefs and ideas. In their broader meaning, the landscape of history and social remembering are also major forces in the construction of ideologies and people’s preferences. Knowledge, information, and culture are concepts that influence the future while corresponding with and being influenced by "the past" (or more precisely, narratives of the past). At the end of the day, this is what networked memory institutions are very much about.

As Tessa Morris-Suzuki has sharply articulated, historical truthfulness is also a social matter that is deeply influenced by power relationships. Political, economic, technological, and legal powers are parameters with direct implications on the ability of individuals, groups, and communities to take an effective part in the landscaping of history and the construction of historical narratives. Our preceding discussion, regarding the paradigm shifts in the political economy of networked memory institutions, emphasized the potential prospects of digitized cultural preservation. My argument in Part III takes a turn as I focus on the complexities of reality where this somewhat utopian vision of digitized cultural preservation confronts dystopian disruptions. One source of these disruptions is partial and gradual privatization processes that both traditional and emerging memory institutions are facing. To this issue I turn.

PART III – THE PRIVATIZATION OF MEMORY INSTITUTIONS

My purpose in this part is to describe the manner in which the emergence of networked communication technologies is the catalyst for the privatization of memory institutions. My use of the term "privatization" is broader than some of its common uses in the literature. "Privatization" is commonly used for situations in which a good that was previously provided by government (through public funding) is now being shifted to a model where its financing and provision are through market mechanisms. My analysis essentially follows this definition, although it also includes in the category of "public provision" not only governments (direct public funding), but also other forms of public-oriented and not-for-profit provision of the goods at stake. Privatization of memory institutions, thus, marks a shift from the centrality of the political and civic spheres in the construction of cultural and social memories to the centrality of markets in this context. As I will demonstrate in the following discussion, to some degree, corporate media – both in its traditional and its novel-networked expressions – is now taking over the long-established social functions of public archives, museums, libraries, and cultural patrons. My subsequent analysis by no means predicts the diminishment of traditional memory institutions. I do argue, however, that if the indicated processes of privatization maintain, in the long-term, market institutions will occupy an increasing share in the cultural fields of social remembering.

A. The Emergence of Cultural Retrieval Markets and Commercial Memory Institutions

Digitization signifies the emergence of cultural retrieval markets and commercial memory institutions due to two transformations that networked communication platforms give

REMINDR: PUBLIC AND PRIVATE RIGHTS IN CULTURAL TREASURES, 81-130 (Univ. Mich. Press 1999) (analyzing the legal aspects of various types of private materials such as diaries and personal notes).


See Tony Bennett, Outsides Literature (1990) (suggesting that the nature of history is discursive mode by mediated groups of gatherings in public historical spaces, and concluding that the past is simply what is seen). History always is a substitute for a past as it is constructed by the work of historians until it dissolves that very idea of past itself. According to this perspective, history, as well as the past it narrates, is limited by the texts of history. For further development of "historical time" and its semantics, see Renshart Rosellini, Futures Past: On the Semantics of Historical Time (Keith Tribe trans., Columbia Univ. Press 2004) (1970). For a discussion of "objective history," as well as the role of contextualization, narratives' construction, and interpretive processes in the work of historians, see Hayden White, Metahistory: The Historical Imagination in Nineteenth-Century Europe (1973) (suggesting that historians establish contexts and narratives which rationalize the past and then identify something as "history").


For a general understanding and definition of privatization, see also John G.A. Poock, The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition 460 (1975).
rise to: (1) the scale, scope, ease, and decreased costs of producing and distributing digital artifacts of cultural works (including of authentic original tangible cultural works); and (2) the scale, scope, production capacities and audience attention attributes that are generated by networked infrastructures for cultural production and cultural exchange, including user-generated content-sharing platforms. My purpose in the next two subsections is to further elaborate on the relationship between these two transformations and the emergence of commercial memory institutions.

(1) Commercializing Cultural Preservation

Regarding the first transformation, the economics are quite simple and straightforward. Since the invention of print, copies of cultural works are and always were traded commodities. They bear economic value. Consequently, along with the ease and decreased costs of documenting, preserving, and distributing digital artifacts of cultural works, comes the economic value and incentive to commercialize the products of such activities. The creative industries have always rested on this logic, as seen in the markets for copies of printed materials, music, and audio-visual works. Nevertheless, in analog realms, the economic equilibrium did not seem to justify mass production and mass distribution of past cultural collections. The costs of maintaining and managing archives and other repositories of tangible cultural works were high, on one hand, and with relatively small profits, if at all, on the other hand. Overall, this area of activity was not commercially profitable. Archives and collections of cultural works remained, therefore, mostly within the spheres of not-for-profit public-oriented provision of cultural preservation.

Digitization and networked communication technologies transform this economic equilibrium by significantly reducing the costs and facilitating the simplicity of: (1) producing high quality digital artifacts (including of authentic tangible cultural objects); (2) storing and retrieving cultural artifacts through databases; and (3) distributing copies of cultural artifacts to the public. In addition, digitization stimulates the economic phenomena of the "long tail." In a networked environment, products that are in low demand or have low sales volume can collectively make up a market share that rivals or exceeds the relatively few current bestsellers and blockbusters, as long as the store or distribution channel is large enough. The "long tail" phenomenon is also a factor that increases the efficiency of commercial memory institutions. The storage capacity of databases is constantly increasing, its costs are decreasing, and networked distribution is both interactive and based on an end-to-end principle. Thus, in the last two decades, cultural (and knowledge) retrieval is becoming an emerging economic business. Consider the following examples:

(1) Commercial enterprises that manage digital images collections of cultural works such as Corbis or Getty Images. These agencies collect, digitize, and then license – both for professional-commercial purposes and for private uses – photographs, visual images (including art works), and videos/stills from audio-visual works. Among other activities, both Corbis and Getty Images focus on acquiring digital reproduction rights of museums' art collections and historical photographs archives like the Bettmann Archive, the Hermitage Museum in St. Petersburg, Russia, the Philadelphia Museum of Art, and the National Gallery in London. The Bridgeman Art Library is another prominent digital images agency that represents museums, galleries, and artists around the world.

Digital image agencies of this kind function as commercial memory institutions in two major aspects. First, they commodify and license for use digital images of society's artistic and cultural treasures. Second, these companies also have a stable of professional photographers who generate stock photos for advertising and media clients. These images are also representations with significance to social remembering.

56 See Lemley & Lessig, supra note 32.
62 See Katie Hafner, A Photo Store, a Mounting Challenge, N.Y. TIMES, Apr. 10, 2007, at CI.
Since 2008, the rapid overtaking of social cultural retrieval networks by corporate media has been a common occurrence. Recent examples include the acquisition of YouTube for $1.65 billion in stock, the acquisition of MySpace by Rupert Murdoch’s News Corporation for $580 million, the acquisition of Flickr by Yahoo, and the acquisition of GroupMe by Sony Corp. for $65 million. As all these examples demonstrate, the rapid overtaking of social cultural retrieval networks by corporate media is as likely to become a tool of market production as a competitor to it, and it is exactly at this juncture that the privatization of networked memory institutions may come into play.

Part II described how contemporary networked cultural production has a derivative function of social remembering. The practical outcome of this observation is that, deliberately or not, Flickr, YouTube, Facebook, and many other online endeavors are de-facto memory institutions. They are meta-archives of cultural representations and private and collective memories. Yet concurrently, proprietary firms are increasingly dominating these infrastructures. This in turn stimulates the privatization of functions that were traditionally performed by public-oriented memory institutions.

By making these observations, I am not arguing that commercial taking-over of cultural retrieval platforms diminishes their focus on user-generated content. Nor do I ignore the fact that many of these ventures were originally initiated by profit-motivated entrepreneurs. I do argue, however, that commons-based peer production is an emerging phenomenon with an embodied social contradiction. Its basic characteristics empower...
individuals in their capacities as landscapers of culture and history. Yet, the same attributes of scale, scope and excess capacity tend to make these novel collaborative frameworks a source of massive profit opportunities. As a result, these novel collaborative frameworks are rapidly being commercialized and thus becoming an integral part of corporate media. Corporate media, however, follows a political economy which, at the end of the day, is bound to influence the conducts and outputs of cultural production networks, including their derivative capacity as memory institutions.

More specifically, attention should be drawn to the regular failures and disruptions that corporate media is subordinated to, including: (1) excessive reliance on advertisements (revenues) and a consequent trend toward content that captures a wide share of the audience and follows the appropriate mood that is required for promoting advertisers’ products; (2) potential acts of private censorship; and (3) alliances between content-sharing platforms and corporate content owners that limit, including through technological protection measures, the incorporation of creative content (e.g., popular music, films and television programs) into user-generated content.

In Part V, I will make several detailed proposals that are intended to mitigate these inclinations. There are two points that I wish to emphasize at this stage. The first refers to the positive externalities that are lost in the course of commercializing cultural digital revolution in two conflicting crucial trends: the democratization of digital content and the increasing importance of digital content as a source of wealth and economic power).

72 BENKLER, supra note 65, (using economic, political, and technological analyses to explain how new information technologies make it easier for individuals to collaborate in producing cultural content, knowledge, and other information goods)

73 See generally C. EDWIN BAKER, MEDIA, MARKETS, AND DEMOCRACY (2002) (focusing on the special nature of media as public goods and, hence, the embodied failure of a market-oriented media system to provide the public with the array of media products that are socially desired).


76 In economics, an externality is an impact (positive or negative) on any party not involved in a given economic transaction. Positive externalities occur when the positive impacts of a product overreach the interests of the direct parties to its production and consumption. See A. OGIS, REGULATION - LEGAL FORMS AND ECONOMIC THEORY, 58 (1994); 35; A.M. FELDMAN, WARE ECONOMICS AND SOCIAL CHOICE THEORY, 107 (1986).

77 See infra Part IV(A).

78 See also infra Part III(B) and infra Part IV(B).

79 Free speech jurisprudence reflects an embodied distrust of governmental involvement in the regulation of cultural production and other related speech activities (see, e.g., Frank I. Michelman, Public Goods, Fair Values, and Constitutional Method, 59 University of Chicago Law Review, 91, 106 (1992); Richard A. Epstein, Property, Speech and the Politics of Distraction, 59 University of Chicago Law Review, 41 (1992)). Indeed, free speech jurisprudence includes also accounts for the necessity of state regulation due to the fact that concentrated private power, in the hands of corporate mass media, regulates and impinges the public discourse, the free flow of information, and the effective speech rights of individuals to less, and even more, than state regulation. Yet the tension described in the above-mentioned text remains persistent and unresolved (see Guy Pessach, Media, Markets, and Democracy: Revisiting an Eternal Triangle, Critical Notice: Media, Markets and Democracy by Edwin C. Baker, The Canadian Journal of Law and Jurisprudence, 959-220 (2004)).
tangible cultural preservation to digitized cultural retrieval also
signifies the increasing dominance of copyright law over the
activity of networked memory institutions. Once transformed into
digital domains, reproduction – an act that is exclusively reserved
to copyright owners – becomes an integral element – a
prerequisite – in almost any form of digital communication,
creation, documentation, archival, or preservation activities. The
fact that digitized cultural retrieval deals with intangible goods
that are governed by copyright law stimulates the privatization
of networked memory institutions through two accumulative tracks:
(1) the commodification of digital cultural artifacts, including
buyouts of copyright portfolios with cultural significance by
commercial enterprises; (2) copyright law’s pressure on traditional
public-oriented memory institutions (e.g., museums and libraries)
to change their policies toward third parties who wish to access
and use copyrighted, cultural works that such institutions posses
and manage.

(1) Commodification, Mergers and Acquisitions of Intangible
Cultural Portfolios

Part III(A) described the emergence of cultural retrieval
markets and commercial memory institutions. Copyright law is
the bedrock that supports and induces commercial forms of
cultural preservation. It does so by legally establishing and
facilitating a proprietary market-based system that enables
producers and institutions to profit from the production and
distribution of intangible cultural artifacts. Copyright law is the
force behind the economic equilibrium that makes digitized
Cultural retrieval an economically viable business, and thus
stimulates the emergence of commercial memory institutions.
The broader the scope and extent of copyright protection, the
greater the inclination toward privatization of networked memory
institutions because of the economic value of selling, licensing
and providing access to digital copies of cultural works.

Practically, this means that with the current extensive scope
of copyright protection digitized cultural preservation activities
may gradually undergo intense privatization. At this point, one

F.2d 511, 518 (9th Cir. 1993); Intellectual Reserve, Inc. v. Utah Lighthouse Ministry, Inc.,
84 See generally RONALD V. BETTIG, COPYRIGHTING CULTURE: THE POLITICAL
85 For a survey, discussion and examples of the expansion of copyright protection in
the last decade, see GUY PESACH, COPYRIGHT LAW AS A SILENCING RESTRICTION ON
NON-INFRINGEMENT: Unveiling the Scope of Copyright Diversity Externalities, 76 S.
86 Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860, 2953-65
87 See 17 U.S.C. § 107. For further discussion See Part V(D)(H) infra. See also Guy
Pesach, Copyright, Music, Digitization and Copyright Law: Taking Stock and Looking Ahead, 1 J.
88 See Diane Leenheer Zimmerman, Can Our Culture Be Saved? The Future of Digital
90 By “comprehensiveness,” I mean the value of the most up-to-date and complete set of
materials available in their relevant content. Knowledge intermediaries and databases are
valued prominently for their capacities to provide access to comprehensive sets of materials.
Zimmerman, supra note 87 at 1004, 1007, 1018 (discussing this in the context of digitized
cultural preservation).
91 In many instances, cultural and informational materials that are provided through
databases and archives are complementary goods. Consequently, and in direct relation to
the parameter of comprehensiveness, those who get exclusive control over some materials
are able to obtain a competitive edge over other commercial players in the field of
knowledge and cultural retrieval.
92 The literature tends to identify media products as a classic example of solidarity
goods. People value media products significantly for the value that IS created through

should also take into account two additional developments. On
one side, copyright protection is now being supported by
additional layers of legal protection against the circumvention
of technological protection measures (TPMs) that restrict access to
and use of digital copyrighted content. On the other side,
copyright's current scheme of exemptions and limitations does
seem to enable effective and sustainable digitized cultural
preservation and retrieval activities outside of commercial market
settings. For example, the current scope, interpretation, and
application of the fair use exception, seem to make it almost
obsolete in the context of digital retrieval and preservation
activities, especially those activities that involve large scale
and large scope reproductions of entire copyrighted works. Similar
outcomes are apparent in the context of specific exemptions that
deal with reproduction for preservation purposes such as Section
108 of the Copyright Act. As a result of this existing legal
regime, licensing and market transactions become the principal
practical option for networked memory institutions.

Another element in the development of commercial memory
institutions refers to transactions in copyright portfolios of cultural
works and the acquisition of such portfolios by commercial
enterprises. Once digital cultural artifacts become tradable goods
they will be traded and reallocated according to the economic
principles that guide media markets. The economics of databases
and networked knowledge intermediaries are based on several
cumulative – and sometimes conflicting – principles: (1)
comprehensiveness; (2) exclusivity; (3) focus on a handful of
blockbuster works that attract much of consumers' attention
surplus; and finally, (4) a tendency toward concentration and
Vertical integration in order to fully use advantages of scale and scope with regard to the production and distribution of media products.\textsuperscript{92} Together, these parameters explain why commercial players in cultural retrieval markets are continuously involved in transactions that provide them with rights and licenses — preferably exclusive — in portfolios of digitized cultural works. The previously described acquisitions by digital images agencies like Getty Images and Corbis,\textsuperscript{93} Google's exclusive contracts with major universities' libraries and publishers regarding the scanning of their collections as part of the Google Library Project,\textsuperscript{94} and the acquisition of YouTube by Google, are only a few examples of commercial transactions in portfolios of cultural works. Some of these deals focus on extracting direct revenues from utilization and licensing of copyrighted cultural works. Others focus on extracting revenues from audience attention that is generated by clusters of content. In both circumstances, there are two important points to be made. First, transactions of this kind are very much responsible for the partial privatization that networked memory institutions are undergoing. Mergers and acquisitions of content portfolios, by corporate media, tend to lead to concentrated commercial media markets, whereas the financial investment in purchasing copyrights in cultural works puts more pressure on extracting revenues from their commercial utilization. The second point refers to copyright's crucial role in facilitating and enabling commercial dynamics of this kind. As demonstrated by the neoclassicist economic approach to copyright,\textsuperscript{95} copyright's function, as an exclusive property right, does not only serve to generate incentives for cultural production. Copyright law also establishes and facilitates a market system for trading and licensing intangible works. It is fundamental to market formation and market operation, and is the driving force behind the above-mentioned dynamics.

Before moving on to the next section, a final caveat is required. By making these observations, I am not ignoring the fact that many networked intermediaries, including several of those previously mentioned (such as the content-sharing websites and Google's library project) are partially based on a free access model. According to this model, users are not required to pay directly money for accessing archived cultural materials. Nor do I ignore the fact that to a very large extent, this model represents an improvement in comparison to prior decades. Until the emergence of the Internet, commercial enterprises were generally reluctant to make their content available to users without direct payment.\textsuperscript{96} Nevertheless, there are several reasons why on its own, embracing a free access model does not rebut copyright's above-mentioned responsibility for the partial privatization of networked memory institutions.

To begin with, a free access model does not necessarily contradict — and in many instances may even integrate well — with a commercial model of digitized cultural retrieval. One prominent example refers to commercial enterprises that provide free access to their content, but still make their profits from advertising revenues. Additionally, one need not confuse a free access model with a true open-access model.\textsuperscript{97} A free access model might still include proprietary restrictions that control and limit the "free" movement and further utilization of its contents.

One example of a free access (but not an open-access) model is Google's Library Project's treatment of public domain materials. Google provides free access to full copies of public domain materials that are archived in its databases. Nevertheless, Google still imposes several proprietary restrictions on the use of such materials. One restriction is that Google prohibits other people from "scanning its scans" and creating additional web services that...

\textsuperscript{92} This last statement should be clarified to some extent, because commercial television and radio were and still are considerably based on a model that provides content free of direct charge from recipients while profiting from selling advertisements. Similarly, newspapers do not charge consumers with the full price of their production costs but rather rely heavily on revenues from advertisements. See generally C. EDWIN BAKER, ADVERTISING AND A DEMOCRATIC PRESS (1994) (providing factual evidence and analyzing the prominent influence that advertisers have on the content of media products within advertisements-supported media entities).


\textsuperscript{94} See also note 25. See also Siva Vaidhyanathan, The Glocalization of Everything and the Future of Copyright, 40 U.C. DAVIS L. REV. 1297, 1215-17 (2007).

\textsuperscript{95} For a critical analysis of the neoclassical theory in the context of copyright law, see Neil Weinstock Netanel, Copyright and a Democratic Civil Society, 106 YALE L.J. 283, 311-36 (1996). For a general discussion of the neoclassical theory of property rights, see Harold Demsetz, Toward a Theory of Property Rights, 57 AM. ECON. REV. 347 (1967).
are based on its scanned public domain materials. Users cannot access and browse the content of Google’s databases; likewise, users cannot apply their own search and retrieval utilities on Google’s database. Users are only allowed to download copies of particular public domain works from Google’s library after using Google’s search engine. In addition to these technological proprietary restrictions, Google also contractually limits the use of its public domain materials to “personal non-commercial use” while prohibiting automated searching and harvesting of public domain materials from Google’s databases.

Another example of proprietary restrictions embodied in free commercial content platforms appears on YouTube. Users can access the content on YouTube free. However, YouTube still imposes several proprietary restrictions on its users. First, technically, the system does not allow users to actually receive a copy of content that someone else has uploaded, but can only view the content or link to it. Users cannot download content and use it in other platforms or settings. Second, YouTube claims copyright in all of the content on the website, except user submissions, including the text, software, scripts, graphics, photos, sounds, music, videos, and interactive features. Finally, recently, YouTube began the implementation of a video filtering system that will give owners of copyrighted videos the choice of blocking or promoting (against revenues from advertisements) their content on YouTube. With the implementation of this mechanism, YouTube users will not only be restricted from secondary uses of content that was uploaded on the platform, but will also be prevented from uploading certain materials to the platform.

A free access model does not, therefore, bar the potential privatization of networked memory institutions. Moreover, as Rebecca Tushnet clearly reminded us at the end of the day, commercial intermediaries like Google are “for-profit organizations.” Hence, no matter how benign these intermediaries may have been thus far, one cannot ignore the chance that, in the long run, current business models of free access might be replaced with a movement toward enclosure and pay-per-use models.

(II) Transforming the Cultural DNA of Traditional Memory Institutions

So far my discussion focused on copyright’s direct effect on the incentives and practices of commercial enterprises. Yet, copyright law’s impact on the privatization of memory institutions has another aspect. Copyright law transforms operation and the cultural DNA of traditional memory institutions. In a networked environment, copyright law and its underlying licensing regimes tend to generate “bottleneck” pressures on traditional public-oriented memory institutions (e.g., museums, libraries, and archives) to adopt proprietary restrictive policies toward third parties. As a result, networked activities of traditional public-oriented memory institutions are likely to become closer to those of commercial enterprises, thus in part neglecting their long-standing legacy as “public trusts” with unique social responsibilities toward the audiences that they are serving. Copyright’s impact on transforming the cultural DNA of traditional public-oriented memory institutions may occur through two main channels: coercion and evolution.

(a) Coercion

By using the term “coercion” I am aiming at the intellectual property, contractual, and technological protection measures that traditional public-oriented memory institutions are compelled to adopt in networked domains. In tangible realms, possession and ownership of cultural objects gave cultural institutions adequate

109 Such a notice appears on all of the PDF files of public domain books that are part of Google’s library.
110 User submissions are subordinated to a worldwide, non-exclusive, royalty-free, sublicensable and transferable license. YouTube Terms of Use, § 6(c).
111 See id.
113 See id.
control over the utilization of these objects. Libraries were able to lend books on an equal basis and in many occasions also to subsidize their provision and charge minimum fees for subscribers. Access policies of museums and other cultural institutions were largely based on similar principles. And lastly, as a matter of law in action, in most circumstances, traditional memory institutions did not restrict or track the uses of their materials by end-users.

This state of affairs no longer exists in a digital-networked environment. Here, unless the copyright work has fallen into the public domain, memory institutions are increasingly subordinated to copyright owners' strategies that alter memory institutions' traditional policies toward their audiences. More specifically, the main restriction appears to be in contractual limitations and technological protection measures that come with licenses of digitized cultural works. According to many licensing regimes, traditional memory institutions are compelled to adopt restrictive terms and practices regarding the ability of individual users to access and use the licensed cultural materials. In addition, memory institutions may also be restricted in their powers to permanently preserve digital copies of licensed cultural works in their collections. Examples in this context include: (a) requirements by publishers of scholarly journals (as well as other types of content) that limit access and use of their digitized content either to libraries' physical premises or to enrolled students in the libraries' parent academic institutions; (b)

106 See American Library Association, Article 1.3 Priority Areas and Goals, The Policy Manual, http://www.ala.org/ala/governingdocs/policymanual/policyman.html. Priority Areas include: "The ALA will promote efforts to ensure that every individual has access to needed information at the time needed and in a format that the individual can utilize, through provision of library and information services. Goals: 1. All individuals have equal access to libraries and information services. 2. Instruction in information use is available to all. 3. Government information is widely and easily available. 4. Library collections are developed, managed, and preserved to provide access for users to the full range of available knowledge and information. 5. Access to information is facilitated by bibliographic organization. 6. Library use is high. Fees are not a barrier to library access and service."

107 Indeed, historically, archives and particularly historical societies were both private and exclusive in their beginnings. Historical societies, even those collecting government records, were also restrictive in their access policy (See SALLY F. GRIFFITH, PHILADELPHIA HISTORICAL SOCIETY OF PHILADELPHIA (2001); KEVIN GUTHRIE, THE NEW YORK HISTORICAL SOCIETY: LESSONS FROM ONE NONPROFIT'S LONG STRUGGLE FOR SURVIVAL (1998)). In this sense, current privatization dynamics of memory institutions have parallels with the origins of some traditional memory institutions. Yet, as part IV infra further elaborates, regarding networked memory institutions, concerns over the consequences of privatization have several aspects other than restrictive access to the repositories of networked memory institutions. In addition, regarding networked memory institutions, the source of restricted access derives mostly from copyright law rather than from control and ownership over originating authentic and tangible documents and cultural materials.

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contractual limitations that prohibit preservation and further use of licensed materials after the licensing agreement has come to an end; (c) adhesion licenses by digital images agencies like Corbis.com, which practically prevent public-oriented non-for profit cultural institutions from including Corbis' materials in their public collections; (d) terms of sale, such as iTunes Music Store's, which arguably forbid libraries from using the Store, since they authorize only "personal, non-commercial use," and (e) contractual terms, such as the terms of Audible (a website supplying audio book content to iTunes ) and Google's Library Project, which limit their offers to individuals making "personal, non-commercial use.""

As these examples demonstrate, by departing from the preservation and provision of access to tangible cultural works, and moving to the realms of digital copies, traditional memory institutions have lost much of their independence and freedom in carrying out their public role. In networked, digital realms, copyright owners hold a floating servitude over the activity of memory institutions. In turn, this leads to a viral effect of privatization because public-oriented memory institutions are pushed toward practices and policies that are closer to those of commercial entities. I am not arguing that traditional memory institutions' attributes and legacies are diminishing. I do argue, however, that the pressure of the copyright licensing scheme on the activities of public-oriented memory institutions may have a noticeable impact on their performances and practices.

A related, yet more discreet effect refers to barons of entry that traditional memory institutions now face due to copyright's licensing regime. Once commercial players enter the field of digitized cultural retrieval, competition arises between commercial intermediaries and traditional public-oriented cultural institutions. One element is competition over potential audiences. Another element is competition over authorizations, and particularly exclusive licenses, from copyright owners to produce and then use digital artifacts of cultural works. Corbis, Getty
Images, and the Bridgman Art Library are in the businesses of selling digital images of art works. Therefore, practically, at least in some circumstances, they are competitors to museums who may wish to take upon themselves similar functions. Similarly, Google's Library Project competes with the public-oriented, not-for-profit Open Content Alliance venture for building a universal open-access digital library.\footnote{The Open Content Alliance (OCA) represents the collaborative efforts of a group of cultural, technological, nonprofit, and governmental organizations from around the world that help build a permanent archive of multilingual digitized text and image content. See Open Content Alliance, http://www.opencontentalliance.org (last visited Feb. 25, 2008). The OCA was conceived by the Internet Archive and Yahoo! in early 2005 as a way to offer broad, public access to a rich panoply of world culture.}

More generally, whenever public-oriented memory institutions attempt to operate in fields that provide either direct or indirect substitutes to products and services of commercial intermediaries, they are expected to confront additional costs and barriers in the course of obtaining licenses for building their online collections.\footnote{See Molly A. Otten, Fine Art Online: Digital Imagery and Current Intellectual Property Law (2004), available at http://www.law.depaul.edu/express/eps/2004/18.pdf.} Market settings are likely to dictate pricing schemes that many public-oriented memory institutions are unable to comply with. In addition, in some cases, commercial intermediaries may manage to obtain long-term exclusive intellectual property rights in digital artifacts, including works of cultural significance.\footnote{See Rhette Alhert & Annemieke Beunen, Exploiting Museum Imagery, in COPYRIGHT IN THE CULTURAL INDUSTRIES 221, 224-25 (Ruth Tosee ed., 2002).} In such circumstances, public-oriented cultural institutions might be totally deprived of the ability to include cultural materials in their databases, regardless of the importance that these materials have for the comprehensives of their collections.

Competitive pressures of this kind require public-oriented memory institutions to adjust their supply curve (as content providers) to their external limitations as consumers of licensed content. Nevertheless, this implies a transformation in the cultural DNA of traditional public-oriented memory institutions. If a university library exhibition on Leonardo da Vinci wishes to use digital images of da Vinci's manuscripts that are owned by use digital images of da Vinci's manuscripts, it will be bound to impose some of Corbis's financial demands and contractual restrictions on its audience. As I will show in the next subsection, the interface of copyright law and the privatization of traditional memory institutions also have an evolutionary aspect. This aspect refers to copyright's influence on memory institutions' increasing inclination to voluntarily adopt commercial practices in their networked activities.


\footnote{One major question in this context is whether and to what extent digital images of existing cultural works should benefit from an independent copyright protection that is accumulative to the copyright in the originating cultural works. At least one federal court was of the opinion that the mere reproductions of existing cultural works (in that case photographs of art works) do not consist of a creative original work that entails copyright protection. Bridgman Art Library Ltd. v. Corel Corp., 36 F. Supp. 2d 191 (S.D.N.Y. 1999). Nevertheless, it is still an open question how far courts will go with this approach, and whether setting conditions for the production of digital images (e.g., angles, lighting, and shades of producing a digital image) will be considered as generating an "original work" that deserves copyright protection. For further discussion see Guy Pessach, The Legacy of Hess Revisited—A Critical Analysis of the Creativity Requirement, 36 Israel Law Review, 19-106 (2002).}

\footnote{The Smithsonian is an educational and research institute and associated museum complex, administered and funded by the government of the United States and by funds from the institute's endowment, contributions, and profits from its shops and its magazine. See About the Smithsonian, http://www.si.edu/about (last visited Feb. 25, 2008).}

\footnote{See Showtime Networks and the Smithsonian Institution Announce a Joint Venture to Create a New On Demand Service, http://www.sho.com/site/announcements/060310smith.do (last visited Feb. 26, 2008).}

\footnote{See Showtime Networks and the Smithsonian Institution Announce a Joint Venture to Create a New On Demand Service, http://www.sho.com/site/announcements/060310smith.do (last visited Feb. 26, 2008).}
“Smithsonian on Demand,” the cable channel that is expected to be the venture’s first programming service. Thus, the Smithsonian may earn payments from cable operators that offered the on-demand service to subscribers. Yet, concurrently, the Smithsonian is obliged to restrict the access of other creators and documentary film producers to significant portions of its archived materials. Or in the words of Ken Burns, an acclaimed documentary film maker: “It feels like the Smithsonian has essentially optioned America’s attic to one company, and to have access to that attic, we would have to sign off with, and perhaps co-opted by, that entity.”

(2) The second example refers to the already mentioned Google Library Project. Google’s major source for book collections is university libraries that provide Google the right to access and scan their collections. The agreements between Google and the participating universities reveal the proprietary regime that Google enforces on its academic partners. Universities libraries and their audiences are left with very few options with regard to the use of scanned copies. Thus, for example, the agreement between Google and University of California includes the following restrictions: the university can offer the digital copy, whole or in parts, “as part of services offered to the university library patrons” but the university must prevent users from downloading portions of the digital copies and stop automated scanning of the copies, for example, by other search engines. Entire works not covered under copyright can be distributed only to scholars and students for research purposes. Finally, the university can distribute only up 10% of the collection to other libraries and educational institutions for noncommercial research. Similar provisions are included in the agreement between Google and University of Michigan.\(^{123}\)

(3) The Bridgeman Art Library\(^{124}\) already represents over a hundred museums and cultural institutions around the world.\(^{125}\) The Bridgeman Art Library then licenses a variety of commercial and private uses in digital images of cultural works from the collections of these museums (as well as selling print copies of art works). As a practical matter, museums and other cultural institutions outsource to The Bridgeman Art Library the function of commercializing their collections. The scope and growth in the activity of The Bridgeman Art Library is therefore an evidence of the increasing implementation of commercial practices by traditional public-oriented memory institutions.

(4) The fourth example refers to ARTstor.org\(^{26}\) a non-profit initiative, with a declared mission of creating and providing digital images for scholarly use. ARTstor, with a collection of more than 500,000 images of art works from major museums, is available for access and use non-profit institutions exclusively, which pay an annual subscription fee. The general public and individuals are unable to access, view and use the database unless they are affiliated and authorized to do so by a non-profit institution that has subscribed to ARTstor.\(^{127}\) In addition, ARTstor permits only the downloading and printing of low resolution images by its subscribers, and it also prohibits any online utilization of downloaded images, including for non-commercial purposes. These policies are being implemented both on digital images of copyrighted cultural materials and on digital images of cultural materials that have already fallen into the public domain. ARTstor is a paradigmatic example for a public-oriented not-for-profit institution that implements licensing schemes and technological protection measures as part of its networked presence.

(5) In 2003, the Louvre Museum in Paris announced that by using digital technology it will make its collection of Leonardo da Vinci’s works accessible “as never before.”\(^{28}\) The museum digitally
photographed twelve of da Vinci’s notebooks and made them available to museum visitors through computer terminals placed on the museum’s premises as part of an exhibition of Leonardo da Vinci’s works. For the rest of the world (other than visitors to the Louvre) and for uses other than a “one-time experience of viewing,” this important digital images collection is practically useless. In a later stage, after the exhibition ends, the Louvre may produce and sell a CD-ROM with digital images from the collection. Eventually, parts of the digital images collection may also find their way to the Museum’s website. The important point for our purposes is that the Louvre treats this public-domain cultural treasure as a proprietary asset with financial upside to be fully utilized rather than as a cultural treasure that was placed in the hands of the Louvre as custodian of the public.

(6) Finally, the increasing inclination of traditional public-oriented memory institutions to adopt copyright-based commercial practices is also reflected in new conceptions and strategies by people within the community of museums, archives and other related cultural institutions. For example, the Canadian Heritage Information Network – a Special Operating Agency of Canada’s Department of Canadian Heritage – issued several reports and papers related to intellectual property and licensing strategies.120 Although one must be cautious with generalizations, overall, these reports signify a paradigm that encourages cultural institutions to use copyright licensing schemes as a strategic business tool. Similar notions are reflected in other reports such as WIPO’s recent Guide on Managing Intellectual Property for Museums121 and King’s College Digital Consultancy Service’s Report on Reproduction Charging Models & Rights Policy for Digital Images in American Art Museums.122

Together, these examples demonstrate that copyright owners are not the only ones pressing for the commercialization of digital representations by memory institutions. Commercialization is also

125 See Kenneth Hamma, Public Domain Art in an Age of Easier Mechanical Reproducibility, 11 DEDIC TO MAG., Nov. 2005, available at http://www.ddlib.org/ddlib/november05/hamma/1hamma.html (supporting the view that museums should “place[e] . . . visual reproductions in the public domain and clearly remov[e] all questions about their availability for use and reuse [by the public].”)

being independently considered and implemented by traditional public-oriented cultural institutions. It is true that to some degree, traditional public-oriented memory institutions were always engaged in commercial activities (e.g., museum shops that sell posters, coffee-table books, catalogues and other souvenirs)123. Nevertheless, these activities were relatively minor in scope, and more importantly, they were distinct and separated from the cultural function of memory institutions. The privatization of networked memory institutions is different. First, it is different in its scale and scope. Second, it is different in the fact that it refers to the core public cultural function of memory institutions – the preservation and provision of public access to cultural works.

I am not arguing that at present, there is already an instantaneously radical transformation in the nature, attributes and legacy of traditional public-oriented memory institutions. Initiatives like the Open Content Alliance124 demonstrate that networked involvement of public-oriented memory institutions is multidimensional and heterogenic. Many libraries, museums and archives are not part of the drift toward market-oriented schemes.125 Still, there are evolutionary dynamics in which at least some memory institutions are adopting networked policies that bring them much closer to market settings. There may be legitimate reasons at the back of this transformation, such as the budgetary constraints of cultural institutions. Yet, even so, this development represents another brick in the proprietary walled-gardens that are gradually being built around the spheres of social remembering.

C. Summation – Privatized Networked Memory Institutions – Practices of Convergence, Mergers and Acquisitions

Let me summarize my argument thus far. The emergence of networked communications platforms signifies partial and gradual privatization processes with regard to memory institutions. When analyzing these processes, it is helpful to make a distinction between two categories of memory institutions. The first category refers to "traditional" activities of memory institutions, such as the selection, documentation, archiving, indexing, preservation and
provision of access to "informational and cultural works. The second category refers to new emerging types of collaborative platforms for the production and distribution of cultural works (e.g., content-sharing platforms). One derivative ancillary function of these infrastructures is constructing and preserving cultural representations of social remembering. Regarding both categories, dynamics of privatization are appearing to take place, at least to some extent and regarding some circumstances. Memory institutions are partially relocated outside of public-oriented spheres and within market-oriented settings. As for traditional activities of memory institutions, these processes may include two transformations: (a) the entrance of commercial players to cultural fields that thus far, have been dominated by traditional public-oriented memory institutions; and (b) the partial implementation of proprietary practices by long-established public-oriented memory institutions such as museums and libraries. Regarding the second category of emerging collaborative infrastructures for social remembering, privatization is marked by the commercialization of these infrastructures.

In such instances of privatization, the paradigm of digitized cultural preservation may be turned over once again, only this time from distribution back to control. In Part II, I argued that the technological conditions of digital networks offer a new paradigm of cultural preservation—a paradigm of distribution instead of the traditional paradigm of tangible control. The privatization of networked memory institutions implies a partial return of a control paradigm. Only now, instead of being dictated by physical conditions—the scarcity of authentic tangible cultural works and the fear of their destruction—the renewed control paradigm is driven by the profit opportunities that come with digitization. Part II also demonstrated how, by making both the inputs and outputs of networked memory institutions a tradable good—a commodity, copyright law functions as a mechanism that facilitates and supports dynamics of privatization.

The privatization of networked memory institutions is both partial and complex. Regarding traditional memory institutions, the long-standing legacy of these institutions, as custodians of the public is, still the dominant approach. Many traditional memory institutions are constantly seeking paths for public-oriented models of digitized cultural preservation. Yet, with the heavy burden of copyright law, the goodwill of public-oriented memory institutions may not always be operational. Regarding commercial cultural retrieval intermediaries that have a derivative de facto function as memory institutions, the situation is even more complex. Entities like YouTube or Google have no proclaimed intention to follow a public-oriented model of cultural preservation. Their emergence as novel types of memory institutions represents a social contradiction between their contemporary goals (maximizing profits) and their long-term implications (externalities) on future's past. Legal regulation, and particularly copyright law, has a prominent role in either increasing or resolving this tension between the dual capacities of privatized memory institutions. My purpose in the following part is to outline some of the consequences that derive from the privatization of networked memory institutions. Part V then continues by offering some regulatory responses for this emerging reality.

PART IV — THE CONSEQUENCES OF PRIVATIZING MEMORY INSTITUTIONS

Before outlining the consequences of privatizing memory institutions, I wish to emphasize two caveats. First, the following discussion by no means presumes an idealized image of memory institutions in prior decades. To the contrary, both governmental and public-oriented memory institutions tend to suffer from failures and disruptions, which burden their selection and access policies. Traditional public-oriented memory institutions (e.g., museums) usually focus on the preservation of "high culture" with a considerable elitist approach regarding cultural works that are worth preserving. Governmental memory institutions (e.g., public archives) focus on very particular types of information and cultural materials. In addition, their access policies may be highly

116 One example is the previously cited OCA, which already includes more than eighty libraries and research institutions, including the Smithsonian Institution. See supra note 116. [Katsi Hafner, "Libraries Share Details to Place Books on Web," N.Y. TIMES, Oct. 22, 2007, http://www.nytimes.com/2007/10/22/technology/22library.html. See also Making of


influenced by power practices of control over knowledge. 139 Even when legally accessible, there are many practical impediments for accessing and using materials in official and public archives. And finally, traditional memory institutions represent very specific ways of thinking about cultural preservation, which are narrower than the prospects of digitized cultural preservation.

The second caveat is that I am not undermining the many social benefits that come with the entrance of commercial enterprises to the fields of cultural preservation and social remembering. Commercial enterprises like Google or Corbis are responsible for an outstanding proliferation of large-scale knowledge and cultural retrieval projects. Moreover, in comparison to traditional memory institutions, commercial enterprises are more inclined to adopt content-natural and populist approaches regarding the knowledgeable goods and cultural representations that they document and to which they provide access. Indexing and selection mechanisms of commercial cultural retrieval intermediaries may have their own biases. 140 Nevertheless, they are still largely based on decentralized bottom-up mechanisms for assigning relevance in which users and individuals have a significant role. Hence, overall and when compared to traditional cultural institutions, retrieval practices of commercial networked intermediaries may be more attentive and responsive to people's preferences. Additionally, as indicated in Part III(A)(I) supra, some networked intermediaries apply a partial free access model which may represent an improvement when compared to prior periods.

With this background, my subsequent discussion does not wish to idealize traditional and prior types of memory institutions. Similarly, it does not wish to invalidate the important role of commercial intermediaries as part of an overall pluralistic equilibrium of memory institutions. As someone who believes in the value of popular culture, I think that commercial memory institutions have an important role in the landscaping of culture. Yet, I also believe that social conditions of gradual privatization, which leave too little breathing room for other types of memory institutions, may give rise to a new set of problems. To this issue I now turn.

A. Memory Institutions and What they Stand For

My aim in this section is to provide a preliminary inquiry of memory institutions. 141 Until today, this topic has gained very little attention in legal scholarship. 142 My following discussion does not pretend to provide a full comprehensive analysis of memory institutions and their social-cultural functions. Rather, I wish to focus on portraying memory institutions through the prism of free speech and the attributes of a democratic culture. 143 This perspective will serve me later on when returning to the issue of privatization.

139 See Sax supra note 46, at 117-135 and the cases and sources cited therein (surveying restrictions on access to libraries' and museums' collections).

140 See infra notes 176-180 and accompanying text.

141 At this point, one caveat should be emphasized: this article has no pretension of taking a position in the various debates between historians and philosophers of history regarding the nature of history, historiography and the work of historiographers. For a discussion of these issues, see Lawrence Stone's critique of the postmodern approach of history. Lawrence Stone, History & Postmodernism, 131 PAST & PRESENT 187, 217-18 (1992). See also Debate from the Journals, in THE POSTMODERN HISTORY READER 259-73 (Keith Jenkins ed., 1997) (thoroughly accumulating sources regarding the different approaches on the nature and subject matter of history); R.G. Colingwood, THE IDEA OF HISTORY (1946) (presenting a more traditional view). Indeed, the juncture of postmodernity and the notion of "history" evoked many debates and discussions. See, e.g., Bennett, supra note 39 (discussing the nature of history as discursive moves by mediated groups of gatherers in public historical spheres, and concluding that the past is simply what is seen). History is always a substitute for a past, as it is constructed by the subjects of history; it only involves the idea of a past that still exists. Under this perspective, history, as well as the past it narrates, are limited by the texts of history. Id. For further development of "historicity" and its semiotics, see generally Reinhardt Rosler, PICTURES PAST: ON THE SEMANTICS OF HISTORICAL TIME (Keith Thomas ed., Univ. Press 2004). Another broad area of discussion concerns "objective history" and the role of contextualization, narratives' construction and interpretive processes in the work of historians. See, e.g., White, supra note 39 (presenting the arguments that narratives that rationalize or explain events are something as "history").

142 At this point, I will briefly mention some of the prominent work on the role of memory institutions. For example, John Lukacs's GODS AND DEMONS: THE AGE OF MEMORY AND FORGOTTENNESS, 1978-1993 (1993) and his work on...
Memory institutions are more than mere repositories for those who deal with historical research. Memory institutions are frameworks for selecting, indexing, storing, preserving and then making accessible, materials and narratives with cultural and social significance. These functions place memory institutions in a fundamental position of influence on people's perception of the past, life-hoods, beliefs, ideologies, cultural tastes, preferences and the shared significance of cultural works to communities and individuals within them. Part II demonstrated how networked memory institutions are gradually converging and merging with broader categories of speech institutions. By using the term “speech institutions” I am aiming at social constructs that facilitate the production and distribution of information and cultural artifacts: newspapers, broadcasters, publishers, universities, search engines and many other types of media and communications mediators. Memory institutions are a unique category of speech institutions because of their strong, non-inclusive engagement with the dimension of time and an intergenerational element. Memory institutions deal with the formation, preservation and accessibility of representations that across times become memories, facts and narratives about the past. Regarding this capacity, the task of memory institutions is dual:

(a) Facilitating processes that determine future's past, or otherwise phrased, long-standing durable cultural representations to which future generations will have access. These include, for example, what libraries do in the context of printed works, what television and films archive do in the context of audio-visual works, and what Flickr does currently with regard to digital images.

(b) Facilitating the capacities of individuals to take part in the landscaping of cultural and informational works for future generations, including adding one's personal imprint through the organization, selection, contextualization, reference and adaptation of such materials. Consider, for example, the restrictions that a content-sharing site like YouTube—a paradigmatic example for an emerging networked memory institution—intends to impose on the use of copyrighted materials within user-generated uploaded content. Restrictions of this kind are a de facto regulation of people's participation in individual and collective social remembering. Similarly, even a search engine's basic algorithm could be perceived as a mechanism that facilitates individuals' capacities to take part in the landscaping of history. And with regard to traditional memory institutions, the decision of governmental and municipal archives as to what types of materials to preserve also constitutes a form of regulating people's participation in the landscaping of history.

These attributes of memory institutions emphasize their distinctiveness from other types and functions of speech institutions. Memory institutions' social function is forward looking and intergenerational. It includes a fundamental impact on future generations, which in turn has two features. First, future generations are in essence a captive audience of memory institutions, captive in the sense that someone else, sometime before, deliberately or not, constructed a set of cultural representations, historical narratives, individual and collective memories that are to be preserved and left accessible for future generations. As opposed to contemporary audiences, future generations seem to have no practical ex-post ability to influence the remains of the past as they were accumulated and narrated by previous generations (e.g., art works that museums decide to obtain and preserve for the benefit of future generations). By making this argument I am not ignoring the failures and disruptions in the manners that contemporary speech institutions correspond to the preferences, tastes and demands of audiences. I do argue, however, that by definition, future generations are in a much more disadvantaged position. They lack any capability of influencing the mechanisms of selection, indexing and preservation of materials that construct their past.

The second feature is that from a speaker's perspective, memory institutions involve an additional component that comes

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145 The notion of “speech institutions” represents a new paradigm that is gradually being employed by First Amendment scholars, and that examines whether, to what extent, and under which conditions certain types of “speech institutions” should be accorded special treatment. See, e.g., Frederick Schauer, Towards an Institutional First Amendment, 89 NOTRE DAME L. REV. 1256 (2004); Joseph Blocher, Institutions in the Marketplace of Ideas, 57 DUKE L.J. 591 (forthcoming 2008), available at http://ssrn.com/abstract=1009885; Kathleen M. Sullivan, First Amendment Intermediaries in the Age of Cyberspace, 45 UCLA L. REV. 1033 (1998).


147 See, e.g., Baker, supra note 74, at 634-45 (discussing: (1) the failure of a market-oriented media system to have any natural or logical priority as a method of identifying and satisfying people's preferences and desires; (2) the distortions that market-generated preferences produce due to the inherent bias of markets towards commodified media products; and (3) the fact that people's preferences are determined by, rather than being exogenous to, any current realm of media products to which they are effectively exposed).
on top of other, more noticed elements of speech institutions. Memory institutions involve and regulate individuals' capacities to take part in the landscaping of history and culture for future generations. This element may be distinct from the regulation of one's participation in current and contemporary speech activities. It may be distinct in terms of the rights and powers that an individual can legitimately demand. It may also be distinct in terms of the types and consequences of the regulation - both public and private - that memory institutions impose on third-party participants.

Consider for example the case of user-generated content-sharing platforms, which function also as derivative memory institutions.148 Regarding contemporary speech functions of such platforms, individuals seem to have a relatively weak freedom of speech claim for uploading "mere" non-transformative copyrighted materials on the platform (e.g., "my favorite video clips").149 Yet, a stronger claim for uploading these materials may arise if one considers this action as participating in the landscaping of culture for future generations. Now, the same action may be perceived as an act of self-manifestation and contextualization that links to one's democratic right to take part in the formation of historical and cultural narratives. Indeed, I wish to argue that in a democratic culture, part of people's freedom of speech is the freedom to mark ones personal imprint on future's past. This is not just a matter of future audiences' reception interest in having access to plural and multidimensional perspectives and representations of the past. It is also a matter of conceiving people's participatory speech rights as including an intergenerational element, taking an effective part in processes of social remembering.

The functions and goals of memory institutions, therefore, are distinct from the functions and goals of contemporary cultural production and they may require another set of policy

148 See supra Part III; infra notes 67-80 and accompanying text.
149 See Julie E. Cohen, Copyright, Creativity, Catalog: Creativity and Culture in Copyright Theory, 40 U.C. Davis L. Rev. 151 (2007) (persuasively showing how pure personal use, copying, and retelling of nuded copyrighted materials embody important social values, including such as those underlie the copyright system itself). But see Rebecca Tushnet, Only This Essay: How Fair Use Doctrine Hurts Free Speech and How Copying Works, 114 Yale L.J. 585 (2004) (articulating how pure copying of entire copyrighted works can also serve valuable First Amendment purposes, both for audiences and, less obviously, for speakers, for whom copying serves interests in self-expression, persuasion, and participation). Both papers, however, acknowledge that there may be many circumstances in which copyright would still trump First Amendment considerations in circumstances of which copyright would trump First Amendment considerations in circumstances.

150 See Pesach, supra note 105, at 257.
151 See American Library Association, THE POLICY MANUAL § 1.3, http://www.ala.org/ala/ourassociation/governingdocs/policymanual/mission.htm (last visited Feb. 26, 2007), Priority Area A states: "ALA will promote efforts to ensure that every individual has access to needed information at the time needed and in a format the individual can utilize, through provision of library and information services. Goals: (1) All individuals have equal access to libraries and information services. (2) Instruction in information use is available to all. (3) Government information is widely and easily available. (4) Library collections are developed, managed, and preserved to provide access for users to the full range of available knowledge and information. (5) Access to information is facilitated by bibliographic organization. (6) Library use is high. Library services are not a barrier to library access and service."

democratic and autonomy interests of future generations and as an end regarding contemporary participants in the process of shaping future's past – the landscape of culture and history for future generations. Practically, a democratic culture of memory institutions calls for several elements:

(1) Institutional diversity that enables a checks and balances regime between different types and categories of memory institutions – commercial, public-oriented, participatory, traditional and novel – that complement each other and thus mirror a variety of angles of "of and about" any contemporary society;

(2) Capacities of individuals to access and use cultural materials and communicative platforms both as inputs and outputs in the course of their engagement in the landscaping of culture, history and social remembering; and

(3) Technological and communicative infrastructures capable of facilitating the preservation and making available of cultural materials to future generations according to the above-mentioned criteria. From an intergenerational perspective, memory institutions require an element of compatibility and interoperability that make possible the longevity and transferability (migration) of cultural materials from one generation of memory institutions to the next (e.g., from institutions of tangible preservation to digital images collections).

My purpose in the following sections is to examine how the privatization of networked memory institutions corresponds with these conditions.

B. The Commodification of Public Spheres for Social Remembering

The first consequence of privatizing networked memory institutions is seemingly obvious but it is still fundamental. Privatization may partially induce the commodification of public spheres for social remembering. This development represents a transformation from prior decades in which public spheres were a focus of cultural preservation and memory institutions. The preliminary concerns that come into mind in this context are of commercialization and unequal participation.

(a) Commercialization

The impacts and biases of commercialization were already mentioned in Part III,154 and they are basically mirroring the general drawbacks that are associated with corporate media. The risk is that if corporate media becomes a dominant player among

memory institutions, society's landscape of history and culture will be considerably a mirror of corporate media's perceptions and representations of "of" and "about" the pasts and presents of society. This would be a distorted mirror in that it reflects several particular dominant social groups at most. In many occasions, this may not even be a mirror and reflector of life but rather a mirror of the views, beliefs, tastes, preferences and social conceptions that corporate media's particular interests are aimed to enforce in any given era. I will return to this issue in section IV(D) but the important point for our current discussion is the following. Because corporate media is a major stakeholder in contemporary cultural production, it is likely that in its concurrent secondary capacity as a memory institution, corporate media will focus on preserving mostly its own contemporary row materials. These materials tend to concentrate on particular types of commercial cultural representations, which do not necessarily reflect a pluralistic wingspan of society at any given time. Moreover, here one must recall that corporate media is considerably more focused on shaping preferences and beliefs rather than reflecting them.155 This raises the risk that in its social remembering functions, corporate media will merely reinforce preferences and beliefs that were attempted to be embedded in any particular period.

By making these observations, I am not expressing a view against popular and commercial culture. I only argue that regardless of ones preferences toward commercial culture, there are disadvantages if corporate media's dominant position in any contemporary culture will become a main source and filter that memory institutions work through. Consider for example the differences between an amateur digital music library or a peer-to-peer file-sharing platform, and at the other extreme, a commercial online music store like iTunes or Rhapsody. Or for another example, the differences between the television archives of Hulu156 – a new online television archive of News Corp and NBC Universal – and on the other hand, the online television archives of the Internet Archive.157 The long-term landscape of history and culture that is portrayed by digital archives of corporate media, enterprises is expected to be notably different than that of other

154 See Baker, supra note 74, at 87-92. See also Postach, supra note 84, at 1082-1083.
156 See supra note 24 and accompanying text. See also Internet Archive's Moving Images Archive, http://www.archive.org/details/movies (last visited Feb. 26, 2008). The Internet Archive describes itself as a "library of free movies, films, and videos. This library contains thousands of digital movies which range from classic full-length films, to daily alternative news broadcasts, to videos of every genre uploaded by Archive users. Many of these movies are available for download." Id.
memory institutions.

Another related aspect is that the commercialization of public spheres for social remembering can also lessen the commitment of memory institutions to the value of long-term continuation and comprehensiveness, regardless of economic considerations. Commercial intermediaries might abort projects that are not profitable or channel their resources to the retrieval and preservation of materials that are likely to sustain long-term profitability. Similarly, commercial intermediaries' commitment to patron confidentiality and privacy concerns seems to be more doubtful than the long-standing commitment to privacy of public libraries.\footnote{See Siva Vaidhyanathan, A Rich Commodity: Property Rights in Intellectual Property, CHRON. OF HIGHER EDUC., Dec. 2, 2005, at 87, available at http://chronicle.com/weekly/v52/i15/15600701.htm.}

(b) Unequal Participation

A second concern is the unequal participation in the activities and outcomes of memory institutions. The subject matters of memory institutions are to a considerable degree "political goods," elements with direct implications on the beliefs, ideologies, and preferences of individuals, as well as on their ability to have their say in such matters. Memory institutions thus operate in a political-public sphere that justifies and requires equal participation of individuals in their capacities both as contributors and as recipients of social remembering. For this reason, memory institutions and their subject matters are regarded by many as public goods that should be provided through public-oriented public institutions with an inclination toward equal access and equal participation. Libraries, museums, archives, and other cultural preservation institutions are usually conceived as entities that bear unique social responsibilities and fiduciary duties to the public.\footnote{For an elucidation of this point, see, e.g., supra note 105. In some circumstances, such as in the case of museums, this duty is enforced through judicial oversight of the tax exempt foundations that museums operate. See S. AXEL, supra note 34; John Nivola, Duty Exempt Foundations, The Economist, May 23, 1989, at 170. Regarding other categories of traditional memory institutions, including libraries and archives, their subordination to public norms may be the consequence of either direct governmental involvement in their financing or inter-self regulation. See e.g., the American Library Association, "Code of Ethics," available at http://www.ala.org/ala/aboutala/ethics/ethics.cfm.}

Indeed, these institutions suffer from their own biases and disruptions. Yet their legacy still tends to involve a sense of respect toward the value of equal access and, to some degree, the value of equal participation. Consider, for example, the Library of Congress's deposit requirements. Copyright owners are required by law to deposit a copy of all published works originating in the United States with the Library of Congress within three months of publication.\footnote{17 U.S.C. § 407(a) (2008). Section 407(c) provides means for obtaining deposit of copies and phonorecords of "unpublished" television and radio programs that have been broadcast in the United States. In order to effectuate such deposit, the Librarian of Congress may simply make an audio or video recording, or other fixation of such a broadcast as it occurs, and reproduce one copy or phonorecord for archival purposes. Id. § 407(c). Alternatively, the Register of Copyrights may make written demand upon the owner of the right of transmission in the United States, for the deposit of a copy or phonorecord of a specific transmission program. Id. § 407(c)(2).}

With privatization, what were previously public goods are now turning into economic propriety goods.\footnote{See Part III supra.} Both memory institutions and their subject matter may now be operating under a new set of property rules which disregard the notion of equal and public participation in four key aspects: (1) in terms of people's ability to access and use preserved cultural materials; (2) in terms of people's capacities to take an active role in the landscape of history; (3) in terms of people's ability to participate in determining the governance rules and guiding policies of memory institutions; and (4) in a somewhat paradoxical manner, commercialization involves not only risks of enclosure, but also a risk of information overload regarding particular types of cultural representations.\footnote{See, e.g., Frank Pasquale, Copyright in an Era of Information Overload: Towards the Privatization of Categories, 60 VAND. L. REV. 135 (2007) (discussing information overload in terms of environmental law and information ecology).}

Because commercial enterprises tend to merge their function of contemporary content distribution with their ancillary archiving function, there are spillovers and drifts from the production function to the preservation function. Thus, torrent distribution of contemporary content may also become dominant within the social remembering capacity of corporate media and, consequently, leave less space for other representations of the past. Consider, for example, a commercial social network's (e.g., MySpace\footnote{See www.MySpace.com}) contemporary function of content promotion with its secondary derivative function as a memory institution. Extreme commercialization of social networks and ruinous competition over audience attention may gulp down and put out of sight other elements and cultural representations.

(c) Institutional Economies of Social Remembering

Another consequence of commodifying the public spheres of social remembering involves the risk of the shift to institutional parts.\footnote{See supra Part III.}
structures with more transaction costs, thus leading to a regime that disrupts efficient information flow between memory institutions and within them. I argued previously that a democratic culture of memory institutions emphasizes three elements: diversity, comprehensiveness, and the empowerment of people's capacities to work through memory institutions while using cultural works both as recipients and as contributors. These conditions were never fully met. Yet, privatization may take society several more steps away from these elements. Networked memory institutions manage an immense number of cultural works, whereas the imposition of proprietary regimes tends to involve problems of anti-commons and fragmented markets. Additionally, one must add the layer of differentiated contractual terms and licensing regimes. The expected outcome is a web of transaction costs that individuals and institutions face in a privatized environment of networked memory institutions.

Consider, for example, the case of digital image collections of art works. Once commercial enterprises like Getty Images, Corbis, and The Bridgeman Art Library are becoming dominant players in this field, the use of each and every digital image in their collections becomes subordinate to a complex regime of rights clearance, including contractual terms. This in turn stimulates a loop of privatized concentration. While public-oriented entities may be driven out of this area of activity, commercial enterprises attempt to overcome such transaction costs by merging and converging cultural portfolios into larger bulks by mergers or acquisitions.

A public sphere model of memory institutions, on the other hand, attempts to overcome these costs by gathering as many cultural works as possible into one public pool. In prior decades this goal was achieved by schemes like inter-library loans. In a networked environment, public-oriented memory institutions are visioning parallel ventures of open-content alliances. Here, one must bear in mind that memory institutions' subject matter has attributes similar to those of a natural monopoly. Hence, if all cultural materials are accumulated in just a few central sources (networks) from which they can be accessed, this would significantly lower the transactions costs that result from fragmentized licensing markets. As Google's Library Project exemplifies, even in a world of privatized memory institutions, society may end up with either one or several oligopolistic memory institutions. Regarding such a reality, however, a proprietary regime appears to be inferior to a public-oriented open-access scheme. My prior discussion highlighted the fact that due to high transaction costs, a model of robust free markets seems inapplicable in the context of proprietary memory institutions. As a result, a model of public provision may work better for the public interest than concentrated private ownership.

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160 See supra notes 12 and 134 and accompanying text. See also Molly Shaffer Van Houweling, Cultural Commons and the Constructed Commons, 70 LAW & CONTEMP. PROBS. 23 (2007) (describing the Creative Commons licensing schemes).

161 Natural monopoly occurs when fixed costs are so high and marginal costs are so low that it is less expensive for one company to deliver a given number of channels to an area than it would be for two or more companies to provide equivalent combined capacity, because average per unit costs would constantly decrease as new firms produce more. See Douglas H. North, The Structure of Economic Institutions, 1 J.L. & Econ. 55, 56 (1968). While the term "natural monopoly" is usually associated with utilities such as electricity, water supply, or some aspects of telecommunication (id) a natural monopoly exists whenever the costs of production are such that it is less expensive for market demand to be met by one firm rather than more than one firm. In this situation it is optimal to have only one firm. When a natural monopoly exists, a common policy response is to subject it to some form of regulation, in order to ensure socially desirable outcomes when competition cannot be relied upon to achieve them (id). In our context, transaction costs highlight the efficiency of cultural preservation's public provision through one or only several firms, rather than through decentralized market mechanisms and transactions. Such circumstances are usually analyzed through the paradigm of institutional economics, which attempts to locate circumstances in which the production, management, and distribution of resources through one firm is more efficient then through decentralized market transactions. See, e.g., OLIVER E. WILLIAMSON, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS (Free Press 1975).

162 Part IV infra challenges the presumption that the proliferation of networked memory institutions requires a framework of economic resources and incentives that are preconditioned upon the support of a proprietary copyright regime. The important point for my current discussion is that the high transaction costs that a proprietary regime imposes on digitized cultural retrieval and preservation activities seem to far overreach the proclaimed contribution of such a regime to efficient allocation of resources and incentives for cultural preservation activities. I will argue in Part IV infra that copyright may be required for facilitating the production and distribution of cultural artifacts. Yet the latter stage of networked preservation seems to operate well without the support of copyright and a proprietary regime.
C. Future's Past, Separation of Cultural Powers and Privatization

Another consequence of privatization is the gradual convergence between institutions of cultural production and institutions of cultural preservation. This previously mentioned point requires further elaboration. Until the emergence of networked memory institutions and their privatization, there was a considerable degree of institutional separation between cultural production institutions (e.g., book publishers, record companies, and film producers) and institutions for cultural retrieval and cultural preservation (e.g., libraries and archives), that is memory institutions. In digital domains, this separation is being blurred, whereas privatization further stimulates the integration of these two distinct functions. Not only are the same institutional frameworks functioning both as cultural producers and as cultural reservoirs, but also there are content drifts and integrations between the two functions.

Dynamics of this kind follow the logic of corporate media's political economy, which includes vertical and horizontal integrations that are aimed to fully utilize economies of scale and scope regarding intangible goods with high fixed costs and almost zero marginal costs. According to such economics, the market for social remembering seems nothing more than one more ancillary derivative market in which efficiency considerations dictate further utilization of media products that have already obtained their popularity and audience attention. In addition, copyright law further induces the integration between cultural production and cultural preservation functions by making networked memory institutions expensive for contemporary corporate media and more costly for external independent memory institutions. Contemporary corporate media owns much of its own content and therefore can preserve it free of licensing fees. External independent memory institutions, however, are in a different position because they do not possess content portfolios of their own. Hence, unless sheltering under one of copyright's exemptions, they are required both to obtain authorization and pay royalties to copyright owners as a prerequisite for their preservation activities. This makes networked cultural preservation more economic for contemporary media enterprises.

Concurrently, it also increases the likelihood that contemporary media enterprises will concentrate on preserving materials that were originally produced by them, or that they are authorized to use.

In my view, this integration between the production, distribution, and social remembering functions may bear undesired democratic and cultural consequences. One can think of the separation between the production function and the preservation function as a checks and balances mechanism that mitigates some of the failures and disruptions in the outputs of the production function. This separation of cultural powers enables a competent framework of memory institutions for preserving and reflecting a diverse range of cultural representations and memories, including representations that are not those of any dominant contemporary media institutions. It also enables a critical outlook on the biases of contemporary information and cultural representations such as those of dominating contemporary media enterprises.

Compare, for example, the Vanderbilt Television News Archive and its comprehensive collection of all television news programs in the United States with any particular networked archive of a commercial television network (e.g., MSNBC News). Locating the function of social remembering in the hands of contemporary news manufactures is likely to replicate many of the biases of the contemporary commercial news media.

Independent memory institutions for television news, on the other hand, enhance mechanisms of selection, indexing, and contextualization that overcome such biases, allowing a critical outlook on any dominant contemporary discourse rather than its...

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replication.

D. Privatized Memory Institutions, Leveraged Cultural-Political Dominance and Manipulations

The preceding subsection relates to another concern. The privatization of memory institutions may stimulate intergenerational cultural dominance, including potential manipulations in the construction of historical narratives. Memory institutions deal with representations of narratives about historical truthfulness and cultural memories. Consequently, memory institutions are and always were tangled with and influenced by power relationships. Political, economic, and legal powers are parameters with direct implications on the capacities of groups and individuals to participate in shaping future’s past through memory institutions.

The privatization of networked memory institutions shifts significant shares of this cultural capital to commercial enterprises and corporate media. This in turn may stimulate dialectics in which commercial intermediaries replicate their cultural dominance from one generation to another. Since control over memory institutions entails influence over people’s perceptions of their pasts, such a control also entails a dominant position in shaping people’s contemporary preferences, livelihoods, and beliefs. The outcomes of such dialectics are then reproduced and amplified by the fact that the same contemporary audiences are also active participants in shaping their generation’s future’s past. Placing this cultural capital in the hands of corporate media and communications industries raises new concerns regarding both direct and unintentional manipulations in the construction and management of social remembering. Indeed, the power of mass media in shaping contemporary elements of people’s lives is well recognized. Nevertheless, expanding such powers and cultural dominance beyond any contemporary discourse and towards an intergenerational dimension imposes a new set of concerns.

Consider Google’s variety of functions as a networked memory institution. Google has several ventures through which it will gradually obtain a dominant position over future’s past and the landscaping of history. To begin with, Google’s search engine maps, classifies and organizes the Internet both for contemporary users and for future generations. Google’s search engine is also a gateway that many individuals use when they begin their own personal journey of working through culture. Other projects of Google, including Google’s Library Project and YouTube, are also becoming central networked institutions for cultural preservation and social remembering. Google thus obtains a dominant position not only in shaping contemporary preferences and perceptions of people, but also in shaping people’s perceptions about the past, society’s collective memories, and cultural heritage. The outputs of this dominant position are then replicated and amplified whenever individuals who use Google’s applications participate in further activities that deal with cultural retrieval and cultural preservation.

Imagine a documentary filmmaker in the year 2010, who relies and uses materials from YouTube. Or consider a legal historian in the year 2010, who looks in the Google Library for materials on the network neutrality debate, or a researcher who uses Google’s search engine and the Google News application for searching materials on human rights violations in China. In all such instances, the de facto positioning of Google as a memory institution may result in biases and manipulations, which are then reproduced in further secondary works of those who use Google at their gateway and time-tunnel to society’s landscapes of the past.

Among the potential biases and manipulations are the following. One category is direct biases of either “private censorship” or advertising and content promotion policies. Another more oblique type refers to computer-generated biases. Even indexing and selection mechanisms that lack any direct commercial manipulations and are seemingly based on “objective” parameters (such as aggregation of popular links) may be manipulated by network effects, power distribution laws, and dynamics of a “winner-take-all” market. As a consequence, computer-generated mechanisms for indexing and selection may

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177 Id.

reflect a canon of cultural representations that ignores many other voices and alternatives for organizing knowledge and cultures. The landscapes of culture and history are thus constructed, indexed, and organized through particular and narrow dimensions of people’s informational and cultural engagements in prior times.

Google is only one illustration of a broader concern. Privatized networked memory institutions follow certain biases and manipulations in their processes of knowledge retrieval and cultural preservation. Some biases and manipulations may be deliberate. But even when there are no deliberate manipulations, cultural and knowledge retrieval are still guided by a selection and indexing agenda—a certain ideology of organizing culture and knowledge that is based on a set of political, cultural, and economic perceptions. Indeed, memory institutions have always been implicated by dynamics of this kind. For example, the traditionalist conception of an “archive” and the documents it should preserve rests on a particular conception of the past and historical research. Memory institutions were always social constructs that mask as much as they reveal. There are, however, two novel elements in the biases and manipulations that privatized memory institutions may be subordinated to.

The first element refers to the entrance of commercial biases and manipulations in the landscaping of history. This naturally imposes a set of new risks to liberal democracies. The tension between capitalism and democracy is of no novelty. In 1977, Charles Edward Lindblom’s ground-breaking work, *Politics and Markets: The World’s Political-Economic Systems*, showed how, contrary to classical democratic theory, politics is not an autonomous sphere of activity, but is indeed shaped and controlled by the dominant economic interests. As a consequence of this “circularity,” the most important issues of economic and social structure—what Lindblom called the “grand issues”—tended to remain at the margins of politics. The reason, Lindblom hypothesized, was the control exercised by corporate interests over the political agenda.

The circularity that Lindblom describes emphasizes the consequences of commercial-economic biases and manipulations in the operation of networked memory institutions. Biases and manipulations of this kind are not just a matter of attaining and retaining cultural dominance. In addition, these are also mechanisms for reinforcing and replicating certain economic and political structures, while veiling other optional ways and perspectives. Because “the past” and social remembering are major forces in contemporary politics, control and manipulations in representations of the past become imminent for any contemporary social conditions. By organizing knowledge, information, and culture, networked memory institutions are influencing the boundaries of political discourses for future generations. Consequently, once economic and commercial interests become involved in memory institutions, their ideology and self-interests, as a social group, are bound to be reflected in their representations of the future’s past. From this perspective, the call for separation of powers between the cultural production function and the cultural preservation function becomes imminent. The second element refers to substantial lack of transparency regarding the biases and manipulations of privatized memory institutions. Networked intermediaries tend to limit the public’s knowledge of their algorithms, selection, and indexing mechanisms. In addition, users and third parties do not usually have direct access to the full “naked” databases of privatized memory institutions. As opposed to the Library of Congress and its catalogue, one may search Google Library through Google’s searching facility, but cannot browse the full database of sources directly or otherwise according to one’s own self-defined parameters and algorithms. This lack of transparency makes the biases and manipulations of privatized networked memory institutions very hard to detect. Cultural and derivative political dominance are thus gained, maintained, and replicated through a “black box” that leaves little effective powers of critical cultural studies regarding the driving forces of cataloging knowledge and culture for future generations. I am not arguing that in prior periods, the selection mechanisms of traditional memory institutions, such as museums, or archives, were transparent. Nevertheless, what is changing now is that the lack of transparency, in the selection mechanisms of memory institutions, is being coupled together with the lack of institutional separation.

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184 See supra Part IV(C).
186 See supra Part III(A).
between the function of cultural production and the functions of cultural preservation and social remembering. This, in turn, imposes a new set of problems such as the ones just described.

E. Summation

The partial privatization of memory institutions introduces a new order to the politics of the future's past. At the outset, it is a social-cultural order that imports structures and dynamics similar to those of contemporary cultural production by corporate media. Commercialization and unequal participation are two elements that unsurprisingly are associated with the partial privatization of memory institutions. Privatization also diminishes the institutional separation between the function of cultural production and the function of cultural remembering. As a result, social groups with dominant positions in contemporary media are able to reproduce their social dominance from one generation to another. The power to remember, as well as the power to forget, is thus gradually being concentrated, at least partially, in clusters of commercial enterprises with particular interests, beliefs, ideologies, and preferences. From a long-term and intergenerational perspective, these dynamics might be hazardous for a democratic culture because they disrupt and manipulate social remembering practices. I do not aim to portray a dystopian collapse and diminishment of public-oriented memory institutions. I do argue, however, that in a long-term perspective, dynamics and developments, such as the ones that were described in this part, might have a gradual negative impact on social remembering practices and their capacities to serve a public-oriented viewpoint. My purpose in the final Part is to outline several reform proposals for de-privatizing networked memory institutions and relocating them back into public spheres of social remembering.

PART V – DE-PRIVATIZING NETWORKED MEMORY INSTITUTIONS

Where do we go from here? To a considerable degree, the privatization of networked memory institutions is an inevitable byproduct of the new social conditions that digitization encompasses\(^{187}\). Reform proposals in this context require, therefore, a dose of pragmatism in adjusting regulatory solutions that provide enough breathing room for independent public-oriented and individual-based networked memory institutions. But before reaching my particular reform proposals, some general remarks are worth mentioning.

A preliminary step toward de-privatizing is raising public awareness both to the democratic prospects of networked memory institutions and to the obstacles that extreme privatization tends to impose in this context. Here, two key points should be emphasized. First, along with other perspectives, the legal discourse over the future of networked memory institutions should be framed through the prism of free speech jurisprudence. My preceding discussion highlighted the connection between memory institutions and a democratic culture of free speech. Memory institutions regulate the powers of individuals to take part in the landscaping of cultural and informational works for future generations, as well as the ability of future generations to be exposed and have access to a diversified range of representations and narratives from and about the past. The introduction of free speech jurisprudence to the regulation of memory institutions is helpful for two reasons. First, it further emphasizes the importance of supporting a diversified and democratized social structure of memory institutions. Second, freedom of speech is a normative source that can and should serve as a compass in adjusting and fine-tuning positive copyright law doctrines in a manner that would lessen the dependence of public-oriented memory institutions on copyright owners. By making this argument I do not wish to overstate optimism about judicial activism in reconstructing copyright law according to the First Amendment.\(^{188}\) I still believe that, regardless of the bounded limits of constitutional challenges to copyright law, framing the debate over the privatization of memory institutions as a free speech matter bears important normative consequences. It introduces a democratic compass that is based on the values of equal participation, political freedom, and personal autonomy.\(^{189}\) As my earlier discussion indicated, these are exactly the values with which memory institutions correspond.

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187 See part III supra.

188 See, e.g., Eldred v. Ashcroft, 537 U.S. 186 (2003) (rejecting a First Amendment challenge to the constitutionality of the Sonny Bono Copyright Term Extension Act). In Eldred, the majority's opinion had two prongs. First, the court observed that, on the whole, there is no conflict between copyright and free speech because the copyright scheme incorporates its own speech-protective purposes and safeguards (such as fair use defense or the idea-expression dichotomy). Id. at 219-221. Second, the court implicitly stated that there may be circumstances in which First Amendment scrutiny might be necessary if and when Congress would alter "the traditional contours of copyright protection." Id. at 221. See also Michael D. Birnbaum, Copyright Law and Free Speech After Eldred v. Ashcroft, 76 S. CAL. L. REV. 1275 (2003) (discussing the interection of copyright and free speech after the Supreme Court's decision in Eldred v. Ashcroft).

189 See Balkin, supra note 30, at 35-50 (framing freedom of speech as a matter of political freedom, personal autonomy, and equal participation in the spheres of culture and politics).
Diversity in organizational structures of memory institutions serves several goals. It advances the pluralistic vision of a democratic culture by enabling a variety of speakers and a variety of audiences to participate in cultural retrieval and social remembering. Institutional diversity also mitigates, balances and supplements the products, outputs and content management policies of commercial memory institutions. If along with Google’s Library Project, there is a digital library of the Open Content Alliance, and along with Youtube, Wikipedia develops its own user-generated moving images collection, de-privatization will become a visible option.

Practically speaking, this presents a relatively complex scheme of regulation that will encompass all layers of communicative actions, not only the content layer and its regulation through copyright law, but also the physical layer and the logical layer. Broadband discrimination against P2P file-sharing, search engines’ manipulations and biases, and software interoperability are just a few examples of elements in the physical layer and the logical layer that may require regulatory intervention. In the remaining sections of this article, I wish to focus only on the content layer and its regulation through copyright law. I offer several adjustments to copyright law that advance the above-mentioned goals. The accomplishment of these reforms alone is expected to have a direct and prominent contribution to the de-privatization of memory institutions.

A. Copyright and the Organizational Structure of Memory Institutions

Part III(B) demonstrated how copyright law encourages the activity of commercial memory institutions, while imposing costs and burdens and discouraging not-for-profit, civic-oriented memory institutions. De-privatization of networked memory...
institutions requires a legal policy that facilitates free use of digitized cultural artifacts and narrows their subordination to copyright. Such a legal regime would increase the capacities and incentives of public-oriented memory institutions. Concurrently, with limited copyright protection and competition from public-oriented memory institutions, the profitability of networked memory institutions would decrease, and with it the economic motivation of commercial enterprises to invest in this area.

Reduced copyright protection is important, therefore, for four reasons: (1) it is fundamental for enabling the activity of public-oriented, non-commercial memory institutions on a low-cost basis; (2) it unchains memory institutions from subordination to copyright owners and the proprietary regime that they tend to impose; (3) it reduces the economic rents from memory institutions and, as a result, also reduces the incentives of commercial entities to enter this field; and (4) it lessens the evolutionary processes described in Part III(B)(2)(b) that push traditional, public-oriented memory institutions toward commercial, privatized practices.

This analysis is further supported by the basic attributes of networked communications platforms as described in Part II. In his influential work, The Wealth of Networks, Yochai Benkler articulates how the attributes of networked communication platforms facilitate efficient, commons-based, peer production of content and information by a variety of non-market players.

According to Benkler, with the emergence of networked communication platforms, a new mode of social production emerged: commons-based peer production. This novel mode does not rely on either the price system (markets) or centralized commands within the hierarchy of firms to allocate resources. Benkler defines "commons-based production" as a system of production in which inputs and outputs from production processes "are shared, freely or conditionally, in an institutional form that leaves them equally available for all to use as they choose at their individual discretion." Benkler then argues that, given the zero cost of existing information and the declining cost of communication and processing, human capacity becomes the primary resource in the networked information economy.

Therefore, with examples including Wikipedia and other open-source software, commons-based peer production is gradually becoming both a visible and an efficient mode for cultural production and cultural exchange.

Benkler’s work includes two insights that support reduced copyright protection for both the inputs and the outputs of networked memory institutions. First, in a networked environment, there are viable efficient models for cultural preservation that do not require the backing of strong intellectual property rights. As long as the framework of incentives is based on motivations other than monetary profits, the social conditions of networked communication platforms are capable of facilitating and supporting non-market alternatives of cultural production and cultural exchange. Individual-based and public-oriented memory institutions are a prime example of this. Moreover, in such settings, strong intellectual property rights burden and stifle full realization of the prospects that digitization offers. Consider, for example, a digital images collection of art works like the one ARTstor manages. In a networked environment, projects of this kind are economically operational through decentralized participation of public-oriented cultural institutions, which contribute the scanned images and then share the cumulative databases among themselves and with the public. Copyright protection of either the inputs or the outputs of such activity may be both unnecessary and burdensome to public-oriented memory institutions.

There is still one consideration that may complicate this call for decreased copyright protection: the multi-sided and Janus-faced nature of networked memory institutions, that is, their tendency to converge and integrate with contemporary production and distribution of content and cultural works.

For example, a significant share of the content that is being uploaded and distributed through content-sharing platforms like YouTube or Flickr consists of contemporary copyrighted materials. In my 2008]
opinion, the inclusion and contextualization of this content by
decentralized individuals is highly contributive for social
reemerging. Yet, concurrently, this type of activity might harm the
contemporary value of, or the potential markets for, the copyrighted
works. Take, for another example, the case of PLYmedia, an
application that enables end-users to sync independent content,
such as comments, to audio-visual works (e.g. adding bubble
captions to the original content). Now imagine an individual
who uploads to her MySpace personal page. This is an act of
then uploading her video clips, which she
market substitute for consuming or purchasing these video clips
via their standard distribution channels.

There are no neat and crystallized solutions for such tensions
raised by the multilateral aspects of networked memory institutions.
The farther we reach in the life-cycle of a copyrighted work, the
more minor these tensions become. Yet regarding new
contemporary copyright works, to some extent, the risks of
contemporary commercial cultural
production may be valid. In the remaining sections, I outline my
proposals for copyright law reforms in relation to the activity of
networked memory institutions in more detail. These proposals
are constructed in a manner that takes into account the risks of
networked memory institutions. Nevertheless,
privatization of networked memory institutions in a
manner that is likely to achieve a better equilibrium between
various types of memory institutions. I focus on:

1. ex-ante various types of memory institutions. I focus on: (1) ex-ante
privileges that enable free use of copyrighted materials by memory
institutions; and (2) ex-post obligations that are intended to
moderate and limit extreme proprietary regimes of networked
memory institutions.

B. Reforms in Ex-Ante Copyright Privileges of Memory Institutions

Ex-Ante copyright privileges of memory institutions
encompass exemptions and limitations that enable free use of
copyrighted materials by memory institutions. My proposed
reforms in this context refer to: (1) adjusting a particular

206 See supra notes 86-88 and accompanying text. See also Zimmerman, supra note 85,
at 1027-1028; Roberta R. Kwok, Contract Options for Individual Artists: Library Reproduction
Rights for Preservation and Replacement in the Digital Era: An Author's Perspective on § 108, 29

207 See Zimmerman, supra note 85, at 1027-40. Similar, though narrower proposals have
been devised by the Section 108 Study Group, which currently examines the
exemptions and limitations applicable to libraries and archives under the Federal
Copyright Act, specifically in light of the changes wrought by digital media. See supra note 140.

208 See Peter S. Movell, Knowledge Accessibility and Preservation Policy for the Digital Age, 44

209 See supra note 88 and accompanying text.

210 A related issue is in the deposit requirement of copyrighted works. Copyright owners are required to deposit a copy of all published works originating in the United States with the Library of Congress within three months of publication. 17 U.S.C. § 407(a) (2008). Once the materials are submitted, these materials may then be returned and borrowed by other libraries and patrons around the country. 17 U.S.C. § 407(a) (2008). Section 407(c) of the Federal Copyright Act also provides for obtaining deposit of copies and phonorecords of television and radio programs that have been broadcast in the United States. Id. Current structure of the deposit requirement suffers, however, from drawbacks similar to the ones that were mentioned in the context of section 108 of the Federal Copyright Act. 17 U.S.C. § 108. Thus, for example, the current version of the deposit requirement does not apply to new forms of non-fixed informational materials such as websites. Another major obstacle is that with regard to digital copies of a
copyrighted work, the deposit requirement itself provides no legal mechanisms that are
reasonable for making such materials available and accessible to the public. A full
discussion of the required reforms in the deposit requirement exceeds the scope of this
article, and I leave it to another opportunity.
should have a functional basis rather than an institutional basis that exempts particular categories of cultural institutions. In addition, and unlike current version of Section 108, an exemption for digital archiving requires that archivists will have the ability to capture and document artifacts of cultural objects that they do not own or posses. Finally, any revised exemption for digital archiving should apply also to making the full content of digital archives accessible to the public, including "off-premises" and through networked communication platforms (e.g., the Internet). These basic principles imply a broad exemption. They also involve a shift to a non-market model of digital archiving. Everyone would be able to establish and make accessible digital collections of cultural works. Such an exemption, however, is likely to involve mass reproductions of entire copyrighted works. Consequently, a compulsory licensing scheme seems inevitable in order for the U.S. to comply with international obligations and to provide copyright owners with a fair compensation for the use of their works. 211

It is also true that, regarding relatively new copyrighted works, digital archives could also function as a de facto substitute for market provision of such works. Nevertheless, in my opinion, this possibility could be approached and handled within the proposed exemption. Thus, for example, the compulsory licensing scheme could include a differential scale of royalties for the making accessible of newly released copyrighted works, whereas the mere reproduction of such works for the purpose of preservation should not be subjected to the same increased amount of royalty fees. This scheme would enable immediate inclusion of copyrighted works in digital archives, whereas their making accessible to the public through the archive would be dependent on either the passage of time or the payment of increased royalties. The general principle may be to create a differentiated decreased scale of royalties for different periods in the lifecycle of copyrighted works. In addition, commercial attributes of the archiving entity may also result in higher royalties. The purpose of this differentiated scale of royalties is that, in periods closer to the release of a copyrighted work, such high royalties would make its accessibility to the public unprofitable for commercial archiving entities.

By making these proposals, I am not ignoring the fact that a compulsory licensing regime for digital archiving could decrease the incentives of commercial enterprises to enter this field. Nevertheless, I do not see that this possibility is a consideration that outweighs the advantages of the proposed exemption. To the contrary, dynamics of this kind follow my general recommendation toward de-privatizing of digital archiving and locating it closer to society's public spheres. The proposed exemption for digital archiving does not provide a comprehensive solution for all of the activities that a democratic culture of memory institutions encompasses. General cultural production and cultural distribution activities, which have only a derivative function of social remembering, are less likely to be covered by a particular activity, the focus should be on reforms and adjustments in the fair use defense. I now turn to this issue.

(II) Adjusting Fair Use for Networked Memory Institutions

Current application and interpretation of the fair-use defense 212 tends to identify the public interest almost solely with secondary uses that have a strong element of "transformativeness," which is presently interpreted as the incorporation of copyrighted material into a new independent, "socially-valued," original, creative work. 213 De-privatized networked memory institutions

211 The Berne Convention and the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS") permit an exemption to the reproduction right only in "certain exceptional cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author or of the rightholder." See Berne Convention for the Protection of Literary and Artistic Works, art. 9(2), Sept. 9, 1886, as last revised Oct. 2, 1978, 6 U.N.T.S. 225. [Hereinafter Berne Convention]. Agreement on Trade-Related Aspects of Intellectual Rights, art. XIII, Apr. 15, 1994, 1 I.M. 81, available at http://www.wto.org/english/tratop_e/trips_e/tripso_e.htm. Similarly, the WIPO Copyright Treaty recognizes copyright owners' right of "communication to the public," Copyright Treaty, art. 8, Dec. 20, 1996, 112 Stat. 2850, available at http://www.wipo.int/copyright/en/wpct/pdf/irtodoswo06.pdf. According to the Berne Convention, an exemption to the exclusive right vested in article 8 would be applicable only in "certain special cases." See also Martin Sengleben, Copyright, Limitations and the TREATY-STEP art. 10(4). See also Martin Sengleben, Copyright, Limitations and the TREATY-STEP art. 10(4). See also Martin Sengleben, Copyright, Limitations and the TREATY-STEP art. 10(4).


213 See, e.g., Jeremy Rudkin, Note, Form over Function: Expanding the Transformative Use Test for Fair Use, 90 COLUM. L. REV. 579 (2000). In 1996, Judge Leval proposed the transformative test in his influential article, Pierre N. Leval, Toward a Fair Use Standard, 103 HARV. L. REV. 1105, 1111 (1990). It was adopted by the Supreme Court in its next fair use decision, Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994), which Judge Leval interpreted "transformative" as critical in whether a use "fulfills" the objective of copyright law to stimulate creativity. Leval, supra, at 1111. According to Leval, uses that added value to the original brought something new and creative into the world, so they might be justified even if the copyright owner objected, while mere reprocessing or republication was not
require a different fair use doctrine. Fair use analysis needs to be
less rigid when quantifying an identified "social value" of a new
creative work that uses copyrighted materials. Networked memory
institutions require fair-use determinations to be more holistic and
contextualize of cultural (copyrighted) materials merit
considerable value for social remembering processes. This
considerable value for social remembering processes. This
approach implicates two practical issues: (1) redefining the scope
of transformative uses of copyrighted materials; and
(2) enabling private uses (copying) of copyrighted materials as
part of the fair use defense.

(1) Redefining "Transformative Uses"

The category of "transformative uses" needs to be redefined
in a manner that encompasses also "mere 'naked' use" of
copyrighted works for personal reference and re-contextualization
of cultural, copyrighted works. Thus, even without "adding value"
by using the copyrighted work as part of a new independent
work, I propose that fair use should also be applicable to
personal encounters with copyrighted, cultural works, even if such
encounters are not necessarily a new, derivative, creative work.
Accordingly, transformative uses may find shelter under the fair use defense.

At the practical level, the category of transformative uses seems
malleable enough to be adjusted in the above-mentioned manner.
Indeed, it is presumed that in order to satisfy the
criterion of "transformativeness," the secondary work must contain
transformative uses that may find shelter under the fair use defense.

In revision of the "transformative uses" category, the court identified transformative uses as uses that "add
something new, with a further purpose or different character,
altering the first with new expression, meaning, or message,
and uses that "provide social benefit, shedding light on an
earlier work, and, in the process, creating a new one." These
expressions of the Supreme Court are not conclusive or exclusive.
Yet, overall, the Campbell decision seems to leave
enough interpretive flexibility to enable courts to take a more
relativist approach in determining the boundaries of
"transformativeness" as a legal term.

(2) Enabling Private Use (Copying) of Copyrighted Materials

There are several reasons why free private copying of
copyrighted, cultural materials is a fundamental part of de
privatizing networked memory institutions. Private copying and
reproduction of copyrighted cultural works are prerequisites for
active participation by individuals in social remembering practices.
Individual-based participation in social remembering is
preconditioned upon prior robust exposure, access and
understanding and influence of cultural materials. Free private copying is
very much a prerequisite for achieving the pluralistic vision of
networked memory institutions that this article wishes to advance.
Reliance on commercial markets as the only legitimate channel
for accessing and using copyrighted, cultural works does not seem
to suffice in this context because of the strong distributional bias
of commercial markets. Market institutions leave many individuals
without effective access to copyrighted, cultural works, a fact which
has direct negative spillovers on a democratic vision of individuals'
cultural participation.

Fair use, therefore, should be more responsive to private uses
(copying) of copyrighted materials. At least this should be the
situation in legal settings that do not have a particular exemption
for private copying (e.g., as part of a mandatory levy scheme on
media and copying devices). For example, in my view,
reasonable private copying of copyrighted materials through peer-

See id. See id. at 579-83.

See Julie E. Cohen, Copyright, Creativity, Catalogs: Creativity and Culture in Copyright
Theory, 41 U.C. Davis L. Rev. 1151, 1168-1169 (2007); Rebecca Tushnet, Copy This Essay:
How Fair Use Doctrine Harms Free Speech and How Copying Serves It, 114 Yale L.J. 335
(2004.).

See Jessica Litman, Symposium, Frontiers of Intellectual Property: Lawful Personal Use, 85

For an illuminating essay and analysis of private copying exemptions and levy
systems in Germany, see Katerina Galatz & Andrew F. Christie, Principle of Compromise?
Understanding the Original Thinking Behind Statutory License and Levy Schemes for Private

It is worth noting that this is not the view that was taken by courts. See e.g., A&M
boundaries between legitimate, permissible, personal copying, and unauthorized, commercial-type, mass reproduction of copyrighted works. Yet, I dare propose that copyright law need not impose an absolute bar on digital private copying just because it is broader and more extensive than analog private copying. Legislators may create novel compulsory licenses and levy schemes in this context. But with or without such schemes, a democratic culture of social remembering requires that, up to a certain degree, personal uses remain sheltered from markets' governance.

(III) Adjustments in the DMCA's Anti-Circumvention Prohibitions

Adjustments are also required with regard to technological protection measures (TPM's) that restrict access and use of digital copyrighted content and their legal protection by the anti-circumvention prohibitions of the Digital Millennium Copyright Act (DMCA). The DMCA's anti-circumvention provisions are of two basic types. First, the DMCA prohibits users from circumventing control technology to gain access to protected works. Second, the Act prohibits the manufacture and trafficking of devices, technology, and services that are primarily designed to assist users in circumventing technology that: (1) controls access to content that is protected under the Copyright Act, or (2) effectively protects a copyright holder right by controlling uses of such content. Along with these provisions, the DMCA also purports to protect counter interests by delegating to the Librarian of Congress the power to suspend application of the access prohibition to the extent required to prevent undue burdens on users of creative works. The Act requires the Librarian to subsequently undertake a review every three years to monitor the ongoing impact of the access prohibition on non-infringing uses and provides for a three year suspension of the prohibition with regard to those works for which the Librarian finds an adverse impact. In making this determination, the Librarian must devote particular attention to the availability of works for non-profit archival, preservation, and educational purposes and for criticism, comment, news reporting, teaching, scholarship, and research.

Technological protection measures geared toward cultural artifacts and particularly legal protection against their anti-circumvention are regulatory tools with an embodied bias toward a privatized model of networked memory institutions. Part II described the paradigm shift of digitized cultural preservation from control to distribution. Technological protection measures overturn the paradigm of digitized cultural preservation from a paradigm of distribution back to a paradigm of control. The only difference is that now this paradigm is no longer based on — or justified by — the scarcity and "physical conditions" of authentic cultural objects from the past. Rather, this second generation of a control paradigm is based on private ordering regimes that derive their enforceability from technological fencing mechanisms and the legal backing of the anti-circumvention prohibitions. These private ordering regimes then stimulate and support the commodification of digitized cultural artifacts and consequently the privatization of memory institutions. The regulation of the DMCA's anti-circumvention prohibitions should focus, therefore, on two accumulative goals: (1) enabling access and secondary use of digitized cultural works for the purposes of cultural retrieval and cultural preservation; and (2) enabling the activity of public-oriented and civic-engaged memory institutions that are less likely to proliferate in an environment of technologically legally protected digital artifacts.

(1) Adjusting a Particular Preservation Exemption as part of the Librarian of Congress Rulemaking Procedure

Sections 1201(a)(1)(C) and (D) of the DMCA include a procedure that authorizes the Librarian of Congress to suspend the anti-circumvention prohibitions, for a period of three years, if the prohibitions tend to have an adverse impact on non-infringing uses with regard to particular types of works and particular types of uses. In making this determination, the Librarian must also devote particular attention to the availability of works for non-profit archival, preservation, and educational purposes. Thus far, this safeguard option of the DMCA has not been fully appreciated and utilized in the context of digitized cultural preservation. The only area in which the Librarian of Congress takes archiving and preservation into account is the realm of computer programs and video games. Here, a rulemaking by the Librarian of Congress that legalized circumvention was issued with regard to obsolete computer programs and video games require the original media.
or hardware as a condition of access.\textsuperscript{237} My proposal is that future rulings of the Librarian of Congress will put more emphasis on circumstances in which the anti-circumvention prohibitions have an adverse impact on non-infringing archiving and preservation activities. Future rulemakings may cover two levels: (a) particular types of users that take part in archiving and preservation activities; and (b) particular categories of works whose technological protection measures tend to impose serious impediments to archiving and preservation activities. Thus, for example, a rulemaking by the Librarian of Congress may refer to digital archiving and preservation activities by museums, libraries, and archives, with particular focus on works that were “born digital” and that according to their industries’ practices, are usually locked under technological protection measures. A moving images archive, for example, may then legitimately circumvent the technological protection measures of DVDs in order to include them in its collection.

Another example refers to video-sharing websites, like YouTube,\textsuperscript{238} that by the use of technological protection measures, limit the ability of users to download and make copies of content that other users upload on the content-sharing platform. Previous parts of this article emphasized the unique importance of user-uploaded content to social remembering. As a result, memory institutions of various types (e.g., the Internet Archive)\textsuperscript{239} are likely to identify the significance of archiving the content of video-sharing platforms for future generations. Therefore, a rulemaking by the Librarian of Congress that suspends the anti-circumvention prohibitions regarding archiving and preservation of user-uploaded materials is indispensable for enabling legitimate non-infringing activities of this kind.

(2) Enhancing Fair Use and other Copyright Privileges with Regard to Technologically Protected Cultural Materials

A second element refers to the applicability of fair use and other copyright privileges with regard to technologically protected cultural works. Several scholars have called for compliance between digital rights management systems and copyright law’s exemptions and limitations.\textsuperscript{232} Their arguments emphasize concerns that TPMs and the anti-circumvention prohibitions override the traditional breath-space of copyright law’s exemptions and limitations. In order to overcome this imbalanced scheme, to which the TPMs and the anti-circumvention prohibitions give rise, several proposals have been made. Overall, these proposals focus on enforcing fair use privileges against TPM’s either directly (e.g., through the creation of a “Key Escrow” System) or through legalizing “the right to hack” TPM’s.\textsuperscript{234} Recently, Reichman, Dinwoodie and Samuelson proposed a “reverse notice and takedown regime” to enable legitimate public interest uses of technologically protected materials.\textsuperscript{235} According to their proposal, users would be able to give copyright owners notice of their desire to make public interest uses of technologically protected copyrighted works, and rights holders would have the responsibility to take down the TPM’s or otherwise enable these lawful uses.

These proposals, and especially the proposal of Reichman, Dinwoodie and Samuelson, are highly important for de-privatizing networked memory institutions. On their own, reforms in copyright’s exemptions schemes would be ineffective unless public-oriented memory institutions and users are able to effectively access and use the increasing amount of technologically protected cultural materials. A “reverse notice and takedown regime” is specifically important because at least some types of networked social remembering practices are unlikely to be covered by a Librarian of Congress rulemaking.\textsuperscript{236} A pluralistic vision of networked memory institutions thus requires a legal framework that provides individuals and institutions both the legal tools and the legal validity to access and use technologically protected materials.


\textsuperscript{239} See supra note 100 and accompanying text.
C. Reforms in Ex-Post Obligations of Networked Memory Institutions – Imposing a Share-alike Requirement on Privileged Uses

Along with ex-ante privileges, a cultural democracy also requires the imposition of ex-post obligations on networked memory institutions. My proceeding analysis demonstrated the dual layer of proprietary rights that characterize the activity of networked memory institutions. One layer consists of rights that are possessed and managed by originating owners of copyrights in cultural works. On top of it comes another layer which includes the rights that memory institutions – and especially commercial memory institutions – manage and enforce. YouTube, the Google Library Project, Corbis, and ARTstor are just a few examples for memory institutions that compose this second layer while imposing their own accumulative proprietary regime on other users and memory institutions.

Part III emphasized the central role that this second layer of proprietary regimes has in inducing the privatization of networked memory institutions. Hence, de-privatization of memory institutions also demands regulation that will moderate imbalanced proprietary regimes by networked memory institutions. More specifically, policy makers need to develop a set of public-interest "access" and "free secondary-use" obligations for networked memory institutions. The goals of these obligations are: (1) sustaining a robust and pluralistic equilibrium of memory institutions while mitigating the concentration of cultural powers in the hands of only a few commercial intermediaries; and (2) enabling free flow of information and cultural artifacts that are managed by commercial intermediaries.

Here, I propose to develop a set of obligations that will complement the general ex-ante privileges previously outlined. The basic idea is to condition ex-ante privileges of memory institutions upon the acceptance of ex-post obligations. For example, the proposed exemption for digital archiving would require its beneficiaries to enable future third parties free access and use of cultural materials that were obtained with the legal support of the digital archiving exemption. Similarly, beneficiaries of a fair use privilege will be bound to correspondingly share-alike the products of their privileged use with future users. Before getting into the doctrinal aspects of the proposal, several general remarks are required.

One advantage of my proposal is its coverage of contractual limitations and technological protection measures that are imposed by commercial memory institutions. A second advantage refers to the proposal's ability to bypass the practical difficulties in any legislative attempt to impose a new set of limitations on commercial memory institutions in their capacities as copyright owners and licensors. Since my proposal rests on a quid-pro-quo between benefiting from copyright's exemptions and complying with reciprocal share-alike obligations, it is relatively easy to integrate it into current copyright law positive doctrines. Thirdly, a share-alike requirement functions also as a mechanism for implementing distributive values and enabling more people to take part in social remembering practices. Indeed, my proposal is inconclusive in terms of the fact that it covers only materials that were originally obtained through a copyright exemption. Nevertheless, as long as the layer of ex-ante exemptions is well constructed, the scope of the share-alike requirement is expected to have a significant impact.

The implementation of a viral, share-alike requirement is likely to make commercial memory institutions a less profitable business and may also decrease the economic incentives for such activities. Yet, as I already argued, it is exactly this form of reverse-regulation that the de-privatization of networked memory institutions requires. Moreover, given the unique social functions of memory institutions, there may be positive long-term expressive implications for introducing notions such as reciprocity and social responsibilities into this field. Cultural retrieval and cultural preservation are a joint enterprise of individuals and institutions working together within the social machinery. The success of such a human project, as well as the success of many other cultural and creative encounters, is largely based upon introducing a strong element of reciprocity into copyright law, at least in this area of social activity. More specifically, my proposal covers three aspects of positive copyright law: (1) Imposing a share-alike requirement on beneficiaries of the fair-use defense; (2) obligations that are coupled together with exempted digital archiving; and (3) Safe-Harbor for and the obligations of content-sharing platforms and other hosting services providers.

226 For a related discussion, see Van Houweling, supra note 164, at 23 (making an analogy between land conservation assessments and "share-alike" requirements that are included within GPL and creative commons licenses). My proposed scheme in the main text is also based on an assessment model, yet it is a model that imposes mandatory assessments, which are the quid-pro-quo of privileges (exemptions) for using copyrighted materials.

227 For a general discussion regarding reciprocity, see LAWRENCE C. BECKER, RECIPROCITY (1986). For an implementation of reciprocity as a guiding principle in the context of copyright law, see Haochen Sun, Overcoming the Achilles Heel of Copyright Law, 5 NW. J. TECH. & INT. PROP. 265, 322-24 (2007).
(I) Imposing a Share-Alike Requirement on Fair Use Beneficiaries

I propose to adopt a "share-alike" requirement as part of the equitable conditions that fair use imposes on users who wish to benefit from the defense. The idea is that memory institutions, information intermediaries, and other third parties, who rely on fair use in the course of their cultural retrieval and preservation activities, will be legally bound to treat-alike subsequent third parties who wish to access and use the same copyrighted materials—a new institution for subsequent retrieval and preservation activities.

For example, if Google argues that its Book Project reproductions of entire copyrighted works are fair use, a similar exemption should apply to the benefit of future third parties who wish to reproduce and distribute these digital copies, from Google’s databases and applications, for authorized purposes. Google, therefore, will be prohibited from imposing technological and contractual obligations that revoke its share-alike obligations. On the positive level, my proposal rests on the equitable nature of the fair use defense and its common law origins. In my view, the role of fair use does not suffice in generating islands of privileges and liberties to users. Concurrently, fair use could and should serve as a basis for imposing a degree of reciprocal obligations on its beneficiaries.

(II) Obligations that "Run With" Exempted Digital Archiving

Part V(B)(1) outlined my proposal regarding a particular exemption for digital archiving. Here, I also suggest that the application of such an exemption should be conditioned upon a reciprocal requirement. The content of a digital archive that relies on the proposed exemption should be made accessible to the general public without imposing any technological or contractual limitations on its openness. This additional condition should be an integral part of any compulsory licensing scheme for digital archiving.

228 The "share-alike" requirement is based on a concept offered by the "creative commons" licensing schemes. See Creative Commons, http://creativecommons.org (last visited Feb. 26, 2008). The share-alike licensing option creates a viral licensing scheme, requiring creators of derivative works to require subsequent users of their derivatives to use the same license that governs the original. See Creative Commons, Choosing a License, http://creativecommons.org/about/licenses (last visited Feb. 26, 2008).


231 See Zimmerman, supra note 85, at 1035 (mentioning two similar requirements as part of a proposed compulsory licensing scheme for digital archiving: (1) that the database should be in a standardized format and one that allows users to search its content; and (2) that public domain materials within the database are free for use by anyone who wishes to use them). As set forth in the main text, my proposal is broader than Zimmerman's proposal where it also rests on a different justification.

232 One analogy that can be made in this context refers to the issue of database protection and the U.S. approach not to provide independent copyright protection for databases that aggregate informational and cultural works. See, e.g., Miriam Bitton, A New Outlook on the Economic Dimension of the Database Protection Debate, 47 IDEA 93 (2006).

233 For example, the Stanford University Libraries have developed a "digital library of Pushkin," which is available at http://www.pushkinlibrary.org (last visited Feb. 26, 2008).
added by the DMCA.\textsuperscript{233} The most recent example for the centrality of section 512(c) in this context is a law suit filed by the entertainment conglomerate Viacom against YouTube.com for nearly 600,000 unauthorized clips of Viacom's entertainment programming that have been available on YouTube.\textsuperscript{234} Several scholars, including Timothy Wu\textsuperscript{235} and Lawrence Lessig,\textsuperscript{236} expressed the view that section 512(c) safe-harbor also applies with regard to the activity of content-sharing platforms and other types of web 2.0 applications. As Wu writes: "In 1998, that (section 512(c)) meant Geocities and AOL user pages. But in 2006, that means Blogger, Wikipedia, Flickr, Facebook, MySpace, and, yes, YouTube—all the companies whose stick is 'user-generated content.'\textsuperscript{237}

Regarding networked memory institutions, the approach of Wu and Lessig seems both justified and fundamental. It is fundamental for continuous operation of content-sharing platforms in an organizational structure that enriches the landscapes of history and cultures with as many voices and narratives as possible. It is justified because, as Lessig points out, with the enactment of the DMCA, the safe-harbor for internet service-providers were part of a \textit{qui-pro-quo} against the enactment of the anti-circumvention prohibitions. Copyright owners were given much more (maybe too much) control with regard to their portfolio of copyrighted works. Yet simultaneously, Congress had made a complementing move by reducing the liability of [content] intermediaries and service-providers by shifting from an opting-in strict liability regime to an opting out "notice and take down" regime.\textsuperscript{238}

These are complex issues to be fully considered here. The proposal that I wish to make in this context is very specific. The applicability of section 512(c) safe-harbor should be conditioned upon a reciprocal obligation. Hosting services providers that rely on section 512(c) safe-harbor should not limit — contractually, technologically, or otherwise legally — secondary uses of materials and information (e.g., metadata) that resides on their platforms after being uploaded by third-parties. According to this view, the flip-side of content-sharing platforms' reliance on section 512(c) safe-harbor is a reciprocal obligation not to organize the platform around a proprietary regime. Once classifying their activity as "a network that hosts information at the direction of users" and sheltering under section 512(c) exemption, content-sharing platforms cannot "lock" — either technologically or legally — third parties' materials that their hosting is privileged. A full elaboration of this proposal and its justifications exceed the scope of this article.\textsuperscript{239} For my current purposes, this proposal is another mechanism for overcoming extreme privatization of networked memory institutions.

CONCLUSIONS

Digitization and networked communication platforms involve two conflicting layers of transformations in the political economy of social remembering and memory institutions. The first layer is a layer of prospects and hopes that are signified by the transformation from a control paradigm of cultural preservation to paradigm of distribution and redundancy. At least potentially, digitization can decentralize and democratize memory institutions and social remembering practices. This somehow utopian vision takes a turn once identifying the second layer of transformations which deals with the partial and gradual privatization of networked memory institutions. Privatization processes may take place with regard to both traditional public-oriented memory institutions and emerging novel types of memory institutions such as content-sharing platforms and social networks. At least to some extent, commercial players are now taking over components in both categories of memory institutions while attempting to implement proprietary practices and other elements that are part of corporate media's political economy. Copyright law supports such dynamics by making both the \textit{inputs} and the \textit{outputs} of networked memory institutions a tradable good – a commodity. Copyright law is also responsible for dynamics of evolution that gradually may change the cultural DNA of traditional memory institutions and make them more inclined to adopt proprietary practices.

\textsuperscript{238} See Wu, supra note 239; Broache, supra note 140, at 1861, (discussing the choice between an "opting in" strict liability regime and an "opting out," "notice and take down" regime, in the context of Google's library project, while making analogies with § 512(c)'s "notice and take down" regime with regard to hosting services providers).
In order to fully grasp the consequences of these processes, one must go back to the functions of memory institutions in a democratic culture. Throughout this article, I demonstrated the value and importance of institutional diversity in social remembering practices. A democratic culture of memory institutions focuses on two key dimensions. The first dimension is intergenerational and it refers to the importance of providing future generations with as many landscapes of culture and history as possible. The second dimension refers to the right of individuals to participate in contemporary landscaping of culture and history for future generations.

Privatized memory institutions would impose several obstacles on the accomplishment of these goals. Commercialization and unequal participation are two elements that would characterize privatized memory institutions and that unsurprisingly conflict with a democratic vision of social remembering. My discussion also indicated that at least to some degree, privatized memory institutions may be less efficient than public-oriented and open-access social remembering practices. Privatized memory institutions may also avoid institutional separation between the social function of cultural production and the social function of cultural preservation. The resulted outcome is that groups and sectors with dominant positions in contemporary media would be able to reproduce, leverage and manipulate their social dominance from one generation to another. The power to remember, as well as the power to forget, would thus gradually be concentrated in clusters of commercial enterprises with very particular interests, beliefs, ideologies and preferences.

In the final part of the article, I outlined several reform proposals for de-privatizing networked memory institutions. As a general matter of policy, reduced copyright protection is likely to result in an equilibrium that strengthens the capacities of public-oriented memory institutions while reducing the incentives — and therefore the dominance — of commercial intermediaries entering this field. More specifically, I focused on two distinct types of reforms. The first type is reforms in ex-ante copyright privileges for networked memory institutions. Copyright law should include a revisited framework of exemptions, limitations and compulsory licenses that together are able to support independent ubiquitous activity by public-oriented memory institutions. The second type of reforms introduces my novel proposal to impose ex-post obligations on networked memory institutions. De-privatization of memory institutions requires also regulation that takes into account and moderates imbalanced proprietary regimes that may be implemented by networked memory institutions. Copyright law should include, therefore, a complementary set of reciprocal share-alike obligations that come on top of the general ex-ante privileges that memory institutions should benefit from.

Thus far, social remembering processes and memory institutions received little attention by legal scholarship. The partial and gradual privatization of networked memory institutions emphasizes the importance of further in-depth research into this field of human activity. My purpose in this article was to begin such a discourse and set the grounds for future research.