
PANEL V
FIXATION AS NOTICE IN COPYRIGHT LAW

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INTRODUCTION

For the first two centuries of copyright protection in the United States, putative copyright owners had to clear important hurdles in order to obtain protection, such as registration, deposit, publication, and the use of proper notice of the claim of copyright on published copies. Copyright owners of yesterday had to opt-in in order to obtain protection, taking affirmative steps that notified others of their claim and their desire to protect their economic interests in a work. Today the only hurdles that remain for obtaining copyright protection are originality and fixation.

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While the more significant hurdles to obtaining protection declined through the centuries (with the requirement of notice of copyright on published works being the last to fall), fixation has been required, by necessary implication, since the inception of U.S. copyright law.¹ Fixation was implicitly required because Congress delineated the subject matter of copyright protection by reference to certain tangible objects—e.g., books, maps, and charts—in which works of authorship were embodied. During this period, fixation existed alongside copyright's system of mandatory formalities that were pre-conditions to the grant of copyright under federal law—i.e., the administrative requirements of registration of claims of copyright and deposit of copies of copyrighted works, and the publication of the work with proper notice. Publication itself furthered the implicit requirement for a fixed copy of the work, as the courts interpreted publication to require access by the public to copies, or at least a copy.²

In the 1976 Copyright Act³ (“1976 Act” or “the Act”) Congress made the fixation requirement explicit, and today it is the only remaining required indication of the content of the author's expressive work to which copyright protection may attach. In other words, fixation is, like it or not, the only remaining “notice” of what can be claimed as protected by the federal copyright law.

We typically think of originality and fixation as substantive requirements, not as requirements of “notice.” Yet the fixation requirement does provide a type of notice for what is protected by federal copyright law. In fact, fixation is a marker of two critically important boundaries in copyright law. First, fixation marks the moment at which a work is “created” for purposes of the Copyright Act.⁴ If a work is not “fixed” it cannot be protected by federal copyright law.⁵ Instead, unfixed works are eligible for state protection.⁶ Thus the binary

¹ In enacting the 1976 Copyright Act, Congress acknowledged that the fixation requirement “perpetuates the existing requirement that a work be fixed in a ‘tangible medium of expression.’” H.R. REP. NO. 94-1476, at 52 (1976), *as reprinted in* 1976 U.S.C.C.A.N. 5666. *See also* Laura A. Heymann, *How To Write a Life: Some Thoughts on Fixation and the Copyright/Privacy Divide*, 51 WM. & MARY L. REV. 825, 844 (2009).

² *Estate of Martin Luther King, Jr., Inc. v. CBS, Inc.*, 194 F.3d 1211, 1215-16 (11th Cir. 1999) (discussing the requirements for publication). To the extent that unpublished works could gain federal copyright protection under the 1909 Act, it was through registration, and that required the submission of a deposit copy.

³ Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended at 17 U.S.C. §§ 101-810 (2012)).

⁴ 17 U.S.C. § 101 (2012) (defining “created”).

⁵ *See id.* § 102 (“[C]opyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression . . .”).

⁶ For example, California provides statutory protection to unfixed works of authorship. CAL. CIV. CODE § 980(a)(1) (West 2007) (“The author of any original work of authorship that is not fixed in any tangible medium of expression has an exclusive ownership in the

characteristic of fixed/unfixed provides notice of which type of rights, if any, might exist in a work. And, if the work is fixed, that fixation provides some notice of what original expression may be protected, if at all, by federal copyright law.

Second, fixation also provides notice of the potential for infringement. The Copyright Act grants five different exclusive rights to copyright owners.⁷ Certain types of infringement require that the defendant either reproduce the copyright work in copies or distribute copies to the public.⁸ The Copyright Act defines “copies” as material objects in which works are “fixed.”⁹ Accordingly, the reproduction or distribution rights are infringed when an unauthorized fixation of a copyrighted work is made or distributed.

Considering the notice function of fixation leads to an obvious question: how well does fixation serve that “notice” function? In Part I, I explore the statutory language, legislative history and caselaw concerning fixation. With that background in place, in Part II I consider the notice role that fixation plays. Who is the audience for the notice that fixation might provide? Providing notice involves a cost, but notice can also provide cost savings. In Part II I conclude that the cost of the notice provided by fixation is low, but the cost savings is also low because the notice provided in both the copyrightability and infringement contexts is extremely weak. Additionally, the conflation of the fixation inquiry in the different contexts in which it arises can lead to confusion and an even further weakening of fixation’s notice function. Finally, in Part III I argue that more explicit recognition of the notice function that the fixation requirement can play could help focus the fixation inquiry on relevant aspects of fixation that would further the underlying purpose of copyright.

representation or expression thereof against all persons except one who originally and independently creates the same or similar work.”).

⁷ The rights are: reproduction, creation of derivative works, distribution to the public, public performance, and public display. 17 U.S.C. § 106(1)-(5). A sixth enumerated exclusive right is granted in § 106(6) only to copyright owners of sound recordings, but it is a smaller subset of the more general public performance right found in § 106(4) which is granted to copyright owners of other types of copyrighted works. *Id.* § 106(4), (6).

⁸ The Copyright Act grants to copyright owners the right “to reproduce the copyrighted work in copies or phonorecords” and “to distribute copies or phonorecords of the work to the public.” *Id.* § 106(1), (3). Other types of infringement do not require the defendant to have “fixed” a copy. *See id.* § 106(2) (unauthorized creation of a derivative work); *id.* § 106(4), (5) (unauthorized public performance or display); *id.* § 106(6) (unauthorized digital audio transmission of a sound recording).

⁹ *Id.* § 101 (definition of “copies”).

I. FIXATION: PROTECTABILITY VERSUS INFRINGEMENT

To be eligible for federal copyright protection a work must be both original and fixed.¹⁰ While the Supreme Court has provided guidance on the first hurdle, originality, and it has set the originality bar extremely low,¹¹ the lower courts continue to struggle with the standard for fixation.¹² To complicate matters, the legislative history and the caselaw surrounding fixation address what it means for a work to be “fixed” in three contexts: (1) meeting the threshold for copyright protection, (2) determining whether a “copy” has been made or distributed by the defendant in an infringement action, and (3) determining whether a state law is not preempted because it protects unfixed works.

A. *The Statute and its Legislative History*

The 1976 Copyright Act grants protection under federal law only to original works of authorship that are “fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”¹³ Section 101 of the Copyright Act provides that:

A work is “fixed” in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is “fixed” for purposes of this title if a fixation of the work is being made simultaneously with its transmission.¹⁴

The Act also uses fixation as defining the moment when a work is created:

A work is “created” when it is fixed in a copy or phonorecord for the first time; where a work is prepared over a period of time, the portion of it that has been fixed at any particular time constitutes the work as of that time, and where the work has been prepared in different versions, each version constitutes a separate work.¹⁵

¹⁰ *Id.* § 102.

¹¹ *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991) (defining “original” in the copyright context as “possesses[ing] at least some minimal degree of creativity”). For a persuasive discussion of how to change that standard and why raising the bar for copyrightable expression might be a good idea, see generally Joseph Scott Miller, *Hoisting Originality*, 31 *CARDOZO L. REV.* 451, 494 (2009).

¹² See, e.g., *Kelley v. Chi. Park Dist.*, 635 F.3d 290 (7th Cir. 2011); *Kim Seng Co. v. J&A Imps.*, 810 F. Supp. 2d 1046 (C.D. Cal. 2011).

¹³ 17 U.S.C. § 102(a).

¹⁴ *Id.* § 101.

¹⁵ *Id.*

The use of the idea of a fixed work as a potential way in which to articulate what copyright protects and when that protection begins appears to first have entered the Congressional debates in 1935 in the context of choreographic works.¹⁶

The legislative history of the 1976 Act concerning the fixation requirement in the context of copyrightability indicates Congress intended the definition of fixed to be expansive. With the shift to a requirement for protectability that a copy be “fixed” Congress made clear that:

[I]t makes no difference what the form, manner, or medium of fixation may be—whether it is in words, numbers, notes, sounds, pictures, or any other graphic or symbolic indicia, whether embodied in a physical object in written, printed, photographic, sculptural, punched, magnetic, or any other stable form, and whether it is capable of perception directly or by means of any machine or device “now known or later developed.”¹⁷

Through the use of the broad language in the definitions, Congress was trying “to avoid the artificial and largely unjustifiable distinctions, derived from cases such as *White-Smith Publishing Co. v. Apollo Co.*, 209 U.S. 1 (1908), under which statutory copyrightability in certain cases has been made to depend upon the form or medium in which the work is fixed.”¹⁸ This piece of legislative history indicates Congress was concerned that whether a work qualified as a “book” had led courts to exclude new physical manifestations of a work from resulting in copyright protection, but the case it cited as an example of such exclusion, *White-Smith Publishing*, was not a case that concerned the copyrightability of a work. Instead, *White-Smith Publishing* involved claims that player piano rolls were infringing copies of copyrighted musical composition.¹⁹ And therein is the beginning of a problem. The 1976 Act relies on the same definition of “fixed” both in the context of copyrightability and in the context of infringement.²⁰ This is a problem that continues to muddy the understanding of fixation in copyright law.

¹⁶ S. 3047, 74th Cong., § 4 (1935) (proposing to amend § 5 of the 1909 Act to add protection for “[c]horeographic works and pantomimes, the scenic arrangement of acting form of which is fixed in writing or otherwise”); see also Heymann, *supra* note 1, at 845-47 (discussing the legislative origins of the fixation requirement).

¹⁷ H.R. REP. NO. 94-1476, at 52 (1976).

¹⁸ *Id.* The language concerning devices “now known or later developed” is located in the definition of “copies” and “phonorecords.” 17 U.S.C. § 101.

¹⁹ *White-Smith Publ’g v. Apollo*, 209 U.S. 1, 18 (1908) (holding that player piano rolls were not copies within the meaning of the Copyright Act).

²⁰ See *infra* Section I.B. Certain types of infringement require that the defendant either reproduce the copyright work in copies or distribute copies to the public. The Copyright Act defines “copies” as material objects in which works are “fixed.” 17 U.S.C. § 101. Accordingly, the reproduction or distribution rights are infringed when an unauthorized fixation of a copyrighted work is made or distributed.

In the context of copyrightability, the House Report provides examples of works that would not be protected by federal copyright law because they are not fixed: “an improvisation or an unrecorded choreographic work, performance, or broadcast, would . . . not be eligible for Federal statutory protection”²¹ In its discussion of the preemptive scope of the Copyright Act, the House Report also provides examples of unfixed works: “choreography that has never been filmed or notated, an extemporaneous speech, ‘original works of authorship’ communicated solely through conversations or live broadcasts, and a dramatic sketch or musical composition improvised or developed from memory and without being recorded or written down.”²² These examples have not provided much aid in the determination of whether a particular instantiation of a work meets the fixation requirement.²³

The House Report also explains the need for the final sentence of the definition of fixation relating to broadcasts of live events that “are reaching the public in unfixed form but that are simultaneously being recorded.”²⁴ The Report notes that if the broadcast were first recorded and then transmitted there would be no question of the fixation and thus the eligibility of that work, a “motion picture” under the Act, for federal copyright protection.²⁵ The second sentence of the definition, the House Report explains, is intended to provide

²¹ H.R. REP. NO. 94-1476, at 52.

²² *Id.* at 131. Further in that discussion, exploring whether “misappropriation” as a state law cause of action is preempted, the Report indicates:

The proprietor of data displayed on the cathode ray tube of a computer terminal should be afforded protection against unauthorized printouts by third parties (with or without improper access), even if the data are not copyrightable. For example, the data may not be copyrighted because they are not fixed in a tangible medium of expression (i.e., the data are not displayed for a period of not more than transitory duration).

Id. at 132.

²³ As the entity that determines whether an application for registration should be granted, the United States Copyright Office gives relevant interpretations. However, the Copyright Office Compendium does not provide much guidance, beyond an acknowledgment that to comply with the deposit requirements for registration, in most cases fixation will be easily satisfied. U.S. COPYRIGHT OFFICE, COMPENDIUM OF COPYRIGHT OFFICE PRACTICES § 305 (3d ed. 2014) [hereinafter COMPENDIUM] (“The Office rarely encounters works that do not satisfy the fixation requirement because the Office requires applicants to submit copies or phonorecords that contain a visually or aurally perceptible copy of the work.”) The Compendium does note that it:

may refuse registration if the work or the medium of expression only exists for a transitory period of time, if the work or the medium is constantly changing, or if the medium does not allow the specific elements of the work to be perceived, reproduced, or otherwise communicated in a consistent and uniform manner.

Id.

²⁴ H.R. REP. NO. 94-1476, at 52.

²⁵ *Id.*

the similar eligibility for protection for live broadcasts that are simultaneously recorded.²⁶ It concludes that discussion:

Thus, assuming it is copyrightable—as a “motion picture” or “sound recording,” for example—the content of a live transmission should be accorded statutory protection if it is being recorded simultaneously with its transmission. On the other hand, the definition of “fixation” would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the “memory” of a computer.”²⁷

Courts have seized on the second sentence of this paragraph to help draw the fixation line, however, they have done so mostly in the context of infringement, not in the context of copyrightability.²⁸

The House Report lends some support for relying on this statement to understand what is required to infringe the reproduction or distribution right despite the fact that the statement was made while explaining the boundaries of copyrightability. In the context of discussing the different rights granted to a copyright owner, the Report distinguished the reproduction right in § 106(1) from the public display right in § 106(5) and uses images on a screen as a distinction:

For a work to be “reproduced,” its fixation in tangible form must be “sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.” Thus, the showing of images on a screen or tube would not be a violation of clause (1), although it might come within the scope of clause (5).²⁹

The statutory connection between infringement and fixation begins with the language defining the exclusive rights of a copyright owner. Both the reproduction and the distribution rights use the words “copies” and “phonorecords,” granting a copyright owner the right “(1) to reproduce the copyrighted work in copies or phonorecords” and “(3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending.”³⁰ The Act contains definitions of both “copies” and of “phonorecords” that rely on fixation:

²⁶ *Id.*

²⁷ *Id.* at 52-53.

²⁸ *See, e.g.,* Midway Mfg. Co., v. Artic Int’l, Inc., No. 80-C-5863, 1981 WL 1390, at *7-8 (N.D. Ill. June 2, 1981) (citing the House Report for a question of fixation).

²⁹ H.R. REP. NO. 94-1476, at 62.

³⁰ 17 U.S.C. § 106 (2012). Other types of infringement do not require the defendant to have “fixed” a copy. *See id.* § 106 (2) (unauthorized creation of a derivative work); *id.*

“Copies” are material objects, other than phonorecords, in which a work is *fixed* by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. . . .

“Phonorecords” are material objects in which sounds, other than those accompanying a motion picture or other audiovisual work, are *fixed* by any method now known or later developed, and from which the sounds can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.³¹

Although § 102 provides the forward-looking and media-neutral sentiments for copyrightability,³² when it comes to infringement, those sentiments are found in the definition of “copy” and “phonorecords.”³³

A final word of caution about the fixation requirement. The Copyright Act protects original works of authorship that have been fixed by their author. But, keeping the original work of authorship that is the subject of copyright protection separate from the fixed copy can be tricky. The House Report indicates that:

It is possible to have an “original work of authorship” without having a “copy” or “phonorecord” embodying it, and it is also possible to have a “copy” or “phonorecord” embodying something that does not qualify as an “original work of authorship.” The two essential elements—original

§ 106(4), (5) (unauthorized public performance or display); *id.* § 106(6) (unauthorized public performance by means of a digital audio transmission of a sound recording).

³¹ *Id.* § 101 (emphasis added).

³² Section 102 states that work can be “fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated” *Id.* § 102(a).

³³ An odd nested-definition problem could exist in the context of copyright infringement. Infringement requires a violation of an exclusive right of a copyright owner. *Id.* § 501(a). The exclusive rights of reproduction and distribution both require “copies” or “phonorecords.” *Id.* § 106. In turn, “copies” and “phonorecords” are defined as objects in which the work is “fixed.” *Id.* § 101. But, fixation is defined as something done “by or under the authority of the author.” *Id.* (providing a definition of “fixed”). An infringer does not have the authority of the copyright owner, so how can the infringer, in fact, “fix” a copy as required by the statute? Of course this is an absurd reading of the statute, but it is one of the problems with relying on the same definition in two different contexts. Another example of this kind of problem is the definition of “derivative works”—relevant to both the existence of a copyright in a derivative work, *id.* § 103, and an infringement of an existing copyright by the preparation of a derivative work, *id.* § 106(2). See Pamela Samuelson, *The Quest for a Sound Conception of Copyright’s Derivative Work Right*, 101 GEO. L.J. 1505, 1515-19 (2013) (discussing this definitional overlap and the interpretive problems that have resulted).

work and tangible object—must merge through fixation in order to produce subject matter copyrightable under the statute.³⁴

Despite what the legislative history seems to indicate, that the original work of authorship can be separate from the fixed copy, the definition of “created” seems to exclude this possibility. The statute provides that “[a] work is ‘created’ when it is fixed in a copy or phonorecord.”³⁵ This definition seems to exclude the idea of an unfixed work of authorship because such a work would not yet be created.

Fixation is a key concept in federal copyright law. The statutory language and legislative history concerning fixation have presented challenges for courts when called upon to interpret and apply the statute in a variety of contexts.

B. *Caselaw and Commentary Concerning Fixation*

1. Constitutional Mandates and International Law Flexibility

The requirement for a “fixed” copy of the work before federal copyright protection attaches reflects the limitation on congressional authority in the area of copyright law. Article I, Section 8, Clause 8 of the Constitution empowers Congress to grant authors exclusive rights only in “[w]ritings.”³⁶ A physical rendering of the copyrightable work in some form is thought to be a requirement of that constitutional provision. In *Goldstein v. California*,³⁷ the Supreme Court stated that “although the word ‘writings’ might be limited to script or printed material, it may be interpreted to include *any physical rendering* of the fruits of creative intellectual or aesthetic labor.”³⁸ Judge Learned Hand also argued that Congress could grant protection to a work, consistent with the Constitution, “provided it was embodied in *a physical form* capable of being copied.”³⁹

Commentators are more emphatic in the connection between fixation and the constitutional requirement of a “writing.”⁴⁰ The Nimmer treatise elaborates:

Fixation in tangible form is not merely a statutory condition to copyright. It is also a constitutional necessity. That is, unless a work is reduced to

³⁴ H.R. REP. NO. 94-1476, at 53 (footnote omitted).

³⁵ 17 U.S.C. § 101.

³⁶ U.S. CONST. art. I, § 8, cl. 8.

³⁷ 412 U.S. 546 (1973).

³⁸ *Id.* at 561 (emphasis added).

³⁹ *Capitol Records v. Mercury Records Corp.*, 221 F.2d 657, 664 (2d Cir. 1955) (Hand, J., dissenting) (emphasis added). In that case, Judge Hand argued that the performance of a musical composition was protectable and separate from the protection for the composition itself. *Id.*

⁴⁰ *See, e.g.*, 2 WILLIAM PATRY, PATRY ON COPYRIGHT § 3:22 (2015) (stating that “without fixation there cannot be a ‘writing’”).

tangible form it cannot be regarded as a “writing” within the meaning of the constitutional clause authorizing federal copyright legislation. Thus, certain works of conceptual art stand outside of copyright protection.⁴¹

Congress has provided protections for “unfixed” works in one area: the Uruguay Round Agreements Act, adopted in 1994, grants certain protections for live musical performances.⁴² Specifically, unauthorized recording of live musical performances and distribution of copies of such recordings violates federal law.⁴³ While violators are subject to remedies contained in the Copyright Act, the anti-bootlegging provisions do not in themselves grant copyright protection to unfixed live performances and do not preempt state law.⁴⁴

At least two courts have rejected Constitutional challenges to these provisions. In *United States v. Moghadam*,⁴⁵ the Eleventh Circuit assumed, arguendo, that “the fixation requirement would preclude the use of the Copyright Clause as a source of Congressional power for the anti-bootlegging statute,” but held that the anti-bootlegging provisions were nonetheless valid because they fell within Congress’s Commerce Clause power.⁴⁶ In *United States v. Martignon*,⁴⁷ the Second Circuit limited its ruling to the criminal anti-bootlegging provision, emphasizing that because those provisions do not allocate exclusive rights to performers, the anti-bootlegging provisions were not a copyright law subject to the “writings” limitation.⁴⁸ The court left open the question of the constitutionality of the corresponding civil provision, which does create exclusive rights and allocates them to performers.⁴⁹

The broad scope of physical manifestations that will satisfy the statutory definitions of “copies” and “fixed” has led one commentator to note that “it is difficult to imagine more permissive definitions than [those found in the statute] that would still pass constitutional muster.”⁵⁰

⁴¹ 1 MELVILLE B. NIMMER, NIMMER ON COPYRIGHT § 2.03[B] (2015) (footnote omitted).

⁴² Pub. L. No. 103-465, 108 Stat. 4809 (1994) (codified as amended at 17 U.S.C. § 1101).

⁴³ 17 U.S.C. § 1101 (2012).

⁴⁴ See *id.* § 1101(d); *id.* § 1101(a)(3) (stating that violators “shall be subject to the remedies provided in 502 through 505 to the same extent as an infringer of copyright”).

⁴⁵ 175 F.3d 1269 (11th Cir. 1999).

⁴⁶ *Id.* at 1274-81. See also *Kiss Catalog Ltd. v. Passport Int’l Prods., Inc.*, 405 F. Supp. 2d 1169, 1177 (C.D. Cal. 2005) (holding the anti-bootlegging statute constitutional).

⁴⁷ 492 F.3d 140 (2d Cir. 2007).

⁴⁸ *Id.* at 151-52.

⁴⁹ *Id.*

⁵⁰ Douglas Lichtman, *Copyright as a Rule of Evidence*, 52 DUKE L.J. 683, 734 n.207 (2003). But see Megan Carpenter & Steven Hetcher, *Function Over Form: Bringing The Fixation Requirement Into The Modern Era*, 82 FORDHAM L. REV. 2221, 2244 (arguing that

International copyright treaties to which the United States is party do not mandate a fixation requirement but do permit countries to impose one. For example, the Berne Convention provides that “[i]t shall, however, be a matter for legislation in the countries of the Union to prescribe that works in general or any specified categories of works shall not be protected unless they have been fixed in some material form.”⁵¹ It should be noted that some of the Berne signatory countries do not require fixation but do require evidence that a work has been “objectified.”⁵² That is, even in countries that do not require fixation, a work does not exist for copyright purposes if it is only in the author’s mind.

Professor Paul Goldstein argues that “beyond literalism, there is nothing in the mechanical act of fixation to distinguish writings from nonwritings.”⁵³ However, the mechanical act of fixation offers some limits on the law—providing notice of both what the federal law will protect and what actions constitute infringement.

2. Copyrightability and the Fixation Requirement

Two significant groupings of caselaw exist that analyze the fixation requirement in the context of protectability.⁵⁴ First, the early cases decided in the decade after the effective date of the 1976 Act involved claims of protection for the audiovisual output of video games.⁵⁵ Those cases all reached the conclusion that the audiovisual work was sufficiently fixed in the computer programs embodying the games.⁵⁶ These cases tackled the component of the fixation definition that permits the use of devices to be able to perceive a work. For example, the Second Circuit held that “[t]he audiovisual work is

the constitutional language does not prevent Congress from providing copyright protection for unfixed works).

⁵¹ Berne Convention art. 2(2), Sept. 9, 1886, 828 U.N.T.S. 221 (revised July 14, 1967). The Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPs Agreement”) incorporates that provision of the Berne Convention. TRIPs Agreement art. 9.1, Apr. 15, 1994, 1869 U.N.T.S. 299 (“Members shall comply with Articles 1 through 21 of the Berne Convention (1971) and the Appendix thereto.”).

⁵² See, e.g., Copyright, Designs and Patents Act 1988, c. 48, § 3(2) (Eng.) (“Copyright does not subsist in a literary, dramatic or musical work unless and until it is recorded, in writing or otherwise . . .”).

⁵³ PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 17.6.1 (3d ed. 2005).

⁵⁴ Other cases exist that find the particular works at issue to either meet the fixation requirement or not, but these cases do not analyze what, in particular, is required to meet the statutory requirement. See e.g., *Conrad v. AM Cmty. Credit Union*, 750 F.3d 634, 636 (7th Cir. 2014) (holding a banana-lady singing telegram performance was not copyrighted because it had not been fixed by the author).

⁵⁵ E.g., *Stern Elecs., Inc. v. Kaufman*, 669 F.2d 852, 855-56 (2d Cir. 1982) (holding that the audiovisual work of video games is embodied in a material object).

⁵⁶ E.g., *id.* at 856 (holding that the copyrightable material was fixed because it could be perceived with the aid of the components of the system).

permanently embodied in a material object, the memory devices, from which it can be perceived with the aid of the other components of the game.”⁵⁷

The second grouping of cases is more recent and tackles other aspects of fixation, particularly as fixation relates to authorship. For example, in *Kelley v. Chicago Park District*⁵⁸ the Seventh Circuit, as a matter of first impression, analyzed whether an artistically arranged garden known as “Wildflower Works” was fixed and thus qualified as a copyrightable work. It held that a living garden “lacks the kind of authorship and stable fixation normally required to support copyright.”⁵⁹ Although recognizing that “the artistic community might classify [Wildflower Works] as a work of postmodern conceptual art,” and that “copyright’s prerequisites of authorship and fixation are broadly defined,” the court nonetheless found the garden “owes most of its form and appearance to natural forces” and “is not stable or permanent enough” to be a work of fixed authorship.⁶⁰

The background context for the ruling in *Kelley* is important to understand. Artist Chapman Kelley was asserting a claim that the City of Chicago’s parks department had violated his rights of integrity under the Visual Artists Rights Act (“VARA”) when it modified the garden, located in a public park.⁶¹ Kelley sought what the Seventh Circuit referred to as “a staggering \$25 million for the VARA violation.”⁶² The district court rejected Kelley’s claim. Although being a copyrighted work is a requirement for protection under VARA, rights of integrity only extend to “works of visual art,”⁶³ a phrase with a narrow and detailed definition that includes a “painting, drawing, print, or sculpture.”⁶⁴ On appeal, the defendant failed to argue that the Wildflower Works did not qualify for protection under VARA because it was not a “painting” or a “sculpture.”⁶⁵ The Seventh Circuit referred to this failure as “an astonishing omission,” which led the court to instead rely on the exclusion from the definition of “works of visual art” for “any work not subject to copyright protection under

⁵⁷ *Id.* at 855-56; *see also* *Williams Elecs., Inc. v. Artic Int’l, Inc.*, 685 F.2d 870, 874 (3d Cir. 1982) (finding the video game displays to be fixed in the memory device of the game); *Midway Mfg. Co. v. Dirkschneider*, 543 F. Supp. 466, 479-80 (D. Neb. 1981) (finding “plaintiff’s audiovisual works are fixed in the printed circuit boards”).

⁵⁸ 635 F.3d 290 (7th Cir. 2011).

⁵⁹ *Id.* at 303.

⁶⁰ *Id.* at 304-05.

⁶¹ *Id.* at 294-95 (recounting Kelley’s argument that his moral rights under VARA were violated when his flower beds were reduced to half of their original size).

⁶² *Id.* at 295.

⁶³ *See id.* at 298 (“VARA amended the Copyright Act and provides a measure of protection for a limited set of moral rights . . . only for artists who create specific types of visual art.”).

⁶⁴ *See* 17 U.S.C. § 101 (2012) (defining “work of visual art”).

⁶⁵ *Kelley*, 635 F.3d at 300.

this title.”⁶⁶ In other words, the Seventh Circuit’s fixation ruling was one born of frustration at the defendant’s failure to make what the court implies was the stronger argument for exclusion.

The changes that occur in a wildflower garden take place over days, weeks, months, and years. Yet many works of artistic creation change as time passes. Even those that seem permanent, in fact, are subtly changing: stained glass windows slowly thicken at the bottom as the force of gravity pulls on them, steel sculptures rust, and pigment in paintings fade. The Seventh Circuit noted its fundamental concern expressly: while “copyright’s prerequisites of authorship and fixation are broadly defined[,] . . . the law must have some limits . . .”⁶⁷ The court focused its concern on the statutory requirement for sufficient permanency or stability⁶⁸:

Although the planting material is tangible and can be perceived for more than a transitory duration, it is not stable or permanent enough to be called “fixed.” Seeds and plants in a garden are naturally in a state of perpetual change; they germinate, grow, bloom, become dormant, and eventually die. This life cycle moves gradually, over days, weeks, and season to season, but the real barrier to copyright here is not *temporal* but *essential*. The essence of a garden is its vitality, not its fixedness. It may endure from season to season, but its nature is one of dynamic change.⁶⁹

In *Kelley* the Seventh Circuit expressly identified its concern as making sure that law had limits. In part that concern about limits can be understood as one concerned with boundaries on what type of works might lead to claims of violations of federal law. The law there was VARA, a sub-species of copyright law. And ultimately, with the court’s conclusion that Wildflower Works lacked the required fixation the court was acknowledging the Chicago Park District’s ability to modify the garden without concern for violating federal law.⁷⁰

In *Kim Seng Co. v. J&A Importers*,⁷¹ a district court in California relied on *Kelley* to support its conclusion that a bowl of food could not be copyrighted because it failed to meet the fixation requirement.

Like a garden, which is “inherently changeable,” a bowl of perishable food will, by its terms, ultimately perish. Indeed, if the fact that the

⁶⁶ *Id.* at 299-300 (citing 17 U.S.C. § 101).

⁶⁷ *Id.* at 304.

⁶⁸ Recall that the definition of fixation provides: “A work is ‘fixed’ in a tangible medium of expression when its embodiment in a copy . . . is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.” 17 U.S.C. § 101.

⁶⁹ *Kelley*, 635 F.3d at 305.

⁷⁰ VARA provides the right for authors of works of visual art to prevent any intentional modification to their artwork that would be prejudicial to their honor or reputation. 17 U.S.C. § 106A(a)(3)(A).

⁷¹ 810 F. Supp. 2d 1046 (C.D. Cal. 2011).

Wildflower Works garden reviving itself each year was not sufficient to establish its fixed nature, a bowl of food which, once it spoils is gone forever, cannot be considered “fixed” for the purposes of § 101. *Kelley*, 635 F.3d at 304-05.

Although a garden is distinguishable from a bowl of food, in that the garden itself may be considered alive and self-cultivating, the purposes underlying the fixation requirement—to “ease[] problems of proof of creation and infringement”—apply with equal force to a garden and a bowl of perishable food. 2 Patry, *Patry on Copyright*, § 3:22. Accordingly, a bowl of perishable food is not “fixed” for the purposes of the Copyright Act.⁷²

Again, the context for the court’s ruling is important. The plaintiff and defendant were competing food supply companies.⁷³ Plaintiff asserted a claim for copyright infringement based on label designs that contained a photograph of a bowl of noodles with toppings.⁷⁴ Unfortunately for the plaintiff, the photograph used on its packaging was created by someone who was not an employee and no writing existed that assigned the copyright in this photograph to the plaintiff.⁷⁵ However, an employee had assembled the bowl of noodles depicted in the photograph.⁷⁶ If the assembled food dish was copyrightable, then the Plaintiff’s hopes of a copyright claim may have had traction. The court’s conclusion that the bowl of food was ineligible for copyright protection meant that the defendant did not face a claim of copyright infringement for copying the photograph on the label.⁷⁷ In *Kim Seng*, the court did not appear to be concerned with limits on protectability, or on “problems of proof of creation,” after all there was the fixed copy of the food in the photograph that had been taken. The real concern appeared to relate more to claims of copyright ownership without proof.

The Ninth Circuit’s en banc decision in *Garcia v. Google, Inc.*⁷⁸ also engages with the elements of the fixation requirement in the context of whether a copyrighted work of authorship existed. In that case an actress, Cindy Lee Garcia, asserted copyright in her on-screen performance of a cameo role in a larger motion picture. Garcia’s role involved two short lines and direction to “seem[] concerned.”⁷⁹ In the final film that was created, Garcia was on screen

⁷² *Id.* at 1054.

⁷³ *Id.* at 1050.

⁷⁴ *Id.* (“Each package depicts a photograph of a bowl filled with rice sticks, topped by foodstuffs such as egg rolls, grilled meat, and assorted garnishes.”).

⁷⁵ *Id.* at 1056-57.

⁷⁶ *Id.* at 1050.

⁷⁷ *Id.* at 1055 (“[T]he Court finds that the underlying bowl of food is not copyrightable. Accordingly, [the] photograph cannot be considered a derivative work.”).

⁷⁸ 786 F.3d 733 (9th Cir. 2015).

⁷⁹ *Id.* (internal quotation marks omitted).

for five seconds and her spoken lines had been replaced with a different actor's voice speaking a different line.⁸⁰ The Ninth Circuit rejected Garcia's claim of copyright in her performance, relying in part on her lack of fixation of her performance. Noting that "the author is the party who actually creates the work, that is, the person who translates an idea into a fixed, tangible expression entitled to copyright protection," the court found that it was not Garcia but rather the creator of the film and his crew that had fixed the performance.⁸¹ The court then stated that Garcia "played no role in the fixation."⁸² Garcia further claimed that she had not consented to the use of her performance in the film that ultimately was created, thus the fixation that occurred was not done under her authority as required by the statute.⁸³

While seemingly concerned with fixation, the en banc court's statement indicates the intertwined nature of the fixation and authorship requirements. Garcia was not the author of the fixed work that was, in fact, created by the filmmaker. Thus Garcia could not assert a claim of copyright, even for her contribution to that larger work. The Second Circuit in *Kelley* also combines its inquiry into the requirements of fixation with the requirements of authorship.⁸⁴ This intertwining of authorship and fixation in some ways looks like a desire to see evidence of the claimant's intent to create a stable copy, from which the work could be enjoyed or exploited.

3. Fixation as a Requirement for Infringement

In the context of the infringement question, the caselaw focuses mostly on the durational stability of the alleged "copies" created by the defendants. The Second Circuit opined on the requirements of fixation in *Cartoon Network LP v. CSC Holdings, Inc., (Cablevision)*,⁸⁵ a case involving a data stream that passed through two different buffers belonging to the defendant. The first buffer was being constantly overwritten every 0.1 seconds, and the second was being overwritten every 1.2 seconds.⁸⁶ The Second Circuit identified two components of the fixation requirement:

We believe that [the statutory definition of "fixed"] plainly imposes two distinct but related requirements: the work must be embodied in a medium, i.e., placed in a medium such that it can be perceived, reproduced, etc., from that medium (the "embodiment requirement"), and

⁸⁰ *Id.*

⁸¹ *Id.* at 744 (quoting *Cmty. for Creative Non-Violence v. Reid*, 490 U.S. 730, 737 (1989)).

⁸² *Id.*

⁸³ *Id.* ("[Garcia] can hardly argue that the film or her cameo in it was fixed 'by or under [her] authority.'" (quoting 17 U.S.C. § 101 (2012))).

⁸⁴ See *supra* notes 58-69 and accompanying text.

⁸⁵ 536 F.3d 121 (2d Cir. 2008), *cert. denied*, 557 U.S. 946 (2009).

⁸⁶ *Id.* at 124-25.

it must remain thus embodied “for a period of more than transitory duration” (the “duration requirement”). Unless both requirements are met, the work is not “fixed” in the buffer, and, as a result, the buffer data is not a “copy” of the original work whose data is buffered.⁸⁷

Applying those requirements, the court held that data stored and maintained in a computer buffer for 1.2 seconds was stored for only a transitory duration, was not “fixed,” and therefore did not constitute the creation of an infringing copy. The Second Circuit faulted the district court’s decision finding sufficient fixation because the district court had relied on the fact that the buffer data was “[c]learly . . . capable of being reproduced.”⁸⁸ That conclusion addressed only the first requirement, the embodiment requirement; it did not address whether the actions engaged in by the defendant satisfy the duration requirement.

In reaching its conclusion, the district court in the *Cablevision* case had relied on an important Ninth Circuit case in particular: *MAI Systems Corp. v. Peak Computer, Inc.*⁸⁹ That Ninth Circuit case is the genesis of the idea that data stored in Random Access Memory (“RAM”) is sufficiently fixed for purposes of finding infringement of the reproduction right.⁹⁰ But as the Second Circuit noted in *Cablevision* (and as other courts have also noted⁹¹), a RAM copy *may* be sufficiently fixed for purposes of the Copyright Act, but a RAM copy also *may not* be sufficiently fixed. The Second Circuit reasoned that *MAI Systems* and cases following *MAI Systems* hold “that when a program is loaded into RAM, the embodiment requirement is satisfied—an important holding in itself, and one we see no reason to quibble with here.”⁹² Those cases did not, however, address the second requirement identified by the Second Circuit: the “duration requirement.”⁹³

⁸⁷ *Id.* at 127 (citations omitted).

⁸⁸ *Id.* (quoting the district court decision, *Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp.*, 478 F. Supp. 2d 607, 621-22 (S.D.N.Y. 2007)).

⁸⁹ 991 F.2d 511 (9th Cir. 1993). The Second Circuit also noted that the district court had also relied on a report from the United States Copyright Office, stating that an embodiment is fixed “[u]nless a reproduction manifests itself so fleetingly that *it cannot be copied.*” *Cablevision*, 536 F.3d at 127 (citing U.S. COPYRIGHT OFFICE, DMCA SECTION 104 REPORT, 111 (Aug. 2001) (“DMCA Report”). The Second Circuit concluded that the Copyright Office interpretation “reads the ‘transitory duration’ language out of the statute.” *Id.* at 129.

⁹⁰ *MAI Sys.*, 991 F.2d at 519 (“[S]ince we find that the copy created in the RAM can be ‘perceived, reproduced, or otherwise communicated,’ we hold that the loading of software into the RAM creates a copy under the Copyright Act.”).

⁹¹ See, e.g., *Advanced Comput. Servs. of Mich., Inc. v. MAI Sys. Corp.*, 845 F. Supp. 356, 363 (E.D. Va. 1994) (arguing that a program’s embodiment in the computer’s RAM might be too ephemeral to be fixed if the computer had been shut down “within seconds or fractions of a second” after loading the copyrighted program).

⁹² *Cablevision*, 536 F.3d at 128.

⁹³ *Id.* (“It appears the parties in *MAI Systems* simply did not dispute that the duration requirement was satisfied . . .”).

The duration requirement put the question of “what constitutes a period ‘of more than transitory duration’?” squarely before the court.⁹⁴ The line the Second Circuit drew in answering that question was not entirely a clear one; the difference between seconds and minutes, however, appeared to be important. The court noted that in *MAI Systems*, where the Ninth Circuit had concluded defendants had “fixed” a copy for purposes of finding infringement, it was “fair to assume that . . . the program was embodied in the RAM for *at least several minutes*.”⁹⁵ Additionally, when the Second Circuit was describing the decision in *Advanced Computer Services of Michigan, Inc. v. MAI Systems Corp.*, it identified that “the district court expressly noted that the unlicensed user in that case ran copyrighted diagnostic software ‘*for minutes or longer*.’”⁹⁶ Those cases involved allegedly infringing copies that met the fixation requirement. In contrast, the buffer copies at issue in the *Cablevision* case lasted for, at most, 1.2 *seconds*.⁹⁷ The Second Circuit held that such fleeting existence failed to meet the duration requirement.⁹⁸

Like the Ninth Circuit, the Fourth Circuit has interpreted the transitory duration part of the fixation requirement to have two dimensions. The Fourth Circuit refers to those dual dimensions as fixation having both qualitative and quantitative aspects, stating “[i]t is quantitative insofar as it describes the period during which the function occurs, and it is qualitative in the sense that it describes the status of transition.”⁹⁹ It used this insight to distinguish the RAM copies in cases like *MAI Systems* from the copies made by internet hosting providers:

Thus, when the copyrighted software is downloaded onto the computer, because it may be used to serve the computer or the computer owner, it no longer remains transitory. This, however, is unlike an ISP, which provides a system that automatically receives a subscriber’s infringing material and transmits it to the Internet at the instigation of the subscriber.¹⁰⁰

The court concluded that “an ISP has not itself fixed a copy in its system of more than transitory duration when it provides an Internet hosting service to its subscribers.”¹⁰¹ The copies that are made in the transmission process, the court concluded, were not fixed because they were not “of more than a transitory duration.”

⁹⁴ *Id.* at 127.

⁹⁵ *Id.* at 128 (emphasis added).

⁹⁶ *Id.* (emphasis added).

⁹⁷ *Id.* at 129.

⁹⁸ *Id.* at 130 (“[T]hese facts strongly suggest that the works in this case are embodied in the buffer for only a ‘transitory’ period, thus failing the duration requirement.”).

⁹⁹ *CoStar Grp., Inc. v. LoopNet, Inc.*, 373 F.3d 544, 551 (4th Cir. 2004).

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

Whether phrased as the dual “embodiment” and “duration” requirements or as “quantitative” and “qualitative” aspect of the fixation requirement, the analysis used by both the Second and Fourth Circuits tries to ensure that the alleged “copy” that the defendant has made is a sufficient instantiation such that it has the potential to interfere with the market for reproductions of the copyrighted work.

It would, however, be inappropriate to use the precedent concerning fixation in the context of infringement to assist with understanding the permanence required for copyrightability, particularly if one focuses on the notice role that fixation plays. For example, if the line between unfixed and fixed works is one between seconds and minutes, as the Second Circuit implies in *Cablevision*, then many works, including ice sculptures carved in warm climates, sand sculptures built below the high tide line, and even wildflower gardens and food, would meet the duration requirement. In other words, the qualitative aspect or the durational requirement of fixation should be context-sensitive.

4. Fixation as a Boundary Marking Permissible State Law Protections

The final area of copyright law in which the definition of “fixed” comes into play is preemption of state laws. Section 301 indicates the scope of express preemption¹⁰² that Congress intended the federal Copyright Act to have:

[A]ll legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106 in works of authorship that are *fixed* in a tangible medium of expression and come within the subject matter of copyright as specified by sections 102 and 103, . . . whether published or unpublished, are governed exclusively by this title.¹⁰³

After setting out the scope of preemption, § 301 also provides the flip side:

(b) Nothing in this title annuls or limits any rights or remedies under the common law or statutes of any State with respect to—

(1) subject matter that does not come within the subject matter of copyright as specified by sections 102 and 103, including works of authorship *not fixed* in any tangible medium of expression . . .¹⁰⁴

¹⁰² Of course, implicit preemption remains a relevant consideration even if the state law is not preempted expressly. *Geier v. Am. Honda Motor Co.*, 529 U.S. 861, 869-74 (2000) (“[T]he principles underlying this Court’s preemption doctrine . . . make clear that the express preemption provision imposes no unusual, ‘special burden’ against [implied] preemption.”); *Freightliner Corp. v. Myrick*, 514 U.S. 280, 288 (1995) (“The fact that an express definition of the preemptive reach of a statute ‘implies’—i.e., supports a reasonable inference—that Congress did not intend to preempt other matters does not mean that the express clause entirely forecloses any possibility of implied preemption.”).

¹⁰³ 17 U.S.C. § 301(a) (2012) (emphasis added).

¹⁰⁴ *Id.* § 301(b) (emphasis added).

While state law protections for unfixed works are not preempted, and some states have adopted statutes clearly providing for such protections,¹⁰⁵ many states have not adopted statutory protections for unfixed works.¹⁰⁶

Given the importance of fixation to the preemption question, it is not surprising that many cases involving assertions that a state law cause of action is preempted identify whether the item sought to be protected is fixed or not. Despite that, for the most part the caselaw does not delve deeply into the meaning of fixation, with one notable exception: right of publicity claims.

Right of publicity cases often center on the concept of a “persona” that is protected under the right of publicity.¹⁰⁷ As the Fifth Circuit has held: “A *persona* does not fall within the subject matter of copyright—it does not consist of ‘a “writing” of an “author” within the meaning of the Copyright Clause of the Constitution.’”¹⁰⁸ However, *persona* is often portrayed using copyrightable expression and that copyrightable expression may have been fixed in a variety of tangible embodiments. The nature of the fixation of the *persona* as well as the nature of the alleged violation of the right of publicity sometimes involve intricate questions of fixation.

Ninth Circuit caselaw involving singers who have complained of the use of their *persona* has drawn clear line. The Ninth Circuit has concluded that “federal copyright law preempts a claim alleging misappropriation of one’s voice when the entirety of the allegedly misappropriated vocal performance is contained within a copyrighted medium.”¹⁰⁹ When, instead, the claim is that the defendant has done something other than, or more than, simply reproduce a copyrighted work that embodies the plaintiff’s *persona*, such as using the

¹⁰⁵ CAL. CIV. CODE § 980(a)(1) (West 2007).

¹⁰⁶ As the Western District of Virginia has explained:

The existence of common law copyright protection for the spoken word has not been established by any court. From time to time, the courts have entertained actions based on a claim of common law copyright in which the medium of expression was the spoken word, but in each instance the courts have never recognized a proprietary interest where there was no tangible embodiment of the expression of an idea. Were this court to accept plaintiff’s cause of action as legally cognizable, it would set an unprecedented departure from the state of the law as it presently exists. Such an extension of the doctrine of common law copyright would be novel and unwarranted.

Falwell v. Penthouse Int’l, Ltd., 521 F. Supp. 1204, 1207 (W.D. Va. 1981).

¹⁰⁷ See, e.g., OHIO REV. CODE ANN. §§ 2741.01 to .02 (LexisNexis 2015) (defining “[p]ersona” to mean “an individual’s name, voice, signature, photograph, image, likeness, or distinctive appearance, if any of these aspects have commercial value”).

¹⁰⁸ *Brown v. Ames*, 201 F.3d 654, 658 (5th Cir. 2000) (quoting MELVILLE B. NIMMER, NIMMER ON COPYRIGHT § 1.01[B][1][c] (1999)); see also *Jarvis v. A&M Records*, 827 F. Supp. 282 (D.N.J. 1993); *Bi-Rite Enters., Inc. v. Button Master*, 555 F. Supp. 1188 (S.D.N.Y. 1983); *Apigram Publ’g Co. v. Factors, Etc., Inc.*, No. C78-525, 1980 WL 2047 (N.D. Ohio July 30, 1980); *Lugosi v. Universal Pictures*, 603 P.3d 425, 446-47 (Cal. 1979) (Bird, C.J., dissenting).

¹⁰⁹ *Laws v. Sony Music Entm’t, Inc.*, 448 F.3d 1134, 1141 (9th Cir. 2006).

plaintiff's persona for advertising, the claim is not preempted by the Copyright Act.¹¹⁰ When the singer's voice is merely imitated as opposed to being directly copied from an existing recording, the Ninth Circuit has held the right of publicity claim is not preempted: "A voice is not copyrightable. The sounds are not 'fixed.'"¹¹¹

Another line of publicity violation cases involves athletes and their depictions. The Seventh Circuit's early and much criticized decision held that players' performances in a baseball game were fixed in the recordings of those games:

[O]nce a performance is reduced to tangible form, there is no distinction between the performance and the recording of the performance for the purpose of preemption under § 301(a). Thus, if a baseball game were not broadcast or were telecast without being recorded, the Players' performances similarly would not be fixed in tangible form and their rights of publicity would not be subject to preemption.¹¹²

In that case the court held that because the broadcasts of the games had been recorded, the players' right of publicity claims were preempted.¹¹³ The right of publicity claimed by the baseball players was essentially a right to prevent rebroadcast of games whose broadcast rights were already owned by the clubs. In other words, the entirety of the alleged misappropriation was contained within a copyrighted medium.

In these preemption cases the reference to the recorded copy embodying the "persona" helps sort the preempted claims from the non-preempted claims. In that role the courts have settled on what could be viewed as a market-based test: is the exploitation complained of merely the exploitation of the fixed instantiation of persona, or is something more than just the fixed copy being exploited, serving other markets or other market-based purposes such as advertising.

II. CONSIDERING FIXATION'S NOTICE ROLE

In copyright law, fixation serves to provide some level of notice to a variety of audiences, depending on the context. Considering the audience for that notice and the strength of the notice provided demonstrates the extremely weak notice role fixation is currently playing in copyright.

¹¹⁰ See *id.* at 1139-41 (discussing *Sinatra v. Goodyear Tire & Rubber Co.*, 435 F.2d 711 (9th Cir. 1970), *Midler v. Ford Motor Co.*, 849 F.2d 460 (9th Cir. 1988), *Waits v. Frito-Lay, Inc.*, 978 F.2d 1093 (9th Cir. 1992), and *Downing v. Abercrombie & Fitch*, 265 F.3d 994 (9th Cir. 2001), which all concerned the use of singers' personas in advertising).

¹¹¹ *Midler v. Ford Motor Co.*, 849 F.2d 460, 462 (9th Cir. 1988).

¹¹² *Balt. Orioles, Inc. v. Major League Baseball Players Ass'n*, 805 F.2d 663, 674-76 (7th Cir. 1986).

¹¹³ *Id.* at 676.

A. *Copyrightability and the Claim of Federal Protection*

In the context of copyrightability, the audience for the notice that fixation provides includes both the author and those who encounter the physical manifestation of the work. The content of the notice provided to the author is that now, with this fixed copy, you may have a “work of authorship” that is protected by federal law. The work needs to contain original expression, but the fixation of that work marks the time at which the author can look to federal law for protection. Prior to that moment of fixation, the creator would have to find protection (if any) under state law.¹¹⁴

However, the fixation requirement is extremely easy to satisfy. Individuals routinely create fixed copies of expression in the normal course of everyday activities. Emailing; tweeting; leaving voice messages; snapping photos and posting them on Facebook, Instagram, Snapchat, etc.; and even streaming real-time video through Periscope or Meerkat are all means of communication that, in many ways, substitute for the live, face-to-face conversations and interactions that were more common at the time Congress drafted and passed the 1976 Copyright Act. These countless physical manifestations of communication are eligible for copyright protection.¹¹⁵ The cases explored in Section I.B.2 that found no copyright, at least in part, because of a lack of fixation seem to entangle the fixation determination with the concept of authorship. Because the fixation requirement, when not entangled with authorship questions, is so easily satisfied, the notice that fixation provides to creators is a weak signal at best.

Saying that fixation serves a notice function acknowledges the evidentiary role that fixation plays. In this evidentiary function, the fixation requirement helps to minimize abuse that might otherwise arise with post hoc descriptions of works of authorship for which there is no material object embodying the expression. However, as Professor Douglas Lichtman has described, “as a rule designed to address evidentiary issues, the modern [fixation] requirement has been implemented in a shockingly unambitious fashion.”¹¹⁶ Even if the fixed copy that gave rise to copyright has been destroyed, and even if no authorized copy remains, that does not destroy the copyright owner’s rights.¹¹⁷

¹¹⁴ See 17 U.S.C. § 102(a) (2012) (limiting the scope of copyright law to works that are “fixed”); *id.* § 301 (preempting state law claims that provide “rights that are equivalent to any of the exclusive rights within the general scope of copyright . . . in works of authorship that are fixed in a tangible medium of expression . . .”).

¹¹⁵ See *id.* § 102(a) (allowing fixation to be accomplished in “any tangible medium”).

¹¹⁶ Lichtman, *supra* note 50, at 732.

¹¹⁷ “The statute requires only that the original work be ‘fixed’ for a period of ‘more than transitory duration,’ not for the entire term of the copyright.” *Pac. & S. Co. v. Duncan*, 744 F.2d 1490, 1494 (11th Cir. 1984) (involving videotapes of television broadcasts that were destroyed by the copyright owner after seven days).

Viewing fixation as a notice, apart from its potential evidentiary role, we see that the definition requires a physical manifestation of a work of authorship that can be communicated or perceived by others.¹¹⁸ The fixation requirement for copyrightability also provides notice to others—those who encounter the fixed copy. The author's work of authorship must exist in a physical form at some point before it gives rise to the rights granted under the Copyright Act. It is that physical manifestation that permits others to determine the objective existence of a work. To the extent that a fixed copy notifies others of the authorship embodied in that copy, the fixed copy also provides proof of what was actually created and it provides evidence of what authorship is being claimed by the author.¹¹⁹ To infringe upon the rights of a copyright owner one must *copy from* the copyrighted work.¹²⁰

There are, however, many ways in which fixation fails as a notice-to-others mechanism. First, fixation only provides notice that there is a *potential* claim of copyright. That's all. Fixation does not provide any notice of what is original about the work of authorship embodied in the physical manifestation. It may be entirely original, or only incrementally original, or it may not be original at all.¹²¹ The formal notice requirements that were required prior to March 1, 1989, also provided just that—notice that there was a potential claim of copyright in the expression contained in that copy. While the formal notice requirements further provided some notice that at least someone might be interested in *asserting* those rights, it did not provide any more information

¹¹⁸ The definition of "fixed" requires that the embodiment be "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." 17 U.S.C. § 101.

¹¹⁹ Lichtman, *supra* note 50, at 730 ("Much as a patent marks the boundaries of a claimed invention, and a deed makes clear the borders associated with land, a fixation makes plain what is being claimed and allows that claim to be recorded as of a certain date.").

¹²⁰ See, e.g., Repp v. Webber, 132 F.3d 882, 889 (2d Cir. 1997) (considering infringement by determining access to an original, which would provide opportunity to copy from that original).

¹²¹ As Professor Wendy Gordon has observed:

Inevitably, the boundaries of intangibles will be less precise than the metes and bounds of realty, and the courts must be vigilant in enforcing copyright's limits lest the public be "chilled" in its proper use of the unprotected aspects of a work. If this vigilance is maintained, copyright's boundaries can work simultaneously to identify the staked claim over which others must respect the owner's entitlements and to identify the intellectual material open to use by all.

Wendy Gordon, *An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory*, 41 STAN. L. REV. 1343, 1383-84 (1989) (footnote omitted).

than fixation itself provides concerning the elements of the expression that might be protected by federal copyright law.¹²²

Second, and related, the fixation requirement provides very little indication that the author of the work has any intention of claiming or ever asserting copyright rights in the work. Technology has increased the quantity of works of authorship that meet the fixation requirement, thus weakening further the link between fixation and an intent to claim copyright in a work or authorship. Individuals routinely email and text today, when in the past they would have had telephone or face-to-face conversations that would not have resulted in the creation of any fixed copy. Email and text programs create fixed copies of works by default. The fixation of that expression cannot really be said to indicate authorial intent to claim copyright.

Third, the limited notice function performed by the fixation requirement works only when others encounter the expression through that fixed object. However, when one encounters expression through live performance, the fixation requirement does not necessarily provide notice of a potentially copyrightable work. That is because a live performance of a work of authorship may have been previously fixed or it can also be simultaneously fixed while it is being performed.¹²³ Additionally, the performance may itself be of a work that is subject to a separate copyright, such as a musical work, dramatic work, or other literary work that is being performed. In both cases, the audience for that live performance is not necessarily given any notice of the possible existence of a copyrighted work. Thus even when one is encountering unfixed expression, copyright may nonetheless protect elements of the expression, thereby further weakening the notice function of the fixation requirement.

Finally, fixation does not provide any notice of the duration of protection.¹²⁴ Previously, when publication with notice was required on all published copies, the duration was pegged to the year of first publication and the year of first publication was a required element of proper copyright notice. That combination provided significant notice to those who encountered the copies.¹²⁵ Fixation, on the other hand, provides no indication of whether

¹²² The registration of a derivative work does require the copyright owner to identify the material that is not original. COMPENDIUM, *supra* note 23, § 311.2. Thus, for this type of formality, there is some indication of at least what is not claimed to be original. Registration, however, is not a requirement of obtaining copyright protection.

¹²³ See *supra* Section I.A for a discussion of fixation simultaneous with live broadcast.

¹²⁴ For a much fuller discussion of this aspect of notice failure in copyright law, see generally Pamela Samuelson, *Notice Failures Arising From Copyright Duration Rules*, 96 B.U. L. REV. 667 (2016).

¹²⁵ Moving from a duration that is no longer measured based on the year of first publication but is instead tied to the life of the author plus a fixed term of years, see 17 U.S.C. § 302 (2012) (setting the duration as the author's life plus seventy years), makes

copyright protection remains in force for that work or how much longer the protection will last.

B. *Infringement*

When we consider the role that fixation plays in the context of infringement, we again see that fixation provides a kind of notice both to creators of potentially infringing copies and to others, particularly the copyright owners of the works being copied. When one creates a material object that embodies the expression of another, that material object triggers the potential for a particular type of infringement liability. If one does not create a physical manifestation, or the manifestation created is too fleeting, then if liability exists it will not be for a violation of the reproduction or distribution rights.

However, as with the fixation requirement in the context of copyrightability, the role of fixation as notice in infringement is incomplete. One can infringe the copyright owner's other rights without creating a fixed copy of the work. The public performance right does not require any fixed copy to infringe. Similarly, the derivative work right does not require a fixed copy.¹²⁶ Thus, the possibility of infringement liability remains even when one has not created a physical object that could interfere with the market for copies of the work.

Additionally, the ease of creating fixed copies in today's technologically steeped culture also weakens the notice role that fixation plays in the infringement context. It is exceedingly easy to create copies that satisfy the fixation requirement and thus may trigger infringement liability. The sheer, staggering quantity of copies created significantly lessens the likelihood of being held liable for any particular copy that is made.¹²⁷

III. BOLSTERING COPYRIGHT'S PURPOSE AND FIXATION'S NOTICE ROLE THROUGH A FOCUS ON MARKETS

Copyright's primary purpose is to benefit the public, specifically to promote the progress of knowledge and learning.¹²⁸ Copyright seeks to promote that progress by granting exclusive rights that will provide an incentive for creation

knowing the year of first publication of a copyright work no longer helpful in determining the copyright status of a many works.

¹²⁶ The Ninth Circuit imposes something like "fixation light" in the derivative work context. *See* *Micro Star v. FormGen Inc.*, 154 F.3d 1107, 1111 (9th Cir. 1998) (discussing the "requirement that a derivative work must assume a concrete or permanent form").

¹²⁷ *See* Tim Wu, *Tolerated Use*, 31 COLUM. J.L. & ARTS 617, 617-18 (2008) (observing the "magnitude" of the "mass low-value infringement" and suggesting alternatives for dealing with such "tolerated use").

¹²⁸ *Golan v. Holder*, 132 S. Ct. 873, 888 (2012) ("Congress' copyright authority is tied to the progress of science.").

and dissemination of new works of authorship.¹²⁹ “By establishing a marketable right to the use of one’s expression, copyright supplies the economic incentive to create and disseminate ideas.”¹³⁰ The fixation requirement serves this overarching purpose,¹³¹ but it would serve copyright’s purpose better if we explicitly recognized the characteristics of fixation that relate to the market function of physical manifestations in all three contexts in which the fixation requirement arises. In fact, the caselaw discussed in Section I.B above appears to demonstrate that courts are implicitly considering these market-based concerns.

Fixation for the purpose of determining copyrightability measures whether an author, or someone authorized by an author, has created an instantiation of a copyrightable work sufficiently stable for it to be exploited in some market for the work. Federal copyright law is not concerned with instantiations too evanescent to be enjoyed by others or to be exploited in a market for the work. As Professor Laura Heymann notes:

[T]he fixation requirement is, however opaquely, communicating something about what kinds of works are worth protecting: works that can be engaged with as things and commodities rather than as experiences, by a reader, listener, or viewer who is removed from the act of creation—in short, who is more consumer than audience.¹³²

As Professor Heymann puts it: “Until a work becomes a thing, it is difficult for it to become an article of commerce.”¹³³ Following this understanding of the role of fixation, the general every-day ephemera of the digital age should fail the fixation requirement, even if a physical manifestation of the expression exists for a limited period of time. These daily digital expressions are not meant to be enjoyed as a thing, but rather they are meant as a communication or as an experience.

Authorial intent should also factor into a determination of whether a fixation is sufficient for purposes of copyrightability. The definition of when a work is “fixed” requires that it be done “by or under the authority of the author.”¹³⁴ A fixation that preserves authorial expression so that others may perceive that

¹²⁹ WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 11-14 (2003) (describing the costs and benefits of the economic theory of property).

¹³⁰ *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 558 (1985); *see also Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003) (“[C]opyright’s purpose is to *promote* the creation and publication of free expression.”).

¹³¹ Heymann, *supra* note 1, at 849 (describing fixation’s role in indicating which works “can be propertized and thus subject to the economic incentives at the heart of copyright law”).

¹³² *Id.* at 856-57.

¹³³ *Id.* at 868-69 (footnote omitted).

¹³⁴ 17 U.S.C. § 101 (2012).

expression provides indicia of an intent that the work should be available for others to interact with at a point in time that is separated from the moment of its creation. If this type of intent were considered when assessing whether the fixation requirement for copyrightability has been satisfied, we could acknowledge when certain expression does not need the incentive of the market-based copyright rights for it to be created. After all, if an author lacks the intent for others to be able to experience the work later in time, how could the market-based rights of copyright be motivating the creation of the expression?

At the same time, some works are designed to be fleeting—ice sculptures in climates above freezing and sand sculptures built below the high tide line are but two examples. If the authors of those works create recordings of them, such as photographs or audiovisual footage of them, those physical manifestations demonstrate an authorial intent for others to be able to experience the physical manifestations (i.e., the photographs or the movies) of those works later in time, beyond the fleeting instantiations of the creations that, by design, disappeared. Those intentional recordings of fleeting works meant to allow others to experience the work, despite the work in its original form no longer existing, should satisfy the fixation requirement as they provide ample notice both to the author and to others of the copyright in the work.

In the preemption context, protection for works that are not fixed and cannot be exploited through their physical manifestations are left to the states. Sorting fixed from unfixed works by reference to market exploitation advances copyright's mission by focusing on instances where the market exploitation of the stable expression of authorship is at issue. In the instances where works are too inchoate to be exploited as stable expressions but rather something else of value is being exploited, those are left for state laws to protect, if at all.

Consider the state law protection for "persona" discussed in Section I.B.4 above. As the Ninth and Fourth Circuits have held, when what is at issue is the market for the stable recorded expression of an element of persona, that claim is a claim for federal copyright and attempts to achieve protection under state law will be preempted.¹³⁵ When, however, the persona claims involve the market value of persona and not just the embodiment in a particular physical manifestation, the state law claims will not be preempted by copyright. The notice provided by this fixation line is clear, and it can be explained by the different markets sought to be controlled by the claim at issue.

Finally, in the infringement context, instantiations that are too evanescent to interfere with the market for tangible manifestations of the copyrighted work¹³⁶

¹³⁵ See *supra* note 110 and accompanying text.

¹³⁶ In some ways this was the common sense result achieved in the *LoopNet* case discussed *supra* in Section I.B.3. There the court compared the copies made by ISPs, which it found were not sufficiently fixed, to those made when a computer user downloads a piece of software: "[W]hen the copyrighted software is downloaded onto the computer, *because it*

are not the concern of the reproduction and distribution rights. To the extent that the issue is the exploitation of other experienced-based markets, the copyright owner may have a claim under other rights granted in § 106. However, because there has been no fixed copy, both the author and others are on notice that the reproduction and distribution rights are not violated. Instead, analysis of the other rights of a copyright owner may be necessary. Those other rights involve their own requirements that must be satisfied for a finding of infringement. For example, the public performance right requires not only that the defendant “perform” the work,¹³⁷ but also that the performance be “public.”¹³⁸ Additionally, not all types of copyrighted works are granted public performance rights, and one type, sound recordings, are granted a limited type of public performance right.¹³⁹

One way to explain the Second Circuit’s decision in *Cablevision*, discussed in Section I.B.3, is that there was no market for the physical manifestation of the buffer copy of the broadcast that was being overwritten every 1.2 seconds. On the other hand, there was a market for the use of the RAM copy of software created by the MAI competitors in the *MAI Systems* case, discussed above.¹⁴⁰ The RAM copy was exploitable in the repair market in which the plaintiff copyright owner and defendant were competing.¹⁴¹

By focusing the inquiry on which market, if any, the defendant’s action may interfere with, the notice of which right may be at issue is clearer to both the author and the defendant. Protecting the copyright owner from unauthorized exploitations of the copyrighted work in markets that do not involve physical

may be used to serve the computer or the computer owner, it no longer remains transitory.” CoStar Grp., Inc. v. LoopNet, Inc., 373 F.3d 544, 551 (4th Cir. 2004) (emphasis added). The Fourth Circuit is acknowledging the market for the copy on the computer user’s computer and distinguishing it from the fleeting copies on the ISP’s servers that were of no use as “copies.” This approach to the market significance of the copies is also seen in European Union’s approach to what it refers to as “temporary copies.” Directive 2001/29/EC, of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 2001 O.J. (L 167) 10, art. 5(1). One of the requirements for those copies to be exempted from infringement liability is that those copies have “have no independent economic significance.” *Id.*

¹³⁷ See 17 U.S.C. § 101 (definition of “perform”).

¹³⁸ See *id.* (definition of “publicly”).

¹³⁹ See *id.* § 106(6) (granting sound recording copyright owners the exclusive right to publicly perform the work “by means of a digital audio transmission”).

¹⁴⁰ See *supra* note 89 and accompanying text.

¹⁴¹ Congress subsequently amended the Copyright Act to permit competition in the repair market without fear of infringement liability exposure. Digital Millennium Copyright Act, Pub. L. No. 105-304, § 302, 112 Stat. 2860, 2887 (1998) (codified at 17 U.S.C. § 117(c)) (providing that it is not an infringement when material is copied for the sole purpose of machine maintenance and repair).

manifestations of the copyrighted work is left to the other rights granted to copyright owners.

CONCLUSION

Fixation plays a notice function in copyright law. The audience for that notice includes both creators of copyrighted works and others. The cost of the notice provided by fixation is low. Concomitantly, the content of that notice, is however, quite weak. Fixation provides notice that it is federal copyright law that may provide protection and it is the reproduction and distribution rights that might be violated. Without that fixation, creators and others know that if there is protection it will stem from state law and, in the infringement context, if there is infringement it will be of the other rights granted to copyright owners. More explicit recognition of the role that markets play in understanding what constitutes a fixed copy not only is consistent with copyright's underlying purpose but would help strengthen the notice function of fixation in copyright law.