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Article

**MODERNIZING COPYRIGHT LAW**

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**I. Background**

In November of 2001, the Center for the Public Domain at Duke University's School of Law held a conference on the public domain. The public domain was defined as belonging to the outside of the intellectual property law system and as consisting of the material that is free for all to use and to build upon. The conference touched upon the history and the theory of the public domain and proceeded through a "state of the public domain" report in three subject areas--the digital realm, culture, and science.<sup>1</sup> In a way, the conference launched an ongoing discussion \*66 and debate regarding the public domain and how it should be preserved, guarded, and enriched.

Indeed, legal scholars and the courts have discussed the public domain extensively during the past decade. Some of the major concerns that have occupied legal scholars pertain to the over-propertization of information, which leads to the gradual contraction of the public domain. In sharp contrast, since the invention of the personal computer and Internet technologies (including sophisticated copying technologies), we have witnessed a significant growth in the piracy rates of copyrightable materials. Copying music, movies, software, and other copyrightable works has become common practice.

In addition, during this past decade we have also witnessed the emergence of productive communities that rely extensively upon two important licenses: the GPL license for software, introduced by Stalman's Free Software Foundation; and the Creative Commons license for other creative works. In many ways, the emergence of such licenses represents the desire to collaborate and share information for free or allow access to copyrightable works under less restrictive terms than those required by copyright law. It also reflects a movement against the use of proprietary regimes, demonstrating a drive to create better access to information and knowledge.

Thus, two disparate trends are taking place simultaneously. On the one hand, the growing propertization of the public domain is spreading. On the other hand, we can see a growth of taking proprietary materials occurring in the form of extensive copyright infringement with the emergence of sharing norms for materials that could have been proprietary. These trends and what can be done about them have been the subjects of extensive discussion in academia, Congress, and the courts. However, such discussions have not yet yielded any groundbreaking, satisfactory resolutions to the problems at hand.

**\*67** This Article offers a new perspective on the public domain problem, providing a better legal framework for modernizing copyright law and achieving openness while avoiding some (hopefully many) of the obstacles hindering previous frameworks. Previous proposals have attempted to address the contraction of the public domain by suggesting reforms that were either too narrow by virtue of their piecemeal approaches or too revolutionary in that they offered reforms that significantly departed from the current copyright framework in many ways. The framework offered in this Article attempts to mimic the modern creative environment because such an approach is more responsive to the needs and desires of the creative world while also remedying many of the ills of the current copyright system.

Building on the existing academic literature, this Article suggests that the rules concerning copyrightability should be modernized and designed on the basis of emerging practices. Based on these principles, the default rules concerning creative works would be reversed so that works will be subjected to what I call the "Gradual Dedication Model" (GDM). Under the proposed model, creative works would be dedicated gradually to the public domain, so that at first (GDM Phase 1) they would be owned by the public but at the same time would be subject to some use-restrictions for a set period of time. The use-restrictions would, in essence, reflect emerging practices of sharing for free. The only restrictions imposed would be a duty to attribute the work and a duty to similarly dedicate any derivative works under the GDM, while allowing copying, distribution, display, and public performance of the work, and derivative works based upon it, for both commercial and non-commercial purposes. After the set period of time, at GDM Phase 2, the work would be dedicated to the public domain with no strings attached, free for use by all with no use-restrictions.

This model improves on previous proposals such as those provided by the Creative Commons licenses and the open source movement licenses because it provides authors not just with an alternative; instead, it sets the default. In other words, the new model incorporates the growing culture of openness and sharing by making it the default rule rather than relying on people using complex contracts that pose many difficulties.

This new model will result in a number of benefits: first, it will clarify the status of creative works, allowing the public to observe which works are protected and which are not, and use the latter freely. Second, it may make copyright law more efficient at incentivizing the production of both original and sequential works by aligning the law with common practices. Third, such a solution has great potential to create and ingrain a more robust dynamism of giving and sharing given the structure of its default rule. Fourth, it avoids many of the problems we currently experience under other proposals, such as private ordering. Fifth, such a solution can enrich the public domain because copyright protection would be claimed for fewer works under this proposed regime. Lastly, such a regime can bring about a discursive effect, triggering the consideration of reform initiatives to copyright law.

**\*68** The Article proceeds as follows: Part II provides an overview of the origins of the public domain, defining the public domain as well as describing the processes of its contraction. Part III introduces and critically reviews different proposals that address the public domain problem. Part IV submits a new solution for the public domain: the Gradual Dedication Model

(GDM). This part emphasizes the GDM's positive externalities as compared to other proposals. Part V delineates the challenges to the proposed solution, offering some initial responses to those challenges. Part VI offers some concluding remarks and possible directions for future research on the subject.

## II. The Public Domain: Origins, Definition, and Its Ongoing Propertization

The public domain was first recognized in the Statute of Monopolies<sup>2</sup> and the Statute of Anne.<sup>3</sup> In the United States, the origin of the public domain is in the Constitution, where it structurally accords rights of unrestricted access to the public and functionally serves as a restraint against the government in the Copyright and Patent Clause.<sup>4</sup> The intellectual property clause is in effect an exception to the rule that all knowledge, information goods and expression reside in the public domain. Unless protection is claimed under either the patent or copyright laws, inventions and expressive works are considered a part of the public domain.

As a number of scholars have demonstrated,<sup>5</sup> since 1960 the Supreme Court has repeatedly emphasized the constitutional dimensions of the public domain, including the principle that it is the public that “owns” public domain materials and that these “ownership” rights are irrevocable --i.e., once something becomes part of the public domain, it will forever remain a part of the public domain. The Court has decided several major cases that place a renewed emphasis on the public domain's preservation. For instance, in the famous *Sears and Compco*<sup>6</sup> decisions the Court held that states could not prohibit the copying of unpatentable materials that reside in the public domain:

An unpatentable article, like an article on which the patent has expired, is in the public domain and may be made and sold by whoever chooses to do so. . . . To allow a [s]tate by use of its law of unfair competition to prevent the copying of an article which represents too slight an advance to be patented would be to permit \*69 the [s]tate to block off from the public something which federal law has said belongs to the public.<sup>7</sup>

Although determining what resides in the public domain can be somewhat intuitive, some scholars have taken upon themselves the task of actually mapping the public domain. Some of the most comprehensive and thorough mappings of the public domain have been conducted by Pamela Samuelson in her seminal works on the subject.<sup>8</sup>

Samuelson correctly points out that the public domain is actually a murky area that consists of a wide variety of content.<sup>9</sup> Likewise, she suggests that there are actually thirteen public domains that can be categorized into one of three groups: 1) domains that focus upon the legal status of the content; 2) domains that focus upon the freedom to use content, even if it is protected by intellectual property rights; and 3) domains that focus upon the accessibility of content.<sup>10</sup> For our purposes, we need only to discuss a few of them in order to make a general overview of the materials that reside in the public domain.

Thus, the public domain is composed of content that is completely free from intellectual property rights, such as works whose intellectual property rights have expired, and works that did not or do not qualify for intellectual property rights.<sup>11</sup> In addition to this public domain content, there are also information resources such as ideas, concepts, principles, and laws of nature that are outside of the realm of intellectual property.<sup>12</sup> As Samuelson suggests, the privileges awarded under fair use and other copyright rules reside close by--although outside of--the public domain. \*70<sup>13</sup> Furthermore, the public domain arguably encompasses contractually constructed information commons, although the materials in these commons remain slightly outside of the public domain. Consequentially, open source and Creative Commons licensing that make information artifacts available also reside close by the public domain.<sup>14</sup> In contrast to the categories discussed so far, this licensing domain utilizes intellectual property rights in order to ensure accessibility and widespread use.<sup>15</sup>

However, this does not fully capture the full scope of the public domain. There are many works that reside in the public domain but are not really accessible. For example, some works are out of print or might be single-copy works that are owned by one person who does not provide access to them. Therefore, the public domain includes works that reside in it although they are not necessarily accessible for public use.

Once generally identified, it is also important to articulate why the public domain is important. Many scholars have touched upon this issue, offering varying explanations. One of the more common explanations regarding the significance of the public domain is that it constitutes an integral part of the cultural landscape in which creativity occurs and from which everyone should be able to draw.<sup>16</sup> This view suggests that the public domain is a sphere that reflects a balance created by Congress

between intellectual property protected realms and materials free from intellectual property protection. This view suggests that such a balance is important for future creation and innovation and as such should not be disrupted.

Additionally, the public domain serves as a communications sphere that provides societal infrastructure for a democracy inasmuch as it allows people to freely exchange their ideas. David Lange has poetically described the public domain as a “sanctuary for individual creative expression, a sanctuary conferring affirmative protection against the forces of private appropriation that threatened such expression.”<sup>17</sup> This view perceives the public domain as a status which arises from the exercise of the creative imagination.<sup>18</sup> Thus, under this view, even appropriation of protected materials for creating new works is always allowed.<sup>19</sup> While this latter conclusion is less common, Lange’s view emphasizes the importance of the public domain for self-governance in securing the freedom “to think and imagine, to remember \*71 and appropriate, and to play and create.”<sup>20</sup> Edward Lee suggests a different view, arguing that the public domain serves to provide the public with access to government materials; such access prevents unwarranted government secrecy.<sup>21</sup>

In summary, the public domain’s origins can be traced back to the Intellectual Property Clause in the Constitution. It consists of vast and diverse contents, and secures important social values. Creativity is cumulative to some extent and there is no such thing as true “originality.” Therefore, the public domain serves a very important role in fomenting the creation of new works. Too much protection effectively provides exclusivity of ideas and information, as well as expression. This can stifle future creation in that future authors will not have access to creativity’s building blocks.

Despite these important social values, during the past few decades we have witnessed a trend in which the public domain has been propertized in different ways. Given its importance for further creation and innovation, such a move cannot be perceived as a positive one. The discussion that follows will highlight major benchmarks in this propertization process.

Legal scholarship to date has discussed and critiqued various threats to the public domain. It has reviewed different corporate practices, as well as legal and policy developments, all the while examining their possible impact upon the public domain.<sup>22</sup> Samuelson, James Boyle, and other noted scholar have studied some major legislative developments that have significantly shrunk the public domain.<sup>23</sup> The first development, the Copyright Term Extension Act (CTEA), delayed the entrance of thousands of works which would have entered into the public domain, by extending copyright protection for an additional twenty years.<sup>24</sup>

Another important development has occurred with the enactment of the Uruguay Round Agreement Act (URAA) that restored copyright protection to foreign works that had fallen into the public domain.<sup>25</sup> Under the Act, copyright protection in foreign works is restored for one of three specific reasons: “failure to comply with formalities, lack of subject matter protection, or lack of national eligibility.”<sup>26</sup> \*72 The triggers for adopting this legislation were three-fold: attaining indisputable compliance with international treaties and multilateral agreements; obtaining legal protections for American copyright holders’ interests abroad; and remedying past inequities of foreign authors who lost or never obtained copyrights in the United States.<sup>27</sup> It is difficult to estimate how many foreign works were restored under the Act.

The constitutionality of this Act was challenged in the district court of Colorado by a group of plaintiffs who had relied on artistic works in the public domain for their livelihood.<sup>28</sup> Because of the URAA, the plaintiffs were prevented from using these works or were required to pay royalties to the copyright holders.<sup>29</sup> The plaintiffs subsequently argued that the URAA violates the First Amendment.<sup>30</sup> The district court found that the URAA was unconstitutional to the extent that it suppressed the right of reliance parties to use works they exploited while the works were in the public domain.<sup>31</sup> On appeal the Tenth Circuit ruled that the URAA provisions in question did not violate the First Amendment.<sup>32</sup> The court explained that because the URAA advances a substantial government interest -- securing foreign copyrights for American works-- and it does not burden substantially more speech than necessary to advance that interest, it is consistent with the First Amendment.<sup>33</sup> The Supreme Court has recently granted certiorary in the case.<sup>34</sup> In light of the Supreme Court’s ruling in *Eldred v. Ashcroft*, in which the Court held that extending the term of copyright protection in twenty years and effectively removing works from the public domain was constitutional,<sup>35</sup> it may be expected that the Court will confirm the Tenth Circuit’s holding.

With the advent of digital technologies, the balances struck by copyright law are also changing. The content industries have begun using revised intellectual property laws to strengthen their hold on their works. As digital technologies continue to develop, copying can be achieved instantly and almost perfectly; in order to protect themselves against this technological infringement, the content industries have created programs (codes) which prevent violations from the very start. However, while useful to some extent, people can develop technologies to circumvent these protections. The Clinton administration allowed the content industries to remain \*73 protected by passing policies that illegalized technologies that circumvent codes.

The Digital Millennium Copyright Act (DMCA) strengthens the protection conferred by intellectual property law to digital information.<sup>36</sup> Its protection is focused on the technical measures used to protect digital information. Unfortunately, this law harms fair use doctrines inasmuch as it does not require that the aforementioned technical measures be designed to enable fair uses. This makes the DMCA a significant threat to the public domain. Under the DMCA, technical measures can be enforced without regard to what the law says. These measures can have broad negative effects over the digital public domain, as well as over fair use doctrines.<sup>37</sup>

The public domain has also shrunk because of other factors.<sup>38</sup> Scholars have shown how the scope and duration of patent, copyright, and trademark protections have expanded throughout the years, as well as demonstrating how patent/copyright/trademark overlaps have been able to develop. While channeling (line-drawing) rules prevented such overlaps, today's technologies have blurred the lines. Such overlaps shift the balance in favor of the intellectual property owners, thereby cutting into the rights held by the public.<sup>39</sup>

Some legislators have even gone so far as to protect classic public domain materials, such as factual databases. In 1996, the European Union adopted the Directive on the Legal Protection for Databases (Database Directive).<sup>40</sup> This directive constituted a comprehensive attempt to provide protection for databases, granting a fifteen-year, renewable, sui generis right to prevent the extraction and utilization of raw data found in a database.<sup>41</sup> Thus, de facto protection was provided for the raw \*74 data itself.<sup>42</sup> Similarly, for several years Congress had likewise considered different bills that would substantially reduce the digital public domain by awarding rights to those who compile collections of information that are the product of substantial investment.<sup>43</sup>

There are many other things that further diminish the public domain. Privacy rights prevent people from using and accessing information that is protected by the laws of privacy.<sup>44</sup> Privacy protection prevents that information from falling into the public domain.<sup>45</sup> Similarly, trade secrets prevent information from entering the public domain--provided secrecy is effectively maintained--effectively allowing eternal protection.<sup>46</sup> Likewise, even rights of publicity prevent certain informational goods pertaining to certain famous individuals from entering the public domain.<sup>47</sup>

There are, however, counter views suggesting that propertizing information does not necessarily have detrimental effects on the public domain. For example, Polk Wagner argued that many scholars overlook the contribution that propertized information makes to the public domain, suggesting that the increasing appropriability of information goods may grow the quantity of open information.<sup>48</sup>

It should be pointed out that propertization trends have also taken place in patent law.<sup>49</sup> However, these trends go beyond the scope of this Article and will not be discussed here. These and other judicial trends, legislative initiatives, and different \*75 corporate practices have threatened the public domain and have already significantly reduced it.<sup>50</sup>

Promoting learning and preserving the public domain are important factors in the social bargain struck in copyright law.<sup>51</sup> James Boyle argues that this "maximalist rights culture," in which intellectual property is assumed to automatically promote innovation and that providing more rights is the best way to encourage innovation, only benefits a small sector of businesses and has upset the balance made between the public domain and property.<sup>52</sup> In light of these propertization trends, legal scholars have proposed different approaches for handling the challenges made to the public domain.

### **III. The Public Domain: Proposals and Their Critiques**

Legal scholars, individuals, corporations, and others have approached these propertization trends in different ways. Interestingly enough, the proposed solutions vary significantly. This Part will discuss some of the major solutions introduced, which include: further reliance on property regimes; resorting to private ordering by using licenses, innovative corporate initiatives, or by employing legal mechanisms of givings; forming institutional solutions; and enacting legislative solutions. Each of these solutions, including their strengths and weaknesses, will be briefly discussed in turn.

As I will show below, the different solutions offered over the years are valuable, but are only applicable in certain circumstances, suggesting that such solutions are limited. Moreover, other than a small number of solutions, most have never been actually employed. As a consequence, many of the threats to the public domain described above have not yet been effectively remedied by the solutions offered.

## A. Further Reliance on Property Regimes

As mentioned earlier, some scholars have proposed that the existing property system serve as a solution. Some do not view the propertization trends as a curse \*76 but rather as a blessing, and advance different rationales for their desirability. While most proponents of the public domain view the propertization of public domain materials as a hurdle to further creation and innovation, there are some who suggest that there are advantages to be gained from the increasing propertization in copyright law.<sup>53</sup>

David Fagundes and others have also observed that it is the unclear doctrines in copyright law, and not the imposition of boundaries, that allow for the privatization of the public domain to take place.<sup>54</sup> If the boundaries between the public domain and intellectual property rights were clear, litigation testing the boundaries of the uncertainty would not occur.<sup>55</sup>

While clarifying doctrines seems to be a move we should welcome, propertizing materials that otherwise should reside in the public domain is a counterproductive move. The more we propertize materials, the less we will have to draw upon for further creation. Moreover, the further propertization of expression does not necessarily clarify boundaries; rather, it creates more of them. The more clarifying rules there are, the more of a maze it creates for others who could use that expression.

Similarly, some scholars argue that copyright law is far more effective in promoting expression than the public domain, thereby inaccurately downplaying the importance of the public domain. They argue that the fair use clause in copyright law is sufficient for allowing access to works.<sup>56</sup> Peter Jaszi has asserted that arguments in favor of the public domain, which are based on the protection granted by the Framers in the Intellectual Property Clause in the U.S. Constitution, are no longer given much weight, lamenting the loss of concern with the public domain while not advocating its demise.<sup>57</sup> Instead, a new understanding of copyright has developed in which the rights of the intellectual property owners are held to be more important on the assumption that giving them financial rewards promotes increased \*77 production of works. Such an approach, however, has been rejected by many scholars.<sup>58</sup>

While copyright law does allow certain uses under the fair use defense, it is clear that the scope of the fair use defense has been significantly blurred and narrowed in the new technological era.<sup>59</sup> Furthermore, innovation and creation critically rely on the public domain as it provides the building blocks and basic tools we all use. Presumably, for some scholars, enriching and protecting the public domain is not a goal at all.

William Landes and Richard Posner seem to go in a somewhat similar direction, suggesting that providing indefinite copyright protection will bring even more works to the public domain.<sup>60</sup> In their work on the issue, they raise questions concerning the widely accepted proposition that economic efficiency requires the limited duration of copyright protection.<sup>61</sup> The authors argue that a system of unlimited renewals might, “depending on the length of the initial term and on the fee structure, expand the number of works in the public domain.”<sup>62</sup> Under the system that the authors suggest, the more extensive the copyright protection is, the greater the incentive to create intellectual property; the net result being, the greater the amount of works which will eventually enter the public domain when the copyright is not renewed.<sup>63</sup> Therefore, a system of indefinite copyright renewals would not necessarily entail the depletion of the public domain.<sup>64</sup>

\*78 Landes and Posner demonstrate that the public-good aspect of intellectual property does not necessarily imply that once a copyright work becomes a part of the public domain it will be distributed and exploited efficiently.<sup>65</sup> Problems, such as congestion and overuse externalities, apply to intellectual property as well (for example, if everyone uses the likeness of Humphrey Bogart in advertising, it will eventually become worthless).<sup>66</sup> In addition, they argue that indefinite copyrights will provide incentive for investing in already existing intellectual property items.<sup>67</sup> If those items had entered the public domain, they would have become obscure and thus no one would invest in them due to the problem of free riding.<sup>68</sup> Items which retain enough value for future use should be given indefinite copyrights to maintain their value.<sup>69</sup>

While appealing, their analysis can be critiqued on many fronts. Their analysis is overly optimistic in regards to the predicted benefits that would result from more property rights. Extremely valuable works are probably not going to fall into the public domain quickly and it is very likely that delaying their entrance might be the preferable route for their owners. This might result in high pricing of these works for long periods as well as significant free speech concerns when works are indefinitely protectable. Additionally, the authors’ assumptions concerning the works residing in the public domain do not seem to be in line with what we know about the role of the public domain in further creation and innovation. Moreover, the contention that

the public domain can potentially bring about congestion and overuse externalities has not been empirically proven.<sup>70</sup> This cannot be the case with regard to works produced in the digital era because their production costs are very low compared to print age costs.

## **B. Private Ordering**

Unlike those who call for the use of property-based solutions, some suggest that private ordering can offer a more useful route for enriching the public domain. The use of licenses, innovative corporate strategies, or the legal mechanisms of givings and dedication are some of the major methods proposed in this regard. Licensing is probably the only proposal that has been employed and used extensively \*79 compared to other proposals discussed. Therefore, the discussion that follows will thoroughly explore such licensing schemes.

In a way, the production and dissemination of cultural content, using open source and Creative Commons licenses, constitutes a revolution against the intellectual property regime. The open source and Creative Commons movements “bypass the structural inequalities of the intellectual property system” and reject “the philosophical basis of copyright and patent laws.”<sup>71</sup>

### **1. The Open Source Licensing System**

The open source licensing system functions to facilitate collaboration through easy and open access to software content. Some of the most widely used open source licenses are the GNU General Public License (GPL), the Berkeley Software Distribution License (BSD), and the Apache License.<sup>72</sup>

Both the Free Software Foundation (FSF) and the Open Source Initiative (OSI) define what constitutes an open source license. According to the FSF, an open source license is “free” if it gives users the freedom to run the program for any purpose, the freedom to study how the program works as well as the freedom to change it according to the user’s wishes, the freedom to redistribute copies, and the freedom to improve the program and release those improvements to the public.<sup>73</sup> In order to provide these freedoms, the license must also make the software’s source code available.<sup>74</sup>

The OSI has put forth ten conditions that must be met in order for a license to be classified as open source.<sup>75</sup> Among other provisions, the OSI mandates that the license provide for free redistribution, access to the source code, and permission to allow modifications and derivative works.<sup>76</sup> Modified and derivative works must also be licensed under the same terms as the original software.<sup>77</sup> The OSI also requires that the licenses acknowledge the author of the source code.<sup>78</sup>

The advantages of open source licensing are great. Open source licenses in software have allowed access to and use of material in a manner that would otherwise \*80 have been considered copyright infringement.<sup>79</sup> Open source licenses have provided access to anyone on the same terms thereby eliminating the need for ‘individual bargaining’ and the increased transaction costs that come with such bargaining.<sup>80</sup> Content licensed under open source has increased the pool of materials available for use by programmers.<sup>81</sup> These licenses lay behind the GNU/Linux operating system, the Apache web server programs, and the Firefox web browser.<sup>82</sup> They enable computer programmers to improve software more quickly as the source code is open to public access.<sup>83</sup>

Despite the successes of open source licensing, the use of such licenses has also come at a price. Questions concerning transaction costs, interpretation, notice, license proliferation, enforcement, and termination remain largely unanswered. Consequentially, the uncertainty surrounding these licenses poses an obstacle for the continued protection and enlargement of the raw materials necessary for creation.

#### **i) Transaction Costs**

When there are many contributors to the development of an open source product, and each contributor applies a license to their contribution, the question of who is authorized to enforce the license when copyright infringement occurs is unclear.<sup>84</sup> Moreover, because the identity of the owner of the licensed work is oftentimes in question, it may be difficult to ascertain to whom the rights in the software belong.<sup>85</sup>

Molly Shaffer Van Houweling asserts that the current licensing system gives today's contributors too much control over the future decisions of tomorrow's contributors.<sup>86</sup> She points out that because there are so many "owners" of an open source product, when a license needs to be upgraded or changed in some unforeseen ways not agreed upon when the license was entered into, each owner's permission **\*81** must be sought in order to carry out a licensing change.<sup>87</sup> This incurs high transaction costs and may not even be possible.<sup>88</sup> Consequently, future changes in licensing that need to be made will not be able to occur, and this may result in the underuse of open source products.<sup>89</sup>

Dennis Kennedy makes note of the issues that may arise from unauthorized open source licensing.<sup>90</sup> For example, at times, software is a product of professional development, and the software may be licensed under an open source license when in fact, the developer is not authorized to license the software as it belongs to his employer in the first place.

## **ii) Notice Issues**

Open source licensing imposes restrictions between parties that are far removed from each other (thereby making it very difficult to negotiate problematic clauses in the license), and the contents of the licenses are not always brought to the attention of the user in a straightforward manner.<sup>91</sup> However, these notice problems are downplayed by the fact that the uses permitted by these licenses are normally prohibited under copyright law in the first place, and thus they "complicate only that subset of transactions that are already complicated by copyright."<sup>92</sup>

## **iii) Interpretation Issues**

The interpretation of the licenses raises another difficulty. Each license mandates different terms of use; therefore, a developer faces difficulties when trying to determine what is permissible and what is prohibited.<sup>93</sup> Licenses are not always clear-cut, and many times are worded ambiguously. For example, questions concerning the scope of the license upon derivative works are oftentimes unclear.<sup>94</sup> If a work making use of the licensed content is defined as "derivative" according to the license, the owner of the work will also have to share with future users the source code behind it, thereby reducing the chance of any profit being made off the **\*82** new program.<sup>95</sup> In addition, because the number of open source licenses has steadily increased, interpretation difficulties have been exacerbated as each license can be interpreted differently due to the different conditions contained therein.<sup>96</sup>

## **iv) Proliferation Issues**

The steady increase in open source licenses negatively impacts the credibility of the licenses. Scholars continue to recommend that programmers stick to the most popular open source licenses so that case law can develop around them and "help those licenses gain stability and credibility from precedent."<sup>97</sup> Each license achieves a different goal and must be read carefully in order to ascertain what actions constitute violations. Programmers who want to select an open source license have over sixty from which to choose from,<sup>98</sup> and users of a licensed program must caution against using it in such a manner which would violate it.<sup>99</sup> Thus, the large number of licenses serves more to confuse than to clarify.

The increase in licenses has also resulted in license incompatibility.<sup>100</sup> A user may create content using programs that have conflicting license terms. In such a case, the user cannot release his content because it is the product of incompatible licenses. Thus, the lack of uniformity resulting from the continuing diversification of licenses can actually hinder the development of creative works.

## **v) Enforcement Issues**

Identifying infringement of source codes in the first place is difficult because of the length and complexity of many source codes.<sup>101</sup> In addition, enforcing open source licenses is costly, and thus high transaction costs deter people from actually **\*83** bringing suit.<sup>102</sup> Moreover, because many of the contributors to an open source product are unknown, it is unclear who will enforce the licenses' restrictions.<sup>103</sup>

In the past, it was uncertain that the open source licenses were even enforceable in court. However, this changed when the Federal Circuit ruled in *Jacobsen v. Katzer* that open source licenses can be enforced under both contract and copyright law.<sup>104</sup> Despite this apparent victory for the open source movement, *Jacobsen v. Katzer* also underscored the far reaching

consequences that the wording of the license will have upon the outcome of the case.<sup>105</sup> The likelihood of the license's enforcement and the remedies available depend upon the categorization of the provisions of the license.<sup>106</sup> If the provisions are categorized as contractual (covenants), then the licensor will only be able to receive damages if he proves that the license meets the requirements of state contract law (i.e. there must be an offer, acceptance, and consideration).<sup>107</sup> If this is proven, the licensor has the additional hurdle of proving that he suffered damages from the breach in order to receive a remedy.<sup>108</sup> Proving monetary damage in open source licensing is difficult because the content has been put forth for the public's use and therefore specific monetary damage will be difficult to prove.<sup>109</sup> In addition, the remedies an open source licensor would prefer--an injunction or that the licensee reveal the source code of the violating content--are more easily granted in a copyright infringement suit.<sup>110</sup>

However, if the license's terms are classified as conditions, as opposed to covenants, then the licensor has the right to seek remedy for violations under copyright law. The conditions that must be proven in order to receive damages are less of a burden than those required under contract law.<sup>111</sup> The monetary damages available under copyright law are much more generous because they are statutory and can include attorney fees.<sup>112</sup> Furthermore, suits filed under copyright law are more advantageous because copyright law is uniform both federally and internationally. \*84<sup>113</sup> In contrast, contract law varies from state to state;<sup>114</sup> as a result, copyright law offers a steadier and more consistent avenue for pursuing enforcement than does contract law.

Despite the opening created by the *Jacobsen v. Katzer*, many issues concerning the enforcement of open source licenses have yet to be addressed by the courts. For example, the difference between a covenant and a condition is not clearly delineated.<sup>115</sup> *Jacobsen v. Katzer* also did not address the responsibility of third parties that have used open source materials in violation of their licenses.<sup>116</sup> Furthermore, the case does not address the liability of the middlemen for downstream violations of an open source license.<sup>117</sup> Again, these loopholes shroud copyright provisions in uncertainty, thereby undermining the effectiveness of the open source licensing system.

## 2. The Creative Commons Licensing System

Whereas the open source movement was established in order to promote the sharing of software, the Creative Commons movement was developed in order to promote the sharing of cultural, educational, and scientific content.<sup>118</sup> While a copyright restricts the use of a work without the author's permission, the Creative Commons licenses are a means for enabling authors to instantly permit certain uses of their work. Thus, instead of adopting the © "all rights reserved" approach, Creative Commons licenses enable authors to implement a (cc) "some rights reserved" approach.<sup>119</sup> By enabling authors to license their work on more generous terms, the Creative Commons movement is able to advance its goal of expanding the works in the public domain, and fostering greater creativity through collaboration.<sup>120</sup>

\*85 Most of the Creative Commons licenses consist of four general conditions that can be combined into six different licenses.<sup>121</sup> All of the licenses require attribution, which means that the user of a work can copy, distribute, display, and perform the author's copyrighted work and its derivatives, so long as appropriate credit is given.<sup>122</sup> The share-alike condition requires that the user of the work license any derivative work with the same license under which the original work is governed.<sup>123</sup> The non-commercial condition allows the user to copy, distribute, display, and perform the work so long as the use is for non-commercial purposes.<sup>124</sup> The no-derivative-works condition allows users to copy, distribute, display, and perform the work itself but prohibits any derivative creations based on the work.<sup>125</sup>

These four conditions serve as the basis for six licenses.<sup>126</sup> The most generous of the licenses, the attribution license, enables the user to do anything he wants with the work so long as proper attribution is given. Next in line is the attribution, share-alike license, which allows for any use of the work provided that the author is credited and derivatives are licensed under the same license as the original work. The attribution, no-derivatives license permits use of the work only if it is properly attributed and no derivative works are made. The attribution, non-commercial license mandates that any use of the work be for non-commercial purposes with attribution. However, derivative works can be licensed under different terms. In contrast, the attribution, non-commercial, share-alike license also requires that derivative works be licensed under the same conditions set forth by the original work. The last license, the attribution, non-commercial, no-derivatives license is the most restrictive, prohibiting any changes to the original work as well as commercial use.

Like the open source licenses, Creative Commons licenses have allowed access to and use of materials in a manner that would otherwise have been considered copyright infringement. Creative Commons estimates that over 350 million works are licensed under (cc)<sup>127</sup> and its users include, among others, Flickr, Google, Wikipedia, the Public Library of Science, and

WhiteHouse.gov.<sup>128</sup> However, the Creative Commons licensing system has problems of its own, as well as issues similar to those presented by the open source licenses.

### **\*86 i) Licensing Ideology**

The open source movement and the Creative Commons movement both provide alternative routes to copyright, which have been used to strengthen proprietary hold over content.<sup>129</sup> However, the open source movement favors user-rights to a larger extent than does the Creative Commons movement.<sup>130</sup> Because authors are given so much control over how their works will be used in the Creative Commons licensing system, the licenses are actually strengthening the proprietary nature of copyright law instead of weakening it.<sup>131</sup> Niva Elkin-Koren has come out against this development, explaining that by enabling authors to license their works so easily, the norm that will emerge will be one in which every work should be subject to authorial control instead of it being shared among a community of users.<sup>132</sup> Shun-ling Chen has been even more critical of the movement, suggesting that it “reifies the idea of romantic authorship, maintains a gap between authors and users, and upholds the individual property model of copyright law.”<sup>133</sup> Despite the widespread popularity of Creative Commons, some argue that by using licenses that favor authorial control, the Creative Commons movement has confined itself to the very same institution that it asserts has stifled creativity and has led to over-commodification of informational goods.<sup>134</sup> Thus, according to these critical scholars, the Creative Commons’ licensing system actually works to solidify the proprietary nature of copyright law, instead of promoting the ethos of the open source movement, which encourages easy access to creative works that will facilitate future, collaborative creativity.<sup>135</sup>

### **ii) Ownership and Notice Issues**

Similar to open source licenses, Creative Commons licenses, which lay the groundwork for large, collaborative projects, face the complexities that arise when future contributors decide to change the licenses.<sup>136</sup> Acquiring permission from the \*87 numerous (and many times anonymous) contributors can incur high transaction costs and the delay in upgrading may result in the underuse of creative works.<sup>137</sup>

Although the (cc) license does appear on websites where licensed content is located, that may not always be sufficient in terms of providing notice for users.<sup>138</sup> However, as noted above, because the licenses provide users freedoms that would otherwise be prohibited by copyright law, the problem of notice is reduced.<sup>139</sup>

### **iii) Issues with the Licenses**

Some scholars have distinguished particular Creative Commons licenses that they deem to be the most harmful to future creativity. Zachary Katz argues that the share-alike provisions are the most problematic because they completely cut off the production of derivative works with content licensed under incompatible provisions.<sup>140</sup> Erik Moller has claimed that the non-commercial provisions are the most harmful, because if an owner wants to allow derivative works the non-commercial provisions may restrict uses that an owner might actually allow.<sup>141</sup> Furthermore, Moller maintains that the non-commercial provisions support “current, near-infinite copyright terms and are unlikely to increase the potential profit from your work.”<sup>142</sup>

In the Association Litteraire et Artistique Internationale’s memorandum on Creative Commons licenses, artists are advised to be aware of the implications of using Creative Commons licenses.<sup>143</sup> Artists are warned that the licenses will not provide them with any direct remuneration, they will not be able to make exclusive deals nor grant a Creative Commons license, after granting a license they will not be allowed to revoke it unless it has been breached, and they will not receive any assistance from Creative Commons in enforcing their rights if their license is violated.<sup>144</sup> Furthermore, because attribution rights vary from country to country, \*88 artists licensing under Creative Commons should be aware that international enforcement will differ.<sup>145</sup>

### **iv) Interpretation Issues**

Several of the licenses provided by Creative Commons include provisions prohibiting commercial use and derivative products.<sup>146</sup> “Non-commercial use” is not defined; however, “commercial” uses are defined as “primarily intended for or directed toward commercial advantage or private monetary compensation.”<sup>147</sup> Interpreting what constitutes “commercial use”

may require the assistance of a lawyer, which effectively encumbers the use of the licenses.<sup>148</sup> The lack of clarity may prevent authors who fear potential commercialization from licensing their work.<sup>149</sup> Commercial use is also left undefined by copyright law and thus its interpretation is in the hands of the court.<sup>150</sup>

The definition of derivative works is likewise unclear and may prove to be problematic for users.<sup>151</sup> The Creative Commons website itself, which addresses frequently asked questions, has stated vaguely that defining what constitutes a derivative work is “a difficult legal question.”<sup>152</sup>

#### v) Proliferation Issues

A lack of standardization and the proliferation of Creative Commons licenses have resulted in license incompatibility.<sup>153</sup> For example, a work licensed under an attribution, non-commercial, share-alike license cannot be mixed with content licensed under an attribution, share-alike license. This incompatibility also occurs with licenses belonging to bodies providing free content outside of the Creative Commons licensing system. Molly Shaffer Van Houweling has described the license incompatibilities that prevented Wikitravel entries from being incorporated into Wikipedia because Wikitravel entries were licensed under a Creative Commons license that was incompatible with GNU Free Documentation license \*89 under which Wikipedia entries were licensed.<sup>154</sup> Although the issue was resolved in 2009 when Wikipedia migrated to the Creative Commons license,<sup>155</sup> such obstructions to interoperability demonstrate the complexities entailed in the use of the licenses.

However, license incompatibility can potentially be solved through the application of technological solutions. It is possible to develop computer programs that would immediately identify when certain works are licensed under incompatible licenses, thereby warning the creator from the very beginning that the works he wants to use are licensed under incompatible terms.<sup>156</sup> Incompatibilities can also be solved through “coerced prelicensing” which would provide licensors with a compatible set of licenses from which to choose.<sup>157</sup> Developing, implementing, and raising awareness concerning these solutions is not an easy task, even in our advanced technological environment.

#### vi) Enforceability Issues

Creative Commons licenses are drafted so that they can be enforced in a courtroom; even so, the responsibility for pursuing such enforcement in the case of infringement lies solely upon the owner of the license.<sup>158</sup> Identifying infringement is not a simple matter and with the high costs entailed with pursuing legal action, few individuals will actually seek redress if their license is infringed.<sup>159</sup> Furthermore, although *Jacobsen vs. Katzer* determined that the violation of open source licenses could constitute an infringement claim under copyright law, some Creative Commons licenses demand attribution; given that this right is not granted by federal copyright law, it is unclear whether such terms are enforceable.<sup>160</sup> Even if these terms are enforceable under contract law (under the assumption that these terms will not be preempted by copyright law), then the licensor will have to prove that a contract was made and that he suffered actual monetary damages.<sup>161</sup> Similar to the difficulties faced by open source licenses, proving monetary damages is \*90 difficult for the Creative Commons licensor, given the fact that his work has already been dedicated for public use.<sup>162</sup>

#### vii) Termination Issues

While Creative Commons licenses ensure that owners cannot withdraw their licenses from works that are already in circulation, owners are permitted to stop distributing their works under the license.<sup>163</sup> However, this leaves open the question of what will happen if a license is withdrawn. Can derivative works (which were made when the license was still in place) still be modified? Timothy Armstrong notes that relevant precedents have not addressed these potential issues, adding that “in the case of large-scale projects like Linux or Wikipedia . . . the task of excising a terminating author’s contributions while simultaneously preserving later users’ contributions would prove particularly vexing.”<sup>164</sup>

Thus, the open source and Creative Commons licensing systems each raise their own complexities. Although issues such as license proliferation and license incompatibilities can be addressed through standardization, the difficulties arising from interpretation and enforcement issues have yet to be dispelled. Furthermore, in the case of the Creative Commons licenses, the lack of a uniform vision combined with a heavy reliance on the proprietary copyright system fail to provide an alternative institution for promoting the sharing ethos that serve as the pillars of creative invention.

Interestingly, non-licensing mechanisms exist for balancing the intellectual property system and enriching the public domain. Some private investors, for example, have taken active steps to enrich the public domain. Gideon Parchomovskiy has shown how private investors are taking it upon themselves to counterbalance the excesses of the intellectual property law system by investing in the public domain in order to preempt their competitors from attaining property rights.<sup>165</sup> Robert Merges suggests that this “self-correction” does not necessarily mean that the current intellectual property system is appropriate, but rather that there are mechanisms besides lawmaking for balancing the system; in doing so, the public domain is becoming enriched.<sup>166</sup> Merges uses examples from the biotechnology and software \*91 industries to show how companies are using “property preempting investments” to prevent information from being privatized.<sup>167</sup>

Parchomovskiy’s and Merges’ observations are true in other contexts as well. One of the most famous examples in this regard is the race to sequence the human genome. In the specific case of the Human Genome Project, there were two private firms (HGS and Incyte) who held private databases of the sequences.<sup>168</sup> The private company Merck financially supported a public database, open to all.<sup>169</sup> Since patent rights were not awarded to discoverers of the sequences, HGS and Incyte had to commercialize their sequence through different strategies, adopting licensing mechanisms.<sup>170</sup> Merck, however, maintained the public domain strategy, supporting a database that was freely accessible to the public.<sup>171</sup>

While valuable, such preemptive disclosures are not prevalent for a number of reasons. In the patent context, one can point to the ongoing commercialization taking place, even within universities. Thus, while we would expect to see more preemptive disclosures coming from basic research institutions, such disclosures do not seem to be taking place. In fact, we do see proprietization of research results since the introduction of the Bayh-Dole Act, which has allowed publicly supported institutions to patent their work product.<sup>172</sup> We have also witnessed a great change in the institutional structure of many of these research institutions: many, if not all of them have technology transfer offices that avidly enforce their IP rights. Moreover, in the corporate world it is probably even less likely for such disclosures to take place given the competitive stance of corporations.<sup>173</sup>

### **C. Institutional Solutions**

Some have suggested that in order to bring about a real change in the intellectual property sphere and in order to move away from the maximalist intellectual property rights regime we currently have, institutional solutions must be introduced. James Boyle compared the growing privatization of the public domain in intellectual property law to environmental policy in order to draw lessons that could be used in shaping intellectual property policy.<sup>174</sup> Thus, in order to protect the public domain there needs to be public or private organizations that set out to protect \*92 the public domain just as the environmentalists have organizations to protect their interests.<sup>175</sup> Boyle applauds the increase in movements in the last ten years that center around the public domain.<sup>176</sup>

However, such institutional solutions have not yet been fully realized, nor have they brought about new formulations of effective policies. While there are private organizations and movements that are dedicated to safeguarding the public domain, such as commons-based peer production movements (e.g. open source and Creative Commons), public organizations have yet to effectively bring about the unification of interests in order to advance the public domain.<sup>177</sup> Moreover, an examination of the impact of these private organizations suggests that their activity is limited. Consequently, these organizations cannot necessarily bring about a real change in the intellectual property system in every context. Looking at the open source and Creative Commons movements as a case study suggests that these movements have brought about a change, but as the foregoing discussion demonstrated, such movements also introduced many problems and have not yet been able to bring about uniformity and sweeping change.

### **D. Legislative Solutions**

Some scholars suggest that change can be brought about by copyright reform initiatives. Beginning in 1976, the U.S. moved from a conditional copyright system that premised the existence and continuation of copyright on compliance with formalities to an unconditional system, where copyright arises automatically when a work is fixed.<sup>178</sup> Richard Epstein has characterized these changes as copyright law “flipping over from a system that protected only rights that were claimed to one that vests all rights, whether claimed or not.”<sup>179</sup> This represented a major break from the former U.S. formalities practice.<sup>180</sup> This move did not generate any strong debates because formalities were viewed and are still viewed as bothersome and unhelpful.<sup>181</sup>

\*93 Christopher Sprigman argues that this shift was a harmful one, suggesting that formalities should be reintroduced.<sup>182</sup> Shifting back to antiquated copyright formalities and thereby resurrecting publication, notice, registration, and deposit as threshold requirements for copyright protection, would solve the uncertainty regarding boundaries and expand the scope of materials that reside in the public domain.<sup>183</sup> This will ensure that copyright does not apply in contexts where it is neither necessary nor useful.<sup>184</sup> Such a reintroduction would arguably discourage filings when their costs outweigh their expected benefits and as a result would expand the public domain.<sup>185</sup> However, there are problems with such a proposal--especially in the digital environment--because copyright notices can easily be removed and users often do not check registrations.

Some have proposed that copyright law should be altered in a way that would enable effective dedication to the public domain. Lydia Pallas Loren suggested that we adopt a doctrine of limited copyright abandonment.<sup>186</sup> Doing so “would result in the copyright owner retaining the ability to enforce the copyright rights that have not been granted to the public, while at the same time allowing the public to rely on the copyright owner’s clear expression of intent to permit certain uses.”<sup>187</sup> Others have proposed that the mechanisms of open access initiatives, such as Creative Commons or open source licenses, be enacted into the federal copyright statute.<sup>188</sup> The problems with such an approach are many. Introducing a menu of licenses has the potential to turn the copyright code into a complex piece of legislation. Moreover, with the exception of a “standardized license,” it is hard to see how these proposals would provide a simpler mechanism compared to their contractual counterparts. Finally, it is difficult to envision these proposals overcoming many of the complexities described above regarding open source and Creative Commons licenses.

\*94 Other scholars suggest that changing the nature of the rights in the material that resides in the public domain could also be a promising route, arguing that the public domain should be viewed as being “owned” by the public, and not as material free from intellectual property protection. If viewed as such, it would be a step in the right direction, insofar as it would give the public domain more weight in legislative and judicial decisions.<sup>189</sup> Some have made even more radical proposals, such as suggesting that because all works are influenced by others, the public should be viewed as a joint author of every copyrighted work as a means of preserving the public domain.<sup>190</sup>

As I explain below, these proposals seem to be valuable and the model proposed in this work relies on some of these proposals as a starting point. However, these proposals alone have not yet brought about a real change.

#### **IV. The Public Domain: Towards Modernized Copyright Laws**

In this Part, I hope to demonstrate a different creativity paradigm and that if we want copyright law to serve as an engine of creativity, we need to adjust it to the new reality. The discussion that follows will highlight certain key changes and the characteristics of the new creative environment. To begin, it will touch upon one of the most important changes in the new creative environment: the phenomenon of user-generated content. Then it will discuss different forms of resistance to copyright law, reflected in extensive copyright infringement. Together, these two major changes require a response that should be reflected in the design of copyright law.

The last decade has seen the upsurge of user-generated content on the Web. Implicit in this development is the transition of the traditionally passive audience into an active participant in the development of independent content.<sup>191</sup> This content is typified by its decentralized production (production rests in the hands of the user)<sup>192</sup> and its generally free availability. Blogs, talkbacks, discussion boards, social networking sites, peer production, fan fiction, news sites, wikis, trip planners, podcasting, and more, come under the wings of the term user-generated content (UGC).<sup>193</sup> YouTube and Wikipedia are two prominent examples of UGC. A succinct definition of the components of UGC has been provided by Steven Hetcher:

\*95 The “user” in UGC generally refers to amateurs, but also includes professionals and amateurs aspiring to become professionals. “Generated” is synonymous with created, reflecting the inclusion of some minimal amount of creativity in the user’s work. Finally, “content” refers to digital content, or that generated by users online.<sup>194</sup>

What incentivizes people to create and contribute content? Scholars point to monetary reasons as well as to a wide variety of non-pecuniary incentives, such as social, hedonistic, and altruistic incentives. Presumably, people may also be motivated by a combination of these incentives. In general, monetary incentives sit on the backburner for explaining the existence of the vast amount of UGC.<sup>195</sup> However, rewards such as monetary payments, prizes, and other rewards may account for part of UGC.<sup>196</sup>

In terms of non-pecuniary incentives, Yochai Benkler and Helen Nissenbaum note that “some contributors contribute because of an expectation of learning and earning a reputation that could translate into a job in the future.”<sup>197</sup> Generating content may also boost one’s reputation and career.<sup>198</sup> Various websites use status incentives such as badges in order to motivate users to participate and contribute to the websites.<sup>199</sup>

Some people may simply enjoy creating content and expressing themselves through the photography, videos, and writings that they upload onto the Internet.<sup>200</sup> The autonomy that users have in creating “when and how much they want” has also been recognized as an incentive to create.<sup>201</sup> Moreover, the low-cost, and accessible technological means for producing and disseminating material can also motivate and enable users to contribute content.<sup>202</sup>

**\*96** The fact that a song, article, or picture can be uploaded onto the Internet at no cost and without losing the original content facilitates sharing.<sup>203</sup> One scholar coins this sharing “cheap altruism,” in which something is given and at the same time still kept by the giver.<sup>204</sup> Other motivations may involve the obligation people feel to give back after having received material.<sup>205</sup> This ties into our need “to continue to share when someone has shared with us, although not necessarily with the same person.”<sup>206</sup> Striving for “positive social relations” may also give rise to the volunteerism found in large-scale projects such as Wikipedia.<sup>207</sup> Finally, in terms of social incentives, social networking sites such as Facebook and Twitter play into the people’s desire to be active members of a community.<sup>208</sup>

The increasing salience of user-generated content translates into the amount of which is being uploaded onto sharing websites and the number of participants. According to YouTube, as of March 2010, twenty-four hours of video is being uploaded per minute and its website receives a staggering two billion views a day.<sup>209</sup> Facebook reports that it has over 500 million active users and that the average user creates 90 pieces of content each month.<sup>210</sup> Meanwhile, a simple visit to Wikipedia’s website reveals that there are over eighteen million articles posted on its Wikipedias.<sup>211</sup>

Over the years we have also witnessed the development of certain emerging practices concerning works that are protected by intellectual property, especially in the field of copyright law. Since the introduction of information technologies and the development of the Internet, we have seen an ever-growing resistance to protection provided for copyrightable works. The largest challenge is faced by the music, software and movie industries, and these three industries have not been particularly successful in handling these challenges. One of the core problems faced by these industries is that of user practices: namely, that many users have developed practices under which content is shared for free. Such sharing, or in effect piracy, has become a widespread practice. Such sharing constitutes copyright infringement under **\*97** the Copyright Act. However, the emerging practice of making copyrighted works available in digital form has made sharing materials commonplace.

A brief look at some empirical studies is instructive, because can jumpstart our understanding of emerging practices with regard to copyright law. This data is significant inasmuch as it will be used below as a justification and basis for the design and scope of the Gradual Dedication Model proposed in this Article.

The International Federation of the Phonographic Industry (IFPI), a trade group, has recently estimated that a full 95% of the music downloaded globally is downloaded illegally.<sup>212</sup> BigChampagne, a firm that monitors file sharing traffic for major record labels and music industry magazines like Billboard, reported that the average number of simultaneous users on peer-to-peer networks was 9.35 millions in 2007.<sup>213</sup> Additionally, during the Grokster litigation the music industry contended that more than 2.6 billion infringing music files are downloaded every month.<sup>214</sup>

In contrast to popular belief that file-sharing is limited only to teenagers, as of 2003, 27% of Internet users between the ages of thirty and forty nine and 12% of those over fifty engage in file-sharing.<sup>215</sup> Unsurprisingly, however, about half of all Americans in ages twelve to twenty-two with access to the Internet have downloaded music from file-sharing networks.<sup>216</sup> There is reason to suspect the accuracy of estimates coming from the content industries themselves.<sup>217</sup> However, there is no doubt based on other estimates (as outlined below) that file-sharing is not far from the content industries’ estimates

One would assume that such extensive file-sharing and music piracy would directly affect the revenue stream of the music industry. Indeed, the music industry accusation has been for many years that consumers, who would otherwise buy the music, consume it free of charge and distribute it to others who do the same, thus **\*98** harming market revenues for artists.<sup>218</sup> The IFPI suggested in February 2009 that file-sharing is responsible for the 30% global decline in music revenues.<sup>219</sup>

However, the notion that file-sharing inherently excludes revenues to artists is far from accurate.<sup>220</sup> The Recording Industry

Association of America (RIAA) reports stating a steady decline of net revenues since the year 2000<sup>221</sup> raised speculations that the industry had been manipulating data.<sup>222</sup> But even ignoring these speculations, the attribution of these claimed losses to file-sharing is questionable. Empirically, there is disagreement over the impact of file-sharing on sales.<sup>223</sup> As \*99 Lital Helman has recently shown “[b]ecause the data regarding actual damages from file-sharing on the music industry is speculative, the severe and resource-thirsty measures currently taken to combat file-sharing are questionable at best . . . . It strengthens the suspicion that the industry’s fight is not centered on increasing revenues.”<sup>224</sup> Additionally, as Helman argues, “[ev]en without deciding between the contradicting empirical analyses regarding its impact on sales, file-sharing probably causes the music business more benefit than harm. Exposure to music can facilitate new opportunities and open new markets.”<sup>225</sup>

Although the impact of file-sharing on industry revenue stream is unclear at best, it remains undeniable that there is evidence that unauthorized file-sharing is a widespread phenomenon. Scholars have pointed to different explanations that might account for unauthorized file-sharing.<sup>226</sup> Perhaps many people view intangible property as free for use by all, suggesting that it cannot be stolen.<sup>227</sup> In fact, 78% of individuals who download music do not consider it to be stealing.<sup>228</sup>

Equally plausibly as an explanation, the Internet’s architecture and design is grounded on culture of sharing information for free. Because of its design, the Internet allows every user to freely distribute materials that can be digitized.<sup>229</sup> College students, in particular, have always perceived the Internet as a way of accessing things for free.<sup>230</sup> File-sharing has also been justified due to lack of online alternatives for buying information online and because of its convenience.<sup>231</sup> Furthermore, many consumers view file-sharing as a way to first experiment with the music copied without paying first.<sup>232</sup> On a legal plane, surveys among users of file-sharing networks show that before and after the wave of industry lawsuits against individuals, people did not think that file-sharing is a violation of copyright laws.<sup>233</sup> Simple personal economics and the perceived high price of CDs are an intuitive possibility. Many believe that sharing is justified, even if it is indeed stealing, because of the high charges for CDs.<sup>234</sup> And, somewhat ironically, music consumers \*100 also believe that the recording industry exploits artists, which supports their views that sharing implies taking from the greedy industry.<sup>235</sup>

Very much like music piracy, software piracy is also common in the U.S. and worldwide. Exploring existing data concerning software piracy reveals a very interesting picture. Although the Western World has low piracy rates, in 2009 the sheer size of their technology markets yielded \$21 billion in unlicensed software.<sup>236</sup> The economies of United States, Japan, and Luxembourg have the lowest software piracy rates at 20%, 21%, and 21%, respectively.<sup>237</sup> However, the economies of Georgia, Bangladesh, Zimbabwe, and Moldova each have software piracy rates exceeding 90%.<sup>238</sup>

According to the Business Software Alliance (BSA) 2009 Piracy Study, use of unlicensed software dropped in 49% of the individual economies studied, and rose in only 17% of the economies.<sup>239</sup> In recent years, the software industry, governments, and law enforcement agencies have led anti-piracy education and enforcement campaigns, which have positively impacted the legal purchase and use of software.<sup>240</sup> The 2009 BSA/IDC Global PC Software Piracy Study found that in 2009 the overall software piracy rate increased by 2% but the total value of unlicensed software decreased by 3% at \$51.4 billion.<sup>241</sup> However, with a 2009 piracy rate of 43%, software piracy continues to be a pressing issue.<sup>242</sup>

While piracy rates in the U.S. have been pretty steady during these past few years, it is evident that very much like music piracy, software piracy is widespread and prevalent. It is possible that the explanations for the widespread piracy practices are somewhat similar to those discussed above regarding music piracy, i.e., copying intangible property such as software is not equivalent to theft, software prices are prohibitively high and therefore resorting to piracy is justified, and the open sharing environment that the Internet has created suggests that materials are free for copying.

The discussion concerning music and software copyright piracy is simply illustrative of widespread piracy regarding works in digital form. It is clear that sharing and free exchange are the evolving practices in that regard. Piracy, however, is also prevalent with regard to other works that have not been discussed, such as \*101 movies, computer games, as well as other works in digital form.<sup>243</sup> This Article will not discuss these other copyright industries because data on specific industries is not readily available.

Furthermore, piracy of copyrighted works is not the only issue we should explore regarding emerging practices. Unlike the negative example of piracy and very much like the emergence of productive communities that endorse the sharing ideal through private ordering as exemplified by the open source and Creative Commons movements, the fast growing phenomenon of user generated content (UGC) is illustrative of emerging practices of sharing (mostly for free) of works created by users.<sup>244</sup>

In summary, exploring emerging practices in the contexts of music and software piracy, as well as emerging practices in the realm of UGC, is very insightful in that it can demonstrate that a significant portion of the American public is resistant to copyright policy. It also illustrates that the emerging practice in some productive communities and amongst many members of the public is one of sharing content for free.

Based on the emerging practices of sharing for free that is reflected in part by both the open source and Creative Commons licensing regimes discussed above and the phenomenon of UGC and resistance to and rejection of copyright policy as it is currently crafted, reflected in extensive infringement of music, software, and other digitally available copyrighted products, I argue that copyright law and policy should be reexamined and reshaped in a way that more accurately reflects emerging practices, suggesting that copyright law has to reflect this growing tension between copyright owners and the desires and practices of a large portion of members of the public, including users who generate content as well as a growing number of authors of creative works. I argue that copyright law should be modernized and crafted in a way that reflects this new emerging reality by offering the public, authors, and users a statutory-based alternative that makes their sharing ideal viable and that can allow in turn the creation of a formalized and richer public domain.

Although challenging on many fronts, this ideal can be realized by adopting and formally legislating the Gradual Dedication Model. In essence, I argue that copyright law has become outdated because of challenges introduced by information technologies and that subsequently we must adapt our copyright laws as well as other fields of intellectual property law to the new reality.

#### **\*102 A. The New Gradual Dedication Model**

The new model envisions a world in which copyright protection is claimed rather than automatically granted. Building on the important work of Christopher Sprigman,<sup>245</sup> I argue that our starting point for the creation of this new legal reality should be reintroduction of formalities into copyright law. As outlined above, resurrection of formalities means that rather than being an unconditional system under which copyright protection automatically attaches to works upon creation, formalities, like registration, notice, filing fees and renewal fees would be reintroduced to the copyright law system so that protection has to be claimed at a cost. It should be emphasized that the regime is not reverting back to publication as the benchmark for copyright protection but rather assumes that creation and fixation is the relevant date for claiming protection. As for filing and renewal fees, one could argue that all creators and authors of copyrightable works will opt into the system by simply filing for copyright protection to an extent that the new regime will become a futile effort to enrich the public domain. However, filing and renewal fees can be structured in a way that can affect people's decisions to file for copyright protection.

Additionally, evidence that suggests that people are not necessarily going to opt into copyright protection can be seen in existing registration practices with the Library of Congress. Copyright registration is not mandatory but it offers many advantages to filers.<sup>246</sup> It establishes a public record of the copyright claim. Moreover, before an infringement suit may be filed in court, copyright registration is necessary for works of U.S. origin.<sup>247</sup> If made before or within five years of publication, copyright registration will also establish prima facie evidence in court of the validity of the copyright and of the facts stated in the certificate.<sup>248</sup> If copyright registration is made within three months after publication of the work or prior to an infringement of the work, statutory damages and attorney's fees will be available to the copyright owner in court actions.<sup>249</sup> Otherwise, only an award of actual damages and profits is available to the copyright owner.<sup>250</sup>

Despite these advantages and the very low filing fees, copyright registration is not so common and not every creator of a copyrighted work registers her work. In fact, it is interesting to note that there is a decline in the number of works registered by the copyright office; data concerning claims to copyright protection during the \*103 years 2005 through 2009 shows a steady decline in the number of copyrights claimed in works.<sup>251</sup> While it is hard to estimate how many copyrightable works are created in general, it is certainly the case that a large percentage of works created are not registered with the Copyright Office. While not dispositive, such evidence suggests that although registration offers significant advantages to the copyright filers, many copyright owners do not register their works. Under the new regime, the motivation to file would undoubtedly be greater given the constitutive effect of registration. Yet, given possible changes to fees structure and existing registration patterns it is unclear whether authors would opt into the regime. Thus, introduction of formalities would make copyright protection conditioned upon meeting certain requirements, so the default rule would be that if no protection is claimed, every work that is created automatically falls into and resides in the Gradual Dedication Model default regime.

Reintroduction of formalities would not constitute a significant burden on the legislative and executive branches because under U.S. law we currently have a system in place for registration of copyrighted works that provides additional independent benefits to creators of expressive works.<sup>252</sup> Such a mechanism has many advantages. It would provide better notice as to what works are protectable. More importantly, it would provide information as to when works fall into the public domain. This latter role of formalities is very important as it effectively creates an identifiable and formalized public domain. This naturally also significantly reduces transaction and search costs.

A further notable contribution of formalities is that they make copyright protection available “on demand,” weeding out works whose creators are not interested in any economic rewards for their creation. If we accept the economic argument that creation of works will not happen unless some form of exclusivity is introduced, then we can assume that most of the creators who will seek protection are those who really need the economic incentives. This in essence optimally uses copyright law only when incentives are needed rather than when unnecessary. Therefore, even under the GDM regime current copyright holders are not necessarily hurt by the model proposed because those who benefit most from copyright protection are those who would be most likely to go to the lengths necessary to claim copyright protection under the GDM (e.g., the music, software, and motion picture industries, etc.).

**\*104** However, the proposed model has a few additional elements beyond reintroduction of formalities. Under the proposed model, the world of creative works would reside in three separate domains. The first is the “Copyrighted Works Domain,” where only works that were claimed under the reintroduced formalities regime would reside. The second domain is the “public domain” where different unprotectable and expired works would reside. If a creator of a work desires to dedicate the work to the public domain, she would be able to do so. The third domain will be one that is generated and regulated under the newly introduced “Gradual Dedication Model” (GDM). Under the GDM model, copyright law would be revised and a new domain would be created that would be designed in a way that closely reflects the emerging practices and ideals described above of free sharing. Because the values this domain reflects are prevalent, this new GDM domain would become the new default regime of copyright law.

As I demonstrated above, identifying current practices is an empirically difficult undertaking. However, based on the analysis conducted above of available data concerning music and software piracy, user generated content, as well as the discussion of prevailing sharing regimes, such as the Open Source GPL and Creative Commons licenses, it is fairly clear that there exists a desire in some productive communities and in a significant part of the public to weaken the strength of copyright protection in creative works. Additionally, and even more significantly, a practice of sharing works for free is emerging and is extensively employed in different contexts by productive communities.

Therefore, and in line with emerging practices, under the GDM, a legislative-based model would be introduced in which creators of copyrightable works would be able to gradually dedicate works to the public domain if they decide not to claim copyright protection or decide not to immediately dedicate the work to the public domain. Under the proposed model, rather than dedicating the work to the public domain immediately and effectively, the work would be dedicated to the public in two phases - GDM Phase 1 and GDM Phase 2. In GDM Phase 1, the owner would dedicate the work to the public, which would jointly own the work together with its creator. This dedication would be subject to some use-restrictions that are detailed below. The notion of joint ownership is aimed at reflecting the sharing ideal endorsed by many members of the creative community and the public at large. The public would “own” the work but would be restricted in what it can do with the work for a set period of time, which would be determined by the legislature. This GDM Phase 1 term will be significantly shorter than existing terms under the copyright laws. The possible term can range between 10 and 20 years at most.

Building on lessons emanating from the experiences of Open Source GPL licenses and Creative Commons licenses, the use-restrictions introduced will be simple and clear; in essence, closely reflecting emerging practices of sharing for free or **\*105** under less restrictive terms than copyright protection as well as other sharing practices of productive communities. The only restrictions imposed on the public as well as the original creator of the work,<sup>253</sup> which build on a variation of the Creative Commons license, are the following: 1) Attribution - this condition requires that each and every member of the public can use the work provided she always attributes it to her creator, giving appropriate credit; this feature is important because it guarantees the integrity of the model in particular and the system in general. Based on studies conducted in different productive communities employing the different licensing regimes discussed above, attribution seems to be a very important provision in granting consent to use a work;<sup>254</sup> 2) Share Alike - this condition requires that the user of the work similarly dedicate any derivative work under the GDM regime. This feature seems to be the most promising feature of the GDM for enriching the public domain, guaranteeing dynamism of giving or more accurately “coercing” those who use works shared under the GDM regime to similarly dedicate their works under the same conditions; 3) Derivative works created can be for

either commercial or non-commercial use. Under this condition others can copy, distribute, display and publicly perform the work, and derivative works based upon it, for both commercial and non-commercial purposes. It is important to note that during Phase 1 of the GDM, it does not matter for what purpose the work is used. Even if the work is used for commercial purposes, we would allow it because the newly created derivative work would also be dedicated under the same GDM Phase 1 terms. This provision also avoids the need to engage in difficult interpretations concerning the meaning of commercial and non-commercial uses.

Another notable aspect of the proposed regime is that during Phase 1, works dedicated under the GDM are jointly owned by the public. This property structure is aimed at reflecting and further ingraining the sense of collectivity concerning the dedicated work, as well as overcoming some of the challenges concerning the licensing regimes described above. In the GPL and Creative Commons schemes, some of the lurking issues are the problems encountered when amending or changing the license and the question of who has standing to sue under the license. Joint ownership avoids these questions altogether by vesting a property interest in the work to each member of the public. This reinforces the sense of sharing and also avoids the ability to make changes to the use-restrictions imposed by the regime given the fact that they are statutorily rather than contractually mandated. Additionally, \*106 each and every member can bring a suit given their ownership interest subject to the original creator consent. The original creator consent is required in order to avoid the phenomenon of professional plaintiffs.<sup>255</sup>

Therefore, in phase 1 of the GDM, a phase which closely follows, reflects, and eventually accomplishes the social norms' goal of sharing for free, with no threats of proprietization of one's contribution, a GDM Phase 1 Domain is created and works reside in it for the set period of time.

After the set period of time elapses, at GDM Phase 2, the work will be dedicated to the public domain with no strings attached, and will be free for use by all, subject to no use-restrictions of any kind. Therefore, at this second phase, the work simply falls into the public domain.

If under the proposed regime claiming copyright protection is conditioned upon adoption of formalities (notice, registration, and filing and renewal fees) and dedication of a work to the public domain requires notice only, resorting to the GDM will be fairly straightforward and easy. In the new default regime, most works will immediately fall into the GDM Phase 1. However, the underlying assumption is that a work was dated by its creator in some way. Dating the work provides accurate notice to the public concerning the expiration date of Phase 1 and the date in which the work will fall into the public domain (Phase 2). Since most digital works are dated,<sup>256</sup> resorting to this default regime will prove simple and easy. As for works that are not in digital form, it is probably harder to make the same assumption about them being dated. However, most newly created works are usually also produced in digital form so it is very likely that most of them will be dated. Failure to date the work, however, will effectively dedicate it to the public domain.

In other words, the GDM, combined with reintroduction of formalities, essentially introduces a mechanism for effectively formalizing, identifying, and enriching the public domain. It does so in a very simple and inexpensive manner, building on already existing registration systems in place. The GDM regime essentially changes copyright law default rules and adds into the menu of options additional prominent options, reflecting the public and productive communities' choices. In a way, the GDM model offers an alternative to private ordering or a way to introduce a fix to Creative Commons and Open Source software licensing, overcoming some of these regimes' flaws.

\*107 This new regime would require a transition period. During the transition period, copyright protection will need to be claimed for existing and new works. Works in which copyright protection is not claimed will automatically fall into the public domain and will be free for use by all. Only newly created works, including New Media, will be subject to the new GDM default regime.

## **B. GDM's Advantages**

Prior to discussing the GDM regime advantages, a few preliminary remarks need to be articulated. The newly introduced GDM regime is not aimed to fully replace existing licensing regimes or to write into the law, as a default rule, a GPL/Creative Commons mechanism. Rather, the GDM regime aims to introduce a legislative-based alternative that responds to emerging sharing norms of productive communities and the public desire to operate in a less proprietary environment. As outlined above, the new regime is in line with the goals and ideologies of those regimes. Therefore, while the GDM regime

cannot necessarily serve as a perfect substitute to each and every GPL/Creative Commons license, it does offer a regime that these productive communities, mainly the open source community as well as some parts of the Creative Commons community, can endorse and employ while overcoming many of the challenges they currently face under their licensing schemes.

It also needs to be clarified that the open source GPL and Creative Commons licenses are a good solution for promoting sharing and greater creativity, and have produced really successful computer programs and other creative works. For example, these licenses lay behind the GNU/Linux operating system, the Apache web server programs, and the Firefox web browser as well as the Wikipedia project. Although many licenses exist and they raise many problems and concerns, it is possible that the day will come in which the different productive communities will try to produce some standardized license. This has not happened yet, probably due to the lack of litigation surrounding these licenses. In any event, the lack of a united vision on the part of the Creative Commons movement, as well as the other problems raised by these licensing schemes might bring about a change in the near future.

The new regime is also not aimed at legalizing file-sharing or other forms of copyright infringement. It simply allows the public and other productive communities to decide how to protect their newly created works through a statutory vehicle. More importantly, the new regime is intended to be transitory rather than a permanent change to the copyright laws. Given the regime's rules, adoption would provide a platform for reforming copyright law in a way that will be more responsive to the new creative environment. By more accurately reflecting the different copyright agendas of different groups, the regime better reflects the debates surrounding copyright protection.

Viewed in light of the preceding, a move towards a common-practices-based GDM is desirable for many reasons. As a baseline, it would provide a voluntary **\*108** formalities-based mechanism for obtaining copyright protection, weeding out many works that are created for reasons besides economic incentives. Thus, as highlighted before, whenever economic incentives are required or when creators are interested in benefitting from copyright protection, they will opt for the copyright law regime. As a practical matter, such a regime would better reflect current perspectives on copyrightable works and (to a certain extent) legitimize trends in popular opinion concerning created content. This move would foment a "dynamism of giving," the dedication of works to the public domain that will result in further enrichment of the public domain. Subjecting works to the GDM forces others to similarly dedicate their derivative works if they wish to incorporate a GDM Phase 1 work.

As other scholars have shown, introduction of default rules through legislation has a constitutive effect and might bring about an adoption of standardized rules provided by the legislature rather than non-standardized contractual arrangements. Yair Listokin has demonstrated in the context of corporate law that menus and legal defaults have an important effect on actors' choices. Listokin found that default arrangements provided by the legislature are adopted by different actors even though they had the option to contractually modify them. He also noted that when a statutory menu provides an opt-in arrangement, it is more likely to be adopted compared to a contractual regime.<sup>257</sup>

Beyond these possible constitutive effects, adoption of legislative default rules can also affect the creation of social norms, affect perceptions, and assist in changing peoples' perception of justice concerning copyright in creative works.<sup>258</sup> Adoption of the GDM as the default regime can thereby ingrain values of sharing in society. Moreover, the GDM regime would bring more coherence and symmetry to intellectual property law, creating a non-automatic protection rule similar to the one currently in place under patent law. This increased coherence and symmetry would encourage businesses to rely on innovative business models in conducting their businesses. Assuming that the dynamism of giving is indeed created, businesses that wish to join such an environment or alternatively are coerced to opt in, will be incentivized to create new business models to recoup their investment.

**\*109** In a related vein, the GDM model would better avoid the complexities stemming from licensing under the Open Source GPL license or under Creative Commons licenses. Similar to the Open Source GPL and the Creative Commons licenses, such a model encourages openness and sharing. However, as compared to Open Source and Creative Commons licenses, the GDM is superior in that it avoids many of the problems encountered under these licensing schemes (as described in Part II). Both the GPL and Creative Commons regimes raise ownership problems, failing to address questions concerning standing to sue, or in obtaining permission from the many different owners when the license needs to be changed or upgraded. They also raise interpretation problems concerning key provisions and definitions such as "derivative works", "commercial use", and other important phrases. Additionally, they raise notice issues because the content of the licenses is not always brought to the attention of the user. As a result, they have left room for concern regarding such contracts' enforceability as well as questions pertaining to licenses compatibility given the large number of versions used.

Many of these issues are addressed by the GDM statutory-based model in the description of the exemplified model. The ownership issues are resolved by vesting property rights with members of the public. The model can be changed only through legislative action rather than by obtaining permission from owners. Standing to sue is granted to all owners, fostering the collective interest in the public domain. Some of the definitional issues are also addressed by adopting the share-alike regime, which ignores the nature of the use made by latecomers. Additionally, the GDM regime is arguably constitutional and enforceable and is not exposed to any challenges on those grounds--unlike its contractually grounded counterparts. The GDM avoids the problem of proliferation of licenses and resulting problems of incompatibility of different licenses by introducing a clear, simple, and uniform legislative-based regime. Rather than providing a menu of statutory-based licenses, only one set of restrictions is provided that reflects emerging practices; overall, the set of restrictions chosen clearly accomplishes additional public goals by enlarging and preserving the public domain.

It is true that the model might miss the preferred positions of many creators. However, the proposed model aims to mimic the prevalent sharing practice. Indeed, exploring, for example, the distribution of Creative Commons licenses deployed and their properties as of June 2006 reveals that more attribution-non-commercial-share-alike licenses were adopted (29.01%) than any other type of license.<sup>259</sup> The majority of the licenses (96.6%) deployed attribution, share-alike condition was deployed by 45.5% and 67.5% deployed the non-commercial use \*110 condition.<sup>260</sup> Moreover, introduction of more options might create a complex code. These and many more advantages make the GDM regime a better route to take.

Because this model creates public ownership in the dedicated materials subject to certain use-restrictions, a property interest is vested in each member of the public. This allows any one of them to challenge illegal takings from the public domain, thereby guaranteeing the openness of the public domain and thus enlarging the number of public domain guardians. Moreover, the GDM provides the public with a rather straightforward choice-set: just as people can decide to opt for a copyright regime, so too people can decide to opt for the superior GDM regime. Rather than accepting a complicated set of rules or resorting to complex licensing--which are counterintuitive in a world of widespread sharing and use of materials (including infringement)--we can choose the more robust practice-based GDM.

One might question why a gradual dedication model should be implemented instead of a regime of unconditional dedication to the public domain. As the size of the public domain increases, so does the number of sources from which one can draw upon to create derivative works. Ironically, this enables the further creation of propertized materials. Thus, while the greatest virtue of the public domain is that it allows others to freely use such materials for further creation of derivative works, this virtue also serves as a vice because those who naturally benefit from the public domain are usually powerful creators or their assignees.<sup>261</sup>

Even if unconditional dedication is positively perceived, it would be illogical not to use a GDM as a means of enriching the public domain and creating the aforementioned dynamism of giving and dedication. If our default rules are changed in a manner that closely follows emerging practices, our copyright system might better and more optimally incentivize the creation of works by providing protection where it is really needed or desired. In a sense, this GDM is a superior incarnation of the public domain because it leverages public choices regarding dedication into a dynamic model of positive "coercion." The decision to opt into the GDM allows others to benefit from positive externalities (i.e., public domain materials) provided that they similarly positively externalize. Thus, it can be argued that the GDM in essence better reflects emerging practices than an unconditional dedication model.<sup>262</sup>

#### **\*111 V. Possible Challenges to the Model and Responses**

There are several potential criticisms of this model. Some might argue that the proposed model might negatively affect incentives to create. Once the GDM is introduced, creators will be subject to "coercive" dedication forces. Every use of a work that is in the "coercive" dedication phase will require reciprocal dedication under the same rules. This might have serious effects on the creation of very valuable works that are commercialized rather than dedicated because of the inability to use information residing in the GDM Phase 1 domain. The response to this argument is that creators are not necessarily worse off under this model as compared to the policies we currently have in place. Under existing copyright law, creators cannot use works without a license unless they meet the fair use defense requirements or other available defenses.<sup>263</sup>

It is also possible to argue that infringement rates, the user generated content culture, and other practices cannot empirically prove the existence of norms of sharing for free; moreover, even if such a social norm exists, it does not necessarily teach us

much about the public's preferred default rules. However, the suggested model does not make creators worse off; rather, they can select the property option right away by simply claiming copyright protection.

Additionally, although some scholars have suggested the opposite,<sup>264</sup> it should be noted that there is no attempt to argue that extensive infringement rates reflect social norms that have some normative component to them. It is equally important to recognize that such an argument is not necessary in advancing the GDM regime. Existing extensive infringement simply reflects the fact that many people commonly behave in self-interested ways without necessarily feeling that they would face social sanctions for doing so. However, extensive infringement rates may also indicate that the current copyright system does not respond well to different creators or the public values implicit in the new creative environment. In contrast to infringement rates, the different productive communities discussed above revolve around sharing. These movements have developed ideologies that have normative components to them, attempting to offer alternative regimes to copyright law \*112 through private ordering. The GDM regime, on the other hand, offers an alternative that covers gaps left by the current copyright and licensing regimes.

Furthermore, the GDM attempts to closely follow common widespread practices and integrate them into a legislative workable framework that will provide a streamlined system that not only takes creators' choices into account but also provides a menu that allows meaningful public participation in the process. Even if this response is not persuasive or lacks strong empirical support, we can still argue that the suggested GDM reintroduces balance into our copyright law and policy by giving more room for the public and users in crafting legislation. At its center, it aims to bring the public domain back to life.

Others might object on the grounds that the GDM is going to negatively affect the number of valuable works created for commercial exploitation. While this argument is valid because creators of such works will be incentivized to claim copyright protection and will be limited in their ability to rely on the GDM Phase 1 domain in creating their works, it is also clear that many works, whether commercially valuable or not, will fall into the public domain. Creators that do not need copyright incentives, creators that do not know that their work is protectable, or creators that simply wish to create for the sake of creation and for the enrichment of the public domain, will all produce works that will immediately fall into the public domain. The GDM provides a voluntary model under which creators can opt out and benefit from copyright protection. The GDM rule better reflects the reality under which we live in the information age.

In a sense, one can argue that the model suggested is not substantially different from a licensing regime because the intermediate public domain that is crafted under the GDM is the product of granting a license consisting of several use-restrictions. Such an argument, however, should be rejected. Under the new model the legislature would provide a greater menu of options rather than the two tier model of either protection or full dedication (or in essence abandonment) as described above. Such effective dedication provides the public with a vested interest, allowing it to use the material subject to certain use-restrictions. Additionally, during the set period of time, every member of the public has a property right and interest in the materials that are gradually dedicated, suggesting that every member of the public is not only a joint owner with the other members of the public, but also has the ability to defend his or her interest, which is a major difference compared to the licensing models. Lastly, as discussed above, the GDM is a better workable model as compared to the private ordering schemes we have in place.

It is true that some complexities can emerge. For example, what will happen when a derivative work relies on multiple original sources, only a few of which are Phase I sources, while others might be pure public domain or purely copyright protected. Would the resulting derivative have to be similarly dedicated to the public under the GDM? There is no doubt that there are many additional scenarios that should be considered. However, it is possible to afford such authors some solutions, \*113 such as the "one-for-one" rule discussed above or other solutions that can be crafted.

One of the most significant challenges to this model is that while it aims to introduce a regime that will strengthen the public domain, it might negatively affect small players and individuals. It will also not necessarily have any impact on those that benefit the most from the current copyright system. There is no doubt that under the current regime, copyright owners, especially sophisticated players, will choose to obtain copyright protection for their works. Very big and strong players (e.g., the big movie studios, the big label companies, and the big software companies) believe in a proprietary model of copyright and therefore, if we switch to the GDM model, they will register their copyrighted work, even with reintroduced formalities and fees. As a result, under the GDM regime sophisticated players will not be significantly affected. However, when viewed from the perspective of those who engage in creative endeavors, the proposed regime might actually hurt such unsophisticated individuals. When copyright protection is the default, such creators benefit from protection automatically;

when the GDM regime is the default regime of protection, such individuals might be disadvantaged due to lack of means or knowledge regarding their legal rights in their works and their ability to exploit them economically using exclusivity as a mean.

While this argument seems to be strong, it rests on some flawed assumptions. Since the introduction of the Internet, the public has also been introduced to the regime of copyright law through the well-known disputes concerning online file sharing. Familiarity with the discourse over protection for music, software and other products available in digital form, suggests familiarity with copyright law and the protection it offers. Individuals who engage in creative activity can be assumed to know about the benefits of copyright protection. If and when copyright laws undergo extensive reform, there is no doubt the public will learn about it, including those creative individuals. Therefore, it seems fair to assume that such problems can be overcome through education or simply publication of the regime's fundamental changes. Assuming that such a regime is adopted, it will require some transition period as well as educational activities that will inform the different copyright holders and potential creators about the fundamental change in copyright protection.

As for the sophisticated players, the current GDM regime does not have any major implications concerning their ability to obtain copyright protection. However, the model introduces a new balance into copyright law that will eventually affect the attitudes of sophisticated players concerning the design and scope of the copyright regime, exerting pressure on them to move towards a regime that better responds to the changing creative environment.

Naturally, there will be some fear that the reintroduction of formalities might disadvantage the academic and scientific community. With formalities, the academic community will be institutionally forced to claim copyright protection in **\*114** many cases. This issue can be addressed by introducing different fees for different entities. One can envision a different lower fee for academic institutions as opposed to commercial players.

Finally, there will be those who will argue that standardization of creative communities licensing regime (which is what the GDM regime is in essence trying to accomplish) can also be achieved technologically. Access to each work can be conditioned upon filling or signing a license agreement that reflects the conditions of the GDM model. While possible, such a regime cannot be very feasible or as strong as a statutory based regime. Statutory-based regimes are inherently stronger in that they can easily reach more people and provide better normative sustainability.

The GDM model and the general regime introduced rely heavily upon formalities. Such reliance is arguably problematic under international treaties such as the Berne Convention that prohibit the use of formalities as a condition to copyright protection.<sup>265</sup> Furthermore, this regime arguably violates the U.S. obligations under the TRIPS agreement that have adopted the Berne Convention by reference.<sup>266</sup> While this problem is acknowledged, it nevertheless does not affect the analysis and the need to rethink allocations of right under copyright law.

## VI. Conclusion

The public domain is viewed as a major engine for further creation and innovation. Therefore, it is important to preserve it and guarantee its continued vitality. This Article has introduced a novel model for handling challenges and threats to the public domain, building upon lessons and insights learned from other solutions introduced to date. It has presented the origins, definition, and importance of the public domain, described current threats to the public domain as well as their impact, and provided an overview concerning solutions that were introduced over the years, particularly private ordering schemes introduced by the Creative Commons and the open source movement licensing schemes. This comment has also described a superior new legislative-based GDM that seeks to reintroduce new balance to the copyright laws, allowing authors as well as the public to make valuable choices regarding their own creations. Resorting to these solutions will bring about many advantages and ultimately preserve and enrich the public domain on which we all rely and from which we draw materials for further creation. Additionally, while transitory in nature, it is believed that this regime will bring about a better discourse concerning the optimal design of copyright law.

### Footnotes

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<sup>1</sup> James Boyle, *The Public Domain: Forward: The Opposite of Property*, 66 *Law & Contemp. Probs.* 1 (2003). See also James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 *Law & Contemp. Probs.* 33 (2003) [hereinafter *The Second Enclosure Movement*]. See generally James Boyle, *The Public Domain: Enclosing the Commons of the Mind* (2008) [hereinafter *Enclosing the Commons of the Mind*] (discussing the centrality of the public domain for the production of culture and knowledge and the effects of copyright and patent policy on the public domain).

<sup>2</sup> Statute of Monopolies 1624, 21 Jac 1, c. 3.

<sup>3</sup> Statute of Anne, 8 Anne c. 19 (1709).

<sup>4</sup> U.S. Const. art. I, § 8, cl. 8. Edward Lee, *The Public's Domain: The Evolution of Legal Restraints on the Government's Power to Control Public Access Through Secrecy or Intellectual Property*, 55 *Hastings L. J.* 91, 139-40 (2003).

<sup>5</sup> Tyler T. Ochea, *Origins and Meanings of the Public Domain*, 25 *U. Dayton L. Rev.* 215, 222-24 (2003) (surveying the history and development of the public domain in intellectual property law).

<sup>6</sup> *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225 (1964); *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234 (1964).

<sup>7</sup> *Sears*, 376 U.S. at 231-32 (citation omitted); see also *Graham v. John Deere Co.*, 383 U.S. 1, 5-6 (1966) (“[C]ongress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available .... This is the standard expressed in the Constitution and it may not be ignored.”) (citations and footnotes omitted); *Kewanee Oil Co. v. Bicon Corp.*, 416 U.S. 470, 481-84 (1974) (acknowledging that under *Sears/Compco*, “that which is in the public domain cannot be removed by action of the states,” the Court concluded that “[t]he policy that matter once in the public domain must remain in the public domain is not incompatible with the existence of trade secret protection.”) (footnote omitted). But see *Goldstein v. California*, 412 U.S. 546 (1973) (criticized as being inconsistent with the principle that the Constitution requires free copying of material in the public domain); Malla Pollack, *Unconstitutional Incontestability? The Intersection of the Intellectual Property and Commerce Clauses of the Constitution: Beyond A Critique of Shakespeare Co. v. Silstar Corp.*, 18 *Seattle U.L. Rev.* 259, 305-20 (1995) (suggesting that state protection of intellectual property rights is constitutionally barred).

<sup>8</sup> Pamela Samuelson, *Enriching Discourse on Public Domains*, 55 *Duke L.J.* 783 (2006) [hereinafter Samuelson, *Enriching Discourse*]; Pamela Samuelson, *The Public Domain: Mapping the Digital Public Domain: Threats and Opportunities*, 66 *Law & Contemp. Probs.* 147 (2003) [hereinafter Samuelson, *Mapping the Digital Public Domain*].

<sup>9</sup> Samuelson, *Enriching Discourse*, supra note 8, at 783-85.

<sup>10</sup> *Id.* at 785.

<sup>11</sup> *Id.* at 789.

12 Id. at 790.

13 Samuelson, Mapping the Digital Public Domain, *supra* note 8, at 149.

14 Samuelson, Enriching Discourse, *supra* note 8, at 799-802.

15 Samuelson, Mapping the Digital Public Domain, *supra* note 8, at 166-69.

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Licenses, 24 Berkeley Tech. L.J. 299, 312-13 (2009) (explaining that damages are difficult to prove because the licensor did not extract direct monetary payment in return for the content, and therefore estimating the monetary damage is difficult).

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112 *Id.* at 1288.

113 Reddy, *supra* note 110, at 312.

114 *Id.*

115 *Id.* at 319 (discussing that because contract law varies from state to state, the definitions of covenants and conditions are not uniform); see also Azzi, *supra* note 101, at 1299-1300 (cautioning courts against confusing a covenant for a condition and thereby expanding the scope of rights that copyright law actually allows).

116 See Azzi, *supra* note 101, at 1293-94 (explaining that under contract law the absence of privity between the licensor and the third party releases the third party from responsibility, whereas *Jacobson v. Katzer* requires that the user have knowledge of the license in order to be held responsible for its violation; if a middleman in such a case does not provide notice of the license to the third party, then the third party is not responsible for the license's violation).

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- 134 Séverine Dusollier, The Master's Tools v. the Master's House: Creative Commons v. Copyright, 29 *Colum. J.L. & Arts* 271, 271-72 and 284-85 (2006).
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- 139 *Id.* at 932-39.
- 140 Zachary Katz, Pitfalls of Open Source Licensing: An Analysis of Creative Commons Licensing, 46 *IDEA* 391, 408-10 (2006).
- 141 See Erik Möller, The Case for Free Use: Reasons Not to Use a Creative Commons NC-License, *Open Source Jahrbuch 2006*, 271, 278, available at [http://www.opensourcejahrbuch.de/download/jb2006/chapter\\_06/osjb2006-06-02-en-moeller.pdf](http://www.opensourcejahrbuch.de/download/jb2006/chapter_06/osjb2006-06-02-en-moeller.pdf) (last visited November 21, 2010) (using the example of individual bloggers who use licensed material on websites that also feature ads that are intended to recover costs; the use of content under the non-commercial license on such blogs may be prohibited if “commercial use” is interpreted to include such activities, and owners of the license may want their work to be used by such bloggers).
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160 Id. at 915.

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- 218 See, e.g., *U.S. v. Dove*, 585 F. Supp.2d 865, 869-70 (W.D. Va. 2008) (stating claims by RIAA that illegal downloading harms industry because people who download would otherwise legally purchase); see also *U.S. v. Chalupnik*, 514 F.3d 748, 755 (8th Cir. 2008) (stating claims by the government that lost sales can be assessed because customers have purchased discs from BMG instead of used record stores).
- 219 Nate Anderson, *IFPI boss at TPB trial: you're either with us or against us*, Ars Technica (Feb. 25, 2009, 10:51AM) <http://arstechnica.com/tech-policy/news/2009/02/ifpi-boss-youre-either-with-us-or-against-us.ars>.
- 220 See, e.g., Boyle, *The Second Enclosure Movement*, supra note 1, at 42-43 (2003) (“The Internet does lower the cost of copying and, thus, the cost of illicit copying. Of course, it also lowers the costs of production, distribution, and advertising, and dramatically increases the size of the potential market. Is the net result, then, a loss to rights-holders...? A large, leaky market may actually provide more revenue than a small one over which one’s control is much stronger.”).
- 221 2007 Year-End Shipping Statistics, Recording Industry Association of America, available at <http://www.scribd.com/doc/6386390/RIAA-Annual-Music-Sales-Data-2007-Year-End> (last visited Oct. 26, 2011).
- 222 See, e.g., Martin F. Halstead, *Comment, The Regulated Become the Regulators--Problems and Pitfalls in the New World of Digital Copyright Legislation*, 38 Tulsa L. Rev. 195, 226 (2002) (“An accounting system in which possible but unrealized income is considered a loss appears an unrealistic basis for policy formulation, yet it is a primary accounting theory on the industry side of the piracy question”); see also, Julian Sanchez, *750,000 lost jobs? The dodgy digits behind the war on piracy*, Ars Technica (Oct. 7, 2008, 11:30), <http://arstechnica.com/articles/culture/dodgy-digits-behind-the-war-on-piracy.ars/1> (reporting manipulation of statistics regarding number of jobs lost due to piracy).
- 223 See, e.g., Stan J. Liebowitz, *File Sharing: Creative Destruction or Just Plain Destruction?*, 49 J. L. & Econ., 1, 24 (2006) (suggesting that file-sharing has a negative effect on music sales); Stan J. Liebowitz, *A Comment on the Oberholzer-Gee and Strumpf Paper on File-Sharing* (Sept. 2007), available at <http://ssrn.com/abstract=1017418>; Norbert J. Michel, *The Impact of Digital File Sharing on the Music Industry: An Empirical Analysis*, 6 Topics Econ. Analysis & Policy, Art 18 (Sept. 10, 2006), available at <http://www.bepress.com/cgi/viewcontent.cgi?article=1549&context=bejeap>. But see Felix Oberholzer-Gee & Koleman Strumpf, *File-Sharing and Copyright 4* (Harvard Business School, Working Paper No. 09-132, May 15, 2009) available at [www.hbs.edu/research/pdf/09-132.pdf](http://www.hbs.edu/research/pdf/09-132.pdf): (finding that evidence suggests piracy and music sales are largely unrelated); Birgitte Andersen & Marion Frenz, *The Impact of Music Downloads and P2P File-Sharing on the Purchase of Music: A Study for Industry Canada*, Industry Canada, <http://www.ic.gc.ca/eic/site/ippd-dppi.nsf/eng/ip01460.html> (last updated Sept. 14, 2011) (finding amongst Canadian population that “P2P file-sharing tends to increase rather than decrease music purchasing”); David Blackburn, *On-line Piracy and Recorded Music Sales*, 45-46 (Dec. 2004), available at <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=297F8BFF0C1A3A8331D80B5FB84E4361?doi=10.1.1.117.2922&rep=rep1&type=pdf> (finding that three-fourth of artists increased their sales as a result of file-sharing, while the most popular quarter’s sales have decreased).
- 224 Lital Helman, *When Your Recording Agency Turns Into An Agency Problem: The True Nature of the Peer-to-Peer Debate*, 50 IDEA 49, 85-86 (2009).
- 225 *Id.* at 86.

226 Yuval Feldman & Janice Nadler, *The Law and Norms of File Sharing*, 43 *San Diego L. Rev.* 577 (2006).

227 *Id.* at 585.

228 *Id.*

229 *Id.*

230 *Id.*

231 *Id.* at 586.

232 *Id.*

233 *Id.* at 586-87.

234 *Id.* at 587.

235 *Id.*

236 See *Seventh Annual BSA/IDC Global Software 09 Piracy Study*, Bus. Software Alliance, 9 (May 2010) <http://portal.bsa.org/globalpiracy2009/studies/globalpiracystudy2009.pdf>.

237 *Id.* at 2.

238 *Id.*

239 *Id.*

240 *Id.* at 4.

241 *Id.* at 9.

242 *Id.* at 4.

243 See, e.g., Bangeman, *supra* note 213 (noting increase in piracy of media such as movies and television).

244 See, e.g., *User-Generated Content*, *supra* note 191 (outlining user-generated content theory and evolution).

245 See Sprigman, *supra* note 180, at 551 (noting reintroduction of formalities).

246 See 17 U.S.C. § 408 (2006) (describing how authors may achieve protection).

247 See 17 U.S.C. § 411 (2006) (stating that no civil action may be initiated until registration of copyright).

248 17 U.S.C. § 410(c) (2006).

249 See 17 U.S.C. § 412 (2006) (providing that statutory damages and attorney's fees will not be available if infringement occurs prior to copyright registration or if the author fails to register within three months after the first publication of the work).

250 Id.

251 Annual Report of the Register of Copyright, U.S. Copyright Office, 48 (2009), <http://www.copyright.gov/reports/annual/2009/ar2009.pdf> (last visited Apr. 28, 2011). See also Sprigman, *supra* note 180, at 513 (noting that "Copyright Office data on the annual number of copyright registrations ... suggest[s] that the rate of registration is responsive to relatively small changes in registration fees.").

252 17 U.S.C. §§ 408-12 (2006).

253 This suggests that - unlike the standard GPL/Creative Commons license - the original creator of the work will not be able to grant a license to a future user that will allow this user to use the work without sharing it alike, for example. Preventing such grants is aimed to expand the public domain.

254 Victoria Stodden, *Why Copyleft Isn't Good for Scientific Code: A Case Study in the Normative Structuring of Law* (2011) (unpublished manuscript) (on file with author) (showing with regard to the scientific community that attribution is a key provision for sharing under the open source licenses).

255 See generally Douglas C. Buffone, Note, *Predatory Attorneys and Professional Plaintiffs: Reforms are Needed to Limit Vexatious Securities Litigation*, 23 Hofstra L. Rev. 655 (1995) (examining professional plaintiffs in the context of individual stockholders suing corporations).

256 Dating a work can be done in different ways. The work may have internal evidence that it was completed after a certain date. If so, it would be possible to use that date as the starting date for its term under the GDM Phase 1. Alternatively, extrinsic evidence might provide a date of release or dissemination.

257 Yair Listokin, *What Do Corporate Default Rules and Menus Do? An Empirical Examination* 6 (Yale Law School, Research, Working Paper No. 335, 2006), available at <http://ssrn.com/abstract=924578> (noting that Georgia's decision to expressly provide in its corporate statute that a corporation can opt into a fair price treatment led Georgia corporations to adopt this option more frequently than corporations in other states that allow this option but did not include it in their statutory menus); see also Ian Ayres, *Menus Matter*, 73 U. Chi. L. Rev. 3, 3 (2006) (making an argument similar to Listokin, suggesting that lawmakers can affect contractual equilibria by using menus).

258 See Cass R. Sunstein, *Preferences and Politics*, 20 Phil. & Pub. Aff. 3, 8-10 (1991); Cass R. Sunstein, *Social Norms and Social Roles*, 96 Colum. L. Rev. 903 (1996); Richard A. Posner, *Social Norms, Social Meaning and the Economic Analysis of Law*, 27 J. Legal Stud. 553, 564-65 (1998).

259 License Statistics, Creative Commons, [http:// wiki.creativecommons.org/Metrics/License\\_statistics](http://wiki.creativecommons.org/Metrics/License_statistics) (last visited July 6, 2011).

- <sup>260</sup> License Statistics, Creative Commons, [http:// wiki.creativecommons.org/Metrics/License\\_statistics](http://wiki.creativecommons.org/Metrics/License_statistics) (last visited July 6, 2011).
- <sup>261</sup> See generally Anupam Chander & Madhavi Sunder, *The Romance of the Public Domain*, 92 *Calif. L. Rev.* 331 (2004) (arguing, in the context of traditional knowledge, that the public domain merely serves private property by providing the materials which will eventually be used to create works which will be protected under private property regimes).
- <sup>262</sup> Theoretically, one could also argue that a better regime would incorporate the GDM Phase 1 only, which means that the limitations in this stage will never expire. However, as explained above, the two phases of the model are aimed to respond to the different creators and users desires, and to incentivize others to share rather than propertize works. A single step regime that includes only GDM Phase 1 is problematic because a too long phase 1 period can potentially increase the cost of creating proprietary copyrighted works. Even those who believe that the public domain is shrinking too much should acknowledge that it is important to allow the creation of proprietary works.
- <sup>263</sup> See 17 U.S.C. §§ 106-06A (introducing exclusive rights of copyright owners); §§ 107-12 (introducing limitations on exclusive rights, including the fair use defense).
- <sup>264</sup> See Geraldine Szott Moohr, *The Crime of Copyright Infringement: An Inquiry Based on Morality, Harm, and Criminal Theory*, 83 *B.U. L. Rev.* 731, 767-73 (2003) (suggesting that there exists a social norm that supports the free use of information and that copyright piracy is caused by consumer confusion stemming from the difficulty in differentiating between what is criminal infringement and what is legal conduct).
- <sup>265</sup> *Berne Convention for the Protection of Literary and Artistic Works* art. 6bis, Sept. 9, 1886, S. Treaty Doc. 99-27 (1986), 1 *B.D.I.E.L.* 715 (revised July 24, 1971) (amended 1979).
- <sup>266</sup> *Agreement on Trade-Related Aspects of Intellectual Property Rights*, Apr. 15, 1994, 33 *I.L.M.* 1125, 1201 (1994).