

PROPERTY, PERSONA, AND PRESERVATION

*By Deven R. Desai**

The intellectual property system has fostered many debates, including recent ones, regarding how the system affects access to knowledge. Yet, before one can access, one must preserve. Two interconnected problems posed by the growth of online creation illustrate the predicament. First, unlike analog creations, important digital creations such as e-mails and word-processed documents are mediated and controlled by second parties. Thus, although these creations are core intellectual property, they are not treated as such. Service providers and software makers terminate or deny access to people's digital property all the time. In addition, when one dies, some service providers refuse to grant heirs access to this property. The uneven and unclear management of these creations means that society will lose access to perhaps the greatest chronicling of human experience ever. Accordingly, this Article investigates and sets forth the theoretical foundations to explain why and how society should preserve this property. In so doing the Article finds that a second problem, which can be understood as one of control, arises.

This Article is the first in a series of works aimed at investigating the nature and extent of control one may have or exert over a work. As such, this Article begins the project by examining the normative theories behind creators', heirs', and society's interests in the works. All three groups have interests in preservation, but the basis for the claims differs. In addition, an examination of the theoretical basis for these claims shows that the nature of the attention economy in conjunction with labor- and persona-based property theories support the position that in life a creator has strong claims for control over her intangible creations. Yet, the Article finds that historical and literary theory combined with recent economic theory as advanced by Professors Brett Frischmann and Mark Lemley regarding spillovers—positive externalities generated by access to ideas and information—reveals two points. First, these views support the need for better preservation of digital intellectual property insofar as it is infrastructure and has the potential for spillover effects. Second, although the creator may be best placed to manage and exert control of the works at issue, once the creator dies, literary, historical, and economic theory show that the claims for control diminish if not

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vanish. The explication and implications of this second point are explored elsewhere. This Article lays the groundwork for seeing that creators may need and have powerful claims for access and control over their works but that these same claims are necessarily limited by an understanding of the nature of creation and creative systems. The dividing line falls between life and death. The life and death distinction that this Article offers seeks to balance creators' interests in control over a work and society's interests in fostering later expressions and creations of new works. This Article examines the life side of the line.

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INTRODUCTION

Internet creation and authorship has exploded;¹ yet, because of gaps in how society manages such work and the nature of digital artifacts, much of this wealth of creation is beyond the creator's control and could soon be lost.² Today as long

1. See, e.g., Frank Pasquale, *Copyright in an Era of Information Overload: Toward the Privileging of Categorizers*, 60 VAND. L. REV. 135, 135-37 (2007) (noting proliferation and wide range of new online content and difficulties in sorting such information).

2. Cf. Diane Leenheer Zimmerman, *Can Our Culture Be Saved? The Future of Digital Archiving*, 91 MINN. L. REV. 989, 989-99 (2007) (examining tension between copyright law and archivists in context of digital artifacts); James Fallows, *File Not Found*, ATLANTIC MONTHLY, Sept. 2006, at 142, 142 (noting that nature of digital storage and changes in software and storage formats mean one may

as one can afford a computer, one can author documents, create spreadsheets, and edit videos. With a computer and an Internet connection one can also author an e-mail, a personal Web site, a blog, a YouTube video, and more. Indeed, *Time* magazine looked at society and found that the 2006 Person of the Year was not one individual but rather individuals who use Wikipedia, YouTube, MySpace, and Facebook to create like never before and spawn blogs, social-network Web pages, mash-ups, and so on.³ Yochai Benkler's *Wealth of Networks* examines technological phenomena and describes the potential of the networked world,⁴ to which *Time* magazine nods, to alter how markets and even democracy operate. Even as user-generated text and images grow, some predict that the somewhat grainy YouTube-style videos seen on the Web today will be replaced by television quality video with media companies changing the way they offer entertainment and an increased role for user-generated content in that offering.⁵

Although this growth of creation offers tremendous benefits⁶ and generates many new debates,⁷ this Article focuses on an area of growing concern: how does the law address, and what theories explain, the management, disposition, and preservation of digital intellectual property? Despite the attention paid to domain names, Web sites, avatars, and online identity as digital property with real property characteristics,⁸ these questions and the related theoretical issues regarding digital intellectual property remain open. The e-mails, blogs, word-processed documents, social-network pages, spreadsheets, photographs, and videos that constitute the bulk of this creation fall within the intellectual property regime. Yet, the advent of online and offline technology-based creation

lose access to files without noticing loss).

3. Lev Grossman, *Time Person of the Year: You*, TIME, Dec. 25, 2006, at 38.

4. See generally YOCHAI BENKLER, THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM (2006).

5. See Martin LaMonica, *Experts: No Stopping the Flood of Web Video*, CNET NEWS.COM, Feb. 7, 2007, http://news.cnet.com/Experts-No-stopping-flood-of-Web-video/2100-1025_3-6157283.html (discussing inevitability of increased Internet video offerings).

6. See generally BENKLER, *supra* note 4, at 1-2 (suggesting numerous advantages of "Internet revolution"); GLENN REYNOLDS, AN ARMY OF DAVIDS: HOW MARKETS AND TECHNOLOGY EMPOWER ORDINARY PEOPLE TO BEAT BIG MEDIA, BIG GOVERNMENT, AND OTHER GOLIATHS, at xii-xiii (2006) (describing proliferation of blogs and forums for personal creation, which facilitate trend away from mass technology toward personal technology); Jonathan L. Zittrain, *The Generative Internet*, 119 HARV. L. REV. 1974, 1975 (2006) (exploring generative capacity of Internet and its ability to foster individual creation and sharing of code, but noting potential "backlashes" from government and corporate interests).

7. See generally Zittrain, *supra* note 6, at 2032-24 (discussing debate over Internet governance); see also generally DANIEL J. SOLOVE, THE DIGITAL PERSON: TECHNOLOGY AND PRIVACY IN THE INFORMATION AGE 13-26 (2004) (detailing rise of technology on Internet and elsewhere that can have beneficial effects but also implicates questions of diminished, if not eliminated, individual privacy); Brett M. Frischmann & Barbara van Schewick, *Network Neutrality and the Economics of an Information Superhighway: A Reply to Professor Yoo*, 47 JURIMETRICS 383, 383-89 (2007) (examining network neutrality debate that has arisen arguably as outgrowth of explosion of Internet usage); Orin S. Kerr, *The Problem of Perspective in Internet Law*, 91 GEO. L.J. 357, 364-78 (2003) (exploring how one's perspective regarding nature of Internet-enabled virtual realities can control questions of criminal law and procedure).

8. See *infra* Part I.A for a discussion of digital property.

can place one's intellectual property outside the individual's control.⁹ Thus, as opposed to the artifacts one creates in the analog world such as one's journal or artwork, digital creations are often, if not always, mediated by others.¹⁰ Besides using software to compose and arrange this information on one's personal computer, today many of these processes occur online and are stored online through the services of companies such as Blogger or TypePad (blog composition and host sites); Snapfish or Flickr (online photo albums); or Yahoo!, MSN, AOL, Google, and so on (Web-based e-mail providers or Web site hosting services). In short, the line between software providers such as Microsoft and Web companies such as Google and Amazon is vanishing.¹¹

9. This issue may also connect to the way in which online property is treated in criminal law contexts. Rather than e-mail being treated as one's property that happened to be stored elsewhere, courts have viewed the question as one of privacy and treated e-mails as somehow public. The recent Sixth Circuit decision in *Warshak v. United States*, 490 F.3d 455 (6th Cir. 2007), *vacated*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007), which was vacated on ripeness grounds, focused on the reasonable expectation of privacy test and found that users do have an expectation of privacy in their e-mails in some circumstances. *Id.* at 473. Insofar as property concerns also animate Fourth Amendment law, this Article may impact the debate regarding government access to e-mail, if not other online property. An investigation of how property ideas should impact this debate is beyond the scope of this Article but merits further study.

10. Some software providers, such as Microsoft, now use piracy concerns to require registration on an ongoing basis, and failure to verify the software results in reduced functionality. This reduced functionality may entail the ability to use the browser for an hour so that one can verify the registration and, if verification does not work, one could conceivably be locked out of access to one's own writings. See Joris Evers, *Microsoft to Lock Pirates out of Vista PCs*, CNET NEWS.COM, Oct. 4, 2006, http://news.cnet.com/Microsoft-to-lock-pirates-out-of-Vista-PCs/2100-7355_3-6122462.html (describing "reduced functionality mode," Windows Vista's new antipiracy software, which locks users out of operating system if not activated within thirty-day, postinstallation period (internal quotation marks omitted)); Katherine Noyes, *Weekend WGA Failure Locked out Legit Windows Vista Users*, TECHNEWSWORLD, Aug. 27, 2007, <http://www.technewsworld.com/story/59041.html> (observing that people who had paid for software and registered it were locked out of programs because Microsoft's verification system failed to recognize authorized use). According to the BBC, Microsoft has decided to abandon the "kill switch" as it was not working well and authorized users were losing access to their work; instead a steady stream of warnings will appear to those who seem to be using unauthorized copies. "Kill Switch" Dropped from Vista, BBC NEWS, Dec. 4, 2007, <http://news.bbc.co.uk/2/hi/technology/7126902.stm> [hereinafter *Kill Switch*]. Regardless of this change, Microsoft intends to continue its authorization strategy—" [a]ll copies of Windows Vista still require activation and the system will continue to validate from time to time to verify that systems are activated properly"—which suggests that it will cut off access in the future if it deems such action necessary. *Id.* (quoting Microsoft Vice President Mike Sievert).

11. See, e.g., Steve Lohr & Miguel Helft, *Clash of the Titans: Google Gets Ready to Rumble with Microsoft*, N.Y. TIMES, Dec. 16, 2007, at 1 (noting that Google's "Google Apps" offers "e-mail, instant messaging, calendars, word processing and spreadsheets" for free and wants to offer capability for ninety percent of computing- to web-based interfaces). For an example of Amazon's foray into online, hosted software in the database industry, see Eric Lai, *Amazon Releases Database Tool*, TECHWORLD, Dec. 17, 2007, <http://www.techworld.com/applications/news/index.cfm?newsID=10950&pagtype=all>. See also Amazon.com, Amazon SimpleDB, Limited Beta, <http://www.amazon.com/b?ie=UTF8&node=342335011> (last visited Sept. 1, 2008) (describing database functions of Amazon SimpleDB).

Nonetheless, in both contexts, the second-party technology company exerts control over an individual's creations, including over access to the material. The companies can and do lock out those who do not have authorized software¹² or lack proper passwords but otherwise have rights in the property.¹³ In some cases, companies shut down Web sites based on mere allegations of impropriety, such as a claim that a site is somehow breaching a privacy policy,¹⁴ is related to the distribution of spam e-mail,¹⁵ or violates a copyright.¹⁶ As such, creators may be surprised to find that they have lost access to their property or that it has been destroyed. In a sense, once the creator dies or an online host terminates service or a software company terminates use of its software, these sites are similar to gravesites to which descendants and society have no access.¹⁷ As Larry Lessig has pointed out, the technology itself can dictate what can and cannot be done,¹⁸ but here the oddity is that the creator, herself, may be told what can and cannot be done. In short, technology-based creation and storage raise fundamental issues regarding the ownership of, access to, dominion over, and preservation of digital property.

To be clear, this Article is aligned in part with efforts to increase access to knowledge¹⁹ and resolve legal issues regarding the archiving of information²⁰ as

12. See *supra* note 10 for a discussion of Microsoft's use of such software.

13. See Jim Hu, *Yahoo! Denies E-mail Access to Family of Dead Marine*, SILICON.COM, Dec. 24, 2004, <http://management.silicon.com/government/0,39024677,39126737,00.htm> (reporting on Yahoo's denial of e-mail access to dead marine's e-mail account because parents did not have password).

14. See Declan McCullagh, *GoDaddy Pulls Security Site After MySpace Complaints*, CNET NEWS.COM, Jan. 25, 2007, http://news.cnet.com/2100-1025_3-6153607.html (explaining that shutdown of Web site was to prevent revealing personal information of MySpace users).

15. See *id.* ("GoDaddy has a 24-hour abuse department that deletes domain names used for spam or child pornography on a daily basis.").

16. See Greg Sandoval, *EFF Takes Viacom to Task over YouTube Takedown*, CNET NEWS.COM, Feb. 15, 2007, <http://news.cnet.com/EFF-takes-Viacom-to-task-over-YouTube-takedown/2100-1026-6159548.html> (addressing Viacom's overinclusive removal of online video clips after claims of copyright infringement).

17. Cf. JOSEPH L. SAX, PLAYING DARTS WITH A REMBRANDT 1-2 (2002) (examining clash between property rights, which allow private owners of artifacts to destroy or cut off access to artifacts, and society's need for access to such artifacts); Alfred L. Brophy, *Grave Matters: The Ancient Rights of the Graveyard* (Univ. Ala. Pub. L. Research Paper, 2005), available at <http://ssrn.com/abstract=777747> (examining descendants' rights to access graves located on private property cemeteries, theoretical justification for such rights, and rights' implications for property theory). In contrast to the way in which one can be cut off from access to the deceased's e-mails and other online creations, some sites offer the Internet as a means to establish memorials and leave messages for future generations. See Rachel Konrad, *An Electronic Medium to Reach the Dearly Departed*, CNET NEWS.COM, Oct. 30, 2000, <http://news.cnet.com/2100-1023-247785.html> (discussing Web sites that allow family and friends of deceased individuals to send e-mail messages to those who have passed away).

18. See, e.g., LAWRENCE LESSIG, FREE CULTURE: THE NATURE AND FUTURE OF CREATIVITY 147 (2004) (arguing that technology has taken over role of controlling copyright).

19. See, e.g., Guy Pessach, *The Role of Libraries in A2K: Taking Stock and Looking Ahead*, 2007 MICH. ST. L. REV. 257, 260 (arguing that libraries require more flexible rights to ensure continued public access to knowledge); Peter K. Yu, *Of Monks, Medieval Scribes, and Middlemen*, 2006 MICH. ST. L. REV. 1, 27 (examining role of scribes and monks as information intermediaries, and noting growing connection to increasing access-to-knowledge movement as evidenced by World Summit on

those efforts address important questions regarding society's ability to access and use information. Nonetheless, as Professor Diane Zimmerman's work on digital archiving notes, "although intertwined, preservation and access are actually distinct and equally significant goals."²¹ Thus, this Article sets forth theoretical explanations regarding why society needs such information, as it identifies and addresses a preservation problem.

Put simply, before one can answer questions of access, one must ensure that the artifacts are capable of being preserved; yet the way in which much of this creation is managed undercuts, if not destroys, *the possibility* of preservation.²² Accordingly, this Article investigates and sets forth the theoretical foundations to explain why society should preserve this property and who should have control over it. Investigating these questions reveals that three groups have an interest in these artifacts: the creator of the artifact; the potential inheritor of the artifact; and historians, who in essence represent society's interest in the artifacts in general. All three groups have claims to the importance and value of digital artifacts but for different reasons.

First, the authors have claims to the artifacts as copyrightable material and, as such, as intellectual property.²³ From that perspective, one can appreciate that the author's heirs have a claim to the artifacts as a type of real property as well. This interest stems from the value of the thing itself as opposed to the expression as manifested in the intellectual property. For example, from a purely pecuniary

the Information Society and Access to Knowledge Campaign).

20. See, e.g., Zimmerman, *supra* note 2, at 998-1003 (discussing issues with electronically archiving copyrighted material).

21. *Id.* at 998.

22. See *id.* ("After all, saving works without at least eventually making them accessible would seem pointless; and, without first ensuring that preservation is attended to, access cannot be assured. To deal with both of them adequately, however, may require disaggregating a bit."); see also Margaret Chon, *Intellectual Property "from Below": Copyright and Capability for Education*, 40 U.C. DAVIS L. REV. 803, 821-27 (2007) (linking social-justice theory to intellectual property and examining textbook availability in developing countries as test case to demonstrate how intellectual property law denies access where it should foster it). In a way, this Article relates to Professor R. Polk Wagner's idea that greater control over one's creations may foster an increased public domain but only because the control allows for some level of preservation, not because, as Professor Wagner argues, information of its nature will be free. See generally R. Polk Wagner, *Information Wants to Be Free: Intellectual Property and the Mythologies of Control*, 103 COLUM. L. REV. 995 (2003) (putting forth theory that even controlled information contributes to public domain).

23. As part of this Article investigates, the term property has become political and subject to debate. See, for example, *infra* Part I.A and accompanying text for a discussion of this debate. The choice of the term property here is to highlight the issue and employ a term that seems to cross the boundaries at issue in this Article but that may not do so once the theoretical underpinnings of the term are understood. In addition, part of the problem for archivists in general stems from the 1976 Copyright Act, which grants copyright as soon as a work is fixed in a tangible form. See Copyright Act of 1976, Pub. L. No. 94-553, § 102(a), 90 Stat. 2541, 2544-45 (codified as amended at 17 U.S.C. § 102(a) (2000)) ("Copyright protection subsists . . . in original works of authorship fixed in any tangible medium . . ."); see R. Anthony Reese, *Public but Private: Copyright's New Unpublished Public Domain*, 85 TEX. L. REV. 585, 623 (2007) (inquiring about impact of copyright law on archival access agreements); Zimmermann, *supra* note 2, at 999-1001 (describing problem of preserving copyrighted works).

perspective, the artifacts of historically significant figures and celebrities can be worth large sums of money as evidenced by Martin Luther King's papers, John Lennon's letters, Maria Callas's love letters, and even Joe DiMaggio's sandals, all of which have been the subject of major auctions with buyers paying thousands and up to millions of dollars for the material.²⁴ The value for the writings may be tied to the expressions within them, but the sandals example points to the value in the physical things as memorabilia. Furthermore, the share-with-the-world-for-free paradigm faces an alternative and perhaps more familiar paradigm: Web sites have begun paying for user-generated content²⁵ and talent agencies have begun looking to this content to find the next star actor, director, writer, and so on.²⁶ These shifts indicate that for some, user-generated content can have a direct pecuniary return for their work.

In addition to the economic property aspect of these artifacts, a persona rationale supports the author's and her heirs' claims to the artifacts. A recent problem illustrates this phenomenon. A marine was killed in Iraq, and, when the family attempted to access its dead son's Yahoo! e-mail account, it was denied access until a court ordered Yahoo! to allow the family access.²⁷ The father wanted his son's e-mails as "one reminder of his son's life"²⁸ and as an extension or expression of his son's persona. A similar rationale was seen in a daughter's investigation of her mother's eBay account and e-mails.²⁹ As author Zadie Smith has written, "[a] writer's personality is his manner of being in the world: his writing style is the unavoidable trace of that manner. . . . [S]tyle [is] a personal necessity, . . . the only possible expression of a particular human consciousness."³⁰ In short these artifacts may also be seen as expressions of the

24. Shalia Dewan, *The Deal that Let Atlanta Retain Dr. King's Papers*, N.Y. TIMES, June 27, 2006, at A11 (detailing the \$32 million that city of Atlanta paid for Dr. King's letters); *Lennon's Noteworthy Book Sale*, AUSTRALIAN, Apr. 21, 2006, at World 8 (describing \$300,000 sale at auction of John Lennon's childhood schoolbook); John McGrath, *Where Have DiMaggio's Shower Sandals Gone?*, TACOMA NEWS TRIB., Apr. 13, 2006, at R9 (describing auction of more than 1000 items from DiMaggio's estate); *Sotheby's to Auction Callas Letters, Dresses in Milan*, REUTERS, Oct. 24, 2007, <http://www.reuters.com/article/worldnews/idUSL2437317620071024> ("Love letters written to Meneghini, an Italian industrialist 28 years her senior and who was also her manager, will be offered for 50,000 euros (\$71,120) to 70,000 euros."). See generally SAX, *supra* note 17, at 145-50 (detailing heirs' economic interests in artifacts and how those interests conflict with biographers' interests).

25. See, e.g., Scott Kirsner, *All the World's a Stage (that Includes the Internet)*, N.Y. TIMES, Feb. 15, 2007, at C7 (noting that Web site Metacafe pays video creators for site traffic generated by their material).

26. See David M. Halbfinger, *Talent Agency Is Aiming to Find Web Stars*, N.Y. TIMES, Oct. 25, 2006, at C1 (reporting on Hollywood talent agency that created department dedicated to seeking creators of Internet content).

27. Hu, *supra* note 13.

28. *Id.*

29. See Katherine Rosman, *Over the Internet, into My Mom's Heart*, WALL ST. J., Sept. 1, 2007, at A1 (detailing way in which daughter used e-mails and eBay account to trace her mother's activities and gain insight into her mother's life).

30. Zadie Smith, *Fail Better*, GUARDIAN, Jan. 13, 2007, available at <http://faculty.sunydutchess.edu/oneill/failbetter.htm>; accord SAX, *supra* note 17, at 21-22 (noting that, under moral rights view of art, physical items are "a constituent part of the artist's personality").

author's persona.

In addition, a persona rationale resonates with society's interests in preserving these artifacts. The use and understanding of the material fosters further creation, or what economists call spillovers.³¹ The way historians use such material presents one way to demonstrate the power of such material and offer insights as to why society in general has a claim on it. In that sense, historians are a subset or exemplars of the creative process. Consider the social historical importance of letters, diaries, manuscripts, sketchbooks, and music notes found today for an important historical figure. These items become part of the corpus of material studied to understand the person, her work, and the society in which she lived. Furthermore, it is not just famous people's artifacts that social historians study. The letters and diaries from individuals who are not so famous allow historians to build a full sense of what certain members of society thought in a specific era.³²

And yet it is not a property rationale or a persona rationale as understood in privacy³³ and intellectual property discussions³⁴ that supports society's preservation of these artifacts so that society may have later access to them.

31. See, for example, Brett M. Frischmann & Mark A. Lemley, *Spillovers*, 107 COLUM. L. REV. 257, 257 (2007), for a description of the relationship between spillovers, or positive externalities, and law.

32. As set forth below, Wilhem Dilthey's theory of history explicitly offers that autobiographical material is necessary to understand history. See *infra* notes 137-56 and accompanying text for a discussion of Dilthey's historical theory. See also WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 131 (2003) (examining nature of unpublished-works market, and acknowledging that fame of author is not necessary for analysis as social historians examine works of nonfamous people for their source material). For a study of the place and evolution of autobiography as it relates to notions of the self, see generally MICHAEL MASCUCH, *ORIGINS OF THE INDIVIDUALIST SELF* (1996). For a discussion of the use of autobiographical material to understand history see, for example, Marilyn Ferris Motz, *The Private Alibi: Literacy and Community in the Diaries of Two Nineteenth-Century American Women*, in *INSCRIBING THE DAILY* 189, 189-206 (Suzanne L. Bunkers & Cynthia A. Huff eds., 1996) (using personal diaries to examine role of middle-class women in nineteenth-century America). See generally MARY BETH NORTON, *LIBERTY'S DAUGHTERS: THE REVOLUTIONARY EXPERIENCE OF AMERICAN WOMEN, 1750-1800* (1996) (using letters, diaries, and other original sources to construct picture of how women understood and partook in American Revolution); Alfred L. Brophy, "The Law of the Descent of the Mind": *Law, History, and Civilization in Antebellum Literary Addresses*, (Univ. Ala. Pub. L. Research Paper No. 07-17, 2005), available at <http://ssrn.com/abstract=777724> (examining orations delivered at University of Alabama to trace evolution of political theory and jurisprudence in antebellum South).

33. See generally Robert C. Post, *Rereading Warren and Brandeis: Privacy, Property, and Appropriation*, 41 CASE W. RES. L. REV. 647, 647-49 (1991) (reexamining Warren and Brandeis's argument that copyright law should be seen as protecting one's right to privacy (citing Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193 (1890))).

34. See, e.g., Margaret Jane Radin, *Property Evolving in Cyberspace*, 15 J.L. & COM. 509, 514-18 (1996) (applying Benthamite economic maxims to intellectual property); Madhavi Sunder, *Property in Personhood*, in *RETHINKING COMMERCIALIZATION: CASES AND READINGS IN LAW AND CULTURE* 164, 165 (Martha M. Ertman & Joan C. Williams eds., 2005) (examining growing cultural importance of contemporary intellectual property law). See generally, e.g., Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287 (1988) (attempting to apply traditional theories of property to justify ownership of intellectual property).

Rather, it is information theory and, as this Article argues, an understanding of the relationship between authorship and the community that provide an explanation for the need to preserve these artifacts. In that sense, this Article argues that these creations are information infrastructure, as Professor Brett Frischmann has developed the term,³⁵ and can generate spillovers—“uncompensated benefits that one person’s activity provides to another.”³⁶ Furthermore, these spillovers may be necessary for human flourishing³⁷ as Margaret Radin has deployed the phrase. Put simply, these creations involve information and ideas that are necessary to foster further productive creation and use of ideas. Not preserving these artifacts prematurely cuts off the possibility of access to the material.

In short, today, the wealth of technology-based online and offline creation has many benefits for the authors of the creation, their heirs, and society at large; yet society lacks a clear normative foundation to explain the rights in, and management of, these creations. With much of our expression and identity constructed in the digital world, not paying attention to the administration of this information will result in valuable resources being lost to the vagaries of inconsistent service provider policies and the foresight of members of society to leave passwords and the like in their wills.³⁸ Furthermore, if the creator of the information does not want it shared, she may find that the law may permit access because the digital artifacts are tantamount to physical property such as a letter and, in the absence of the decedent’s testament, constitute part of the estate left to the descendants regardless of the author’s desire to keep the information

35. See Frischmann & Lemley, *supra* note 31, at 279-81. Frischmann and Lemley explain that: “[I]nfrastructural” resources [are] shareable resources capable of being widely used for productive purposes . . . for which social demand for access and use generally exceeds private demand by a substantial margin. Examples of such goods include education and, significantly for our purposes, information.

....

. . . Ideas themselves are a good example of infrastructure, because they are not merely passively consumed but frequently are reused for productive purposes.

Id. (footnote omitted). For a full discussion of Frischmann’s theory, see generally Brett M. Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 MINN. L. REV. 917 (2005).

36. Frischmann & Lemley, *supra* note 31, at 258.

37. See generally Margaret Jane Radin, *Market-Inalienability*, 100 HARV. L. REV. 1849, 1903-16 (1987) (explaining link between personhood and flourishing and arguing “that market-inalienability is grounded in noncommodification of things important to personhood”).

38. Note that one may not wish to put a password in the will. Even if one did execute codicils to track all of his passwords, it would be cumbersome given that today many have trouble tracking even a small set of passwords. Further, security policy indicates that one should change passwords frequently; indeed, many information technology systems require it every thirty or sixty days. In addition, when one dies, the descendants automatically gain access to papers and belongings unless they are locked away. The image of scouring those papers and belongings and discovering that someone was gay, a brilliant unpublished author, and so on, is common. If one wished to hide the material, then he would place it in a safety deposit box or the like (that often have mechanisms to allow the descendants access to the material).

secret.³⁹ Thus this project examines and presents the theoretical foundations that explain and address the questions surrounding the management and disposition of such creations.

Part I of this Article establishes which types of digital artifacts are at stake and examines the interests of creators and their descendents in the works. Then, drawing on the work of philosopher Wilhem Dilthey, the section provides an account of society's interests in digital artifacts. Although one may see that each group has an interest, the theoretical justifications behind recognizing those interests is necessary to fashion a solution regarding how best to preserve these artifacts. As such, Part II engages with labor and persona theories that animate intellectual property claims on the creator and heir side of the issue and looks to literary, historical, and economic theories to understand society's claims for preservation of the artifacts. Last, based on the arguments and theories behind all three groups' interests, Part III offers a way to ensure that digital artifacts are preserved rather than being subject to the whims of second-party terms-of-service contracts or gaps in probate law.

I. ON THE IMPORTANCE OF DIGITAL ARTIFACTS

This Part begins by explaining what type of digital property is at stake when considering the control, preservation, and disposition of digital artifacts. From there, it investigates the nature and importance of artifacts in general and applies that view to digital artifacts. In brief, artifacts have great importance from several perspectives. As physical things, they have value as items to be sold. As expressions of someone's thoughts, artifacts have value as extensions of one's persona. As chronicles of someone's views, artifacts have value as the tools that historians and sociologists use to understand society. As the repository of ideas, artifacts are the building blocks of future creativity. Thus, to understand the value of artifacts, one must first be clear about who lays claim to an artifact, the value to the person making the claim, and on what basis that claim is made.

Digital artifacts (and indeed artifacts in general) are important to three groups: the creator of the artifact, the potential inheritor of the artifact, and society. All three groups have claims to the importance and value of digital artifacts, yet for different reasons. Thus, it appears that when one looks at each group's specific interest and the arguments that support its position separately, the position is coherent. But because each group makes a different claim regarding digital artifacts, the positions clash and reveal incoherence about who should preserve the material and whether there should be a mandate to preserve the material. To understand this phenomenon, this section examines each group's position and the theories offered to support it. Once each position is understood, two points become clear. First, all three groups' interests indicate that a system for managing digital artifacts is necessary. Second, given that the

39. See Susan Llewelyn Leach, *Who Gets to See the E-mail of the Deceased?*, CHRISTIAN SCI. MONITOR, May 2, 2005, at 12 (examining what happens to personal e-mails after death, and discussing whether families should get access to e-mail of deceased).

positions clash regarding the control, access, and use of artifacts, any system offered to preserve these artifacts must grow from an understanding of the theoretical underpinnings of all the interests. Addressing the second point is the task of the second part of this Article. The rest of this section addresses the first point.

A. *Not-So-Virtual Property*

Recent scholarship has examined digital property and found that various phenomenon qualify as digital or virtual property.⁴⁰ This Article focuses on those types of virtual, or rather, digital property that behave like intellectual property as opposed to real property. In other words, one can distinguish between digital property that functions as real property and digital property that functions as intellectual property.⁴¹

As one author has explained, various forms of digital property, such as a uniform resource locator (“URL”),⁴² an e-mail account,⁴³ a Web site,⁴⁴ and even a chat room,⁴⁵ can all constitute digital property because they share “three legally relevant characteristics with real world property: rivalrousness, persistence, and interconnectivity.”⁴⁶ In other words, only one person owns and controls the property (rivalrousness); like a pen, the property exists unless destroyed (persistence); and the property can be experienced by more than two people at the same time (interconnectivity).⁴⁷ Another author has focused on domain names as an example of a “new artifact” that might constitute property

40. See, e.g., Anupam Chander, *The New, New Property*, 81 TEX. L. REV. 715, 776-79 (2003) (identifying domain names as property); Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1052-64 (2005) (discussing concept of “virtual property”); F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1, 29-51 (2004) (discussing virtual property in online video games); Beth Simone Noveck, *Trademark Law and the Social Construction of Trust: Creating the Legal Framework for Online Identity*, 83 WASH. U. L.Q. 1733, 1754-84 (2005) (proposing theories for application of legal protection to virtual identities or “avatars”).

41. But see Adam Mossoff, *What Is Property? Putting the Pieces Back Together*, 45 ARIZ. L. REV. 371, 393-415 (2003) (examining bundle-of-rights approach to property and finding that “the integrated theory of property” offers more coherent way to understand both real and intellectual property). In contrast, even if one holds that real and digital property have distinct, important differences, both “tangible objects and intangible concepts” can be seen as “things.” Michael J. Madison, *Law as Design: Objects, Concepts, and Digital Things*, 56 CASE W. RES. L. REV. 381, 381 (2005). As Professor Michael Madison has offered:

We have a universe of malleable cultural forms, some of which descend from accepted antecedents, many of which can be modified by practice and by law. The question for things is a broader form of the narrow question raised by copyright and patent: what is the role of the law in preserving and shaping the forms that our “creative” institutions produce?

Id. at 477-78. In that sense, this Article seeks to engage with questions regarding creative production with the hope of informing the more general question.

42. Fairfield, *supra* note 40, at 1055.

43. *Id.* at 1055-56.

44. *Id.* at 1056.

45. *Id.* at 1057.

46. *Id.* at 1053.

47. Fairfield, *supra* note 40, at 1053-54.

but may be better considered as part of a global commons resource.⁴⁸

Yet other scholars have looked to virtual worlds such as Blazing Falls, a city within the Sims Online game,⁴⁹ and found that “[p]articipants in virtual worlds clearly see their creations [within the virtual world] as property”;⁵⁰ indeed, these worlds have deployed “real property systems [that] mostly conform to the norms of modern private property systems, with free alienation of property, transfers based on the local currency, and so forth.”⁵¹ Thus everything from one’s avatar, the image that represents one’s presence in a virtual world, from a virtual pizza parlor to a helmet to a dog to a castle and beyond may be created, bought, and sold as virtual property within a virtual world.⁵² Although these aspects of digital property are important, they are digital property that behaves like tangible property and do not encompass a more simple part of digital property: the writings, images, recordings, and videos that constitute most of the content on the Internet.

As such, for the purposes of this Article, the digital property at issue is that which is created by the user and that falls squarely within what also is considered intellectual property, which “protects the creative interest in non-rivalrous resources.”⁵³ Specifically, e-mails, blogs, and other writings; pictures, videos, and other graphical material; and any other creation that is copyrightable are the digital property that this Article addresses. Because this property is nonrivalrous, it is like an idea: it need only be created once and has an infinite capacity in that once it is created there is no additional marginal cost in allowing others to use it.⁵⁴ Given that this property is nonrivalrous and governed by intellectual property law, this Article investigates the theoretical justifications for the intellectual property rights at issue with digital property to discern the contours of that interest as those justifications relate to preservation and control of the artifacts. Before such an investigation, however, one must understand the

48. Chander, *supra* note 40, at 756.

49. Lastowka & Hunter, *supra* note 40, at 3-4.

50. *Id.* at 37.

51. *Id.* at 32.

52. *See generally id.* at 30-40 (tracing history of virtual property and its behavior).

53. Fairfield, *supra* note 40, at 1049 (addressing types of virtual property that are rivalrous, persistent, and interconnected and thus function similarly to real property). *But see* Adam Mossoff, *Is Copyright Property?*, 42 SAN DIEGO L. REV. 29, 39-40 (2005) (noting economic concept that intellectual property is nonrivalrous public good and arguing that physical property understandings do apply to intangible property but degree to which they apply varies based on nature of property in question).

54. *See, e.g.*, Frischmann, *supra* note 35, at 946 (discussing the value of an idea). Frischmann explains:

An idea only needs to be created once to satisfy consumer demand while an apple must be produced for each consumer. Essentially, this means that the marginal costs of allowing an additional person to use an idea are zero. Most economists accept that it is efficient to maximize access to, and consequently consumption of, an existing nonrival good because generally there is only an upside; additional private benefits come at no additional cost. Ideas, like other nonrival goods, have infinite capacity.

Id. (footnote omitted).

interests at stake so that one may see where they intersect and diverge. The next sections take up this task.

B. *Creators' Interests*

To reiterate, this Article focuses on the digital intellectual property that constitutes a large part of the creation both on and off the Internet (i.e., writings, images, spreadsheets, and video content). The interests and motivations at work from the creators' view range from traditional law and economic understandings to issues of the economics of attention and related trademark interests to persona interests. This section sets forth these varying interests and shows how all the perspectives support the creator's claim to her work and the need for access to, and dominion over, her work.

1. Monetary Economic Incentives

Traditional law and economics doctrine offers that creators own the creation, and the intellectual property protection afforded to such creations provides incentives to create.⁵⁵ And although one may doubt whether the proliferation of digital creations is of the same nature as the entertainment industry's products (e.g., films, television programs, and music), the industry has taken notice of the creations and offered monetary compensation for some of these creations.⁵⁶

In some online cases, the business model has changed from a free-for-all in which users simply want to be seen online and share their work to one in which certain Web sites pay creators of so-called user-generated content for the right to display the work.⁵⁷ Certain Web sites pay users on an almost pure incentive model in that users are paid per view of their work, others pay the creator when a user clicks on an advertisement, and still others pay up-front fees for videos.⁵⁸

55. Under copyright law authors own their creations and have the right to control them. The font of this right is Article I, section 8 of the Constitution which states that "Congress shall have the Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. CONST. art. I, § 8. The Supreme Court has explained the Copyright Clause as a

limited grant . . . by which an important public purpose may be achieved. It is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired.

Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984); *see also* Fairfield, *supra* note 40, at 1049 (noting that intellectual property enables creators to "recoup the costs of creation"); Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1031 (2005) (noting that American intellectual property law stems from objective of "generating incentives to create"). *But see* LANDES & POSNER, *supra* note 32, at 11, 213-14 (expressly stating that incentive interests must be balanced against administrative and access costs).

56. *See* Kirsner, *supra* note 25 (discussing Web site that pays users for their online content); LaMonica, *supra* note 5 (discussing creation of business model around user-generated video Web sites).

57. Kirsner, *supra* note 25.

58. *Id.* (noting growth of payment for inclusion of user-generated content on social-network Web

In addition, one of the creators of YouTube is “exploring similar ways to ‘reward creativity,’”⁵⁹ and one major Hollywood talent agency “has created an online unit devoted to scouting out up-and-coming creators of Internet content — particularly video — and finding work for them in Web-based advertising and entertainment, as well as in the older media.”⁶⁰

Thus even if one were to argue that the law and economics model did not apply to user-generated content because the monetary incentive model would not apply for much of the content currently created, shifts in online business models indicate that this situation is changing. Indeed, even prior to the Internet, when one wrote by hand or used a typewriter there was no guarantee of compensation. Rather one had the *potential* to earn money from the creation. Although people create for many reasons,⁶¹ not having an immediate gain does not undercut the fact that some seek the possibility of earning from their creations. Similarly, the monetary economic incentive model may not have been in obvious force at the beginning of YouTube’s and MySpace’s existences, but monetary economic interests and incentives are coming into force now. As such, creators have genuine economic interests in their digital property and denying them access to their work denies them access to something of potential value. Indeed, given that entertainment industry writers went on strike in large part because of questions regarding the use and distribution of content online,⁶² the question is not whether but when that platform will generate income for creators. Furthermore, even if one held that these monetary returns were small and would in the end be anomalies, recent examinations of the implications of digital creation offer compelling arguments for the creator’s interest in, and the value of, these artifacts.

2. Attention Economics and New Capital

In 1991 some folks in Cambridge University’s computer department set up the world’s first Web cam.⁶³ The camera allowed people within the department to see whether a coffee pot was full rather than having to go up and down flights of stairs only to find no coffee in the pot.⁶⁴ As the number of people with access to the Internet grew and the desire to see new things on the Internet grew, the site had millions of visitors curious to see the coffee pot.⁶⁵ The Internet has of

sites including payments from \$13,000 to one performer to \$35,000 to another as well as growth in bookings and attention of agencies for these previously unknown performers).

59. *Id.*

60. Halbfinger, *supra* note 26.

61. See *infra* notes 256-57 and accompanying text for a discussion of motivations for creation.

62. See, e.g., Michael Cieply, David Carr & Brooks Barnes, *Screenwriters on Strike over Stake in New Media*, N.Y. TIMES, Nov. 6, 2007, at C3 (“In effect, the sides finally got down to what they were really fighting about: who will get what from the media of the future.”).

63. *Web Coffee Pot Goes off the Boil*, CNN.COM, Mar. 7, 2001, <http://archives.cnn.com/2001/TECH/internet/03/07/coffee.pot/>.

64. *Id.*

65. See Leela Jacinto, *Plug Pulled on Web’s Historic Coffeepot*, ABCNEWS INT’L, Mar. 7, 2001, <http://abcnews.go.com/International/story?id=81417&page=1> (noting activity was tantamount to

course come a long way in just sixteen years. Whereas it took graduate-level Cambridge computer scientists rigging a video camera and writing a server program and a client program to allow one to “display[] an icon-sized image of the pot in the corner of the screen. . . . [that] was only updated about three times a minute,”⁶⁶ today a user can go to a range of Web sites and create elaborate blogs, personal Web sites, and e-commerce stores without much, if any, computer science knowledge at all.⁶⁷ Yet what motivates these acts? In many cases the monetary incentive cannot be easily found if at all. Nonetheless, one may perceive that with banner and other advertising revenue, economic value is generated because the content draws users to the sites.⁶⁸ The content is key here, but there may be something different in the digital realm.

As rhetorician and theorist Richard Lanham has asked “[w]hat’s new about the digital expressive space and what’s not?”⁶⁹ That question led him to “a larger one: What’s new in the ‘new economy’ and what’s not?”⁷⁰ For Lanham the attention economy is the new and leads to intellectual property because the key assets in the attention economy are part of the cultural conversation and intellectual property is the way our society manages such assets.⁷¹

watching “grass grow” and that its popularity may have been due in part to more “rac[y]” material, such as dormitory Web casts, not being available).

66. Quentin Stafford-Fraser, *The Trojan Room Coffee Pot, A (Non-technical) Biography*, <http://www.cl.cam.ac.uk/coffee/qsf/coffee.html> (last visited Nov. 1, 2008) (detailing origin of coffee pot as presented by one of those involved with its creation).

67. See, e.g., Stefanie Olsen, *A Social Site Where Webcams Rule*, CNET NEWS.COM, Feb. 23, 2007, http://news.cnet.com/A-social-site-where-Webcams-rule/2100-1026_3-6161505.html (noting growth of new social-network site with 400,000 registered users that offers consistent Web cam and instant chat services via “Stickam, a so-called ‘widget’ that people can plug into other social networks to enable live video”).

68. See, e.g., Chuck Salter, *GiRL POWER*, FAST COMPANY, Sept. 2007, at 104 (noting how seventeen-year-old girl started site with free content for teens to use on MySpace and earns close to \$1 million per year based on advertising).

69. RICHARD A. LANHAM, *THE ECONOMICS OF ATTENTION: STYLE AND SUBSTANCE IN THE AGE OF INFORMATION*, at xi (2006).

70. *Id.*

71. *Id.* at 259. Although Lanham develops the idea of the “attention economy,” the question of the ownership of information and related questions regarding attention have received analysis by others. See, e.g., Julie E. Cohen, *Examined Lives: Informational Privacy and the Subject as Object*, 52 STAN. L. REV. 1373, 1400 (2000) (discussing idea of attention economy and claims that such economy requires access to personal information to target consumers); Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutionary Impulse*, 78 VA. L. REV. 149, 150-57 (1992) (noting shift from narrow intellectual property rights to broader rights in intangibles and connecting shift to change from manufacturing-based economy to service-based economy in which intangibles play larger role in wealth); Radin, *supra* note 34, at 517 (“One ‘thing’ that comes to mind is our attention. Information overload means that our attention is scarce. Communicators—advertisers and ideologues—desire it. What are the implications for intellectual property of information overload? Could we make our attention property? Could we meter our attention and make information providers pay us to listen to them?”). The idea is not lost on those who command attention. See, e.g., Salter, *supra* note 68, at 104 (“I have this audience of so many people, I can say anything I want to. . . . I can say, “Check out this movie or this artist.” It’s, like, a rush. I never thought I’d be an influencer.” (quoting Ashley Qualls, Whateverlife.com’s creator)).

To understand this point, one must see the steps by which Lanham arrives at this conclusion. First, Lanham offers that we now have to:

[W]onder whether “information economy” is the right name for where we find ourselves. Economics, in the classic definition, is the “study of how human beings allocate scarce resources to produce various commodities and how those commodities are distributed for consumption among the people in society.” In an information economy, what’s the scarce resource? Information obviously.⁷²

Yet as he and others have pointed out, the proliferation of information is the world we face, with one study finding that each year’s information output “would require roughly 1.5 billion gigabytes of storage” or “the equivalent of 250 megabytes per person” in the world.⁷³ For Lanham, the question thus becomes, “What then is the new scarcity that economics seeks to describe?” and the answer is, “It can only be the human attention needed to make sense of information.”⁷⁴

Lanham asks next, “What, in an attention economy, constitutes capital?”⁷⁵ He offers that this capital may be “the literary and artistic imagination, [the capacity to] spin from it new patterns for how to live and to think about how we live. Capital, in this view, lies in the cultural conversation.”⁷⁶ And here one can see the connection to the Internet and the expansion of creations on it. Indeed, Lanham comes to a point familiar to intellectual property theorists: the information economy is concerned with “a public good that is effortlessly duplicated and distributed”; in other words, the information economy concerns nonrivalrous goods, which necessarily leads to intellectual property not real property.⁷⁷ As Margaret Radin has put it, “[c]ultural norms can substitute for legal property rights as an incentive for production.”⁷⁸ Thus the cultural assets or norms that make up the attention economy become part of the property system. Given that these items are intangible, they are part of the intellectual property system.

In addition, Lanham offers that attention economists are those who guide attention from visual artists who challenge how we see,⁷⁹ to Web interface designers who help drive the Internet and the capture of “eyeballs,”⁸⁰ to car

72. LANHAM, *supra* note 69, at 6.

73. *Id.* at 7; *cf.* Pasquale, *supra* note 1, at 140 (arguing that “[i]nformation law should adjust the rights of content creators in order to compensate for the ways they reduce the usefulness of the information environment as a whole. Every new work created contributes to the store of expression, but also helps make it more difficult to find whatever work” one wants).

74. LANHAM, *supra* note 69, at 7.

75. *Id.* at 8.

76. *Id.* at 9.

77. *Id.* at 12 (noting difference between use of car as opposed to use of idea or its expression).

78. Radin, *supra* note 34, at 515; *see also id.* at 517 (noting possibility of “monetary metering of our attention”).

79. *See* LANHAM, *supra* note 69, at 15 (describing visual artists as attention economists who shifted focus of art from object itself to attention and response it requires).

80. *Id.* at 17.

designers who focus on designing and branding the car but allow others to make it,⁸¹ to universities that “exist to ‘uncover, capture, produce, and preserve’ information” and use curricula and courses of study to focus the attention of students.⁸² Put more generally, attention economists are those who help filter and categorize information both online and offline.⁸³

These ideas may seem foreign to intellectual property, but they should not.⁸⁴ Another way to understand attention economists is to consider them as those who reduce search costs.⁸⁵ Here, another distinct connection to intellectual property can be seen. Although for Lanham, literary and artistic capital constitutes much of the material that makes up the attention economy, his explanation of who attention economists are leads to trademark and brand theory as well. As explained elsewhere, companies engage in brand building so that their brand is “dominan[t] to the point of ubiquity . . . and ideally it conveys (hopefully positive) information as well.”⁸⁶ This understanding relates to the idea that a trademark can help reduce search costs, because the consumer sees the mark and relies on information that the brand symbolizes.⁸⁷ Thus, one could sum up this part of brand and trademark theory as providing that one builds a brand so that consumers search less and information is better communicated; in Lanham’s words, brand builders capture attention.⁸⁸

As such, one can see two ways that the attention economy explains the creator’s interest in her works. First, the substance of the work itself is vital to the attention economy. In the attention economy, capital consists of the ability to

81. *Id.* at 18.

82. *Id.* at 13-14. (citing admonition of Walter Wriston).

83. *See id.* at 13-18 (noting role of universities, visual artists, actors, computer-human interface designers, and automobile designers in categorizing information).

84. *See, e.g.,* Pasquale, *supra* note 1, at 140 (explaining connection between copyright law and “search cost” theory of information economics).

85. As Carl Shapiro and Hal R. Varian have noted, the idea of information overload traces some of its history to Nobel Prize Laureate Herbert A. Simon, who stated that “a wealth of information creates a poverty of attention.” CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY* 6 (1999). The need to sort such information is a search cost.

86. Deven R. Desai & Sandra L. Rierson, *Confronting the Genericism Conundrum*, 28 *CARDOZO L. REV.* 1789, 1790 (2007).

87. *Id.*

88. LANHAM, *supra* note 69, at 18 (“Firms are beginning to outsource the actual manufacture of their products as tangential to their real essence, which is brand development and recognition.”); *see also* Laura A. Heymann, *The Birth of the Authonym: Authorship, Pseudonymity, and Trademark Law*, 80 *NOTRE DAME L. REV.* 1377, 1377-78 (2005) (arguing that copyright creation of material aspect of authorship should be considered separate from authonym or trademark function of assigning name of author to work, and asserting that choice of name, either the author’s true or pseudonymous name, “[is] essentially [a] branding choice[] . . . and therefore . . . the ‘author function’ is really a ‘trademark function’”). As argued elsewhere, this understanding is questionable and poses significant problems regarding the nature of this trademark-like interest and society’s access and use of the copyrighted material. *See* Deven R. Desai, *Property, Persona, and Permission 78-79* (Jan. 16, 2008) (unpublished manuscript, on file with author) (exploring limits of creators’ control and the way death must inform nature of such limits). Nonetheless, the perspective has taken root.

partake in and contribute to the “cultural conversation.”⁸⁹ This capital in the cultural conversation can be understood more concretely as that which falls under copyright—writings, videos, etc. In addition, attention economists have capital as those who build a brand, reduce search costs, and capture one’s attention by those efforts.⁹⁰

Here then is a subtle problem within this issue. Just as one focuses on the copyright side of the issue for the material itself, one can also express a trademark or personal brand interest in one’s creations.⁹¹ For once one builds a name based on one’s creations, one also has a personal connection to that material and brand value beyond the creation itself.⁹² This Article does not endorse this view and, as argued elsewhere, this view poses problems. The point made here is that this view exists and must be understood. To understand this perspective one must look to the creator’s possible persona interest in her creation.

3. The Persona Interest

Although artifacts are physical and, in that sense, items are separate from their creator, they may also be seen as aspects of the creator’s persona. As stated above, the economic property interest is somewhat clear in that the creator of an artifact has a recognized right under the Copyright Act and the law and economics view of creation. In addition to those rationales, artifacts, both digital and analog, arguably have another quality—persona.⁹³ Indeed, some see writing as a way of being in the world.⁹⁴

This perspective manifests in intellectual property law under the idea of moral rights.⁹⁵ Professor Roberta Kwall, in examining the European

89. LANHAM, *supra* note 69, at 9.

90. For an explanation of the relationship between visual artists and brand building for both commercial products and the artists’ individual brand, see generally Jonathan E. Schroeder, *The Artist and the Brand*, 39 EUR. J. MARKETING 1291, 1294-95 (2005).

91. Heymann, *supra* note 88, at 1380.

92. See Schroeder, *supra* note 90, at 1291 (discussing how many artists successfully transition themselves into brands through careful development and presentation of their art).

93. See Hughes, *supra* note 34, at 289-90 (justifying property according to labor or personality theories).

94. See Smith, *supra* note 30.

95. See, e.g., SAX, *supra* note 17, at 22 (explaining idea of “droit moral,” which postulates that work of art is part of artist’s personality and therefore belongs to artist); Roberta Rosenthal Kwall, *Inspiration and Innovation: The Intrinsic Dimension of the Artistic Soul*, 81 NOTRE DAME L. REV. 1945, 1976-83 (2006) (comparing moral rights doctrine in Europe to moral rights doctrine in United States). In contrast, Professor Peter Drahos notes that, although Hegel did state “property is the embodiment of personality,” the reliance on this idea by those wishing to assert that artistic creations are extensions of personality misunderstand Hegel insofar as they assert “special rights for artists and other creators” and that Hegel’s concept, properly understood, “offers the possibility of a potent critique of authors’ rights systems.” PETER DRAHOS, A PHILOSOPHY OF INTELLECTUAL PROPERTY 79-80 (1996) (emphasis added); cf. George H. Taylor & Michael J. Madison, *Metaphor, Objects, and Commodities*, 54 CLEV. ST. L. REV. 141, 146-47, 150-51 (2006) (examining Hegel and Radin and drawing distinction between external embodiment as positive way that one presents internal self to

understanding of moral rights, has noted that the doctrine traces its roots to Immanuel Kant and Georg Hegel and explained that “[a]ccording to Kant, authors’ literary works represent a complete embodiment of the internal self.”⁹⁶ And, although United States law is ostensibly somewhat hostile to moral rights doctrine,⁹⁷ the rhetoric of one’s creation being an extension of one’s persona can be found in a key case in intellectual property law.⁹⁸

The case of *Folsom v. Marsh*,⁹⁹ though often cited as the source of the doctrine of fair use,¹⁰⁰ is important too as one of the key American cases to set forth the principle that an author retains her copyright in unpublished letters.¹⁰¹ In 1841, Justice Story, sitting as a Circuit Justice, wrote regarding President Washington’s letters “[t]hat the original work is of very great, and, I may almost say, of inestimable value, as the repository of the thoughts and opinions of that great man, no one pretends to doubt” and “they consist of the thoughts and language of the writer reduced to written characters, and show his style and his mode of constructing sentences, and his habits of composition.”¹⁰² Although Story did not decide the case on these grounds, the phrases “repository of the thoughts and opinions,” “thoughts and language of the writer,” “show his style and his mode of constructing sentences,” and “his habits of composition” give the letters a sense of person, a sense that they are embodiments of the author. By imbuing the letters with parts of the author, Story conflates the author with the letters to support his presentation of why they are important. Recent interest in presidential candidate Hillary Clinton’s letters as signs of her personality suggests that this view persists.¹⁰³

world as opposed to alienation or reification wherein one gives up something in a way that strips away personhood in negative manner).

96. Kwall, *supra* note 95, at 1976.

97. See generally, e.g., Natalie C. Suhl, Note, *Moral Rights Protection in the United States Under the Berne Convention: A Fictional Work?*, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1203, 1211-15 (2002) (noting conflict in U.S. utilitarian-based approach to intellectual property and moral rights and questioning whether U.S. law actually conforms to moral rights provisions required under article 6bis of Berne Convention for the Protection of Literary and Artistic Works).

98. See, e.g., *Folsom v. Marsh*, 9 F. Cas. 342, 345 (Story, Circuit Justice, C.C.D. Mass. 1841) (No. 4901) (calling letters of George Washington “the repository of the thoughts and opinions of that great man”).

99. 9 F. Cas. 342 (Story, Circuit Justice, C.C.D. Mass. 1841) (No. 4901).

100. See, e.g., *Harper & Row Publishers, Inc. v. Nation Enters., Inc.*, 471 U.S. 539, 550 (1985) (noting that Justice Story gave fair-use doctrine judicial recognition in *Folsom*).

101. Professor Tony Reese’s recent work regarding the public domain and unpublished works indicates that under today’s Copyright Act unpublished letters would enter the public domain and not receive such protection. Reese, *supra* note 23, at 586. Yet one commentator has argued that the right vindicated in protecting such letters is privacy and thus not preempted by copyright law. See Ned Snow, *A Copyright Conundrum: Protecting Email Privacy*, 55 U. KAN. L. REV. 501, 540 (2007) (arguing that “the common-law right of first publication furthers only an author’s privacy interest; that this common-law right which protects private email expression falls outside the preemptive scope of the [Copyright] Act; and that the centuries-old common-law doctrines that have protected private letters today protect private emails”).

102. *Folsom*, 9 F. Cas. at 345-46.

103. See, e.g., Mark Leibovich, *In the '60s, a Future Candidate Poured Her Heart out in Letters*,

Regardless of whether one agrees with this perspective, it exists and animates the way a creator and others view her work. Indeed, at this point one can at least appreciate that the assertion and idea that certain creations—be they writings, artwork, photographs, or videos—have some deep connection to the creator and manifest an aspect of the creator is real and perhaps compelling.

Another way to grasp the persona perspective can be seen in the attachment the public places on any item, authored or not, that has a connection to the person in question. For example, many items such as letters, a shirt, and even sandals can have great economic value *as items* or memorabilia.¹⁰⁴ That is, there may be value as intellectual property in a letter, but when the letter is treated as an artifact, its value is not the expression alone but the fact of the authorship itself.¹⁰⁵ For example, recently a letter from Beatrix Potter sold for £8200¹⁰⁶ and an early notebook of John Lennon's "thoughts, drawings and poems" sold for \$304,340.¹⁰⁷ In one instance, the King family intended to use Sotheby's to auction Dr. Martin Luther King's papers until the city of Atlanta raised and paid the King family \$32 million to prevent the sale and secure the rights to the papers for Morehouse College, Dr. King's alma mater.¹⁰⁸ That figure is arguably on the low side of what the family could have obtained.¹⁰⁹

Returning to the digital world, one can see that the e-mails, word-processed documents, blog entries, spreadsheets, Web pages, and video clips are the modern version of the letters, lovers' notes, and scrapbooks of the past.¹¹⁰ As such, these artifacts have the potential to be worth thousands, if not millions of dollars. An e-mail or unsent note from Bill Clinton to Monica Lewinsky or from George W. Bush to Karl Rove may have no substance to it, but, as an artifact

N.Y. TIMES, July 29, 2007, at A1 (analyzing what thirty letters written by Clinton while in college reveal about her personality and beliefs).

104. See, e.g., Lior Jacob Strahilevitz, *The Right to Destroy*, 114 YALE L.J. 781, 817 n.144 (2005) (noting value of Babe Ruth's jersey as memorabilia); see also Eugene Volokh, *Freedom of Speech and the Right of Publicity*, 40 HOUS. L. REV. 903, 915-16 (2003) (noting that parody works "do not generally threaten markets for celebrity memorabilia that the right of publicity is designed to protect" (quoting Comedy III Prods., Inc. v. Gary Saderup, Inc., 21 P.3d 797, 808 (Cal. 2001))). The range of memorabilia can be seen in one auction, such as a recent one for Joe DiMaggio items in which everything from his shower sandals to a letter from Marilyn Monroe to Joltin' Joe was auctioned with an expected return of \$4 million (the Monroe letter's anticipated minimum bid was for \$20,000). John McGrath, *Where Have DiMaggio's Shower Sandals Gone?*, GLOBE & MAIL, Apr. 13, 2006, at R9.

105. See, e.g., Greg Lastowka, *The Trademark Function of Authorship*, 85 B.U. L. REV. 1171, 1171-72 (2005) (arguing that authorship marks have value and function similar to trademarks such that consumers should be protected from misattribution of authorship).

106. *Pounds 8,200 for Beatrix Potter Letter*, MAIL ON SUNDAY, Mar. 19, 2006, at 12.

107. *Lennon's Noteworthy Book Sale*, *supra* note 24.

108. Dewan, *supra* note 24.

109. See SAX, *supra* note 17, at 146-48 (detailing earlier actions by King family to extract economic gains from Dr. King's works and noting that, in 1999, estimated value of papers was between \$30 and \$50 million).

110. See, e.g., Strahilevitz, *supra* note 104, at 813-15 (noting similarity between e-mail and personal documents (e.g., letters or diaries) and way in which ability or lack of ability to destroy either affects incentive or disincentive to create them).

with a connection to a major figure, it will have some extra economic value,¹¹¹ because the public views it as an extension of the person to whom it was connected.¹¹² Thus, even the public maintains the perspective that a creator's things are manifestations of a part of the creator's persona.

C. *The Heirs' Interests*

The question here is how heirs' interests relate to preservation or why they may desire preservation of the artifacts. An heir's interests in the artifacts tracks a creator's interests but with slightly different explanations and perspectives. One major difference is that heirs' claims are indirect insofar as a creator may choose to leave the artifacts to someone else. Even if an author leaves work to an heir, the interests of an heir may be diluted relative to those of the creator. For example, attention economics helps to explain the creator's interest in her works because the creator's contribution to the cultural conversation is capital, and contributing to the conversation may capture attention. That interplay builds a reputation which in turn benefits future work because it is easier to find. Heirs, however, create nothing new. Thus, although heirs will be better able to exploit an inherited work if the creator had captured attention while alive, heirs do not have the same ongoing relationship with society as those who partake in and contribute to the cultural conversation. Thus, as a matter of attention economics, heirs' interests are derivative to the creator's interests. Nonetheless, heirs often receive artifacts by default as part of an estate.¹¹³ Once an heir receives an artifact, it has an economic value that an heir can try to exploit. In addition, the persona aspect of an artifact heightens an heir's claim to the artifact.

Beginning with monetary economic incentives, one can see that, insofar as the artifacts in question are capable of generating income, as with any piece of

111. See, e.g., Steven Semeraro, *An Essay on Property Rights in Milestone Home Run Baseballs*, 56 SMU L. REV. 2281, 2282 n.4 (2003) (noting Mark McGwire's seventieth home run ball sold for more than \$3 million); Melanie Skehar, Comment, *Who Really Owns the Zapruder Film After the JFK Act: The Sixteen Million Dollar Question*, 34 SW. U. L. REV. 325, 339 n.116, 340 (2004) (noting valuations of President John F. Kennedy assassin Lee Harvey Oswald's memorabilia artifacts—"a wallet, letters, a diary, photographs, and a marriage license"—ranging from \$70,000 to \$90,000); cf. Serena Morones, *Exclusive Autograph Deals: What Value to the Athlete and Their Fans?*, 22 ENT. & SPORTS LAW, Spring 2004, at 10, 10-11 (2004) (describing \$1 billion per year sports memorabilia industry, and finding that unworn jersey signed by player may lose half its value at time of resale). On the general growth of the sports memorabilia industry and the importance of unique items connected to individual players, see Michael Pastrick, Note, *When a Day at the Ballpark Turns a "Can of Corn" into a Can of Worms: Popov v. Hayashi*, 51 BUFF. L. REV. 905, 911-14 (2003) (noting value of unique or historical items such as "record setting home run ball[s]").

112. See, e.g., Randall T.E. Coyne, *Toward a Modified Fair Use Defense in Right of Publicity Cases*, 29 WM. & MARY L. REV. 781, 801 (1988) ("The success of the product is determined not by the strength or content of its message, but rather by the popularity of the person portrayed."); Semeraro, *supra* note 111, at 2295 ("By hitting the baseball, the batter creates a connection between the baseball and his reputation; without the connection the ball would not be nearly so valuable.")

113. See, e.g., *Estate of Martin Luther King, Jr., Inc. v. CBS, Inc.*, 194 F.3d 1211, 1213 (11th Cir. 1999) (inferring that copyright for "I Have A Dream" speech passed from King to estate following King's death).

intellectual property, the heir will have an interest in inheriting that intellectual property to continue to derive that revenue.¹¹⁴ Likewise, if the artifacts are part of capturing attention, the heirs will want to have the artifacts for that purpose. Both of these interests have an economic component. One can appreciate the economic value by considering the income that can be generated after a celebrity's death. For example, Elvis Presley, John Lennon, Charles Schulz, George Harrison, Albert Einstein, Andy Warhol, Theodor Geisel (Dr. Seuss), Tupac Shakur, Marilyn Monroe, Steve McQueen, James Brown, Bob Marley, and James Dean are all dead and yet they, or rather their estates, "grossed a combined \$232 million in the past 12 months" according to a *Forbes* survey of dead celebrity earnings.¹¹⁵ The list includes some consistent names but does fluctuate from year to year. For instance, the 2006 survey listed Kurt Cobain at number one, Andy Warhol at number six, Ray Charles at number eight, Johnny Cash at number ten, J. R. R. Tolkien at number eleven, and George Harrison at number twelve, with the rest of the remaining names on the 2007 list.¹¹⁶ Some of this wealth is from merchandising, but some comes from the sale of artifacts and copyrighted material.¹¹⁷ Thus, in some cases, a large amount of wealth is at stake. Even with smaller estates, as noted above, those who own Maria Callas's or Martin Luther King's letters can generate a large amount of income from the sale of those items.¹¹⁸ Thus, heirs have economic interests in the preservation of these artifacts.

The noneconomic, persona component is present for heirs as well. Consider, for example, the recent problem a family had when it tried to access its dead son's Yahoo! e-mail account.¹¹⁹ The son, a marine killed in Iraq, used Yahoo! for his e-mail while stationed abroad.¹²⁰ When he died, the Marine Corps sent home all his possessions, including received mail and letters about to be sent.¹²¹ The father thus was given his son's property, the physical items. But when the father wanted access to his dead son's e-mail, Yahoo!, in accordance with its privacy policy, refused to grant the father access to the digital artifacts until a court ordered Yahoo! to do so.¹²² The reason the father wanted the e-mails was not

114. Cf. Reese, *supra* note 23, at 586 ("Much of the material is primarily of educational or historical interest, but some of it has commercial value as well, so archives, museums, scholars, students, publishers, film studios, and others will be affected.").

115. Lea Goldman & Jake Paine, *Top-Earning Dead Celebrities*, FORBES.COM, Oct. 29, 2007, http://www.forbes.com/media/2007/10/26/top-dead-celebrity-biz-media-deadcelebs07-cz_lg_1029celeb.html (discussing *Forbes* annual survey of top-earning dead celebrities with figures for 2007 survey).

116. Lacy Rose et. al., *Top-Earning Dead Celebrities*, FORBES.COM, Oct. 24, 2006 http://www.forbes.com/technology/2006/10/23/tech-media_06deadcelebs_cx_pk_top-earning-dead-celebrities_land.html (discussing *Forbes* annual survey of top-earning dead celebrities with figures for 2006 survey).

117. Goldman & Paine, *supra* note 115.

118. See *supra* note 24 and accompanying text for a discussion of sales of artifacts once belonging to famous people.

119. Hu, *supra* note 13.

120. *Id.*

121. *Id.*

122. *Id.*

the economic value of the artifacts. Rather, he wanted to see his son's e-mails "as one reminder of his son's life."¹²³ For the father, the artifacts' value lay in the way they were an extension or expression of his son's persona. Similarly, a daughter used her deceased mother's "saved email correspondence and eBay account[] [to] jump[] into the world [her] mom created for herself as she journeyed toward the end."¹²⁴ The daughter used these artifacts to trace and discover stories and insights about her mother's decisions and desires.¹²⁵

The persona perspective, then, presents another way to appreciate the connection between the creator and descendants. As discussed below in the context of Margaret Radin's presentation of the persona aspect of property,¹²⁶ one can argue that an heir is more closely related to the artifact than many others who may lay claim to the artifact. In addition, insofar as one must determine who, if anyone, should gain access to a preserved artifact, the persona dimension of the artifact favors the heir. In short, given an heir's close connection to a creator, she stands likely to inherit the artifact and thus gain whatever financial benefit possible, and she has a noneconomic interest in the artifact as an extension of, and a connection to, a relative. To allow for the possibility of either of these interests to come to fruition requires that the artifacts be preserved.

D. Society's Interests

Society has many interests in the preservation of these artifacts. In simplest terms, these artifacts are the foundations for numerous acts that enhance society at large.¹²⁷ As discussed below, the nature of productivity and creation requires inputs.¹²⁸ These artifacts are the key inputs to productive and creative systems. This section uses historians and biographers in conjunction with the theory behind their activities as one example of how this feedback system operates and the positive effects of such preservation.

Historians require access to primary sources to gain insight into how society has evolved.¹²⁹ Furthermore, as historians continue to present more developed pictures of how a society functioned, primary sources offer information that histories written at or just after a period in question may lack.¹³⁰ Whereas

123. *Id.*

124. Rosman, *supra* note 29, at A1 (discussing daughter's obsession with, and analysis of, deceased mother's e-mail and eBay purchasing habits).

125. *Id.*

126. See *infra* Part II.B for a discussion of Radin's presentation.

127. See Zimmerman, *supra* note 2, at 989 ("[O]ur understanding of who and what we are as social beings and societies is largely informed by the continuity of our access to the books, correspondence, records, and other ephemera that capture the essence of earlier times and places.").

128. See *infra* Part II.C.2 for a discussion of inputs as a necessary part of creation.

129. See generally, e.g., Brophy, *supra* note 32, at 42-56 (analyzing orations at University of Alabama to understand political and social philosophies of antebellum South).

130. See generally, e.g., NORTON, *supra* note 32, at 304-14 (discussing importance of primary sources in allowing greater insight and academic understanding of women's lives during American Revolution).

historians studying ancient Egypt or even the more recent colonial era are fortunate to have one or two scrolls or journals as sources,¹³¹ today and in the near future historians may face an inverse problem of too many sources. With the number of e-mails, blogs, and social-networking and personal Web pages available on the Internet, society has likely hit a high point in the sheer volume of individuals chronicling almost any aspect of life one can imagine.¹³² In short, society is engaging in perhaps the largest creation of autobiographical material ever.

The importance of these chronicles can be underestimated. After all, why would historians or society in general care about the ramblings of random bloggers or the video chronicles of teenagers and college students?¹³³ Even the thoughts of professors, CEOs, doctors, lawyers, or any other member of society may not rise to the level of material worth studying.¹³⁴ Still, one commentator has argued that such autobiographical speech merits increased constitutional protection.¹³⁵ And another has argued that the development of modern biography necessitates that the law of biography must account for the biographer's need to access personal materials in writing biographies.¹³⁶ As such, it appears that at least two interests—autobiographical and biographical—may be served in protecting and preserving digital artifacts. One theorist, Wilhem Dilthey, provides a cogent explanation as to why we should care about both of these interests.¹³⁷ In addition, his explanation of how these materials relate to history provides a basis from which to see society's interest in preservation of

131. See Zimmerman, *supra* note 2, at 989-90 (noting library destruction at Alexandria and looting of historical sites as examples of how society's loss of intellectual and cultural assets diminishes social, cultural, and historical identity).

132. See, e.g., Brian Bergstein, *Digital Info Overload Is Finding No Place to Go*, CINCINNATI POST, Mar. 6, 2007, at A1 (noting studies indicating "for the first time, there's not enough storage space to hold" all information humans generate).

133. Cf. Reese, *supra* note 23, at 586 (noting importance to educators and historians of placing letters and other traditionally unpublished work in public domain).

134. Cf. LANDES & POSNER, *supra* note 32, at 131 (acknowledging social historians' study of nonfamous people).

135. See generally Sonja R. West, *The Story of Me: The Underprotection of Autobiographical Speech*, 84 WASH. U. L. REV. 905, 931-58 (2006) (applying various free speech goals to autobiographical speech to show that autobiographical speech merits constitutional protection).

136. See generally Mary Sarah Bilder, *The Shrinking Back: The Law of Biography*, 43 STAN. L. REV. 299, 350-60 (1991) (proposing solutions for legal doctrine to facilitate normative biography, including suggestion that using unpublished material as fact would not infringe copyright). Although the law at the time Professor Bilder wrote her article failed to apply fair use for unpublished works, the Copyright Act was amended more recently to include unpublished works under fair use. As explored below, it is the position of this Article that the growth of the persona and publicity views of artifacts threatens historical access and use of these artifacts.

137. See generally WILHELM DILTHEY, *SELECTED WORKS VOLUME III: THE FORMATION OF THE HISTORICAL WORLD IN THE HUMAN SCIENCES* 221-23, 267-70 (Rudolf A. Makkreel & Frithjof Rodi eds., 2002) (discussing heightened ability to understand life and history through autobiography and biography). Although a full investigation of the importance of Dilthey to history and hermeneutics is well beyond the scope of this Article, his articulation of the relationship between autobiography, biography, and history can still inform why we must preserve digital artifacts.

this material.

Lived experience is of central importance to Dilthey's conception of history. In his view, "[t]he course of a life consists of parts, of lived experiences that are inwardly connected with each other. Each lived experience relates to a self of which it is a part; it is structurally linked with other parts to form a nexus."¹³⁸ Professors Rudolf Makkreel and Frithjof Rodi explain that, for Dilthey, "[h]uman individuals are productive systems in that their lived experience apprehends what is of interest in the present relative to past evaluations and future goals."¹³⁹ This focus on life systems points to Dilthey's hermeneutics.¹⁴⁰ Dilthey's theory posits that it is life that must be understood. Specifically, one must see that each part of life relates to the whole and that the whole in turn "determines the significance of each part."¹⁴¹

From this point, we can see why Dilthey asserts that

In autobiography we encounter the highest and most instructive form of the understanding of life. Here a life-course stands as an external phenomenon from which understanding seeks to discover what produced it within a particular environment. The person who understands it is the same as the one who created it.¹⁴²

In other words, if we accept that life has discrete parts such that each part stands on its own but is also part of a larger whole, we see that an individual life is a discrete, productive part that has connection to the whole. The question becomes how to understand that discrete part. The autobiographer has a special place in this process because she is simultaneously the nexus and the reflection on the meaning of the nexus.¹⁴³

For Dilthey, autobiography chooses the significant events of life experience and "expresses what an individual life knows about its own connectedness."¹⁴⁴ In short, "[a]utobiography is merely the literary expression of the self-reflection of human beings on their life-course."¹⁴⁵ As Professor Makkreel explains, "No matter how much the individual needs to be understood in terms of his communal and historical context, his own *Erlebnisse* and deeds possess an inner coherence. These relations cannot, however, be articulated into a definite meaning framework as long as his life history is still incomplete."¹⁴⁶ In short,

138. *Id.* at 217.

139. *Id.* at 4.

140. See CHARLES R. BAMBACH, HEIDEGGER, DILTHEY, AND THE CRISIS OF HISTORICISM 164 n.112 (1995) (noting connection between hermeneutics and Dilthey's critical review of historical reason).

141. *Id.* at 164.

142. DILTHEY, *supra* note 137, at 221.

143. *Id.* at 221-22; accord H.A. HODGES, THE PHILOSOPHY OF WILHELM DILTHEY 274 (2d reprinting, Greenwood Press 1976) (1952) ("For the autobiographer has himself already lived the life which he now portrays, and in living it he has reflected upon its meaning.").

144. DILTHEY, *supra* note 137, at 222.

145. *Id.* "The literary expression of an individual's reflection on his life-course is autobiography." *Id.* at 266.

146. RUDOLF A. MAKKREEL, DILTHEY: PHILOSOPHER OF THE HUMAN STUDIES 379 (1975).

autobiography is limited by the fact that the story is not complete until the life is over.¹⁴⁷ This point leads to the importance of biography.¹⁴⁸

In Dilthey's theory, autobiography is "an individual's reflection on his life-course," and, "[w]hen this reflection is carried beyond one's own life-course to understanding another's life, biography originates as the literary form of understanding other lives."¹⁴⁹ To undertake biography requires that one "understand[] . . . manifestations that indicate plans or an awareness of meaning."¹⁵⁰ What then are these manifestations? Dilthey offers letters because they "can show what this individual finds to be of value in his situation; or they can indicate what he finds meaningful in particular parts of his past."¹⁵¹ By examining texts from the person, we can discern the forces at work on a person and thus see where the person fits in the productive nexus.¹⁵² Indeed, "[t]hese documents show the individual to be a point of intersection that both experiences force and exerts it."¹⁵³

Although for Dilthey the most important biographies are of "the historical individual whose life has produced lasting effects,"¹⁵⁴ Dilthey does not dismiss the value of other biographies. As he puts it:

Every life can be described, the insignificant as well as the powerful, the everyday as well as the out of the ordinary. Interest in doing so can stem from a variety of perspectives. A family retains its memories. Theorists of criminal law want to record the life of a thief, psychopathologists the life of an abnormal person. Everything human becomes a document for us that actualizes one of the infinite possibilities of our existence.¹⁵⁵

And here we return to e-mails, blogs, and digital artifacts in general. It is not that these artifacts are necessarily self-reflective. Insofar as they have the potential to reveal the autobiographical moments of the individual, however, they have great importance and must be preserved so that biographers and, in Dilthey's sense, historians may have access to these artifacts as evidence of the relationship between the whole and the parts—the relationship between the forces acting on

147. H.P. RICKMAN, *DILTHEY TODAY: A CRITICAL APPRAISAL OF THE CONTEMPORARY RELEVANCE OF HIS WORK* 29 (1988).

148. See *DILTHEY*, *supra* note 137, at 268 (noting importance of interpreting history to assess meaning of one's life); *HODGES*, *supra* note 143, at 282 (noting that biographer has advantage over autobiographer because biographer deals with life already completed); *MAKKREEL*, *supra* note 146, at 379-80 (recognizing that autobiography illustrates individual's self-reflection before definition of its historical meaning in biography).

149. *DILTHEY*, *supra* note 137, at 266.

150. *Id.* at 268.

151. *Id.*

152. *Id.*

153. *Id.*

154. *DILTHEY*, *supra* note 137, at 266; accord *HODGES*, *supra* note 143, at 283 (stating that biographies of historical individuals reflect both individual and social movements); *RICKMAN*, *supra* note 147, at 31 (observing that Dilthey determined that history must focus on role of great men by looking at their thoughts and plans).

155. *DILTHEY*, *supra* note 137, at 266.

a person and the person's effect on the forces of which the person is a part.¹⁵⁶

As Professor Rickman puts it, biographers try to offer “a meaningful story about a person's life” and “[w]here, as in most cases, no autobiography exists, he looks for autobiographical remarks in letters, diaries, or conversations recorded by contemporaries, which indicate what worried that person, what his viewpoint was, and what he was seeking to achieve.”¹⁵⁷ Thus, failing to preserve these artifacts may result in the loss of information important to society and historians. These materials are required to understand arguably everything from family histories to the flow of history itself to the present.

At a more general level, society requires these creations so that more creations can occur. Thus, historians' interests in preservation of these materials is a subset of society's general interest, for in both cases the artifacts are the very building blocks of future understanding, creativity, and production. Not only does one need to preserve creations to understand the past, but the interaction with such parts of culture generates the possibility for future creation. As Radin has put it, “creativity is deeply a collective matter; in a sense, all creativity is collective creativity.”¹⁵⁸ This view comports with Larry Lessig's description of creativity as depending on a certain amount of free culture, that is, culture free for others to use and on which they can build.¹⁵⁹ As discussed later, in economics, the phenomenon in which one's creations stimulate other creations may be called a spillover, an uncompensated benefit, but one that in many ways society wishes to occur as it stimulates future production.¹⁶⁰ Whether one takes a historical, literary, or economic perspective, it appears that society's claim on artifacts rests on the way in which creation occurs and society's interest in fostering further understanding and creations. That interest can be met when the inputs for such a creative system are preserved.

E. Summary of Interests

As such, one can see that digital artifacts—from e-mails to word-processed documents to Web pages to spreadsheets to blog posts to video clips and more—have importance from three perspectives. The artifacts may hold a pecuniary value to the creator and her heirs from an economic property interest, and they may also hold a persona interest. In addition, society has a distinct interest in these artifacts as core material to understand an era and, more generally, as the foundation for future creation. Thus, although society's access to these materials

156. As Professors George Taylor and Michael Madison discuss, Paul Ricouer's work on hermeneutics takes a similar view of the way in which external manifestations of the self, such as “art and discourse,” function. Taylor & Madison, *supra* note 95, at 151 (internal quotation marks omitted). They explain that “[o]ur belonging to traditions must pass through the interpretation of the signs, works and texts in which cultural heritages are inscribed and offer themselves to be deciphered.” *Id.* at 152 (internal quotation marks omitted).

157. RICKMAN, *supra* note 147, at 29.

158. Radin, *supra* note 34, at 510-11.

159. See LESSIG, *supra* note 18, at 21-30 (detailing way creativity takes other creative inputs and then creates new works).

160. See *infra* Part II.C.2 for a discussion of spillovers that stimulate future production.

may be limited by creators' and heirs' claims to ownership and control over the artifacts, before one can argue about the nature of such dominion as it affects historians and society in general, the artifacts must be preserved. With this point in mind, it is now necessary to see the basis for the claimed interests.

II. THEORETICAL FOUNDATIONS OF THE INTERESTS

This section seeks to probe the normative arguments that ground the claimed interests to provide a clearer picture of the basis for these interests and to clarify the limits of giving any one group too much control over a work. This section examines some of the classic arguments regarding the Lockean labor and persona rationales behind intellectual property, both of which may be necessary to understand intellectual property,¹⁶¹ and seeks to set forth a more clear understanding of how they relate to digital intellectual property as possibly having the same rights as real property.¹⁶² Yet this section finds that the justifications for such treatment stem from tangible property insights such that death is an inflection point that appears to extinguish those claims. In addition, this Article finds with others that the claim for real property treatment of intellectual property is overstated and causes errors by granting too much control in general to creators.¹⁶³ As such, this Article argues that some of the insights regarding the way in which property relates to an individual may be needed to understand the management of digital intellectual property creations, but those arguments do not support full real property rights in general precisely because of the intangible nature of the intellectual property in question. This point becomes clear when one engages with the theories regarding creativity and the basis for society's claims on artifacts.

Although these claims are strong and demonstrate the need for a system to preserve digital artifacts, they do not demonstrate that society can require preservation or demand access, at least not during the creator's life. Nonetheless, they do indicate that limits on creators' claims are necessary and further show the need for a system to allow for the preservation of these artifacts. From these insights, the Article moves to the last section, which offers a system for the preservation of digital artifacts informed by the interests and theoretical foundations behind those interests.

161. See Hughes, *supra* note 34, at 289-90 (proposing that one can justify property through either labor or personality theories, or both); see also DRAHOS, *supra* note 95, at 48-50 (arguing that different "Lockean" theories of intellectual property are possible using different concepts than Locke); Cohen, *supra* note 71, at 1377-91 (examining different ways in which one may understand property and the limits of such understandings for privacy concerns).

162. But see Lemley, *supra* note 55, at 1031-32 (maintaining that treating intellectual property like real property "is a mistake as a practical matter"); Margaret Jane Radin, *A Comment on Information Propertization and Its Legal Milieu*, 54 CLEV. ST. L. REV. 23, 33-34 (2006) (discussing free riding of goodwill in trademarks for placement of store brand next to national brand).

163. Lemley, *supra* note 55, at 1046-69.

A. *Natural Rights and Property*

From one perspective, we can see that one's writings come from one's efforts. From Locke's view of property, that labor justifies treating the items as one's property with all the rights the law usually affords to things that are deemed property.¹⁶⁴ But here we must be careful because, although some argue that there has been an overprotection of intellectual property and suggest that intellectual property is arguably a relatively recent term,¹⁶⁵ as Justin Hughes has noted, the treatment of intellectual and especially literary work subject to copyright as property has persisted for a few hundred years.¹⁶⁶ Indeed with the advent of certain natural rights approaches to intellectual and real property, the call that intellectual property must be treated as real property may be reaching new heights.¹⁶⁷ Still, an examination of the basis for such claims suggests that they inherently have a limit, life, which begins to cabin creators' rights.

Adam Mossoff's recent arguments for what he calls an integrated theory of property provide an insight into the labor arguments often offered to justify property rights. In addition, an examination of the theory provides a way to understand an issue of concern to this Article: the relation between life and property. Mossoff's work thus wishes to help understand exactly what is meant by the term property and better guide society regarding the nature of property, both real and intellectual.¹⁶⁸ The integrated theory responds to the bundle theory of rights, which the integrated theory finds lacks grounding and is so malleable that the term property itself need not be used.¹⁶⁹ As part of his project, Mossoff

164. JOHN LOCKE, TWO TREATISES OF GOVERNMENT 287, 305-06 (Peter Laslett ed., Cambridge Univ. Press 1988) (1690); accord Adam Mossoff, *Locke's Labor Lost*, 9 U. CHI. L. SCH. ROUNDTABLE 155, 156 (2002) (asserting, in Locke's view, labor resulted in "moral right to property" (citing LOCKE, *supra*)); Alfred C. Yen, *Restoring the Natural Law: Copyright as Labor and Possession*, 51 OHIO ST. L.J. 517, 523 (1990) (discussing Locke's belief in body as property, leading to inference that labor performed by body was also property (citing LOCKE, *supra*)).

165. See, e.g., Rochelle Cooper Dreyfuss, *Expressive Genericity: Trademarks as Language in the Pepsi Generation*, 65 NOTRE DAME L. REV. 397, 406-10 (1990) (tracing shift to pure property approach to trademark rights and noting way in which shift limits potential for expressive use of trademarks); Lemley, *supra* note 55, at 1032 (arguing that it is mistake to treat intellectual property like real property, because there is no reason for individual to internalize all social benefits and trying to capture externalities might reduce them).

166. Justin Hughes, *Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson*, 79 S. CAL. L. REV. 993, 1004-05 (2006).

167. But see, e.g., Mossoff, *supra* note 53, at 31-32 (noting that traditional treatment of intellectual property is misplaced due to freedom embedded in this property); Mossoff, *supra* note 41, at 413-15 (positing that problem with classifying intellectual property as property is that it does not define intangible quality of intellectual property); cf. Radin, *supra* note 162, at 28 (noting that supporters of propertization compare intellectual property with real property, but arguing that legal scholars do not have to and must not accept this comparison). For an example of the popular position that real property is the best way to understand intellectual property, see Mark Helprin, Op-Ed, *A Great Idea Lives Forever. Shouldn't Its Copyright?*, N.Y. TIMES, May 20, 2007, § 4, at 12.

168. See Mossoff, *supra* note 53, at 38 (describing conflict between ownership of tangible and intangible property).

169. See Mossoff, *supra* note 41, at 373-74 (stating that bundle approach maintains that rights associated with intellectual property do not necessarily constitute ownership and noting that bundle of

acknowledges that the focus on exclusionary rights in property begins to address the shortcomings of the bundle approach, but he argues that it fails to reach the core of property rights that stems from Grotius's, Pufendorf's, and Locke's property theories and the theories of those who drew on them, such as Blackstone.¹⁷⁰ As such, Mossoff details that exclusionary rights play a large role in the property theory of Grotius and Locke but do not capture the rights "sufficient" to explain property.¹⁷¹ Instead "the more fundamental rights of acquiring, using, and disposing of one's possessions"—possessory rights—explain property better, for one cannot exclude until one has possessed.¹⁷²

Mossoff argues that possessory rights stem from a few key points. First, with Grotius, use of a thing was key to deeming it property and later, for Locke, it was labor that made the thing one's property.¹⁷³ In both cases, however, the property claim stems from the rivalrous nature of consumption of physical things.¹⁷⁴ According to Mossoff's reading of both Grotius and Locke, this fact of use or occupation is part of what is "one's own" that begins with one's "life, limbs and liberty."¹⁷⁵ From that understanding one finds:

It is one's right to life that justifies the liberty required for him to take the actions necessary to support this life (*suum*), which temporally and logically results in the development of property (*dominion*). Thus, writes Grotius, "property ownership was introduced for the purpose . . . that each should have his own." It is "one's own" that is the fundamental right; *property is the derivative right*. It is this analytical structure that beget [sic] the "traditional" triad of political rights—the rights to life, liberty and property. For, as Grotius explains, "liberty in regard to actions is equivalent to *dominion* in material things."¹⁷⁶

rights could be interpreted by courts without any discussion of property).

170. *Id.* at 378.

171. *Id.* at 378-80.

172. *Id.* at 390, 395 ("[T]he *substance* of the concept of property is the possessory rights: the right to acquire, use and dispose of one's possessions. The right to exclude enters the picture, so to speak, at the point at which one identifies one's property entitlements in the context of creating and applying explicit legal protections within civil society. . . . Exclusion therefore represents only a formal claim between people once civil and political society is created, and it has meaning only by reference to the more fundamental possessory rights that logically predate it."). Professor Yen makes a similar point regarding possession and natural law when he examines the Roman law origin of the possession view and how it manifests itself in Blackstone. Yen, *supra* note 164, at 522-24 ("The effect of all this was that the English natural law of property developed as the combination of two legal traditions: the Roman doctrines of possession and the moral philosophy of Locke. In other words, the English did see property law as the vindication of a person's moral right to property in the fruits of her labor. However, the English vindicated that right only if the fruits of that labor were considered capable of permanent possession.").

173. Mossoff, *supra* note 41, at 381.

174. *Id.*

175. *Id.* at 383-84.

176. *Id.* (footnote omitted) (third emphasis added) (quoting HUGO GROTIUS, DE JURE PRAEAE COMMENTARIUS 322 (G.L. Williams & W.H. Zeydel trans., 1964), and RICHARD TUCK, NATURAL RIGHTS THEORIES: THEIR ORIGIN AND DEVELOPMENT 60 (1979)); see also Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE L.J. 1533, 1559-60 (1993) (discussing relationship between liberty,

Thus the focus is on life. To have life and exercise liberty, one must be able to support that life, which in turn leads to being able to exercise liberty and to have property to support one's life, which results in a familiar triumvirate: life, liberty, and property.¹⁷⁷

Accordingly, as far as tangible items are concerned, the integrated theory of property offers much. Recall that this Article focuses on artifacts such as writings, videos, and photographs.¹⁷⁸ These creations as things have value. For example, a letter is a thing. When one writes a letter, the copyright remains with the author, but the recipient owns the letter itself.¹⁷⁹ This division of the rights to the item as opposed to the underlying copyright follows from the ability to give or sell the physical representation of the expression while still retaining the copyright.¹⁸⁰ Thus, if one owns a physical writing or other copyrightable work, absent some contractual limit placed on the thing, that person may sell it at her pleasure. As noted above, people often sell famous people's copyrighted artifacts for large sums of money.¹⁸¹ The author cannot prevent that sale.

Thus, as things, these items are rivalrous and fit under a use right because of a basic intuition, i.e., a use-right logically creates a private right insofar as something is consumed or depleted in the process of using it. A piece of meat can be eaten only once, for instance, and, in the process of building a shelter, a tree can be cut down only once.¹⁸²

Accordingly, as far as one's creations manifest themselves in physical, fixable things, real property understandings can guide the way in which the law addresses the rights in those items rather easily.

property, and commons, and noting Locke's view that people, in order to provide for subsistence, have right to use and possess as much as needed to satisfy their subsistence needs).

177. Mossoff, *supra* note 41, at 381, 384.

178. See *supra* Part I.A for a discussion of digital property, such as e-mail, blogs, and videos, and their behavior as intellectual, rather than real, property. *But see* Yen, *supra* note 164, at 524 (noting that if person cannot claim permanent possession, such as in case of labor, then she can only claim temporary right of use).

179. *Salinger v. Random House, Inc.*, 811 F.2d 90, 94 (2d Cir. 1987) (citing *Meeropol v. Nizer*, 560 F.2d 1061, 1069 (2d Cir. 1977)); *Folsom v. Marsh*, 9 F. Cas. 342, 346 (Story, Circuit Justice, C.C.D. Mass. 1841) (No. 4901); *Ipswich Mills v. Dillon*, 260 Mass. 453, 457 (1927) ("The original letters from the plaintiff to the defendants belonged to the defendants. They were the recipients, and therefore owned them.").

180. See *Snow*, *supra* note 101, at 526 ("Once delivery occurs, the letter recipient receives by gift property rights to possess the physical components of the letter: the physical paper, the envelope, the ink, and the postage stamp. So while copyright secures an author property rights in the letter's expression, property law secures the recipient property rights to the physical components of the letter." (footnote omitted)); *accord* DRAHOS, *supra* note 95, at 17 (noting copyright can be possessed without owning any physical copy).

181. See *supra* note 24 and accompanying text for examples of the selling of famous people's copyrighted items.

182. Mossoff, *supra* note 41, at 381. This statement is informed by Mossoff's reading of Grotius as can be seen when Mossoff quotes Grotius's assertion that, "[f]or the essential characteristic of private property is the fact that it belongs to a given individual in such a way as to be incapable of belonging to another individual," which is the core of the idea of a rivalrous good. *Id.* (emphasis added) (quoting GROTIUS, *supra* note 176, at 228).

So the e-mails, videos, and other artifacts at issue seem to comport with the basic intuition. One who creates an item has possessory rights. One can “acquire, use and dispose”¹⁸³ of the possessions in question. As such, the creator acquires a creation through labor or other means, uses it as she sees fit (e.g., posts it online, sends it as an e-mail, etc.), and then may choose to dispose of it as she sees fit by destroying it or giving it to someone who then will have the same possessory rights over *the thing*. Indeed, the premise above is that the rights over the creations as things belong to the creator and that online intermediaries’ failure to respect those rights is a harm to be remedied.

Yet, this understanding of property does not seem to work well with intangible property.¹⁸⁴ One can see that giving the thing to someone if it is an e-mail, allows one to retain the thing at the same time. Indeed, even with a handwritten item, one can give it to someone and that recipient may sell that item, but the author retains the copyright in the expression of the ideas and could make copies at will. So although Mossoff argues that copyright fits well under the integrated theory, because the Copyright Act of 1976¹⁸⁵ details exclusive rights regarding uses of a work and provides that “exclusion is a formal right that only has meaning by reference to the more fundamental, substantive possessory rights,”¹⁸⁶ the rubric regarding “a basic intuition, i.e., a use-right logically creates a private right insofar as something is consumed or depleted in the process of using it”¹⁸⁷ appears to be lost. To be fair, it is Locke’s notion of labor that allows this jump; yet that jump is not as easy as it might appear.

Mossoff points to Locke’s labor ideal—that one has property in that which she mixes with her labor—to show the connection between transforming something from the commons into one’s own. The idea again is that insofar as something is part of one’s own, it is part of life, liberty, and property.¹⁸⁸ Yet immediately thereafter, Mossoff returns to the tangible and the example of taking an acorn from a tree moves the acorn from the commons by labor and thus makes the one who exerts that labor the owner of the acorn.¹⁸⁹ Where then is the intangible in this view? It can only hide within labor; the basic notion that rivalrous items are key is now gone.

Thus, the expanded idea is that labor allows one to argue that property is about both the tangible and intangible just as James Madison wrote that

183. Mossoff, *supra* note 41, at 395.

184. See DRAHOS, *supra* note 95, at 32-33 (analyzing natural right justifications for property, and finding that they do not fit for abstract objects or intellectual property); accord Yen, *supra* note 164, at 524 (noting that natural law does not offer property for that which person cannot permanently possess).

185. 17 U.S.C §§ 101-1301 (2000).

186. Mossoff, *supra* note 41, at 425. Mossoff recognizes, “The essence of Locke’s ‘mixing labor’ argument is that an individual *exclusively owns* his life and his labor—such things are, in the Latin used by Grotius and Pufendorf, an individual’s *suum*—and that labor extends this moral ownership over things appropriated from the commons.” *Id.* at 388.

187. *Id.* at 381.

188. *Id.* at 388.

189. *Id.* at 389.

property “embraces everything to which a man may attach a value and have a right”¹⁹⁰ and that the law recognizes harms to property without loss of the physical item.¹⁹¹ The argument has evolved from the need for tangibility to the idea that once one’s labor has created in a general sense, property theory recognizes the creator’s “ability to use, control or dispose of the values that one has created.”¹⁹² Note that the discussion has shifted to anything that has “value.”¹⁹³ As Peter Drahos has observed, this focus on labor to justify property rights in abstract objects places this concept of property in a strong form such that “[v]ery few abstract objects, if any, would escape individual ownership.”¹⁹⁴

Still, the limits of integrated property theory are not lost on Mossoff. He offers: “It is important, though, for integrated theorists not to overstate their claims. The integrated theory does much for the property scholar, but it does not do everything.”¹⁹⁵ Important for this Article, he acknowledges:

An integrated theorist, for example, would be hard pressed to deduce from the possessory rights the optimal term limit for a copyright or patent. The integrated theorist maintains that there should be legal protection *as such* for intellectual property, but important details of this protection are not deducible from the integrated theory.¹⁹⁶

Yet, the theory points to an inherent limit—life.

Thus as digital creation grows, digital artifacts may indeed support one’s life, and, as material stemming from one’s labor to create what one needs to live, one needs access to one’s artifacts as property. As such, when creations are mediated by others, ensuring that a creator has access to her creations so she may use them has merit. Note, however, that position does not extend or expand claims regarding exclusion of others from intangibles unless one returns to the idea that exclusion is the only way to provide incentives to create nonrivalrous goods.¹⁹⁷ Unlike tangible property, which is the basis for the integrated theory, intangible property can be held by the creator and others at the same time. The irony here is that because of the nature of digital creation, the creator often

190. Mossoff, *supra* note 41, at 401 (quoting James Madison, *Property*, NAT’L GAZETTE, Mar. 5, 1792, reprinted in JAMES MADISON, *THE MIND OF THE FOUNDER 186* (Marvin Meyer ed., 1981)).

191. Mossoff, *supra* note 53, at 41-42.

192. *Id.* at 42.

193. An example of this phenomenon is seen in the domain-name context where as value increased so did property claims. See, e.g., Margaret Jane Radin & R. Polk Wagner, *The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace*, 73 CHI.-KENT L. REV. 1295, 1299-1301 (1998) (discussing development of domain names as property). Although domain names are different than the material at issue here because of their rivalrous nature, the logic of claiming property rights runs parallel but perhaps has more reason to honor claims for domain names. See *supra* notes 40-48 and accompanying text for a discussion of ownership of digital property.

194. DRAHOS, *supra* note 95, at 48.

195. Mossoff, *supra* note 41, at 441.

196. *Id.*; cf. Yen, *supra* note 164, at 546-57 (examining natural law and modern copyright to show how natural law on its own terms has inherent limits regarding way one should treat copyright).

197. See Desai, *supra* note 88 (exploring limits of creators’ control and way that claims for control and property rights extinguish at death, and arguing that heirs’ claims are much less robust than creators’).

places the only instance of the intangible in a service provider's hands or must continually verify registration of software and thus is distanced from and denied access to her own creations.¹⁹⁸ The use and possessory rights central to the integrated theory are attenuated if not cut off. This point gives pause and forces a reconsideration regarding ownership of, access to, dominion over, and preservation of digital intellectual property.

B. Persona-Based Property Interests

Personality or persona arguments are a key other way to consider the justifications for property rights.¹⁹⁹ A close reading of one of the most well-known articulations of such an argument, Margaret Radin's "Property in Personhood,"²⁰⁰ offers three benefits. First, one can see the theoretical roots of the claim that anyone may assert regarding a thing being an extension of one's being. Second, one can see the limits of such claims as they relate to tangible items. Third, the investigation shows that Radin's own articulation of the idea stresses *personhood* over property and seeks to foster human flourishing by arguing for access to another's property when access promotes such flourishing.²⁰¹ So as far as digital property is concerned, without preservation *the possibility* for later access to and use by society of the artifacts such that human flourishing *can* exist is severely limited and may even vanish. Last, this analysis of Radin also shows that, like the labor-based property rationale, the persona rationale has inherent limits regarding the amount of control afforded to the author and demonstrates that life is a key terminus regarding control based on persona claims.

At the outset, Radin's project "attempts to clarify a . . . strand of liberal

198. As discussed below, one might argue that a creator should have multiple copies of the work in question, but when one considers the quantities of e-mail, the nature of the average online user, and the inefficiency of such a requirement, it makes little sense. See *infra* notes 308-14 and accompanying text for a discussion of requirements concerning the creator's maintenance of multiple copies of documents. In addition, just because one can create such a backup does not indicate that one should lose access to one's possessions.

199. See Hughes, *supra* note 34, at 289-90 (justifying property through either labor or personality theories, or through both); see also DRAHOS, *supra* note 95, at 32-33 (positing that where traditional labor theory leaves off, instrumentalist justifications and ethical concerns can pick up and help justify protection of intellectual property).

200. Margaret Jane Radin, *Property and Personhood*, 34 STAN. L. REV. 957, 986-91, 1008-10 (1982).

201. Professor Cohen's discussion of Radin's work notes this distinction but places human flourishing as somewhat separate from Radin's concept of personhood. See Cohen, *supra* note 71, at 1382-83 (discussing two innovations in Radin's theory of property for personhood). Nonetheless, Radin has been explicit about an argument that property matters as it relates to human flourishing:

In one paradigm, which I think of as noncommodified, we are not-too-distant intellectual descendants of Immanuel Kant, and rather more distant intellectual descendants of John Locke. We reason about value based upon a commitment to an ideal of human flourishing.

We say that property is a natural right because it is necessary to the self-constitution of persons and to their freedom.

Radin, *supra* note 34, at 509.

property theory that focuses on personal embodiment or self-constitution in terms of ‘things.’ This ‘personhood perspective’ corresponds to, or is the dominant premise of, the so-called personality theory of property.”²⁰² Returning to the dead son’s e-mail and the father’s explanation of his interest in it as one reminder of his son’s life,²⁰³ or the daughter’s use of e-mail to trace her mother’s actions,²⁰⁴ one can see that the thing, the e-mail, had value as a part of the creator’s life. This perspective comports with what Radin calls the intuitive view of personhood: “Most people possess certain objects they feel are almost part of themselves. These objects are closely bound up with personhood because they are part of the way we constitute ourselves as continuing personal entities in the world.”²⁰⁵

Under this view, the more one cannot replace the external thing with another thing, the more the thing is “part of oneself.”²⁰⁶ So it is possible under this theory to have an external thing bound up with one’s personhood and yet have that same thing not be part of someone else’s personhood.²⁰⁷ Radin describes this phenomenon as the continuum between personal property (highly connected to personhood and practically irreplaceable) at one end and fungible property (completely separate and replaceable by even unlike items such as money for an item) at the other end.²⁰⁸ Accordingly, one’s creations reside on the personal end of the spectrum, especially for one who holds the view that “[a] writer’s personality is his manner of being in the world: his writing style is the unavoidable trace of that manner. . . . [S]tyle [is] a personal necessity, . . . the only possible expression of a particular human consciousness.”²⁰⁹

Thus far, however, the theory addresses things. One creates *or acquires* a thing, and, insofar as one is “bound up” with the thing, one’s property interest is found. As Radin explains, this approach

focuses on the person with whom [the thing] ends up—on an internal quality in the holder or a subjective relationship between the holder and the thing, and not on the objective arrangements surrounding production of the thing. The same claim can change from fungible to personal depending on who holds it.²¹⁰

202. Radin, *supra* note 200, at 958.

203. Hu, *supra* note 13.

204. See Rosman, *supra* note 29 (describing daughter’s attempt to reconstruct her late mother’s recent life from e-mails).

205. Radin, *supra* note 200, at 959. Radin uses “a wedding ring, a portrait, an heirloom, or a house” as examples of such things. *Id.*

206. *Id.* at 959-60.

207. *Id.* at 959 (“For instance, if a wedding ring is stolen from a jeweler, insurance proceeds can reimburse the jeweler, but if a wedding ring is stolen from a loving wearer, the price of a replacement will not restore the status quo—perhaps no amount of money can do so.”).

208. See *id.* at 959-61 (looking to pain that cannot be relieved by replacement as informing where on continuum property falls).

209. Smith, *supra* note 30.

210. Radin, *supra* note 200, at 987-88 (using wedding ring to show that maker may sell it as fungible item despite her connection to it from labor and that sometimes thing can move from fungible to personal as attachment grows).

Accordingly, one may write a short story, and it may well be personal property in Radin's sense of the term. Still that same story may be a commissioned story, and one may write it simply as ordered. Or that story may never be published and, instead, may be left to an heir, and that heir may find attachment to the property to be personal. Although Radin acknowledges the subjective aspect of the theory, that nature causes problems. Under her own example of the artisan ring maker, one could easily understand that the artisan is bound up with her creation *and* in Radin's example the wearer of the ring may be bound up with it too. Knowing where the property is on the continuum is difficult to parse if not impossible in many cases.²¹¹

To be clear, it is not that Radin denies a "personhood interest . . . in fungible property."²¹² That is the point of describing the nature of the interest as being on a continuum. For Radin, place on the continuum matters because the closer to personal property the thing is, the stronger interest or entitlement one has in preserving that property.²¹³ Thus, some items may be so close to personhood that no compensation would suffice, and other items may so fungible that "the justification for protecting them as specially related to persons disappears."²¹⁴ In addition, Radin offers a limit on the personal perspective by denying personal property status to those attachments that are fetishistic, which here means that one asserts an irrational attachment that "is inconsistent with personhood or healthy self-constitution."²¹⁵ Despite this idea of healthy self-constitution appearing within the issue of personal property, it points to Radin's shift from property to a broader notion of the importance and power of personhood.

This shift is seen when Radin asserts that "some personhood interests not embodied in property will take precedence over claims to fungible property."²¹⁶ Here the theory moves beyond personal property to other interests. For when

211. For one account of how this distinction poses problems, see generally Taylor & Madison, *supra* note 95, at 157-73.

212. Radin, *supra* note 200, at 1008. Radin detailed the contours of the personal to fungible continuum:

Since the personhood perspective depends partly on the subjective nature of the relationships between person and thing, it makes more sense to think of a continuum that ranges from a thing indispensable to someone's being to a thing wholly interchangeable with money. Many relationships between persons and things will fall somewhere in the middle of this continuum.

Id. at 987; see also Sunder, *supra* note 34, at 2 ("Far from offering a singleminded assault on commodification, Radin is a 'philosophical pragmatist' who acknowledges that economic and cultural inequalities mandate that sometimes even very private things may be bought and sold, but only under carefully regulated circumstances.").

213. See Radin, *supra* note 200, at 986 ("Thus, the personhood perspective generates a hierarchy of entitlements: The more closely connected with personhood, the stronger the entitlement."); *id.* at 1005-06 (explaining that some items are so close to personhood that no compensation would suffice and others are so far from personhood that no personal justification for protection exists).

214. *Id.* at 1005.

215. *Id.* at 968-69.

216. *Id.* at 1008.

Radin turns to the question of using someone else's property (e.g., a mall) for speech interests, she argues that the speech interests trump based on personhood interests.²¹⁷ When two people need use of a space such as a mall, one determines who needs the property more in light of their respective personhood claims.²¹⁸

A private owner loses in this calculus when she lacks a high level of personal property interest in the mall (and perhaps at some point such a claim would rise to the level of fetish). But that fact does not lead to the personhood *in property* interest outweighing the mall owner interest. Rather, it is the necessity of the individual or public accessing the non- or less personal property so he or it can have "opportunities to develop and express personhood" that drives this result.²¹⁹ The emphasis here is on *personhood*, not *property*. Radin later explained and developed this idea as human flourishing,²²⁰ though it can be seen when she writes of the possible need of "private enclaves . . . for personhood to develop and flourish."²²¹ She summarizes that one's claim to access another's fungible property "is strongest where without the claimed protection of property as personal, the claimants' opportunities to become fully developed persons in the context of our society would be destroyed or significantly lessened."²²²

Accordingly, personhood offers a way to understand a creator's and an heir's claims to access to an artifact. Intuitively some things are bound with one's person such that, from the individual's subjective view, no thing can replace the value of the personal thing.²²³ This perspective is subjective in that it is the holder of the thing's view that determines whether the property is personal.²²⁴ Although it is difficult to determine when one's attachment to a thing is unhealthy and a fetish, when the attachment runs contrary to human flourishing, that attachment is less respected if not ignored.²²⁵ Although the exact contours

217. Radin, *supra* note 200, at 1009.

218. *Id.*

219. *Id.* at 1010.

220. See generally Radin, *supra* note 37, at 1903-15 (explaining link between personhood and flourishing and arguing "that market-inalienability is grounded in noncommodification of things important to personhood"); see also generally Cohen, *supra* note 71, at 1383 (explaining Radin's human flourishing as encompassing "both individual and collective goals"); Radin, *supra* note 34, at 510-11 (considering creativity as collective matter and finding such cooperative creation prevalent in development of early cyberspace, where "property" encouraged human flourishing).

221. Radin, *supra* note 200, at 1001.

222. *Id.* at 1015; accord Sunder, *supra* note 34, at 8 ("Assertions of power over one's own identity necessarily lead to assertions of property ownership. . . . Property enables us to have control over our external surroundings. Seen in this light, it is not enough to see all claims for more property simply as intrusions into the public domain and violations of free speech. Instead, we may begin to see them as assertions of *personhood*.").

223. See Radin, *supra* note 200, at 961 ("It intuitively appears that there is such a thing as property for personhood because people become bound up with 'things.'").

224. See *id.* at 987-88 (explaining subjective relationship).

225. See *supra* note 215 and accompanying text for a discussion of fetishism. Professors Taylor and Madison suggest that one way to manage this problem is to understand the issue as one of externalization that can be either positive or negative. See Taylor & Madison, *supra* note 95, at 150 ("If externalization is good and so a positive form of self-actualization, it should be called objectification. If the externalization is bad in the sense that the human expression in the thing or

of human flourishing are unclear,²²⁶ the move to human flourishing reveals that the issue is not property for the sake of property but rather the way in which access to property enables people to “become fully developed persons in the context of our society.”²²⁷

Thus returning to the artifacts in question, although they are digital and are capable of being used or possessed by many people simultaneously, when they are the only copy of the creation and under a service provider’s control, they function as rivalrous things. As Professor Michael Madison has explained, the term “things” encompasses a range of possibilities with both context and law interacting to delineate what may be a thing and what claims are made on it.²²⁸ Here the context of service provider control and technological distance shows that despite being digital artifacts, the claim is over a thing to which only one person has access. Under personhood theory, one could credibly claim that these things, the expressions of one’s ideas, are on the personal property end of the spectrum and thus should be highly protected. A creator or her heirs have greater claim to the digital property than the service provider. As between creators and heirs on one hand and service providers on the other, creators and heirs succeed on both prongs of Radin’s personhood theory. As living beings they have a much higher level of connection to the property and can show a greater need for the material as it relates to their potential for human flourishing.²²⁹ Yet, current systems deny access or remove such personal, digital property.

In addition, by not allowing for the possibility of a creator or her heirs to access and preserve digital property, another interested group is cut off both from a personhood and other perspectives. Insofar as society requires resources to further human flourishing, digital artifacts are and will be vital to such a phenomenon.²³⁰ Just as letters, stories, pictures, and other creations have fueled

object is stripped away, then it should be called alienation or reification.”).

226. See *supra* notes 219-22 and accompanying text for a discussion of the importance of expressions of personhood. See also Radin, *supra* note 37, at 1905 n.208 (“I do not assert either that there is potentially or in the long run one best concept of human flourishing, or that there is not.”).

227. Radin, *supra* note 200, at 1015; accord Sunder, *supra* note 34, at 8 (“As Radin has taught us, property is an essential part of what it means to be fully human.”).

228. See generally Madison, *supra* note 41, at 381-89, 403-39 (arguing for all-purpose theory of things in law). For one description of Madison’s idea of thing-by-practice as manifested in copyright and trademark understandings, see *id.* at 455-57.

229. Once this context is changed, however, to one in which the digital copy is available for more than one person to use it, the claim over the property would not be as strong. When several can use the property at the same time, the dilemma between who can use the thing—the rivalrous aspect of the problem—for flourishing diminishes. Arguably two people could lay claim to a work as necessary for their capacity to flourish, but now the dispute over who will have the creation is less urgent because unlike the ring, both can have the work. Still, as Professor Sunder has shown, this shift does not solve the problem of how use of the thing by many can still diminish flourishing from an identity or cultural perspective. See generally Sunder, *supra* note 34, at 165 (noting fears that increased access to cultural traffic by way of intellectual property may result in homogenization to detriment of subordinated cultural groups).

230. As Radin notes, “creativity is deeply a collective matter; in a sense, all creativity is collective creativity. The critics find overreaching—and consequent impoverishment of the social well-springs of

human flourishing in the past or at least opened the door for its potential, digital artifacts will play a key role in human flourishing or at least its possibility now and in the future. In short, this Article argues that one way to understand human flourishing is to see it in light of, or perhaps embodied by, creative and productive systems. The next section looks at literary, historical, and economic theory to explain this idea.

C. *Preservation for Posterity*

The problem presented involves a lack of coherence regarding the preservation of digital artifacts. In addition to creators and heirs, society in general has a claim that these artifacts must be preserved. Recent scholarship has focused on and called for such preservation.²³¹ Thus far, this part of the Article has offered theoretical support for creators' and heirs' claims that they must have the ability to preserve the artifacts. Although society at large is an ancillary beneficiary of such preservation and, as discussed below, may not receive all the artifacts, this section sets forth the importance of preservation from posterity's perspective. In other words, this section demonstrates that, if one wants to have the possibility of greater creative systems or spillovers as economists might put it, some sort of preservation of the inputs to those systems is required.

1. Literary and Historical Theory and Creative Systems

Literary theory indicates that “the idea of ‘authorship’—individual control over the created environment”²³²—is a “construct”²³³ of the Romantic period's view of authorship.²³⁴ Much has been written regarding the claim that this construct of the Romantic author is suspect.²³⁵ In essence the claim is that the author (or creator) and the text are separate such that the text has meaning entirely distinct from the author.²³⁶ Part of this critique notes that the

creativity—in many aspects of intellectual property law. Property keeps us from flourishing ‘at play in the fields of the word.’” Radin, *supra* note 34, at 510-11 (quoting David Lange, *At Play in the Fields of the Word: Copyright and the Construction of Authorship in the Post-Literate Millennium*, 54 *LAW & CONTEMP. PROBS.* 139, 139 (1992)). In other words, property may reduce the ability of the general populace to create if such creation requires using the property of others for the creation in question.

231. See, e.g., Zimmermann, *supra* note 2, at 989-90 (noting that much of our culture will be lost if this information is not preserved).

232. Peter Jaszi, *Toward a Theory of Copyright: The Metamorphoses of “Authorship”*, 1991 *DUKE L.J.* 455, 470.

233. *Id.* at 459.

234. *Id.* at 455; see also Kwall, *supra* note 95, at 1957-58, 1969-70 (explaining religious view of creative cycle).

235. See, e.g., JAMES BOYLE, *SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY* 53-59 (1996) (detailing and criticizing manifestation of Romantic view of authorship); Jaszi, *supra* note 232, at 462-63 (pointing out internal contradictions in Romantic notion of authorship); see also Lastowka, *supra* note 105, at 1216 n.225 (“Theories regarding the intersection of romantic authorship, copyright, and literary theory enjoyed a heyday of sorts in the early 1990s.”).

236. See Lastowka, *supra* note 105, at 1183 (“New Criticism, partaking in the broader formalistic rigor of modernism, isolated the text from the author. The inevitable result of this effort was, perhaps

presentation of the process of creation holds “that authors create something from nothing, that works owe their origin to the authors who produce them”²³⁷ when in reality authors must rely on other sources to create.²³⁸ This perspective may be found in a perhaps more subtle way in Dilthey’s presentation of history.

To refresh, Dilthey offers an account of history that comes from the autobiographical and biographical.²³⁹ In this understanding, “[t]he course of a life consists of parts, of lived experiences that are inwardly connected with each other. Each lived experience relates to a self of which it is a part; it is structurally linked with other parts to form a nexus.”²⁴⁰ Thus when Professors Rudolf Makkreel and Frithjof Rodi explain that, for Dilthey, “[h]uman individuals are productive systems in that their lived experience apprehends what is of interest in the present relative to the past evaluations and future goals,”²⁴¹ one might discern an understanding that parallels the argument against the Romantic author who seemingly creates out of nothing. For in both cases the claim is that the individual draws on her environment as part of creating.

In short, Dilthey posits that understanding life is the goal and that one must see that each part of life relates to the whole and that “in turn, the whole determines the significance of each part.”²⁴² Autobiography is the way the individual “expresses what an individual life knows about its own connectedness”²⁴³ and a type of authorship: “Autobiography is merely the literary expression of the self-reflection of human beings on their life-course.”²⁴⁴ It is not the creating-from-nothing authorship. Rather it is an expression of being part of something, of being connected.

To understand this connectedness fully, one requires biography. While alive, one’s narrative is incomplete and cannot completely comprehend its relationship to the world around it.²⁴⁵ Yet in understanding one’s place, one may look to another’s life through biography.²⁴⁶ To undertake biography requires

unsurprisingly, the collapse of the concept of any fixed meaning in texts and the publication of an essay (authored by Roland Barthes) where the author was proclaimed dead.”)

237. Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 965 (1990) (footnote omitted).

238. See *id.* at 966-67 (explaining that, rather than creating works from nothing, authors translate and recombine past works); see also BOYLE, *supra* note 235, at 57 (“[E]ven . . . remarkable and ‘original’ . . . works [of authorship] are *not* crafted out of thin air. As Northrop Frye put it in 1957, . . . ‘Poetry can only be made out of other poems; novels out of other novels. All of this was much clearer before the assimilation of literature to private enterprise.’” (quoting NORTHROP FRYE, *ANATOMY OF CRITICISM* 96-97 (1957))).

239. See *supra* notes 138-57 and accompanying text for a discussion of these components.

240. DILTHEY, *supra* note 137, at 217.

241. *Id.* at 4.

242. BAMBACH, *supra* note 140, at 164.

243. DILTHEY, *supra* note 137, at 222.

244. *Id.*; *accord id.* at 266 (“The literary expression of an individual’s reflection on his life-course is autobiography.”).

245. See MAKKREEL, *supra* note 146, at 379 (noting that autobiography must rely on reflection to achieve results history bestows on biography).

246. DILTHEY, *supra* note 137, at 266 (“When this reflection is carried beyond one’s own life-course to understanding another’s life, biography originates as the literary form of understanding

that one “understand . . . manifestations that indicate plans or an awareness of meaning.”²⁴⁷

Thus as part of the process of understanding one’s “own connectedness,”²⁴⁸ one looks to another’s life or her writings that detail what an “individual finds to be of value in his situation; or . . . what he finds meaningful in particular parts of his past.”²⁴⁹ Yet insofar as one is in the process of reflecting on and writing about what one “finds to be of value in his situation; or . . . finds meaningful in particular parts of his past,”²⁵⁰ one of course is taking from another as part of one’s autobiography, which “is merely the literary expression of the self-reflection of human beings on their life-course.”²⁵¹ In other words, one is both a taker and creator in this process; one is a part of a productive nexus such that the “the individual [is] a point of intersection that both experiences force and exerts it.”²⁵²

As such, both the literary and historical theories examined here indicate that creation involves use of material outside of the creator.²⁵³ But whereas the literary theory questions whether who creates matters and suggests that creation may not exist at all, the historical presentation seems to capture the way in which each person’s creation fuels that of others. For, as one commentator acknowledges, whatever death of authorship theory literary theory may posit, many still focus on the author and her life.²⁵⁴ Thus, the focus on an author’s life comports with Dilthey’s presentation of history wherein one’s creation is special as one’s interpretation and understanding of another’s creations and as such is unique, but the creator is not to be seen as disconnected to the system on which the creator draws to create in the first place. Both the reader and the creator are important, but neither is supreme over the other.

Put differently, both views offer that creation is a system in which inputs feed a creator, who in turn generates outputs that become inputs for another’s creation. So if one could not gain access to and use inputs, one’s ability to engage in a process of creation that offers material for others’ creations would be limited.²⁵⁵ Yet access presupposes the possibility of preservation.

other lives.”).

247. *Id.* at 268.

248. *Id.* at 222.

249. *Id.* at 268.

250. *Id.*

251. DILTHEY, *supra* note 137, at 222; *accord id.* at 266 (characterizing autobiography as individual’s way to examine and relay his life).

252. *Id.* at 268.

253. *Cf.* SAX, *supra* note 17, at 2-3 (noting relationship between creators and sources on which they rely to create). Professor Sax takes his understanding of the need for creative inputs and argues that the possibility of the destruction of certain artifacts requires that society find a way to prevent that destruction. *See id.* at 197 (noting that “[c]onventional notions of ownership” thwart such preservation). This Article agrees and sympathizes with much of Sax’s insights but questions whether the mechanism offered would work.

254. *See* Lastowka, *supra* note 105, at 1184 (noting that both popular culture and scholarly reaction to misattribution demonstrate continuing concern with author).

255. In addition, one who claimed that her creation somehow ought to be exempt from use by

Before turning to the question of a system of preservation, however, a discussion of economic theory offers another powerful way to see the importance of preservation of these artifacts. Specifically the theory of infrastructure and spillovers investigates inputs and outputs in a productive system. The next section looks to that aspect of economics to see how it comports with the discussion thus far.

2. Infrastructure and Spillovers

Although incentives can and sometimes do provide levers to foster action, it is not the case that all creation requires incentives.²⁵⁶ As Professors Brett Frischmann and Mark Lemley note, economists have drawn on Harold Demsetz's work and argued that "property rights [offer] a way to internalize the external costs and benefits one party's action confers on another [because without] this internalization . . . a party [would not] capture the full social value of her actions [and as such] she wouldn't have optimal incentives to engage in those actions."²⁵⁷ Given the explosion of uncompensated creation this Article investigates, from e-mails to blogs to MySpace pages to Flickr pages and more, one can question what role property-based incentives play in these creative acts. Yet, as this Article notes the growth of compensation for such acts, be it in monetary or attention economics terms, a property understanding of these creations is growing and presents one way to understand how to manage these creations. The problem thus lies in the term optimal; what amount of internalization is enough to provide incentives without limiting other creations?

Another way to consider this question is as one of control.²⁵⁸ The creations at issue are information. As Professor Wagner describes, information can be seen as having three types: one is the creation itself—"the actual work of authorship or creativity in copyright, or the actual invention in the patent context";²⁵⁹ the second "is in some way *directly* derived from the underlying creation";²⁶⁰ and the third is "'open' information, available for widespread use,

others appears to miss the point that her creation by its nature drew on others' creations. This topic is explored further elsewhere. See Desai, *supra* note 88 (providing general discussion and argument for retooled conceptions of authorial control over intellectual property).

256. See Frischmann & Lemley, *supra* note 31, at 258 (noting that investment occurs even in absence of internalization of all benefits); see also Radin, *supra* note 34, at 515 ("Cultural norms can substitute for legal property rights as an incentive for production. In many situations, contrary to Benthamite reasoning, people produce without monetary benefit-internalization incentives. It could be that information will be abundantly produced in cyberspace even absent property rights. In the utopian vision, people create even if they cannot internalize a substantial portion of the social benefit to themselves.").

257. Frischmann & Lemley, *supra* note 31, at 257.

258. See generally Wagner, *supra* note 22, at 995-1000 (looking at control, particularly exclusion from public domain, as central to intellectual property rights). Wagner's article questions the idea that intellectual property offers too much control and argues that "control may in many cases actually increase open information or the public domain" while still acknowledging that "limitless rights in information" would be a mistake. *Id.* at 1034.

259. *Id.* at 1003.

260. *Id.* at 1004.

as an inherent consequence of the creation of the underlying [first type of] information.”²⁶¹ As Wagner notes, the last type of information generates spillovers, for “[i]n the realm of technological advancement, economists have long (and aptly) described this [last] form of information as spillovers, or more technically, a positive externality on research and development.”²⁶² Wagner argues, however, that such information cannot be appropriated.²⁶³ Thus Wagner argues that the key is to understand the nature of such information because “even fully ‘propertized’ intellectual goods will nonetheless contribute, perhaps significantly, to the growth of open information.”²⁶⁴ For Wagner, the nature of such information indicates that the emphasis on too much control is misplaced. Yet, Frischmann and Lemley’s recent work on spillovers offers more as to what they are, why they are important, and how intellectual property law may indeed be limiting the creation of spillovers.²⁶⁵

To reiterate: spillovers are “uncompensated benefits that one person’s activity provides to another.”²⁶⁶ Spillovers are externalities that can be either positive or negative.²⁶⁷ Many believe externalities must be internalized, or captured, by property owners:²⁶⁸

The basic idea behind “internalizing externalities” is that if property owners are both fully encumbered with potential third-party costs and entitled to completely appropriate potential third-party benefits, their interests will align with the interests of society, and they will make efficient (social welfare-maximizing) decisions. . . . [Property owners] must also internalize benefits in order to have the proper incentive to invest in maintaining and improving their property. According to the Demsetzian theory, internalization is the silver bullet that magically aligns private and social welfare.²⁶⁹

This view has been taken to apply to innovative (what this Article has termed creative) endeavors,²⁷⁰ such that some argue that “only with complete

261. *Id.* at 1005.

262. Wagner, *supra* note 22, at 1005; *accord* Frischmann & Lemley, *supra* note 31, at 258-71 (discussing nature of spillovers and highlighting beneficial nature to third parties).

263. *See* Wagner, *supra* note 22, at 1005 (arguing that spillover information is inherently available as consequence of its mode of creation).

264. *Id.* at 1010.

265. *See generally* Frischmann & Lemley, *supra* note 31, at 298-301 (summarizing importance of spillovers and how intellectual property law’s application can lead to distortions that harm public).

266. *Id.* at 258.

267. *Id.* at 262 (“[P]ositive (or negative) externalities are benefits (costs) realized by one person as a result of another person’s activity without payment (compensation).”).

268. *See id.* at 264-65 (discussing Harold Demsetz’s theory of private property, which emphasizes efficient resource management through internalization of externalities).

269. *Id.* at 265-66.

270. *See* Frischmann & Lemley, *supra* note 31, at 266 (“The Demsetzian view is more or less the same in the context of innovation. If an inventor cannot capture the full social benefit of her innovation, the argument goes, she will not have enough incentive to engage in the research and development that will produce that innovation. If there are spillovers from innovation, they must be interfering with incentives to innovate, and we should find them and stamp them out.”).

internalization will an inventor be able to efficiently manage an innovation after it is created.”²⁷¹ Thus one must be able to prevent others from using one’s creations or loss will occur. Ironically, the debate over preventing others from using a work presupposes that the work is available at all. Nonetheless, assuming for the moment that the work is available, understanding the idea of the positive externalities that are possible when preservation is achieved shows why preservation is important in the first place.

Frischmann and Lemley posit that that “spillovers are good for society. There is no question that inventions create significant social benefits beyond those captured in a market transaction.”²⁷² Indeed, studies show that industries and cities with high spillover rates generate more innovation.²⁷³ Yet, these greater innovations are not because of some sort of theft or free riding; “rather, they are part of a virtuous circle because they are in turn creating new knowledge spillovers that support still more entrepreneurial activity.”²⁷⁴ And here one must stop, for this description comports with what one might expect from literary and historical theory: a creator will draw on others’ creations to understand and create more and those creations in turn will feed other creators as part of “a virtuous circle.”

At this point it is helpful to recall the problem at hand. Experience is being documented like never before. Both the quantity of writing and the way people write have changed. The advent of software tools such as word processors, blogs, social-network sites, and, most importantly, e-mail has allowed everyone with a computer or an Internet connection to author and create in vast quantities. Literary, historical, and economic theory show that information is vital to creative systems. A problem occurs when the law fosters information logjams that interrupt the flow of information. Literary theory demonstrates that creators draw on other works to generate new works, and those works, in turn, start another cycle of creation. Historical theory shows that individuals draw on others’ autobiographies and biographies to generate their own autobiographies and biographies, which in turn start another cycle of historical expression.²⁷⁵ Economics shows that creators generate information itself by drawing on other’s creations and offering of information to create, and then others take that new creation to inform their work.²⁷⁶ These theories offer different yet structurally similar accounts of a feedback loop in creative systems. Without a better understanding for preserving digital artifacts, the inputs for human flourishing in Radin’s terms, spillovers in Frischmann and Lemley’s terms, or future creative

271. *Id.*

272. *Id.* at 268.

273. *Id.* at 268-69.

274. *Id.* at 269; accord Radin, *supra* note 34, at 515-16 (examining balance between no property and full property protection for intangible creations, and noting “there’s a feedback relationship: while the ‘right amount’ of information may depend upon the existence of a particular desired culture, at the same time the development of that particular desired culture may depend upon there being available the ‘right amount’ of information”).

275. See *supra* Part I.D for a discussion of historical theory.

276. Frischmann & Lemley, *supra* note 31, at 268-69, 279.

systems as this Article has described them, are impoverished if not reduced to nothing.

III. ON THE ORDERLY DISPOSITION OF DIGITAL ARTIFACTS

Recall that the artifacts in question are mediated by second parties. That is, online service providers of e-mail, Web site hosting companies, blog hosts, social-networking sites, and even software companies exercise control over the artifacts because these service companies provide the hardware and software to allow the individual to create, use, distribute, store, and destroy her creations. The apparent solution to this problem is to afford the creator better control over the creation in question. Yet, the method for this better control must be set forth. For although one might accept that the artifacts belong to their creator, the way in which the artifacts are to be managed is not so simple.

A. *Who Controls? Creators or Service Providers?*

Creators are distanced from their creations at many points. E-mail services, Web hosting services, blog services, photo services, document hosting services, almost anything that one can imagine is online or moving there. Several companies offer data storage and editing services so that one can create, edit, and store word-processed or spreadsheet documents as well as share other files.²⁷⁷ The current online behemoth, Google, has plans to bring all of these services under its roof by launching “a service that would let users store on its computers essentially all of the files they might keep on their personal-computer hard drives—such as word-processing documents, digital music, video clips and images.”²⁷⁸ In addition, Microsoft’s software policies or Amazon’s Kindle’s (an Internet-enabled, electronic reader for books) terms of service show that one can be cut off from what one may otherwise think one owns.²⁷⁹ Although Microsoft has suspended its policy of disabling allegedly unauthorized software, it continues its validation program.²⁸⁰ The growth of blogs and online journals presents similar problems. For example, LiveJournal²⁸¹ hosts approximately thirteen million journals and recently deleted close to 500 of them because of

277. See Kevin J. Delaney & Vauhini Vara, *Google Plans Service to Store Users’ Data*, WALL ST. J., Nov. 27, 2007, at B1 (describing market for such services and Google’s plan to offer consumers full-service, Web-based data storage).

278. *Id.*

279. See, for example, *supra* note 10 and accompanying text for an explanation of Microsoft’s ability to cut off user access. See also Kindle: License Agreement and Terms of Use, <http://www.amazon.com/gp/help/customer/display.html?nodeId=200144530&> (last visited Nov. 28, 2008) (“Termination. Your rights under this Agreement will automatically terminate without notice from Amazon if you fail to comply with any term of this Agreement. In case of such termination, you must cease all use of the Software and Amazon may immediately revoke your access to the Service or to Digital Content without notice to you and without refund of any fees. Amazon’s failure to insist upon or enforce your strict compliance with this Agreement will not constitute a waiver of any of its rights.” (emphasis omitted)).

280. *Kill Switch*, *supra* note 10.

281. LiveJournal.com, <http://www.livejournal.com/> (last visited Nov. 28, 2008).

claims that they had pedophilic content.²⁸² After many protested the act because little to no screening was conducted, and sites that were discussing the problems of child abuse were removed in the process, the company reconsidered its actions and reinstated some of the journals based on further review of them.²⁸³

Whenever one places a creation at another's site or whenever one uses software similar to Microsoft's in which the technology provider can cut off access to the software and thus cut one off from access to one's creations even on one's home computer, technology distances the creator from her creations. E-mail is perhaps the most familiar example of this problem. Given e-mail's pervasive and enduring use, this section uses e-mail as the model and, in a sense a proxy, for the different ways the technology at issue distances the creator from control over and access to her creations and potentially cuts her off from them. In addition, an examination of what happens to e-mail when one dies shows how the creator's, possible heirs', and society's interests in preservation are defeated because of the technological distance present in the current system. As such, e-mail highlights questions of control, access, and destruction that inform solutions to the problem of preservation of the artifacts in question.

When the problem of Yahoo! and the dead soldier's e-mail arose, commentators noted that Yahoo! only adhered to its terms of service, which explicitly stated at the time,²⁸⁴ and currently still do state, that the e-mail account is nontransferable and there is no survivorship:

No Right of Survivorship and Non-Transferability. You agree that your Yahoo! account is non-transferable and any rights to your Yahoo! ID or contents within your account terminate upon your death. Upon receipt of a copy of a death certificate, your account may be terminated and all contents therein permanently deleted.²⁸⁵

Thus when one has a Yahoo! account one agrees to its terms, which state that under certain circumstances one's creations and property will be destroyed. In addition, as one commentator has noted, Yahoo!'s noncompliance with its privacy policy might have resulted in Yahoo! facing a FTC or state's Attorney General action against it.²⁸⁶ Yahoo!'s policy taken at face value puts great emphasis on the individual's privacy although, as one commentator has noted and as is discussed more fully below, privacy interests usually extinguish at

282. See Declan McCullagh, *Mass Deletion Sparks LiveJournal Revolt*, CNET NEWS.COM, May 30, 2007, http://news.cnet.com/Mass-deletion-sparks-LiveJournal-revolt/2100-1025_3-6187619.html (discussing uproar following LiveJournal's censoring of nearly 500 sex-themed discussion groups).

283. Statement of Barak Berkowitz, *Well We Really Screwed This One Up . . .*, to LiveJournal.com, <http://news.livejournal.com/99159.html> (May 31, 2007, 00:47:00 EST). Mr. Berkowitz is chairman and CEO of SixApart, the owner of LiveJournal.

284. See E-mail from Peter Swire to Declan McCullagh (Dec. 22, 2004, 19:48:58 EST), available at Posting of Declan McCullagh, Declan_at_well.com, to <http://seclists.org/politech/2004/Dec/0011.html> (Dec. 22, 2004, 23:42:13 EST) [hereinafter McCullagh Posting] (posting e-mail of Peter P. Swire, C. William O'Neill Professor of Law at the Moritz College of Law of Ohio State University, discussing Yahoo!'s terms of service).

285. Yahoo! Terms of Service, ¶ 27, General Information, <http://info.yahoo.com/legal/us/yahoo/utos/utos-173.html> (last visited Nov. 28, 2008).

286. McCullagh Posting, *supra* note 284.

death.²⁸⁷

In contrast, AOL, Earthlink, Microsoft's Hotmail, and Google "have provisions for transferring accounts upon proof of death and identity as next of kin."²⁸⁸ This option, however, neglects a different interest: the creator's ability to exert control over the artifact. In short, one may not wish for the creations to be handed over to the next of kin. As the father of the dead soldier offered, e-mails are a remnant of the deceased's thoughts and person. Yet, as one commentator has noted, e-mails may contain information about an affair or confidential information that one did not want to go to the next of kin or to become public.²⁸⁹ This idea has caused some to lament the way their e-mails are treated after death, as they wish to have more control over their writings.²⁹⁰

Such an understanding comports with the more general understanding that creators desire control over their creations—be it e-mail, blogs, photos, word-processed documents, or any creation. Greater control could lead to preservation. But one must appreciate that control allows for preservation and for destruction. After understanding the relationship between control, preservation, and destruction, one can reach the question of who should control and the theoretical foundations behind the general issue at hand: the creator's ability to control (and, therefore, preserve or destroy) artifacts and how such power intersects with heirs' and society's interests in the creations.

B. *Control and Destruction*

Yahoo!'s position and the other service providers' positions point to the question of what interest the creator has in destroying her works? Professor Lior Strahilevitz's recent article, "The Right to Destroy,"²⁹¹ provides insight on this question. In investigating the right to destroy and the law's tendency to thwart a testator's command to destroy despite otherwise striving to honor the deceased's

287. See, for example, *supra* Parts I.C-D for a discussion of noncreator interests in artifacts and suggesting that privacy-centered thinking is an inappropriate rubric for postmortem situations. As discussed elsewhere, whether privacy is the correct way to think about interests after death is doubtful. See Desai, *supra* note 88, at 2-7 (discussing inadequacy of traditional intellectual property rights' focus on privacy in context of Web-based artifacts); see also Elinor Mills, *Taking Passwords to the Grave*, CNET NEWS.COM, Sept. 22, 2006, http://news.cnet.com/Taking-passwords-to-the-grave/2100-1025_3-6118314.html (discussing debate over whether to consider deceased's private e-mails as unprotected privacy right or protected property interest).

288. Anick Jesdanun, *Debates Rise over What Happens to e-belongings After Owners Die*, USATODAY.COM, Dec. 24, 2004, available at http://www.usatoday.com/tech/news/techpolicy/ethics/2004-12-24-data-after-death_x.htm; see also Mills, *supra* note 287 (noting Yahoo!'s reluctance to discuss anything beyond its adherence to court orders requiring transfer of e-mail account); Katherine Rosman, *Passing on Wills . . . and Passwords*, WALL ST. J., Sept. 8, 2007, at A8 (discussing AOL, eBay, Facebook, and Google guidelines for next of kin seeking access to accounts of deceased relatives).

289. See Leach, *supra* note 39, at 12 (discussing Professor Henry Perritt's contemplation of individual carrying on affair who would not want family to know).

290. See *id.* (noting bloggers' negative reaction to court's ruling in Yahoo!'s dead soldier e-mail case).

291. Strahilevitz, *supra* note 104.

wishes,²⁹² Strahilevitz notes that several interests militate in favor of honoring the testator's choice to destroy.²⁹³ First, Strahilevitz notes that destructive acts have expressive force such that burning a flag or a draft card, destroying a prison, tearing down a statue, and other acts are often seen as and afforded First Amendment protection as expressive speech but that distinguishing between an expressive act as opposed to a disfavored, spiteful act of destruction is difficult.²⁹⁴

Next, he turns to an example that closely tracks the present question regarding digital artifacts: the destruction of something one has made. Strahilevitz presents the idea that presidents faced with the preservation of all documents absent authorization to destroy a document might tend to underproduce documents.²⁹⁵ In the writer context, Strahilevitz notes the somewhat famous case of Franz Kafka asking his executor to destroy all Kafka's writings and observing that the executor did not do so, thus preserving *The Castle* and *The Trial*, which had not yet been published.²⁹⁶ Sometimes creators succeed in destroying their work through testamentary instruction and sometimes not, but while alive it appears that some have destroyed their paintings, writings, and photographs.²⁹⁷

Turning to a current question, Strahilevitz argues that, faced with Kafka's destruction request today, the request should be honored.²⁹⁸ He offers four reasons to support his position. First, he offers the *ex ante* argument mentioned above—authors may be more likely to take risks and express only partially developed ideas if they know that unfinished works will be destroyed.²⁹⁹ Next, he offers that an economic perspective supports the right to destroy as the author arguably is in the best position to know which works will benefit his heirs, thereby “assuring that the value of his published works is not diminished by the conceivably inferior quality of the unpublished works.”³⁰⁰ Third, Strahilevitz reasserts the expressive component of the destructive act: “[b]y destroying his unfinished works, [the creator] may wish to send a message to the public that he is not the type of artist who will tolerate, let alone publish, inferior works.”³⁰¹ Last, he argues that another aspect of expression, that of forced speech, is

292. *See id.* at 838-39 (arguing that resistance to testamentary destruction stands in opposition to deferential treatment typically afforded to testators and settlors regarding disposition of their property).

293. *See id.* at 823-38 (examining “the expressive characteristics of property destruction” and questioning prevention-of-waste rationale often offered to support ignoring instructions to destroy).

294. *Id.* at 824-30.

295. *Id.* at 813-15.

296. Strahilevitz, *supra* note 104, at 830-32.

297. *See id.* at 831-32 (footnotes omitted) (noting Jacqueline Susann's requested executor destroyed her diary later valued at \$3.8 million, Virgil's desire to have the *Aeneid* destroyed, Jasper Johns's destruction of his early work, and Brett Weston's destruction of his negatives on his eightieth birthday).

298. *Id.* at 832.

299. *Id.*

300. *Id.* at 833.

301. Strahilevitz, *supra* note 104, at 833.

implicated even though standing for such a claim would be lacking.³⁰² To support this position Strahilevitz holds that if an author were working on “a controversial or envelope-pushing work” she might have only wished to have it published if she were present to defend the work.³⁰³

Thus one can see that the right to destroy and the interest in preserving artifacts track similar arguments regarding the justifications for both. As for preservation, the creator can have both a labor-based interest and a persona interest. Examining Professor Strahilevitz’s rationales supporting the right to destroy, one sees parallel if not the same justifications at work. Strahilevitz’s economic arguments assume a property approach to artifacts. His *ex ante* analysis’s focus on the possible negative effect of not being able to destroy an item can be seen as the inverse of the incentive rationale offered to support the creation of an artifact. Likewise, the view that the creator knows best how to manage her property on its face is a property approach to the artifacts, with the ability to dispose of property being a fundamental part of property. Strahilevitz’s expressive arguments offer a persona approach to the right to destroy: the ideas that one’s work somehow speaks and that one would wish to be sure that one’s work did not speak erroneously when one was unable to defend the work have a persona logic.

In addition, when he asserts that an author may prevent a publication from entering the market because she “will [not] tolerate, let alone publish, inferior works,” and wants to “send [such] a message,” the link between the market interest (which he also couches in quality terms as he describes the interest as preventing the distribution of “inferior quality of the unpublished works”),³⁰⁴ the economics of attention, and persona is complete. The “Attention Economy” demands that one attract and maintain attention and, as argued above, this approach is similar to a trademark understanding. That understanding is quite focused on quality. Thus from the viewpoint of preservation or destruction, there are several arguments supporting the creator’s ability to control her work. The question then becomes how to meet these expectations.

C. Problems and Possibilities for Creator Control

Although there is some difference between denial of access to one’s online creations and the denial of access to one’s work on a home computer because a software provider has cut off use of the software, the fundamental issue—by what reason or right such access is terminated—is the same. In both cases, the creator uses another’s technology to create or store the creation. That fact is what distances the creator and what allows the other party to interfere with the creator’s access to her creation. Again, examining what happens to one’s online creations after one dies provides insight as to the larger problem of technological distance between the creator and her creations in both the online and non-online

302. *Id.* at 833-34.

303. *Id.* at 834-35.

304. *Id.* at 833.

contexts.

Preserving creations that one creates via online services (e.g., e-mails, blogs) or places online (e.g., photos, video clips) can clash with the service provider's policies that deny access or sometimes delete material on different grounds depending on the situation. One solution to this tension between creators' interests and the policies of online providers may be to back up one's files or use testamentary procedures. For example, some have noted that if one wishes to have one's digital artifacts destroyed, one can have a trustee receive one's user identification and password via a will and then instruct the trustee to destroy the e-mail.³⁰⁵ Regardless of whether one wishes the online material destroyed or preserved in an archive, this approach allows one to avoid Yahoo!'s contractual bias for destruction upon presentation of a death certificate, because anyone with a user identification and password could access the account, retrieve the property, and then administer it as instructed.³⁰⁶ One flaw in this approach, however, is that the creator must maintain updated user identification and password lists and pass them on.³⁰⁷

Alternatively, one may argue that the creator should back up files and then dispose of those files just as one would letters. Yet Yahoo! Mail offers unlimited free online storage,³⁰⁸ Google's Gmail service provides over five gigabytes of free space,³⁰⁹ and Microsoft offers five gigabytes of free storage.³¹⁰ The obvious reason for this expansion of free storage is that users wish to have the ability to store large amounts of data online and access it easily through the Web.³¹¹ In

305. Leach, *supra* note 39, at 12 (discussing Professor Perritt's proposed solution). The precise question of whether the destruction of digital artifacts is to be avoided is not the focus of this discussion although preservation implies the question. Nonetheless, for a detailed investigation of the contours of the right to destroy, see generally Strahilevitz, *supra* note 104.

306. See Posting of James Edward Maule, The Impact of Death on Web-Based Content, to MauledAgain, http://mauledagain.blogspot.com/2005_01_01_mauledagain_archive.html#110486775970538028 (Jan. 13, 2005, 14:24 EST) ("As a practical matter, the ISP or provider won't know that it is the executor and not the now-deceased owner, who has accessed the site."); accord Susan B. Shor, *Digital Property and the Laws of Inheritance*, Feb. 22, 2005, TECHNEWSWORLD.COM, <http://www.technewsworld.com/story/40578.html> (interviewing Professor Maule, who reiterates that ISP provider will not be able to distinguish between executor or deceased owner). As Professor Maule notes, the law does not traditionally honor instructions to destroy. Maule, *supra*; accord Strahilevitz, *supra* note 104, at 784 ("Confronted with arguably hard cases and high stakes, many American courts have rejected the notion that an owner has the right to destroy that which is hers, particularly in the testamentary context.").

307. See, e.g., Rosman, *supra* note 288 (noting estate planners recommend clients provide list of passwords and security codes).

308. Yahoo! Mail, Unlimited Storage!, <http://help.yahoo.com/l/us/yahoo/mail/yahoomail/tools/tools-08.html> (last visited Nov. 28, 2008).

309. Gmail Help, Your Storage Limit, <http://mail.google.com/support/bin/answer.py?answer=6558&topic=13288> (last visited Nov. 28, 2008).

310. Windows Live Hotmail, <http://get.live.com/mail/overview> (last visited Nov. 28, 2008).

311. See Jim Hu, *Yahoo Email Storage Reaches 1GB*, ZDNET.CO.UK, Mar. 23, 2005, <http://news.zdnet.co.uk/internet/0,1000000097,39192436,00.htm> (quoting Yahoo! spokesperson asserting that expansion was Yahoo! "paying attention to what users are doing and how they're using their in-boxes" and noting that free e-mail has changed from restricted storage space to large e-mail storage capacity (internal quotation marks omitted)).

addition, with the abundance of online storage, it is arguably inefficient to require users to create redundant backups of their files. Of course, not doing so leaves the user open to possible technical errors and property destruction, but one could just as easily lose creations in a fire or flood. The key issue here is the claim that users who wish to preserve access to the information *must* back up their files so that they and possibly others may access the information. That proposition is inefficient and unnecessary once a more coherent system for access and dominion over online artifacts is in place.

In short, both options—creator foresight and creator backup—require that the creator take action.³¹² In both cases the actions requested are ones that many fail to perform. Backing up e-mails is not likely a concept, let alone a skill, that the broad range of online users (i.e., the non-technology-oriented users who now make up the majority of people online) understand or embrace.³¹³ In addition, when one has abundant online storage, one has an invitation to store e-mails online so that one may easily access the e-mail through Web interfaces or not to go through the process of downloading Web-based e-mail via POP3 e-mail software. Thus, a better default option is required. As one commentator has suggested,

perhaps Yahoo and other providers can give users an option to select when opening an account, namely, “if and when you die, do you wish for us to provide your username and password to your executor or administrator?” accompanied by instructions on the identity and contact information for that person.³¹⁴

This perspective comports with the understandings set forth above.

Regardless of whether one characterizes the e-mails as economic property or extensions of one’s persona, they are intellectual property, and the creator should be able to exercise control over the work.³¹⁵ There is little justification for the service provider not to allow such control. Other online creations, both created and stored online (e.g., blogs) or simply stored online (e.g., photos)

312. This point does not deny that even defaults that might cure inaction have problems. As Professor Adam Hirsch has observed regarding wills, the wealthy can afford to contract around defaults whereas the poor “are more likely to accede to them even though they contradict their preferences.” Adam J. Hirsch, *Default Rules in Inheritance Law: A Problem in Search of Its Context*, 73 *FORDHAM L. REV.* 1031, 1052 (2004). Nonetheless, the solution offered by this Article, which relies on a user choosing how to manage her e-mail at least when she signs up for it, intends to mitigate the problem by calling out the issue to user at the outset. The choice of default still matters, and this Article sets the default to preservation rather than destruction.

313. See Jay P. Kesan & Rajiv C. Shah, *Setting Software Defaults: Perspectives from Law, Computer Science and Behavioral Economics*, 82 *NOTRE DAME L. REV.* 583, 585 (2006) (noting that despite high percentage of users concerned about cyber security, and success of system utilities and security products, nearly eighty-one percent of home computers lacked core security protections because of users’ inability to properly configure security software from default factory settings).

314. Posting of James Edward Maule, News in the “Emails at Death” Case, to MauledAgain, <http://mauledagain.blogspot.com/search?q=ellsworth> (Apr. 25, 2005, 17:35 EST). On the nature of default rules, including their power, and an argument regarding how they work best, see generally Kesan & Shah, *supra* note 313.

315. For treatment of the idea that control may enhance creation while rejecting the idea that some things may not be appropriable, see Wagner, *supra* note 22.

follow the logic set forth for e-mails. One can argue that the creator should back up or use testamentary procedures for such creations, but the same issues arise as with e-mails. Furthermore, the main question of who controls or, as it is often put in terms of service agreements, who owns the creation is the same. Indeed, service providers routinely disavow control or ownership over content. Although these positions may relate more to fears of being sued for aiding in violating intellectual property law, they exist and belie positions that claim some level of ownership over one's creations. In addition, examining the public's reaction to hints of ownership by the service provider and the terms of services indicates that the perception is that the providers are not and should not be seen as owners of the creations.

For example, faced with a potential public-relations fiasco regarding Google Docs and Spreadsheets, Google's Australia office has publicly stated that the terms of service do not mean that Google somehow owns a user's documents or spreadsheets.³¹⁶ That explicit statement fits with Yahoo!'s Terms of Service, which disclaims ownership and uses an implied license from the creator regarding use of the creations.³¹⁷ Like many other terms-of-service statements,³¹⁸ YouTube,³¹⁹ a video-sharing site, and MySpace,³²⁰ a social-network site, also

316. See Liam Tung, *Google Denies Ownership of Users' Words*, CNET NEWS.COM, Sept. 12, 2007, http://news.cnet.com/Google-denies-ownership-of-users-words/2100-1030_3-6207535.html ("In response to the concerns raised, Google Australia issued a statement, which reads, 'We don't claim ownership or control over content in Google Docs & Spreadsheets, whether you're using it as an individual or through Google Apps.'").

317. Yahoo! Terms of Service, *supra* note 285, ¶ 9 ("Yahoo! does not claim ownership of Content you submit or make available for inclusion on the Yahoo! Services. . . . [W]ith respect to Content you submit or make available for inclusion on publicly accessible areas of the Yahoo! Services, you grant Yahoo! the following worldwide, royalty-free and non-exclusive license(s), as applicable . . .").

318. See *infra* notes 319-24 and accompanying text for a discussion of terms of service for various content creation and storage Web sites.

319. See YouTube, Terms of Use, <http://www.youtube.com/t/terms> (last visited Nov. 28, 2008) ("[Y]ou retain all of your ownership rights in your User Submissions. However, by submitting User Submissions to YouTube, you hereby grant YouTube a worldwide, non-exclusive, royalty-free, sublicenseable and transferable license to use, reproduce, distribute, prepare derivative works of, display, and perform the User Submissions in connection with the YouTube Website and YouTube's (and its successors' and affiliates') business, including without limitation for promoting and redistributing part or all of the YouTube Website (and derivative works thereof) in any media formats and through any media channels. You also hereby grant each user of the YouTube Website a non-exclusive license to access your User Submissions through the Website, and to use, reproduce, distribute, display and perform such User Submissions as permitted through the functionality of the Website and under these Terms of Service. The above licenses granted by you in User Videos terminate within a commercially reasonable time after you remove or delete your User Videos from the YouTube Service. You understand and agree, however, that YouTube may retain, but not display, distribute, or perform, server copies of User Submissions that have been removed or deleted. The above licenses granted by you in User Comments are perpetual and irrevocable.").

320. See MySpace.com Terms of Use Agreement, ¶ 6.1, <http://www.myspace.com/index.cfm?fuseaction=misc.terms> (last visited Nov. 28, 2008) ("MySpace.com does not claim any ownership rights in the text, files, images, photos, video, sounds, musical works, works of authorship, applications, or any other materials (collectively, 'Content') that you post on or through the MySpace Services. After posting your Content to the MySpace Services, you continue to retain any such rights that you may

disclaim ownership of user-created content and invoke license language. Even LiveJournal, which deleted users' creations,³²¹ disclaims ownership of users' material.³²² Google is primarily a search engine. Thus, content issues for that service are limited, but as its business expands to include hosted or stored content, a given service's corresponding terms of service often contains language similar to Yahoo!'s regarding ownership of content.³²³ In addition, Google's Groups service denies any responsibility for content.³²⁴ Returning to the e-mail example, by disclaiming ownership and embracing licensing by the creator to Yahoo!, Yahoo!'s contract reveals that, despite its claim of privacy, the issue here is property.³²⁵

In short, one can discern that with the advent and offering of large, free data storage, the disclaimer of ownership of user-generated content, and the emphasis on user responsibility for the nature and substance of content, online service providers are behaving and being used much as one might use a storage facility for one's furniture or other tangible possessions. But unlike a facility that stores tangible items where space is limited and failure to pay results in lost revenue because no one else can occupy the space until it is vacated, online

have in your Content, subject to the limited license herein. By displaying or publishing ('posting') any Content on or through the MySpace Services, you hereby grant to MySpace.com a limited license to use, modify, delete from, add to, publicly perform, publicly display, reproduce, and distribute such Content solely on and through the MySpace Services . . .").

321. See *supra* notes 281-83 and accompanying text for a discussion of LiveJournal's deletion of user creations.

322. See LiveJournal, Terms of Service, ¶ XIV, <http://www.livejournal.com/legal/tos.bml> (last visited Nov. 28, 2008) ("LiveJournal claims no ownership or control over any Content posted by its users. The author retains all patent, trademark, and copyright to all Content posted within available fields, and is responsible for protecting those rights, but is not entitled to the help of the LiveJournal staff in protecting such Content. The user posting any Content represents that it has all rights necessary to post such Content (and for LiveJournal to serve such Content) without violation of any intellectual property or other rights of third parties, or any laws or regulations . . .").

323. For example the Gmail terms of service state that "Google does not claim any ownership in any of the content, including any text, data, information, images, photographs, music, sound, video, or other material, that you upload, transmit or store in your Gmail account. We will not use any of your content for any purpose except to provide you with the Service." Gmail Legal Notices, Your Intellectual Property Rights, http://www.google.com/mail/help/legal_notices.html (last visited Nov. 28, 2008).

324. Welcome to Google Groups, ¶ 5, http://groups.google.com/intl/en/googlegroups/terms_of_service3.html (last visited Nov. 28, 2008). Google Groups provides that

all data, text, information, links and other content (collectively, 'Content'), whether posted in public or restricted groups, is the sole responsibility of the person from which such Content originated. This means that you, and not Google, are entirely responsible for all Content that you publish, post, upload, distribute, disseminate or otherwise transmit (collectively, 'Post') via the Service.

Id. It further disclaims Google's exercise of control over user content: "*Google's Rights.* You acknowledge that Google does not pre-screen, control, edit or endorse Content made available through the Service and has no obligation to monitor the Content Posted via the Service." *Id.*

325. The position of treating intellectual property as encumbered property, or property subject to use restrictions and licenses, has grown and stems from a utilitarian perspective. Cohen, *supra* note 71, at 1385. But as Professor Cohen notes, the use of license concepts in intellectual property does not necessarily enhance social welfare as they give "absolute control" to the owner of the material. *Id.*

storage is less of an issue. Service providers could argue that the cost of maintaining e-mail and other accounts places an economic burden on them, but the plentiful, free storage offered by the major service providers belies such an argument. Put simply, the free service is not in the same position as the storage facility that recently auctioned Paris Hilton's personal items when she failed to pay the storage fee³²⁶ precisely because the online service is free.

To be sure, the service provider should be able to say that a certain period of inactivity or failure to pay maintenance fees allows the provider to terminate and delete the account. Yet that position still allows for the creator to have the option of choosing who should have access or choosing to forgo granting access and allowing the account to lapse and thus terminate and vanish.

Furthermore, allowing the user to actively choose during the sign-up process what she wanted to do would reduce the questions faced by service providers when the law and practice regarding digital artifacts is unclear. The current use of service provider default rules over which the user has no control and little knowledge, but which bind the user, is a practice disfavored by services known for protecting privacy.³²⁷ Yet, service providers such as Yahoo! claim that the goal is privacy protection.³²⁸ This odd state of affairs would be remedied by a more transparent system whereby the user would choose what to do with the artifacts in question.

In addition, this approach would allow the service provider to establish the default within its preferences (i.e., no access for heirs or access only to the extent that certain procedures are followed) but allow the user to construct its relationship on a more personal level based on that default status by opting for the default or alternative status.³²⁹ As two commentators have put it, "[a]s a matter of policy, defaults are good for a number of reasons. First, defaults provide users with agency. Users have a choice in the matter: They can go with the default option or choose another setting. Second, a default setting guides the user by providing a recommendation."³³⁰ Indeed, given that online companies allow and honor user choices regarding marketing, it cannot be difficult to add a similar, choice-based option regarding these important artifacts.³³¹

326. See Marianne Garvey, *Paris' Secret Trasher Chest – Nudie Pix and Dopey Letters in Web Exxposure*, N.Y. POST, Jan. 25, 2007, at 14 (discussing items in Paris Hilton's auctioned storage unit).

327. See David Goldman, *I Always Feel Like Someone Is Watching Me: A Technological Solution for Online Privacy*, 28 HASTINGS COMM. & ENT. L.J. 353, 379 (2006) (discussing debate between proponents of opt-in and opt-out privacy default rules, and noting that "privacy advocates" prefer opt-in rules).

328. Hu, *supra* note 13.

329. See Kesan & Shah, *supra* note 313, at 596 (noting that defaults empower user to make choice between default setting or another setting). See also *supra* note 312 for a discussion of the dangers of defaults and the difference under the proposed system because of the active nature of the individual choosing the default.

330. Kesan & Shah, *supra* note 313, at 596.

331. *Cf. id.* at 590-91 (noting use of opt-in and opt-out check boxes and impact default setting of such boxes has on user behavior); William McGeeveran, *Programmed Privacy Promises: P3P and Web Privacy Law*, 76 N.Y.U. L. REV. 1812, 1842-54 (2001) (detailing way in which software/market solution combined with legislation would allow for consumer protection and choice regarding amount of

Thus, with the implementation of a check-box system to address the disposition of online artifacts, users and service providers would have a better understanding of what the creator wished to do with her property. Given the view of this Article that it is better to preserve these artifacts, the default setting for such check boxes and the law should be that the property is passed to the estate unless the creator chooses otherwise. But that default ought to be a clear opt-out (i.e., the user must affirmatively ask that the material be destroyed on death). In addition, given both the economic property and persona property interests in the preservation or the destruction of artifacts, this solution honors the creator's choice to preserve or destroy her artifacts, yet supports heirs' and society's interests in having the possibility of preserving the artifacts and the benefits that might flow from later access to the creations.

A final word must be said regarding Microsoft and other software providers. Little justifies an online service provider exerting control over one's creations and having systems in place that defeat a creator's ability to manage such creations. Software providers have even less of a claim for such control. In essence they provide a tool. When one paints or writes or sculpts, one purchases raw materials as needed and then creates. After one has used a canvas, pen, or hammer, the provider of those tools has no claim to the creations which came about by using the tools. Software is another tool. To be sure, a software provider has interests in protecting its software, but when such acts go so far as to deny a creator access to her work, the provider oversteps. Again, to protect against such problems the creator would have to create backups, but here a hardcopy backup would be needed. Such an answer undercuts the great advantage of digital storage.³³² The explosion of text creation would be diminished if one had to store analog copies. Photos would suffer a similar fate and videos backup would require burning and storing hard copy after hard copy with the hope that one could play the video on a compatible machine.

In short, whether one creates online or at home or stores online or at home, the technology provider's claim to be able to exert dominion over one's creation is unfounded. In addition, maintaining the current systems fosters unnecessary and unwanted problems such as those that occur when one wishes to access a dead relative's e-mail. The creations belong to the creator. The creator is best placed to determine whether to preserve or destroy the creations. Rather than having systems that default such that a creator's ability to manage her creations

privacy protection the user wanted while still allowing for free flow of information).

332. As one person has noted, analog formats may have a longer lifespan than digital ones because of the possibility of software and hardware obsolescence. *See* Fallows, *supra* note 2, at 142 (discussing file preservation and explaining evolving types of digital data and hardware). Although Fallows's point has merit, a software provider actively limiting one person's or a group of people's access to creations is a different matter. In that situation, it is not that the creator has to address whether the creation can be preserved because of a general change. Rather, it is that even if a creator maintains old hardware and software to preserve access, the access could be cut off based on someone else's judgment about whether access is appropriate in the first place. Thus, if a software provider pushed updates and the updates required compliance with new terms, one could be subject to new limits not even contemplated when one first chose the software.

is curtailed and possibly eliminated, a better solution is to establish systems that favor enhanced creator control over the disposition of her artifacts. Such systems comport with the theoretical explanations regarding a creator's claim over her creations and enhance the possibility of preservation so that heirs and society may benefit from the creations.

CONCLUSION

Literary, historical, and economic theory all show that the past's and today's creations are the lifeblood of present and future creations. Today, much of creation is digital and falls under what the law recognizes as intellectual property. With software-based creation, and with more and more creation occurring online, creators find that control over their work is mediated if not ceded to other parties such as e-mail providers, Web hosting services, and software makers. Thus, technology-based creation raises fundamental questions regarding the management and disposition of digital intellectual property. For one must have access to creations if they are to have the potential of fostering further creations, but before one can think about access, the creations must be preserved.

Indeed, creators, heirs, and society have distinct and at times conflicting interests in the preservation of the material. Creators have labor-based and persona-based interests in control over the material. Heirs' interests are primarily an extension of creator's economic interests. And society's interests stem from maintaining creative inputs that foster further creative outputs. Probing the theoretical bases for these interests offers a solution to the problem of preservation for posterity.

Creators are best placed and have the most direct connection regarding determining the fate of a creation. Little supports a technology provider's interference with a creator's ability to access and use her work. Creators have economic property and persona property interests in the preservation or the destruction of artifacts. Ensuring that creators have control over their technology-mediated artifacts honors the creator's choice to preserve or destroy her artifacts. Although destruction is possible, this approach opens the way for the possibility of heirs and society having access to material that is otherwise lost because of technology's role in creation and regardless of the creator's desires.

Still, high levels of creator control pose problems regarding others' access to a creation in question. Yet, the bases for a creators' control have a natural limit—life. Creators can assert the need for control over a creation to support their lives and to protect their persona. But once one appreciates the nature of creativity, which requires that a creator draw on what others create to offer her creation, the nature of that claim is better understood. Creators do not create out of nothing. They require inputs, or spillovers, on which they build their new creations. Claims for controlling material, including access to it, beyond one's life have little to no support. Indeed, to make such a claim belies the nature of creation.