

Creative Sparks: Works of Nature, Selection, and the Human Author

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INTRODUCTION

It is now common knowledge that if you put a bunch of monkeys in a room with a typewriter, they will eventually reproduce the works of Shakespeare.¹ But according to the United States Copyright Office, if you give that same group of monkeys a camera, you do not get copyright in any pictures they may happen to take. In 2011, British wildlife photographer David Slater was in Indonesia when a group of crested black macaques began playing with his camera equipment and snapped some pictures, one of which went viral and proved temporarily profitable for Slater.² The popular image, known as the monkey selfie, can be seen below.³



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1. See Arthur R. Miller, *Copyright Protection for Computer Programs, Databases and Computer-Generated Works: Is Anything New Since CONTU?*, 106 HARV. L. REV. 977, 1042 (1993) ("We all have heard about the proverbial roomful of monkeys striking the keys of typewriters . . . with one of the monkeys eventually 'producing' Shakespeare's *Hamlet*."); Doug Gross, *Digital Monkeys with Typewriters Recreate Shakespeare*, CNN (Sept. 26, 2011), <http://www.cnn.com/2011/09/26/tech/web/monkeys-typewriters-shakespeare/> [<http://perma.cc/YB4U-T4UZ>] ("It's a time-honored adage about the laws of probability: Give 1 million monkeys 1 million typewriters and they'll eventually type the entire works of William Shakespeare.").

2. James Eng, *Monkey Selfie Can't Be Copyrighted, U.S. Regulators Confirm*, NBC NEWS (Aug. 21, 2014), <http://www.nbcnews.com/tech/social-media/monkey-selfie-cant-be-copyrighted-u-s-regulators-confirm-n186296> [<http://perma.cc/4TBE-P9F2>].

3. *Id.* The term "selfie" is defined as "an image of oneself taken by oneself using a digital camera especially for posting on social networks." MERRIAM-WEBSTER (2015), <http://www.merriam-webster.com/dictionary/selfie> [<http://perma.cc/F542-EBXP>].

4. The monkey selfie (2011), http://upload.wikimedia.org/wikipedia/commons/4/4e/Macaca_nigra_self-portrait_large.jpg.

The image became the source of dispute when Wikipedia refused Slater's request to remove the image from its website and asserted that the photograph was taken by an animal and was therefore uncopyrightable.⁵ Seemingly in response to this squabble, the Copyright Office updated the section on the "human authorship" requirement in the Third Edition of its Compendium, stating that it "will not register works produced by nature, animals, or plants" and cites, *inter alia*, "[a] photograph taken by a monkey" as an example.⁶ Referring to *Burrow-Giles Lithographic Co. v. Sarony*,⁷ the Compendium asserts that "[t]o qualify as a work of 'authorship' a work must be created by a human being" and "[w]orks that do not satisfy this requirement are not copyrightable."⁸

Given the Copyright Office's explicit rejection of any cognizable copyright protection in photographs taken by a monkey, any legal action taken by Slater is likely to fail.⁹ Although Slater's situation appears to be an open and shut case when viewed in isolation, the occurrence triggers larger issues, especially where artists may be prevented from capitalizing on works that are capable of producing substantial income.¹⁰

This Note seeks to break down and understand the Copyright Office and circuit courts' aversion to recognizing a protectable copyright interest in works "authored" by nature and explore any inconsistencies. It seems clear that something in the copyright system is out of sync with reality when countless works of little to no cultural significance can claim copyright protection, while other works that exhibit far more intellectual, physical, or monetary investment will be left defenseless. The monkey selfie debacle and other examples will be used as specimens for understanding the issues at play, as other cases and theories are investigated.

Part I will evaluate the constitutional requirements for copyright, namely originality and authorship. Part II will compare and contrast the different consequences and policy concerns raised by either granting or denying authors like

5. Danny Cevallos, *When a Monkey Takes a Selfie . . .*, CNN OPINION (Aug. 18, 2014), <http://www.cnn.com/2014/08/08/opinion/cevallos-monkey-selfie-copyright/> [http://perma.cc/8SDQ-F2H4].

6. U.S. COPYRIGHT OFFICE, COMPENDIUM III: COPYRIGHT OFFICE PRACTICES §313.2 (2014).

7. *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884) ("An author in that sense is 'he to whom anything owes its origin; originator; maker; one who completes a work of science or literature.'")

8. COMPENDIUM III, *supra* note 6, §313.2.

9. Although the Copyright Act requires registration of a copyright claim prior to any civil action, a civil action may still be instituted where registration has been refused. 17 U.S.C. § 411(a) (2012). But courts have recognized that the Register "has the authority to interpret the copyright laws" and "its interpretations are entitled to judicial deference if reasonable." *Marascalco v. Fantasy, Inc.*, 953 F.2d 469, 473 (9th Cir. 1991). The Compendium, as an internal agency manual, does not garner *Chevron* deference, but is deferred to "only to the extent that those interpretations have the 'power to persuade.'" *Christensen v. Harris Cnty.*, 529 U.S. 576, 587 (2000).

10. Anthony Bond, *Monkey Selfie: US Officials Rule that NOBODY Owns the Copyright on Cheeky Image that Went Viral*, MIRROR (Aug. 22, 2014), <http://www.mirror.co.uk/news/world-news/monkey-selfie-officials-rule-nobody-4088663> ("Mr. Slater said: 'It makes me very angry. I'm a professional photographer—it costs me over £2,000 to do the trip. It's my livelihood. You take 20,000 shots to get one image that sells, it was potentially a good earner for me, I've lost over £10,000 pounds because of it.'").

Slater a copyright interest in their work. As will be shown, denying Slater and others copyright only serves to discredit artistic selection and reduce the number of works being disseminated. In Part III, the Note will propose a two pronged test that on the one hand satisfies the narrow confines of obtaining a copyright claim, while maintaining a strong public domain on the other. Finally, in Part IV, the Note will discuss how the issues presented in the preceding sections are relevant to the discussion of machine- or computer-generated works and that many of the same policy concerns arise and lead to similar conclusions. The Note, at its core, will argue that selection, in combination with constructing the circumstances that led to the existence of the work, can, in certain situations, constitute sufficient originality and authorship to warrant copyright protection for certain works and their authors.

I. THE CONSTITUTIONAL REQUIREMENTS

The Compendium's explicit rejection of extending copyright protection to works "produced by nature, animals, or plants" does not lack cognizable grounding in the Copyright Act or the judicial interpretation of it. Copyright protection subsists in "original works of authorship fixed in any tangible medium of expression."¹¹ Thus, the copyright statutory framework can be boiled down to three essential components: (1) originality; (2) authorship (which constitutes the bulk of Part I's analysis); and (3) fixation (which is not the subject of the present investigation, but can prove fatal and problematic for works incorporating natural elements).¹² Both "original" and "authorship" are conspicuously missing from the definitions provided in §101 of the Copyright Act and yet, as will be shown, each component finds its way into analyzing whether a work of nature contains any copyrightable elements, and that analysis is essential to understanding the processes and logic at work.¹³

A. ORIGINALITY

The originality requirement for copyright protection is no stranger to judicial scrutiny, as it is "[t]he *sine qua non* of copyright" and is "a constitutional requirement."¹⁴ As the Supreme Court has recognized, the bar for what constitutes sufficient originality to obtain copyright protection in a work is astoundingly low, finding that "[t]he vast majority of works make the grade quite easily, as they possess some creative spark, 'no matter how crude, humble or obvious' it might be."¹⁵

The sufficiency of originality contributed to a work need only be more than a

11. 17 U.S.C. § 102(a) (2012).

12. See *Kelley v. Chi. Park Dist.*, 635 F.3d 290 (7th Cir. 2011). For an in-depth discussion of how the Seventh Circuit erred in that case, see Lily Ericsson, *Creative Quandary: The State of Copyrightability for Organic Works of Art*, 23 SETON HALL J. SPORTS & ENT. L. 359 (2013).

13. See 17 U.S.C. § 101 (2012).

14. *Feist Publ'ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 345–346 (1991).

15. *Id.*

“merely trivial” variation to fall within the protective confines of copyright.¹⁶ More importantly, the Second Circuit in *Alfred Bell v. Catalda Fine Arts* stated that the contribution itself does not even require original intent at the point of creation; only later conscious selection, finding that an author’s bad eyesight or a variation caused by a sudden clap of thunder, could provide sufficient copyrightable variation.¹⁷ Given the creation-friendly bar set by our courts, countless “works” of little to no significance will garner copyright protection.¹⁸

And yet, while shopping lists and millions of human selfies taken daily will make the grade, potentially labor intensive works incorporating natural elements (and their authors) will be excluded from claiming copyright protection.¹⁹ If we look in isolation at whether the monkey selfie is “original” in the common sense of the word, it certainly passes muster if its sudden popularity serves as any evidentiary proof.²⁰ But originality is not on its own sufficient for copyright protection.

B. AUTHORSHIP

Although the term “original” may make or break a copyright claim, it cannot be understood without reference to the author, who is at “the heart of copyright.”²¹ As the Supreme Court has interpreted it, “original” and “authorship” are to be considered in tandem. “Original . . . means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity.”²² Thus, to claim copyright protection over a work containing the requisite creative spark, an author must be “he to whom anything owes its origin; originator; maker.”²³

The simplicity of the Supreme Court’s definition is deceiving. If all the

16. *Alfred Bell & Co. v. Catalda Fine Arts*, 191 F.2d 99, 103 (2d Cir. 1951).

17. *Id.* at 105 (“A copyist’s bad eyesight or defective musculature, or a shock caused by a clap of thunder, may yield sufficiently distinguishable variations. Having hit upon such a variation unintentionally, the ‘author’ may adopt it as his and copyright it.”).

18. Jessica Litman, *The Public Domain*, 39 EMORY L. J. 965, 974 (1990) (“Copyright vests automatically in your shopping lists, your vacation snapshots, your home movies, and your telephone message slips.”); David Nimmer, *Copyright in the Dead Sea Scrolls: Authorship and Originality*, 38 HOUS. L. REV. 1, 177 (2001) (“Copyright protection applies equally to works of ‘high authorship’ and to works of emphatically ‘low authorship.’”).

19. Darrell Etherington, *Instagram Reports 90M Monthly Active Users, 40M Photos Per Day and 8500 Likes Per Second*, TECHCRUNCH (Jan. 17, 2013), <http://techcrunch.com/2013/01/17/instagram-reports-90m-monthly-active-users-40m-photos-per-day-and-8500-likes-per-second/> [http://perma.cc/A7RT-DETA] (As of 2013, forty million images are uploaded to Instagram every day.).

20. Olivier Laurent, *Monkey Selfie Lands Photographer in Legal Quagmire*, TIME (Aug. 6, 2014), <http://time.com/3393645/monkey-selfie-lands-photographer-in-legal-quagmire/> [http://perma.cc/6BDM-KPD2] (“The image was an instant Internet phenomenon, guaranteeing financial success for the British photographer.”)

21. Jane C. Ginsburg, *The Concept of Authorship in Comparative Copyright Law*, 52 DEPAUL L. REV. 1063, 1064 (2002).

22. *Feist Publ’ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 345 (1991) (quoting M. NIMMER & D. NIMMER, 1 COPYRIGHT §§ 2.01[A], [B] (1990)) (emphasis added).

23. *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

peripheral nuances of copyright jurisprudence can be stripped away, the central tug of war taking place is that between promoting creation and dissemination of works for the public good on the one hand, and granting authors a monopoly over their creative expressions on the other.²⁴ The intellectual property clause gives Congress the power to “promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”²⁵ The rights awarded to authors are therefore the wellspring as well as the cost we pay for the copyright schema.

What constitutes authorship? What constitutes creation? We would like to think that authors and artists conjure up original thoughts and give them form through their expression, but the “process of authorship, however, is more equivocal than that romantic model admits” and authorship is closer to selection, arrangement and translation of preexisting elements than pure original creation.²⁶ But this is not unexplored territory for copyright disputes. The defendant in *Burrow-Giles* asserted that a photograph, “being a reproduction, on paper, of the exact features of some natural object, or of some person, is not a writing of which the producer is the author.”²⁷ The Court rejected this assertion, finding that the photograph in question was the plaintiff’s “own original mental conception,” as he had, *inter alia*, posed the subject (Oscar Wilde), selected the costume and the draperies and had arranged the light and shade, all of which came together in the picture to constitute a cognizable copyright.²⁸

Of course, despite being able to claim the safety of copyright protection in his photograph, Sarony certainly could not claim copyright over the act of taking photographs, over Oscar Wilde’s face or body, or over the act of arranging the draperies or choices of light and shade in general.²⁹ Their selection and arrangement, though, proves that in copyright, the whole is greater than the sum of its parts. Thus, the Supreme Court recognized protection in factual compilations “so long as they are made independently by the compiler and entail a minimal degree of creativity.”³⁰ Factual compilations may have a cognizable copyright,

24. Peter Jaszi, *Toward a Theory of Copyright: The Metamorphoses of “Authorship”*, 1991 DUKE L.J. 455, 463 (1991) (“On the one hand, copyright aims to promote public disclosure and dissemination of works of ‘authorship’; on the other hand, it seeks to confer on the creators the power to restrict or deny distribution of their works.”); *see also* Golan v. Holder, 132 S. Ct. 873, 889 (2012) (“Our decisions correspondingly recognize that ‘copyright supplies the economic incentive to create *and disseminate* ideas.’”) (quoting Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 558 (1985)).

25. U.S. CONST. art. 1, § 8, cl. 8.

26. *See* Litman, *supra* note 18, at 966.

27. *Burrow-Giles*, 111 U.S. at 56.

28. *Id.* at 60.

29. 17 U.S.C. § 102(b) (2012) (“In no case does copyright protection . . . extend to any idea, procedure, process, system, method of operation”); *Toney v. L’Oreal USA, Inc.*, 406 F.3d 905, 910 (7th Cir. 2005) (“A person’s likeness—her persona—is not authored and it is not fixed.”); *Aliotti v. R. Dakin & Co.*, 831 F.2d 898, 901 (9th Cir. 1987) (“Appellants therefore may place no reliance upon any similarity in expression resulting from either the physiognomy of dinosaurs or from the nature of stuffed animals.”).

30. *Feist Publ’ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 348 (1991).

albeit “thin,” but a copyright nonetheless.³¹

More importantly for the case at hand and others like it, “United States case law admits the possibility of what I will call ‘accidental authorship,’ creativity stumbled upon rather than summoned as an act of will.”³² The Second Circuit recognized in *Bell* that the accidental author could adopt (select) the accident as his own and claim copyright over it. Thus, as in the initial purposeful creation, the later selection of the fortuitously stumbled upon variation can supply a cognizable copyright claim, as long as its adoption, accidental or not, was intentional.³³ Intent, it would seem, carries with it force as a central principle in authorship.³⁴

To reify this assertion, intent carries considerable weight in joint works.³⁵ How the circuit courts adjudicate claims of joint authorship is illuminating where, at least in both the Second and Ninth Circuits, manifestations of intent to be joint authors is dispositive.³⁶ Thus we see that intent to author plays a crucial role in the copyright framework.

II. APPLICATION, APPARENT RATIONALE, AND INCENTIVES

Applying the above principles to Slater’s situation, he did not “make” the image in the normal sense of the word and is arguably not a traditional author.³⁷ He was not holding the camera and he did not press the shutter button.³⁸ But it is well established that an author need not be the *physical* composer in actuality, i.e., the one whose hands hold and use the tools that produce the work, such as the pen, computer keyboard, or camera.³⁹

31. *Id.* at 349 (“This inevitably means that the copyright in a factual compilation is thin.”).

32. Ginsburg, *supra* note 21, at 1086 (citing *Alfred Bell & Co. v. Catalda Fine Arts*, 191 F.2d 99, 103 (2d Cir. 1951)).

33. Nimmer, *supra* note 18, at 208 (“Indeed, even if Christu’s inspiration came from uncopyrightable garbage, his adoption of it imbues it with protection, because of the magical infusion of intent.”).

34. Nimmer, *supra* note 18, at 204 (“[I]t would seem that intent is a necessary element of the act of authorship.”).

35. 17 U.S.C. § 101 (2012) (“A ‘joint work’ is a work prepared by two or more authors with the *intention* that their contributions be merged into inseparable or interdependent parts of a unitary whole.” (emphasis added)).

36. See *Richlin v. Metro-Goldwyn-Mayer Pics., Inc.*, 531 F.3d 962, 969 (9th Cir. 2008) (holding that objective manifestations of a shared intent to be coauthors is one factor in considering whether a work is jointly authored); *Thomson v. Larson*, 147 F.3d 195, 202 (2d Cir. 1998) (holding that “a specific finding of mutual intent remains necessary” for co-authorship).

37. See *Cnty. for Creative Non-Violence v. Reid*, 490 U.S. 730, 737 (1989) (“As a general rule, 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.”).

38. Abby Phillip, *If a Monkey Takes a Selfie in the Forest, Who Owns the Copyright? No One, Says Wikimedia*, WASH. POST: THE INTERSECT (Aug. 6, 2014), <http://www.washingtonpost.com/news/the-intersect/wp/2014/08/06/if-a-monkey-takes-a-selfie-in-the-forest-who-owns-the-copyright-no-one-says-wikimedia/> [http://perma.cc/3UFM-3QFQ] (Slater set up the equipment, but “the monkeys had grabbed his camera and started snapping pictures.”).

39. See *Adrien v. S. Ocean*, 927 F.2d 132, 135 (3d Cir. 1991) (“These writers are entitled to copyright protection even if they do not perform with their own hands the mechanical tasks of putting the material into the form distributed to the public.”); Ginsburg, *supra* note 21, at 1072 (“[A]uthorship places mind over muscle . . .”).

Slater and others are thus not deprived of remedy because they did not physically manufacture or produce the work in question. Rather, the argument goes that a photograph taken by a monkey, a mural painted by an elephant and other such examples are not the “original intellectual conceptions of the author,” but merely the products of nature.⁴⁰

That rationale, though facially valid, produces problematic and concerning cases in the circuit courts. In the Seventh Circuit’s *Kelley v. Chicago Park District*, the court found that a “living garden” “press[ed] too hard on [the] basic principles” of authorship and fixation to be copyrightable.⁴¹ “Wildflower Works,” the living garden at issue in the case, was a piece of “living art,” conceived of and executed by Chapman Kelley, a nationally recognized artist.⁴² The work, which received critical and popular acclaim, spanned across 1.5 acres of parkland, was set within gravel and steel borders, and initially cost Kelley upwards of \$152,000 to implement and took a number of volunteers to maintain.⁴³ In designing the garden, Kelley selected around fifty different species of wildflower based on aesthetic, environmental, and cultural reasons, choosing flowers that would survive the Chicago climate and would blossom sequentially.⁴⁴

Despite acknowledging that the garden may be recognized by the community as being a work of “postmodern conceptual art,” the court found that gardens simply are not authored.⁴⁵ Even though Kelley selected, arranged, and planted the flowers, the court found that flowers “originate in nature, and natural forces—not the intellect of the gardener—determine their form, growth, and appearance” and their initial arrangement is “not the kind of authorship required for copyright.”⁴⁶

One can imagine that a discussion of the *Kelley* decision along with Slater’s situation and other claims based on driftwood or the shape of a natural stone and the like would naturally come to the conclusion that these works sound more like discovery than creation. The Copyright Act explicitly excludes copyright protection from extending to any discovery.⁴⁷ The Supreme Court thus recognized the “well-established” proposition that “facts are not copyrightable.”⁴⁸ A person who discovers the existence of a fact has not created that fact, as he only reports its existence.⁴⁹ So the argument would go that a tree branch or a stone or a flower are

40. COMPENDIUM III, *supra* note 6, §§ 306, 313.2 (citing claims based on a mural painted by an elephant, appearance of actual animal skin, driftwood, and natural stones).

41. *Kelley v. Chi. Park Dist.*, 635 F.3d 290, 304 (7th Cir. 2011).

42. *Id.* at 291.

43. *Id.* at 291–293.

44. *Id.* at 293.

45. *Id.* at 304.

46. *Id.*

47. 17 U.S.C. § 102(b) (2012).

48. *Feist Publ’ns v. Rural Tel. Serv. Co.*, 499 U.S. 340, 344 (1991).

49. *Id.* at 347 (“The first person to find and report a particular fact has not created the fact; he or she has merely discovered its existence. To borrow from *Burrow-Giles*, one who discovers a fact is not its ‘maker’ or ‘originator.’”); *see also* Melville B. Nimmer, *The Subject Matter of Copyright Under the Act of 1976*, 24 UCLA L. REV. 978, 1015–16 (1977) (“The ‘discoverer’ of a scientific fact as to the nature of the physical world, an historical fact, a contemporary news event, or any other ‘fact,’ may not claim to be the ‘author’ of that fact. If anyone may claim authorship of facts, it must be the Supreme

all closer to a “fact” than an original work of authorship, and discovering the existence of that fact is therefore not protectable creation.

In line with this principle, no one can “author” or claim copyright in an animal’s physiology or physiognomy, as noted above.⁵⁰ In *Satava v. Lowry*, the Ninth Circuit thus found that the artist of popular glass-in-glass jellyfish sculptures could not prevent others from copying aspects of his work that resulted from jellyfish physiology.⁵¹ The plaintiff was a glass artist who had been designing and creating glass-in-glass jellyfish sculptures for a number of years, many of which were sold across the country and generated significant revenue.⁵² The defendant, another glass artist who admitted having access to Satava’s works, began making similar sculptures that confused consumers.⁵³

Recognizing that a combination of unprotectable elements may qualify for protection, the court held that those combinations would be “eligible for copyright protection only if those elements are numerous enough and their selection and arrangement original enough that their combination constitutes an original work of authorship.”⁵⁴ Applying this holding to Satava’s sculptures, the court found that the works fell short of the standard as the selection of the glass, the bright colors, the vertical orientation, and the “stereotyped jellyfish form, considered together” lacked the requisite originality to merit protection.⁵⁵

Importantly, the Ninth Circuit did not say that Satava’s work was completely devoid of copyrightable elements. Satava does possess a copyright in his work, but it is a “thin copyright that protects against only virtually identical copying.”⁵⁶ That is to say, the copyright is in the details: “the distinctive curls of particular tendrils; the arrangement of certain hues; the unique shape of jellyfishes’ bells.”⁵⁷ In so holding, the court emphasized that ideas of animals are “first expressed by nature, are the common heritage of human kind, and no artist may use copyright law to prevent others from depicting them.”⁵⁸

Thus in both *Kelley* and *Satava* it becomes apparent that the circuit courts are striving to delineate a source of raw material in the public domain that they simply will not recognize as creating any cognizable copyright claims at all (*Kelley*) or in some circumstances allowing for only very narrow protections (*Satava*). Judicial moves to carve out sources of common or stock elements that are immune to individual copyright claims have a long history in copyright jurisprudence, often alluded to as *scènes à faire*.⁵⁹ Natural elements (flowers, trees, stones, pictures

Author of us all. The discoverer merely finds and records.”).

50. See *supra* note 29.

51. *Satava v. Lowry*, 323 F.3d 805, 810 (9th Cir. 2003).

52. *Id.* at 807.

53. *Id.* at 808–09.

54. *Id.* at 811.

55. *Id.*

56. *Id.* at 812.

57. *Id.*

58. *Id.* at 813.

59. *MyWebGrocer, LLC v. Hometown Info, Inc.*, 375 F.3d 190, 194 (2d Cir. 2004) (“*Scènes à faire* are unprotectible elements that follow naturally from a work’s theme rather than from an author’s

taken by monkeys) are perhaps best understood as the planet's or mother nature's *scènes à faire*, elements that "are the common heritage of human kind" and forever vested in the public domain.

But both the Seventh and Ninth Circuits assert that they are not closing the door entirely to works containing natural elements.⁶⁰ We know that although facts are not copyrightable, compilations of facts generally are as long as the compilations feature an original selection or arrangement of the facts.⁶¹ So how does one extrapolate an intelligible principle that is applicable in future cases?

Ignoring the fixation issue discussed in *Kelley* and accepting that works can incorporate natural elements and still claim copyright, it is hard to understand where "Wildflower Works" went wrong. "While the individual wildflowers themselves are not original to Mr. Kelley, the selection, coordination, and arrangement of the flowers are completely original to him."⁶² The Seventh Circuit conceded that the garden "plainly possess[ed] more than a little creative spark."⁶³

One of the pillars of copyright jurisprudence is that judges should refrain from evaluating the artistic merit and potential value of a work.⁶⁴ The hands-off approach has its origins in *Bleistein v. Donaldson Lithographing Co.* in which Justice Holmes found that it "would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits."⁶⁵ The "danger" spoken of is that "copyright would be denied to pictures which appealed to a public less educated than the judge" and that "have a commercial value[.]"⁶⁶

It is therefore difficult to read both the Seventh and the Ninth Circuit opinions and not feel that future claimants and scholars of copyright jurisprudence have been shortchanged. Of course, the deep-seated aversion to granting individual authors a monopoly over naturally occurring objects or elements has substantial backing in a variety of sources. As we have discussed, copyright does not extend to facts or

creativity."); Litman, *supra* note 18, at 987–88 ("Scènes à faire . . . are the common stock of literary composition—'clichés'—to which no one can claim literary ownership.") (quoting Schwarz v. Universal Pics. Co., 85 F. Supp. 270, 278 (S.D.Cal.1945)).

60. *Kelley v. Chi. Park Dist.*, 635 F.3d 290, 305 (7th Cir. 2011) ("We are not suggesting . . . that artists who incorporate natural or living elements in their work can *never* claim copyright."); *Satava*, 323 F.3d at 812 ("We do not hold that realistic depictions of live animals cannot be protected by copyright We recognize, however, that the scope of copyright protection in such works is narrow.").

61. *Feist Publ'ns v. Rural Tel. Serv. Co.*, 499 U.S. 340, 344 (1991).

62. *Ericsson*, *supra* note 12, at 376 (pointing out that this is analogous to the photograph in *Burrow-Giles*, in which the copyright protection lay in the selection and arrangement of the constituent elements of the picture).

63. *Kelley*, 635 F.3d at 303.

64. *Nimmer*, *supra* note 18, at 201 ("Judges simply have traditionally eschewed esthetic judgments in copyright cases.").

65. 188 U.S. 239, 251 (1903); *see also* *Esquire, Inc. v. Ringer*, 591 F.2d 796, 805 (D.C. Cir. 1978) (stating that judges "have no particular competence to assess the merits of one genre of art relative to another. And to allow them to assume such authority would be to risk stultifying the creativity and originality the copyright laws were expressly designed to encourage.").

66. *Bleistein*, 188 U.S. at 251–52.

discoveries,⁶⁷ and no one can claim stock elements or *scènes à faire* as their own.⁶⁸ Protecting the public domain is desperately important if we keep in mind that the public domain provides the raw material that makes authorship possible.⁶⁹

Moreover, the animosity also appears to be in line with the incentive structures that are embedded in the intellectual property clause.⁷⁰ It is well accepted that the clause gives Congress the power to encourage authorship (and thus “promote the progress of science and useful arts”) by giving authors protection in the ability to seek remuneration for their work.⁷¹ This theory is supported by a plain reading of the clause which gives Congress the power to promote progress *by* giving authors exclusive rights for a limited time. Thus, the clause provides a means to an end: promoting the progress of science (the end) by giving authors exclusive rights in their works (the means).

The Supreme Court has endorsed this reading, finding that the monopoly granted to authors serves a public purpose by motivating creative activity.⁷² Therefore, granting individuals a monopoly over the naturally occurring designs of a stone or a tree branch or a picture taken by a monkey does not promote creative activity, *per se*. If one stumbles upon an interesting stone in the park or finds that the bark on the trunk of a tree looks like a monkey,⁷³ giving copyright protection to the finder does not on its face protect the “fruits of intellectual labor.”⁷⁴ It would only be protecting someone’s fortuitous discovery.

But the actual creation of works constitutes only half the formula in serving the public good. A groundbreaking novel does little for the progress of science and the useful arts if it never sees the light of day. Thus, the Supreme Court has found dissemination to be of equal importance as creation.⁷⁵ The intellectual property

67. 17 U.S.C. § 102(b) (2012).

68. *Satava v. Lowry*, 323 F.3d 805, 812 (9th Cir. 2003).

69. Litman, *supra* note 18, at 967.

70. U.S. CONST. art. I, § 8, cl. 8.

71. William M. Landes and Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326 (1989) (“Copyright protection—the right of the copyright’s owner to prevent others from making copies—trades off the costs of limiting access to a work against the benefits of providing incentives to create the work in the first place.”); Litman, *supra* note 18, at 970 (“Copyright law is a legal scheme, prescribed in the Constitution and put in place by Congress, to encourage the enterprise of authorship.”).

72. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984) (“[T]he limited grant is a means by which an important public purpose may be achieved. It is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired.”).

73. Gillian Murdoch, *Singapore’s “Magic Monkey” Trees Inspire Cult, Cynics*, REUTERS (Sept. 24, 2007), <http://www.reuters.com/article/2007/09/24/us-singapore-trees-idUSSP16732320070924> [<http://perma.cc/N8F6-NWJW>] (“The discovery of two ‘monkey heads’ poking out of the bark of an otherwise non-descript African Mahogany tree have sparked a minor craze in the southeast Asian state, as devotees seek [lucky lottery] numbers from what they believe to be a god living in the tree.”); The “Monkey God Tree” in Singapore (Sept. 16, 2007), http://api.sg/main/index.php?option=com_content&view=article&catid=57:special-articles&id=96:solved-the-case-of-the-singapore-monkey-tree [<http://perma.cc/QY9D-5TS7>].

74. COMPENDIUM III, *supra* note 6, §306, quoting Trade-Mark Cases, 100 U.S. 82, 94 (1879).

75. *Golan v. Holder*, 132 S. Ct. 873, 889 (2012) (“Our decisions correspondingly recognize that ‘copyright supplies the economic incentive to create *and disseminate* ideas.’”) (quoting Harper & Row,

clause itself does not purport to limit Congress's role to incentivizing creation alone.⁷⁶ In actuality, "[a]ny attempt to locate with the Framers the proposition that copyright may be given only as a reward to creativity is an exercise in revisionist history."⁷⁷ Regardless of the Framers' exact intentions, the public good demands creation and subsequent dissemination of works.

How then does denying copyright protection to Slater or Kelley promote these twin aims? Or, stated differently, how would granting copyright protection abrogate the twin aims of creation and dissemination? The monkey selfie is a variation that Slater "hit upon . . . unintentionally."⁷⁸ Like the clap of thunder, the picture was caused by an unpredictable natural occurrence and Slater wants to "adopt it as his [own]."⁷⁹ Does this truly press too hard on the basic principles of authorship?

There are certainly strong arguments to be made that giving Slater, or someone who finds an interesting-looking stone, a cognizable copyright claim in the object promotes and rewards harmful behavior. The public domain "is the law's primary safeguard of the raw material that makes authorship possible."⁸⁰ Granting Slater and others copyright protection in their "works" could potentially do two things: (1) reduce the raw material available in the public domain for future authorship by encouraging others to scour natural resources in search of potentially profitable objects; and (2) create a flood of frivolous litigation.

Firstly, the amount of raw material available might be reduced by persons physically removing potentially valuable objects from their natural habitats. The danger in physically removing naturally occurring objects or elements from their environments speaks for itself. Fear of this occurring goes into the repugnancy of encouraging persons to scour natural environments for worthwhile objects (stones, tree branches, driftwood, etc.) and remove them for profit, thus reducing the natural beauty of the landscape for all common spectators and future authors.

This analysis, of course, does not apply to Slater's situation. Granting Slater a copyright interest in the picture does not physically remove a natural object or alter a natural environment. Rather, it may encourage animal owners or others to use animals as a tool for creating economically valuable works. But that ship seems to have sailed, as animal-made art is an "international trend."⁸¹ If the popularity of the monkey selfie was not sufficient evidence of demand, other examples of

Publishers, Inc. v. Nation Enters., 471 U.S. 539, 558 (1985).

76. *Id.* at 888 ("[N]othing in the text or history of the Copyright Clause, moreover, confines the 'Progress of Science' exclusively to 'incentives for creation.'").

77. Thomas Nachbar, *Constructing Copyright's Mythology*, 6 GREEN BAG 2d 37, 44 (2002).

78. Alfred Bell & Co. v. Catalda Fine Arts, 191 F.2d 99, 105 (2d Cir. 1951).

79. *Id.*

80. Litman, *supra* note 18, at 967.

81. Teresa Annas, *Animals Earn Their Keep in Hampton Roads and Abroad with Art*, PILOT ONLINE (Aug. 11, 2007), <http://hamptonroads.com/node/309221> ("Following an international trend, local zoos and aquariums are turning into art academies for critters. The aquarium's harbor seals also paint pictures, as do the elephants at the Virginia Zoological Park in Norfolk and some snakes and turtles at the Virginia Living Museum in Newport News.")

lucrative animal-made art should put the argument to rest.⁸²

The second concern is the ever-present specter of the flood of frivolous litigation filling court dockets across the country.⁸³ Denying copyright protection to Slater and others is an effective way of filtering out potentially frivolous claims. It also works to prevent saddling courts with difficult legal questions and doling out the appropriate remedies. No copyright means no opening of “Pandora’s Box.”⁸⁴

Reciprocally, denying Slater, Kelley, and others copyright protection may have multiple negative effects: it may (1) discourage creation and/or dissemination of works that incorporate natural elements;⁸⁵ (2) reduce the number of valuable works in the public domain and available for fair use; (3) discredit and depreciate the intellectual labor involved in recognizing and selecting objects with artistic, aesthetic, or cultural value; and (4) encourage “discoverers” to alter natural works and insert sufficient copyrightable contributions to warrant protection.

First, as discussed above, copyright serves as the quid pro quo mechanism for encouraging authors to create and disseminate works.⁸⁶ Naturally if we take away an author’s reliance on being rewarded the exclusive rights in their works, we at least run the risk that the work will not be created or disseminated at all. Authors, knowing that their works may fail to garner copyright protection and fail to generate any remuneration for their efforts, may choose not to create works incorporating natural elements.⁸⁷ If the authors choose to create the works, they may be hesitant to disseminate the works freely and run the risk that the work will either be entirely appropriated as in Slater’s case, or that derivative works will be freely created.⁸⁸

Second, although the public domain is the wellspring of raw material that makes

82. See, e.g., Graciela Flores, *When I See an Elephant . . . Paint?*, THE SCIENTIST (June 1, 2007), <http://www.the-scientist.com/?articles.view/articleNo/25148/title/When-I-see-an-elephant—paint-/> (reporting that a painting by Ruby, a female elephant at the Phoenix Zoo, in Arizona, sold for \$25,000).

83. See Marin K. Levy, *Judging the Flood of Litigation*, 80 U. CHI. L. REV. 1007, 1008 (2013) (“Over the past several decades, the Supreme Court has increasingly considered a particular kind of argument: that it should avoid reaching decisions that would ‘open the floodgates of litigation.’”).

84. See Petition for Writ of Certiorari at 17, n.6, *Kelley v. Chi. Park Dist.*, 132 S. Ct. 380 (2011) (No. 11-101) (“A holding that some gardens are sufficiently original to be copyrighted would not, as the court seemed to fear, open a Pandora’s Box—since, as the court already concedes, blueprints and plans for gardens and landscape designs are already subject to copyright.”).

85. See Ericsson, *supra* note 12, at 382 (“Such a disservice to innovative contemporary artists will significantly hinder development in ground-breaking fields such as bio-art and eco-art, as well as in more traditional art forms that use natural materials. Without the possibility of copyright protection, artists who work in these fields will be less likely to take artistic risks, thus potentially stunting our society’s cultural growth.”).

86. Landes and Posner, *supra* note 71, at 326; see Ginsburg, *supra* note 21, at 1068 (Copyright law is “a system designed to advance the public goal of expanding knowledge, by means of stimulating the efforts and imaginations of private creative actors.”).

87. See Brief for Volunteer Lawyers for the Arts, et al. as Amici Curiae Supporting Petitioner at 16, *Kelley v. Chi. Park Dist.*, 132 S. Ct. 380 (2011) (No. 11-101) (“The Seventh Circuit’s opinion could also deter artists from using natural and organic materials and methods, thus depriving the world of art that might otherwise have been created.”).

88. *Id.* at 15 (“[O]ne could photograph *Wildflower Works*, file a copyright registration for and commercialize the photograph, all without any compensation to Mr. Kelley or providing him any right to injunctive relief.”).

authorship possible,⁸⁹ it cannot be understood fully without reference to the other side of the coin, the extent of copyright protection. As Landes and Posner point out, one of the mechanisms for enlarging the public domain is granting copyright protection: more works created means more works eventually entering the public domain.⁹⁰ Thus, in relation to the first concern, granting copyright protection to Slater and others encourages creation and dissemination which then results in more artistically or culturally valuable works eventually reaching the public domain.

Moreover, less works being created and disseminated will not only potentially reduce the amount of works entering the public domain, but will also reduce the number of works presently available for fair use.⁹¹ The fair use doctrine “permits [and requires] courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which the law is designed to foster.”⁹² The codification of the fair use doctrine signals that Congress believed it was a necessary mechanism “to fulfill copyright’s very purpose, [t]o promote the Progress of Science and useful Arts”⁹³ Reducing the amount of works that are created and disseminated has the additional effect of reducing the amount of fair use works.

Third, from *Burrow-Giles* to *Feist Publications v. Rural Telephone Service*, the Court has recognized that choices of selection can be “sufficiently original that Congress may protect such compilation through the copyright laws.”⁹⁴ The circuit courts have also almost unanimously recognized copyright protection in an author’s “coordination and presentation of otherwise uncopyrightable elements.”⁹⁵ As to the selection at issue in *Feist*, it of course pertained to factual compilations in which the copyright is “thin.”⁹⁶ But as held in *Satava*, artists who depict lifelike animals in their work “possess a thin copyright that protects against only virtually identical copying.”⁹⁷ Thus the protection afforded to factual compilations and lifelike depictions are both thin.

As we know, most authorship is arguably closer to selection, arrangement, and

89. Litman, *supra* note 18, at 967.

90. William M. Landes and Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471, 474 (2003) (“The size of the public domain is in part a positive function of the extent of copyright protection, since, as a first approximation anyway, the more extensive that protection is, the greater the incentive to create intellectual property some fraction of which will become a part of the public domain when the copyright expires . . .”).

91. 17 U.S.C. § 107 (2012); *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 547 (1985) (holding that § 107 of the Copyright Act “codifies the traditional privilege of other authors to make ‘fair use’ of an earlier writer’s work”).

92. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994) (quoting *Stewart v. Abend*, 495 U.S. 207, 236 (1990)).

93. *Id.* at 575.

94. *Feist Publ’ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 348 (1991).

95. *Petition for Writ of Certiorari*, *supra* note 84, at 1–2, citing *Knitwaves, Inc. v. Lollytogs Ltd.*, 71 F.3d 996, 1004 (2d Cir. 1995); *Harper House, Inc. v. Thomas Nelson, Inc.*, 889 F.2d 197, 203 (9th Cir. 1989); *TransWestern Pub. Co. LP v. Multimedia Marketing Assoc., Inc.*, 133 F.3d 773, 776 (10th Cir. 1998); *Corwin v. Walt Disney Co.*, 475 F.3d 1239, 1251 (11th Cir. 2007); *Apple Barrel Prod., Inc. v. Beard*, 730 F.2d 384, 388 (5th Cir. 1984).

96. *Feist*, 499 U.S. at 349.

97. *Satava v. Lowry*, 323 F.3d 805, 812 (9th Cir. 2003).

translation of preexisting elements than pure original creation.⁹⁸ But it would be absurd to assert that the copyright protection in *all* works is thin. Therefore, it becomes clear that the aversion to granting a cognizable copyright claim in works “produced by nature” only serves to depreciate the worth of certain selections as compared to others. The argument against granting Slater any type of copyright protection is that he has not exhibited the type of authorship we traditionally seek to reward.⁹⁹ The monkey selfie perhaps owes its origin only to serendipity and Slater only happened to discover its potential.¹⁰⁰

Unfortunately, evaluating the “discovery” in such a light as to say that Slater only got lucky and therefore is not the right kind of author copyright seeks to protect functions to disregard Slater’s investment and deprecate artistic selectivity. Slater invested significant time and resources in the trip and equipment that eventually led to the image. He spent three days following the monkeys with his equipment.¹⁰¹ Slater, who states that he is in debt,¹⁰² spent over \$3,000 on the trip, much like Kelley spent significant personal resources on planting materials for “Wildflower Works.”¹⁰³

But, as we know, copyright “places mind over muscle.”¹⁰⁴ The Court in *Feist* rejected the “sweat of the brow” doctrine, finding that it “flouted basic copyright principles.”¹⁰⁵ Originality, not energy, time, or money expended, along with fixation, is the sine qua non of copyright.¹⁰⁶ The originality requirement though “is not particularly stringent”; all that is required is “that the author make the selection or arrangement independently . . . and that it display some minimal level of creativity.”¹⁰⁷ An author can happen upon a variation unintentionally and adopt (select) it as his own and copyright it.¹⁰⁸

To assert that Slater’s recognition of the potential value of the image among the hundreds taken is to assert that his selection does not display the minimal level of

98. Litman, *supra* note 18, at 966

99. See Petition for Writ of Certiorari, *supra* note 84, at 11 (“Under this subjective test [used by the Seventh Circuit], some art is deemed to be the ‘wrong kind of authorship’ for protection under the Copyright Act.”).

100. Bond, *supra* note 10 (“When he looked at the shots, he spotted an incredible selfie of the grinning ape [sic] staring right into the camera lense [sic].”). It should be noted that crested black macaques are monkeys, not apes. See *Crested Black Macaque*, PRIMATE INFO NET (Feb. 2, 2006), http://pin.prima.wisc.edu/factsheets/entry/crested_black_macaque [<http://perma.cc/36FF-5BZD>] (“Although they are monkeys, crested black macaques are sometimes wrongfully referred to as apes because of their extremely truncated tails (Groves 2001). Usually one of the best ways to differentiate between a monkey and an ape is to look for the presence of a tail, but this is difficult with crested black macaques because their short tails are difficult to see.”)

101. Phillip, *supra* note 38.

102. Phillip, *supra* note 38.

103. Kelley v. Chi. Park Dist., 635 F.3d 290, 293 (7th Cir. 2011); Bond, *supra* note 10. Currency converted using *Spot Exchange Rate*, BLOOMBERGBUSINESS, <http://www.bloomberg.com/quote/GBPUSD:CUR> [<http://perma.cc/NN3N-Q2FD>].

104. Ginsburg, *supra* note 21, at 1072.

105. Feist Publ’ns v. Rural Tel. Serv. Co., Inc., 499 U.S. 340, 354 (1991).

106. *Id.* at 354–59.

107. *Id.* at 358.

108. Alfred Bell & Co. v. Catalda Fine Arts, 191 F.2d 99, 105 (2d Cir. 1951).

creativity or possess a sufficient creative spark to meet the test.¹⁰⁹ But to do so begins to move the inquiry towards what Holmes described as a “dangerous undertaking” in which a judge serves as the final arbiter of artistic merit.¹¹⁰ The importance of artistic selectivity is exhibited by the works of Marcel Duchamp which “challenged the boundaries and even the foundations of art as a concept.”¹¹¹ Duchamp “selected commonplace objects, including a urinal provocatively entitled *Fountain*, and shook the art world by exhibiting them.”¹¹²

Duchamp’s “Fountain” would likely fail to garner any copyright protection as it is a useful article, but it serves as an important, perhaps quintessential, example of how artistic selectivity is an important component in modern conceptions of “art.”¹¹³ The significance of selection as an artistic act should not be discredited and its worth certainly not determined by judicial bodies.

Fourth, denying Slater and other “discoverers” copyright protection may encourage them to either alter natural works and insert sufficient copyrightable contributions to warrant protection or simply to fabricate the true origins of the work. Katherine Maher, Wikimedia Foundation’s Chief Communications Officer, commented that “Slater would have had to make ‘substantial changes’ to the image—beyond cropping, color correcting and other cosmetic adjustments—in order to own the copyright over the changed product.”¹¹⁴ Thus the system as it stands creates perverse incentives for Slater to change the image enough so as to have a copyrightable interest in it, or disseminate the image in its original form and lose any control over its reproduction. By being forced to alter the image, Slater and others might have to strip the works of their value so as to prevent any subsequent appropriation.

For a conceptually similar occurrence in intellectual property, we can look to patent law. The Supreme Court ruled recently that naturally occurring genes are precluded from patent eligibility.¹¹⁵ The Court in *Association for Molecular Pathology v. Myriad Genetics* stated that although Myriad had “found an important and useful gene,” the act of “separating that gene from its surrounding genetic material is not an act of invention.”¹¹⁶ The decision reaffirms the nature exception implicit in the Patent Act.¹¹⁷ Naturally occurring organisms though are patentable

109. Laurent, *supra* note 20 (Slater, describing the incident: “The sound got his attention and he kept pressing it. He must have taken hundreds of pictures by the time I got my camera back . . .”).

110. Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 251 (1903).

111. Steven Goldsmith, *The Readymades of Marcel Duchamp: The Ambiguities of an Aesthetic Revolution*, 42 J. OF AESTHETICS AND ART CRITICISM 197 (Winter 1983).

112. *Id.*

113. 17 U.S.C. § 101 (2012). “A ‘useful article’ is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information.” Designs of a useful article will only be considered protectable where they can be identified separately from the utilitarian aspects of the article. *See Carol Barnhart Inc. v. Econ. Cover Corp.*, 773 F.2d 411 (2d Cir. 1985).

114. Phillip, *supra* note 38.

115. *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2120 (2013).

116. *Id.* at 2117.

117. *Id.* at 2116 (“We have ‘long held that this provision contains an important implicit exception[:] Laws of nature, natural phenomena, and abstract ideas are not patentable.’” (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012))).

if they are modified. In *Diamond v. Chakrabarty*, the Court held that “human-made, genetically engineered bacterium” that was “capable of breaking down multiple components of crude oil” was patentable subject matter under the Patent Act.¹¹⁸ The patent applicant had discovered a process by which to add plasmids to a single bacterium, thereby rendering it capable of degrading crude oil.¹¹⁹

Thus, from a patent perspective, encouraging patent applicants to modify naturally occurring genes can promote the manufacture of useful inventions. Similarly, one might argue that encouraging Slater to insert enough originality to have a cognizable copyright claim results in the creation of valuable expression. While we can recognize the value in encouraging the modification of the monkey selfie and therefore potentially increasing the number of valuable works being disseminated, some considerations are worth bearing in mind. First, as the monkey selfie’s popularity indicates, the image is valuable in its unaltered form. In fact, its unaltered form may constitute the core of its appeal. The bacteria at issue in *Chakrabarty* was not able to break down crude oil naturally, hence the significant value of the invention.¹²⁰ Encouraging Slater to modify the image may create another valuable work, but it creates the risk that the original image will be stripped of its inherent value.

Moreover, granting Slater a copyright claim in the pure, unaltered image does not preclude Slater from creating any derivative works. As stated, the argument can be made that forcing Slater to alter the image creates additional potentially valuable works. One of the rights authors have in a viable copyright is the right to prepare derivative works.¹²¹ The Copyright Act not only gives authors the incentive to create and disseminate an original work, but incentivizes the creation of useful derivative works as well. Thus, not forcing Slater to insert additional originality does not preclude the creation of new valuable works.

Alternatively, the next time Slater or another comes into possession of an image like the monkey selfie, instead of honestly reporting the origins of the photograph the possessor of the work is encouraged to lie entirely or at least fudge the details of its origin. Perhaps if Slater asserted *ex post* that he had a remote shutter button and gave the camera to the monkey and he himself pressed the button with the intent to create the image his bank account would look substantially different.¹²² One can imagine the variety of fabrications that could be asserted by those seeking copyright protection.

In sum, the aversion to granting Slater and others a copyright in their works has little to do with pressing too hard on the basic principles of copyright. We have already shown that authors do not need to be in physical control of the tools that bring the works into being. Originality, being the sine qua non of copyright, can

118. *Diamond v. Chakrabarty*, 447 U.S. 303, 305 (1980).

119. *Id.* at 305 n.1.

120. *Id.* at 305.

121. 17 U.S.C. § 106(2) (2012).

122. See Phillip, *supra* note 38 (“‘This is ruining my business,’ Slater told The Post on Wednesday. ‘If it was a normal photograph and I had claimed I had taken it, I would potentially be a lot richer than I am.’”).

exist where the selection or arrangement exhibits a minimal creative spark. Moreover, the minimal variations that constitute originality can be stumbled upon unintentionally and their conscious adoption can be sufficient for copyright protection.

Any fears about reducing the number of works or material in the public domain are not only speculative, but have little realistic grounding. The image, as of now, is in the public domain.¹²³ But as shown, the amount of material in the public domain is at least a partial reflection of the works that were once copyrighted and moved into the public domain after a “limited time.” Moreover, the monkey selfie would not truly be in the public domain if Slater chose not to disseminate the image and instead deleted it from his camera.

At the end of the day we must ask: *cui bono*? There is little reason to deny Slater and others copyright protection in their works where there is a clear public demand with little downside to granting them protection, even a “thin” one. We want Slater to disseminate the image. Instead of creating incentives for him and others to either (1) not disseminate the work; (2) alter the work so as to gain copyright; or (3) fabricate the details of its origins, we should be promoting its publication in its purest form.¹²⁴ We can compensate Slater and Kelley and others for their investments, reward their artistic selectivity, and promote the creation and dissemination of works that have cultural and aesthetic value without turning copyright on its head and instituting pandemonium.

III. SOLUTION

Something is rotten in the state of copyright when countless shopping lists and e-mails with no artistic or cultural value to speak of may be embraced by the arms of copyright protection and yet works that exhibit the contributions of significant intellectual, physical, and monetary investment will be left like a ship without a sail.¹²⁵ As stated, there is little downside and much upside to granting Slater and others copyright protection. We thus suggest an approach to the monkey selfie and other works that will fulfill the constitutional goal of promoting the progress of science and the useful arts while comporting with copyright jurisprudence.

For works such as a photograph taken by a monkey or a mural painted by an elephant, we suggest adopting a two-pronged “causation and selection” test.

123. See Laurent, *supra* note 20 (“The image was an instant Internet phenomenon, guaranteeing financial success for the British photographer. That is until editors at Wikipedia deemed the image belonged in the public domain and could be used, at no cost, by anyone online.”).

124. See Dane E. Johnson, *Statute of Anne-Imals: Should Copyright Protect Sentient Nonhuman Creators?*, 15 ANIMAL L. 15, 47 (2008) (“If interest in animal works is significant enough to promote substantial economic activity, policy should favor exploiting copyright’s potential to foster that activity.”).

125. See William Shakespeare, *Hamlet*, Act 1, Scene 4, <http://shakespeare.mit.edu/hamlet/hamlet.1.4.html> [<http://perma.cc/V4CY-B5PD>] (“Something is rotten in the State of Denmark.”); Richard Rodgers and Lorenz Hart, *A Ship Without a Sail* (“All alone, all at sea / Why does nobody care for me? / When there’s no love to hold my love / Why is my heart so frail? / Like a ship without a sail.”).

Authorship can be attributed to whoever: (1) constructed and put into motion the events that culminated in the creation or existence of the work (i.e. proximate causation) and (2) exercised a minimal spark of creativity in selecting whatever was produced or its component parts and had final authority over that selection. Without getting too enraptured in metaphysics, the proposed test functions to award authorship to whoever the work owes its origin and whose selection provides sufficient originality. The test embodies the principles established in *Burrow-Giles* by attributing authorship to “whom anything owes its origin” and also the principles of *Bell* and *Feist* by recognizing sufficient originality in selection.¹²⁶

We could filter out claims based on tree branches or interesting looking stones where the second prong may be satisfied, but the first is not. We assume for the sake of this article that a tree or stone or piece of driftwood exists whether or not it is in the consciousness of a human mind. Someone walking on a beach who spots an interesting piece of driftwood cannot claim copyright as he has not triggered the events that led to the object’s existence, despite being in the right place at the right time to make the selection. The first prong recognizes that “one who discovers a fact is not its ‘maker’ or ‘originator.’”¹²⁷ The monkey selfie, on the other hand, only came into being because Slater took his camera equipment to a certain location and set down his camera by the group of macaques. He then exercised the requisite spark of creativity in recognizing the value in the image and selecting it.

The test comports with *Bell* by considering the intent of the author to be relevant only in the second prong of the test. An author can hit upon a variation unintentionally and then consciously adopt it as his own and copyright it. The “final authority over that selection” wording in the second prong is meant to comport with concepts of intent in single work and joint work jurisprudence by reaffirming that manifestations of intent to be an author or joint author are often crucial.¹²⁸ The ability to exercise final control over the inclusion of contributions is indicative of intent.¹²⁹ By doing so, the test also addresses potential competing claims for authorship in natural works.

The test does not purport to fully address *Kelley*-like situations where the author is incorporating natural elements into a work. The *Feist* test for compilations of otherwise uncopyrightable elements is sufficient.¹³⁰ A flower in isolation would fail to garner copyright protection, as it would fail the first prong of the above test. Even though someone may have purchased the seed, planted it, and tended to it with great care, the Seventh Circuit was correct that “what we see and experience in a garden—the colors, shapes, textures, and scents of the plants—originates in nature, not in the mind of the gardener,” to the extent that that applies to the shape

126. *Feist Publ’ns v. Rural Tel. Serv. Co.*, 499 U.S. 340, 348 (1991); *Burrow-Giles Lithographic Co. v. Sarony*, 115 U.S. 53, 58 (1884); *Alfred Bell & Co. v. Catalda Fine Arts, Inc. et al.*, 192 F.2d 99, 105 (2d Cir. 1951).

127. *Feist*, 499 U.S. at 347.

128. See Nimmer, *supra* note 18, at 208 (“Indeed, even if Christu’s inspiration came from uncopyrightable garbage, his adoption of it imbues it with protection, because of the magical infusion of intent.”).

129. See *Aalmuhammed v. Lee*, 202 F.3d 1227 (9th Cir. 2000).

130. See Ericsson, *supra* note 12 (explaining how the Seventh Circuit misapplied *Feist* in *Kelley*).

and color of an individual flower.¹³¹

Even if a claimant could satisfy the first prong of the test by arguing that the object or work would not exist but for the actions of the claimant, a number of claims will fail the second prong. “The standard of originality is low, but it does exist.”¹³² Planting a rose and selecting it for its beauty simply would not exhibit the requisite creative spark to satisfy the second prong. Recognizing the beauty in a rose is “entirely typical” and a “garden-variety” selection.¹³³ Differentiating between a photograph taken by a monkey and a flower will not prove an insurmountable obstacle. Recognizing a copyright claim in the color and shape of a rose would constitute a substantial taking from the public domain. Recognizing a copyright claim in the monkey selfie, an altogether novel image, would not.

As to the appropriate remedy, the Supreme Court noted in *Campbell* that there may be situations in which the goals of copyright are not “best served by automatically granting injunctive relief” and monetary damages are sufficient.¹³⁴ Although the Court was addressing issues of fair use, the most appropriate and reasonable remedy for works like the monkey selfie would be monetary damages rather than injunctive relief, given that the moral rights of the author are not intrinsically implicated.¹³⁵ The justification for moral rights is the idea that the author impresses his personality into the work.¹³⁶ Where an author has unintentionally stumbled upon an interesting variation and had the creative spark to recognize and select it, his personality is simply not implicated to a degree that warrants injunctive remedies. The proposed approach recognizes that while society wants to encourage Slater to disseminate the photograph, it does not go so far as to say that the image bears an impression of his personality.

IV. BEYOND NATURE

A. GENERATIVE TECHNOLOGY

Questions of authorship are not limited to works produced by nature. In the same section of its Compendium, the Copyright Office states that it similarly “will not register works produced by a machine or mere mechanical process that operates randomly or automatically without any creative input or intervention from a human author.”¹³⁷ Presumably the Copyright Office will not recognize works produced in

131. *Kelley v. Chi. Park Dist.*, 635 F.3d 290, 304 (7th Cir. 2011).

132. *Feist*, 499 U.S. at 362.

133. *Id.*

134. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 578 n.10 (1994).

135. Jaszi, *supra* note 24, at 496 (“The particular set of moral rights of ‘authors’ consists of the right to control the circumstances in which the work will be released to the public . . . [and] the right to withdraw the work from circulation . . .”).

136. Jaszi, *supra* note 24, at 496 (quoting 1 J. MERRYMAN & A. ELSEN, *LAW, ETHICS, AND THE VISUAL ARTS* 145 (2d ed. 1987) (“The primary justification for the protection of moral rights is the idea that the work of art is an extension of the artist’s personality, an expression of his innermost being. To mistreat the work of art is to mistreat the artist, to invade his area of privacy, to impair his personality.”)).

137. COMPENDIUM III, *supra* note 6, § 313.2.

this fashion for the same reason it will not recognize works produced by natural processes: “to qualify as a work of ‘authorship’ a work must be created by a human being.”¹³⁸

Finding an explanation for what exactly the Copyright Office meant is difficult. The Copyright Act itself does not address machine-generated creations.¹³⁹ The Compendium provides numerous examples of works that will not be registered, only one of which is helpful for our analysis. The last example provided is a claim based on “a mechanical weaving process that randomly produces irregular shapes in the fabric without any discernible pattern.”¹⁴⁰ The two-pronged test proposed above could conceivably apply to an author who wanted to claim copyright in a work that was randomly produced by a mechanical process that the author initiated.

Of further interest is whether or not copyright claims can be recognized in computer-generated works. While computer programs are copyrightable, it is unclear whether works produced by those programs share the same protection.¹⁴¹ One can imagine programs that are capable of producing countless works that would be copyrightable if a human had pushed a pencil across a piece of paper¹⁴² and yet it is clear that “generative software [is not] an author’s tool in the traditional sense.”¹⁴³ As it currently stands, copyright law does not squarely address the issue.¹⁴⁴

For the sake of keeping this issue within a manageable scope in our discussion, the possibility of true randomness in generative software will not be fully parsed. For a helpful example, we can look to English artist and musician Brian Eno’s work, “77 Million Paintings.”¹⁴⁵ The work is an audiovisual piece that is “self-generating” and seemingly creates new works by randomly selecting Eno’s drawings and continually layering them into new works that are accompanied by changing ambient soundscapes.¹⁴⁶ Although it is titled “77 Million Paintings,” Eno

138. COMPENDIUM III, *supra* note 6, § 313.2.

139. William T. Ralston, *Copyright In Computer-Composed Music: Hal Meets Handel*, 52 J. COPYRIGHT SOC’Y U.S.A. 281, 282 (2005).

140. COMPENDIUM III, *supra* note 6, § 313.2.

141. COMPENDIUM III, *supra* note 6, § 721.1 (“The Copyright Act defines a ‘computer program’ as ‘a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.’ 17 U.S.C. § 101. Congress added this definition to the statute ‘to make it explicit that computer programs, to the extent that they embody an author’s original creation, are proper subject matter of copyright.’ NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS (“CONTU”), FINAL REPORT 1 (1979) (CONTU REPORT).”)

142. See Ralston, *supra* note 139, at 283 (citing a computer that can write poetry and a computer that can compose music).

143. Annemarie Bridy, *Coding Creativity: Copyright and the Artificially Intelligent Author*, 2012 STAN. TECH. L. REV. 5, 21 (2012).

144. See *id.* at 22 (“[C]opyright law is not currently structured to accommodate the particular authorship matrix of people-who-write-programs-that-make-art.”).

145. For an image capturing a moment of “77 Million Paintings,” see Travis Korte, ‘77 Million Paintings’ NYC: Brian Eno’s Audiovisual Experience Makes East Coast Debut, THE HUFFINGTON POST (May 6, 2013), http://www.huffingtonpost.com/2013/05/06/77-million-paintings-nyc-brian-eno-east-coast-debut_n_3219941.html [<http://perma.cc/MSN7-FQE9>].

146. Melissa Locker, *Brian Eno on Art, Music and Inspiration*, TIME (May 9, 2013), <http://entertainment.time.com/2013/05/09/brian-eno-on-art-music-and-inspiration/> [<http://perma.cc/3FAL->

estimated that there are more in the order of 8.25 trillion possible combinations.¹⁴⁷ One might argue that the work is not truly “random” as there are still a predictable, albeit enormous, number of mathematical possibilities. Again, without getting too mired in this issue, we do not believe it is necessary to conflate randomness with infinity. A work that produces 8.25 trillion possible combinations produces sufficient variations unpredictably to the common viewer for the works it continually produces to be considered random.

The Eighth Circuit has held that mechanical randomness, such as the random and arbitrary selection of part numbers (digits assigned to products for identification), does not express sufficient originality for copyright protection.¹⁴⁸ In *Toro Co. v. R & R Products Co.*, the Eighth Circuit affirmed the lower court’s holding on the basis that the plaintiff’s part numbering system lacked the requisite originality for copyright protection.¹⁴⁹ The court found that the numbers were assigned “without rhyme or reason” and that “no effort or judgment went into the selection or composition of the numbers.”¹⁵⁰ The court’s reasoning, thus, evidences an aversion to finding authorship in pure randomness where the “accidental marriage of a part and a number” does not produce an original work of authorship.¹⁵¹ The decision represents an interesting fold to the *Bell* logic that randomness (the clap of thunder) can provide sufficient originality for copyright protection. *Toro* does not purport to reject the reasoning in *Bell*. The two decisions can be understood not to contradict one another where randomness can provide originality if the subsequent selection evidences sufficient “effort or judgment.” Thus the *Toro* decision does not preclude the copyrightability of original selection of randomly generated works.

Moving back to the issue of generative software, although it is not addressed squarely by the Copyright Act, it is at least peripherally addressed by the Copyright Office and the Second Circuit. The Copyright Office addresses an aspect of generative software in its Compendium, at least as it applies to computer programs that generate typefaces. In Section 313.3(D) the Office states that it may register the computer program itself that generates the typeface, provided it is sufficiently original, but it will not register any typeface that may be generated by the program.¹⁵²

The Second Circuit also has confronted a peripheral issue in generative software. In *Stern v. Kaufman*, the Second Circuit rejected a challenge to the registration of a video game as an audiovisual display.¹⁵³ Konami, the game developer in that case, was issued a registration for the audiovisual work (the

MZ9T].

147. *Brian Eno’s New Installation Lets You Experience ‘77 Million’ Possibilities*, SOUNDCHECK (May 7, 2013), <http://soundcheck.wnyc.org/story/291932-brian-eno-77-million/> [<http://perma.cc/7U6Y-6C4K>].

148. *Toro Co. v. R & R Prods Co.*, 787 F.2d 1208 (8th Cir. 1986).

149. *Id.* at 1213.

150. *Id.*

151. *Id.*

152. COMPENDIUM III, *supra* note 6, § 313.3(D).

153. 669 F.2d 852 (2d Cir. 1982).

“sights and sounds”) in its “Scramble” game.¹⁵⁴ The challenger contended that because players of the game affect the audiovisual work every time it is played, Konami was only entitled to registration of the underlying program.¹⁵⁵ The court affirmed the preliminary injunction, finding that the audiovisual display, though “different each time the game is played,” had sufficient originality to garner copyright protection independent of the underlying program.¹⁵⁶ In other words, Konami was the author of the underlying program that was the author of the sights and sounds of the audiovisual display.

The issues presented by generative software are not conceptually inapposite in our discussion of authorship in works of nature. Without restating the arguments made prior, granting Slater and others who can satisfy the two-pronged test a copyright claim in their works comports with copyright jurisprudence and intuition. The same rationale is generally applicable to generative software.¹⁵⁷ But along with key similarities, there are key differences between the two.

An important and obvious difference between a generative program and works of nature is that the generative program itself is subject to copyright. Thus even where the author of a generative program is not the author-in-fact of the works generated by that program, there is still a straightforward segue or nexus between the underlying copyrightable work and the new works being generated. Konami had a copyright in the underlying program that made possible the variations in the audiovisual display. *Stern* then appears to embrace the logic of “to every cow her calf” when it comes to copyrighted works generating secondary copyrightable works.¹⁵⁸

So the argument would go that the black macaque was not Slater’s “cow” and, therefore, the monkey selfie is not his “calf.” Where Konami had a copyright in the underlying program, Slater does not (and cannot) have a copyright in the pure act of giving a camera to a monkey or a canvas and paint set to an elephant. As discussed earlier, the Copyright Act does not extend protection to any procedure, process, or method of operation.¹⁵⁹

But what is fascinating about *Stern*, Eno’s “77 Million Paintings,” and many other examples of software that are capable of generation is that they present a rupturing of the distinction between a process and copyrightable expression. A computer program is copyrightable as a literary work.¹⁶⁰ But when software is capable of (1) being itself copyrightable expression; and (2) generating

154. *Id.* at 854.

155. *Id.* at 855.

156. *Id.* at 856.

157. *Id.* (“Intuition and the principle of transitivity both suggest that the programmer of generative software is the logical owner of the copyright in the works generated by his or her software.”)

158. See *Golan v. Holder*, 132 S. Ct. 873, 901–02 (2012) (Breyer, J., dissenting) (The “natural rights” view underlying European copyright law is “[p]remised on the idea that an author or inventor has an inherent right to the fruits of his labor, it mythically stems from a legendary 6th-century statement of King Diarmed ‘to every cow her calf, and accordingly to every book its copy.’”).

159. 17 U.S.C. § 102(b) (2012).

160. *Stern Elec., Inc. v. Kaufman*, 669 F.2d 852, 855 n.3 (2d Cir. 1982) (citing 1 M. NIMMER, NIMMER ON COPYRIGHT § 2.04(C) (1981)). See COMPENDIUM III, *supra* note 6, § 721.1.

copyrightable works, copyright would then seem to extend to a process or system of creation. The generative software or program is simultaneously copyrightable expression while serving as a method or system for producing additional copyrightable expression.

Opponents might scoff at the secondarily generated work being “copyrightable” at all, as we are once again confronted with the specter of “authorship.” The generative software might strike one as too similar to the mechanical weaving process that “randomly produces irregular shapes” or patterns.¹⁶¹ Although a human may have authored the underlying generative work, once it is set in motion there is conceivably little to no human intervention. This lies in the essence of what sets generative software apart from the camera in *Burrow-Giles*. The Court, addressing an argument about technology-assisted creation over 130 years ago, reasoned that the inert camera “mediated but neither negated nor co-opted the process of artistic production” which was the direct intellectual conception of the photographer.¹⁶²

The inert camera in *Burrow-Giles* only can go so far, as it is still conceptually closer to the typewriter or paintbrush than to generative software. Presumably, the typewriter or camera is simply “employed as a tool to assist a human author.”¹⁶³ But to assert that a camera is always an inert tool without active human intervention is an overly reductive conclusion. An example of a camera functioning without active human intervention is “camera trapping.” “Camera trappers” are photographers who set up motion sensing cameras that detect movement (presumably of wild animals) and begin recording.¹⁶⁴ The cameras are used to capture rarely seen moments of normally elusive animals.¹⁶⁵ Although the camera setup is designed to work without a human present pressing the shutter button, it still requires human oversight as the focus needs to be correct, the batteries need to be replaced, and the cables need to be maintained.¹⁶⁶

Generative software and “camera trapping” allude to the vast number of situations in which technology’s “contribution may be more conspicuous and the human authorship element less so.”¹⁶⁷ Like the monkey selfie, a direct human author-in-fact is missing from the equation. But as shown above, the Second Circuit appears to recognize a form of authorship for a cognizable copyright claim where there is a nexus between the secondarily generated work and a human author. A human wrote the underlying and copyrightable code that generated the audiovisual display in *Stern*. Thus it was not a stretch of the imagination to find that Konami had authored the secondary work. If the Second Circuit’s reasoning

161. COMPENDIUM III, *supra* note 6, § 313.2.

162. Bridy, *supra* note 143.

163. Arthur R. Miller, *Copyright Protection for Computer Programs: Databased and Computer-Generated Works: Is Anything New Since CONTU?*, 106 HARV. L. REV. 977, 1045 (1993).

164. “Camera Trappers’ Capture Elusive Wildlife in the San Gabriel Mountains,” CBS LOS ANGELES (Dec. 23, 2014), <http://losangeles.cbslocal.com/2014/12/23/camera-trappers-capture-elusive-wildlife-in-the-san-gabriel-mountains/> [<http://perma.cc/BRP3-T3XV>].

165. *Id.*

166. *Id.*

167. Miller, *supra* note 163, at 1047.

can be extrapolated and applied to other forms of generative software outside of video game displays, then presumably the author of generative software that is subject to copyright would have copyright in the secondarily produced works as there is a clear nexus between the author of the underlying work and the secondarily produced works. The author of a program that could produce original poetry or eight trillion distinct images would be the author for copyright purposes. Moving even further, the “camera trappers” would be authors of any images the cameras captured, as “someone had to” buy the equipment, select a location, activate the motion sensing technology, adjust the focus, replace the batteries and so on.

That reasoning, though intuitively correct, is more nuanced than the Second Circuit acknowledges. As already pointed out, the reasoning begins to edge towards rupturing the distinction between an uncopyrightable method or process and copyrightable expression. At least for generative software, the software doubles as copyrightable expression and a method for producing copyrightable expression. Moreover, the secondarily produced works are capable of sufficient randomness that they are not the direct “original intellectual conceptions of the author.”¹⁶⁸ Although Eno can calculate the number of possible combinations of images and sounds that “77 Million Paintings” is capable of producing, mathematical foreseeability, at least as the Copyright Office and Eighth Circuit appear to assert, is not sufficient for copyright protection.

To illustrate, common sense demands the conclusion that there is a limited, albeit mathematically large, number of possible combinations of paint strokes and shapes an elephant may make when given a paintbrush, a canvas, and a can of blue paint. What the elephant may paint each time is potentially random in that it is difficult to predict what geometric shapes will be painted, but there are only so many possible variations. Although what the elephant paints may be virtually different every time, “many aspects of the sights and the sequence of their appearance remain constant.”¹⁶⁹ But as we know, the Copyright Office will not register copyright in a mural painted by an elephant or a photograph taken by a monkey.¹⁷⁰

The video game display can be distinguished from the monkey selfie by pointing out that there is a human author behind the author-in-fact. Konami authored the underlying work that made the “Scramble” audiovisual display possible. Slater did not author the black macaque, although he did author or cause the situation in a sense as will be discussed below. Therefore, because the secondarily generated work is a product of a copyrightable work, the authorship for copyright holding purposes transfers over. But why the author of generative software is the rightful author of secondarily generated works and Slater or others who satisfy the two-pronged test are not is unclear.

One might argue that the secondarily generated work is a derivative work of the

168. COMPENDIUM III, *supra* note 6, § 306.

169. *Stern Elec., Inc. v. Kaufman*, 669 F.2d 852, 856 (2d Cir. 1982).

170. COMPENDIUM III, *supra* note 6, § 313.2.

underlying work.¹⁷¹ But as Bridy points out, courts have interpreted the term to mean that a derivative work “must contain material taken from the preexisting work.”¹⁷² Many generative works function without incorporating any of the underlying code that constitutes the original expression.¹⁷³ The footage produced from “camera trapping” does not incorporate any of the underlying mechanisms (digital and/or physical) that enable the creation of the work.

Instead of attempting to squeeze secondarily generated works into a category of copyrightable works that may burst under the strain, such as derivative works or works made for hire, authorship can be attributed directly using the two-pronged test proposed in Part III. The attribution of authorship should make sense “not only in terms of doctrine, but also in terms of the realities of the world in which the question will have to be addressed.”¹⁷⁴ As with Slater and others, applying the proposed test should enable the attribution of authorship where authorship is due.

Beginning with the “camera trappers,” the works created in that situation are most conceptually similar to the monkey selfie. We are presented with photographic images or video footage of an animal in which the animal was at least partially responsible for the creation of the work. In the monkey selfie, the black macaque held the camera and pressed the shutter button. In “camera trapping,” the animals move within the gaze of the camera and thereby set off the motion sensor that begins the recording process. The “camera trappers” present a stronger case than Slater, as they had the intent for the footage to be created and the work is the result of their “original intellectual conception.”¹⁷⁵ But it still remains relevant that apart from the initial design, implementation and routine maintenance of the equipment, the camera becomes substantially autonomous and will record whenever an animal happens to enter its gaze.

“Camera trappers” should have no problem satisfying the two-pronged test. They constructed and set in motion the events that created the work by purchasing the equipment, choosing a location, setting up the equipment and performing routine maintenance. They then can exercise final authority over selecting what footage has aesthetic or cultural value and exhibit sufficient originality to have a cognizable copyright claim. Because animals in their natural habitats and routines are captured, we must again meet public domain concerns. As discussed in Slater’s situation, concerns about the amount of raw material in the public domain being

171. 17 U.S.C. § 101 (2012) (“A ‘derivative work’ is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted.”).

172. Bridy, *supra* note 143, at 25.

173. Bridy, *supra* note 143, at 25.

174. Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. PITT. L. REV 1185, 1192 (1986).

175. *But see* Hayden Smith, *Can Monkey Who Took Grinning Self-Portrait Claim Copyright?*, METRO (July 14, 2011), <http://metro.co.uk/2011/07/14/can-monkey-who-took-grinning-self-portrait-claim-copyright-77773/> [http://perma.cc/5UFJ-EKJR] (“It was my artistry and idea to leave them to play with the camera and it was all in my eyesight. I knew the monkeys were very likely to do this and I predicted it. I knew there was a chance of a photo being taken.”).

reduced are unsubstantiated. The extent of copyright strengthens the public domain by encouraging creation and dissemination of new works. Footage of animals undisturbed by the presence of humans is especially useful for research and educational purposes and we should seek to encourage and reward those authors who invest time, energy, and creativity in making the works possible.

The argument may be made that the “camera trappers” had the intent of capturing the footage and it was foreseeable that the images they sought to capture would eventually be created, hence why some might feel more comfortable recognizing a legitimate copyright claim in “camera trapping” as opposed to Slater’s situation. Approaching the copyright claim from this perspective seems inevitable, but cannot be squared with the Copyright Office’s stance or *Bell*. The Compendium states that murals painted by elephants will not be registered.¹⁷⁶ Even if it is foreseeable that an elephant will paint something and it is given a paintbrush and canvas with that intent, it is irrelevant. Moreover, *Bell* recognized that initial intent was not necessary for copyright and that random or unpredictable occurrences could be adopted.

Generative software or technology that does not concern animal or nature related activity but raises similar authorship issues should also be subjected to the two-pronged test. The works produced by a mechanical weaving process or computer capable of writing poems that once set in motion “operates randomly or automatically,” regardless of whether the secondarily generated work is the product of copyrightable expression, should be attributed to whomever the work owes its origin and exercised sufficient originality in the selection of the final work or its component parts.

Incorporating all of our previous arguments about incentivizing the creation and dissemination of works, intuition and common sense dictate that authorship is rightfully attributed to whoever can satisfy the two-pronged test. The programmer or creator of the technology is the “logical owner of the copyright in the works generated by his or her software.”¹⁷⁷ The programmer is the “originator.”¹⁷⁸ Despite being the author of the author, the secondarily generated work “owes its origin” to the programmer.¹⁷⁹

B. EMPLOYERS AND USERS OF GENERATIVE TECHNOLOGY

Unlike the monkey selfie, generative technology brings employers and potential users to the forefront. Although the programmer is the “logical owner of the copyright,” that assertion is always subject to the work made for hire doctrine, as with any other work, where the employer is considered the author for purposes of the Copyright Act.¹⁸⁰ Our consideration of generative technology and the two-

176. COMPENDIUM III, *supra* note 6, § 313.2.

177. Bridy, *supra* note 143, at 21.

178. *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

179. *Id.*

180. 17 U.S.C. § 201(b) (2012) (“In the case of a work made for hire, the employer or other person for whom the work was prepared is considered the author for purposes of this title, and, unless the

pronged test do not purport to challenge the statutory framework or suggest that the statutory framework and other well established doctrines are preempted.

Users of generative technology, unlike employers, require a more detailed analysis. On the one hand, the programmer or creator of the generative technology is the logical owner of the copyright of any works that the technology produces. On the other hand, some generative technology begins to blur the line between an inert tool facilitating authorship and an autonomously functioning author.

On one end of the spectrum we have totally inert tools: the pencil or the paintbrush “by which the ideas in the mind of the author are given visible expression.”¹⁸¹ It would be silly to assert that pencil manufacturers hold the copyright in works created using their products. Otherwise, “copyright would explode.”¹⁸² Further down the spectrum we have cameras. Although photographs were challenged as “the mere mechanical reproduction of the physical features or outlines of some object,” the Supreme Court found photographs to be copyrightable “so far as they are representatives of original intellectual conceptions of the author.”¹⁸³ An author can utilize a camera as if it were a pen to express her ideas.

But technology has come a long way since Sarony thought to pose Oscar Wilde in 1882. As the “camera trappers” illustrate, cameras can be rigged to act largely autonomously. As we discussed earlier, human users of that technology still exercise sufficient control for authorship purposes. In 1966, Abraham Kaminstein, the Register of Copyrights, formulated the question as whether the work “is basically one of human authorship, with the computer merely being an assisting instrument” or whether the basic elements of authorship “were actually conceived and executed not by man but by a machine.”¹⁸⁴ The users of the technology utilize the camera’s motion sensing technology to give visible expression to their ideas. Furthermore, users still must exercise originality in parsing through the footage to identify and select worthwhile content.

Further down the spectrum, getting closer to autonomous generative technology, we have video game displays and “77 Million Paintings.” In *Stern*, the Second Circuit found that although the users will affect the audiovisual display every time it is played, “many aspects of the sights and the sequence of their appearance remain constant during each play of the game.”¹⁸⁵ Despite users having an actual effect on the audiovisual display, “the repetitive sequence of sights and sounds qualifie[d] for copyright protection.”¹⁸⁶ There is no suggestion that individual players or users can claim any copyright in the audiovisual work they are orchestrating by interacting with the underlying code.

Similarly, although Eno’s work is capable of randomly producing an enormous

parties have expressly agreed otherwise in a written instrument signed by them, owns all of the rights comprised in the copyright.”).

181. *Burrow-Giles*, 111 U.S. at 58.

182. *Gaiman v. McFarlane*, 360 F.3d 644, 658 (7th Cir. 2004).

183. *Burrow-Giles*, 111 U.S. at 58–59.

184. COPYRIGHT OFFICE, SIXTY-EIGHTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS 7 (1966), <http://www.copyright.gov/reports/annual/archive/ar-1965.pdf> [<http://perma.cc/Z6Y4-726B>].

185. *Stern Elec., Inc. v. Kaufman*, 669 F.2d 852, 856 (2d Cir. 1982).

186. *Id.*

number of different works, certain aspects remain constant. The underlying art and sound is fixed on the DVD and there are a set number of combinations that can possibly be produced. Although the individual user activates the work, there is no intervention beyond that. The user is only performing the work, or rather performing the works as they are randomly generated. Eno's copyright in the secondarily generated works should be a nonissue. He certainly has copyright in the underlying works that "77 Million Paintings" layers into new works. The process of constantly layering old works into new ones was Eno's original intellectual conception and "77 Million Paintings" is the visible expression of that idea. He of course cannot stop others from making works using a similar process.

And on the other end of the spectrum, opposite pencils and paintbrushes, is totally autonomous generative technology. A prime example of technology working autonomously (or close to it) is BRUTUS, a "silicon author able to generate stories that would be regarded as creative."¹⁸⁷ Although BRUTUS may not be coming to retailers anytime soon, products with similar capabilities may soon be implicated. Technology like BRUTUS is unlike the inert tool such as the pencil or camera in that it is not giving direct visible expression to a human author's intellectual conceptions. It seems closer to "Scramble" and "77 Million Paintings" in that it is acting on underlying code, written by a human, to create something new.

Looking abroad for answers, in both the United Kingdom and New Zealand copyright in such works vests in "the person by whom the arrangements necessary for the creation of the work are undertaken."¹⁸⁸ Like the "without any creative input or intervention from a human author" language in the Compendium, it is unclear what "arrangements" or "input" is necessary at which stage of the creative process. The coder of the underlying generative software always makes the necessary arrangements for the creation of secondarily generated works. Thus, it is implied that a user can never secure copyright. The Compendium is seemingly more open to user intervention, perhaps where the user gives the generative technology initial parameters for the creation or edits the work after it has been produced.

Thus, it is conceivable that different levels of autonomy in generative technology can (and do) exist and thereby create different allocations of authorship. The motion sensing camera clearly facilitates the visible expression of the user's intellectual conception, despite the manufacturer producing a tool that can function without constant human oversight. Similarly, "Scramble" and "77 Million Paintings" are the intellectual conceptions of Konami and Eno respectively. Both continue to function and create completely apart from the original author, but

187. SELMER BRINGSJORD & DAVID A. FERRUCCI, *ARTIFICIAL INTELLIGENCE AND LITERARY CREATIVITY: INSIDE THE MIND OF BRUTUS, A STORYTELLING MACHINE*, at 6, xxiii (Psychology Press 1999).

188. Copyright, Designs, and Patents Act, 1988, c. 48, § 9(3) (U.K.), http://www.legislation.gov.uk/ukpga/1988/48/pdfs/ukpga_1988048_en.pdf [<http://perma.cc/H3WR-HGN2>]; Copyright Act of 1994, § 5 (N.Z.), <http://www.legislation.govt.nz/act/public/1994/0143/latest/whole.html> [<http://perma.cc/2F52-2L28>]; Bridy, *supra* note 143, at 26.

granting copyright to the user or the public would be unfair and inconsistent with the statute and its objectives.

Technology like BRUTUS presents more nuanced issues. A user of a BRUTUS-esque technology who simply presses “start” and produces an original work does not appear to be the “right kind of author,” if there is one. A user who is simply in possession of generative technology that requires no participation beyond pressing the power button does not generally implicate situations in which an injustice is being served by denying a copyright claim in any of the works that are generated. But, an argument may be raised that the user satisfies the two-pronged test by setting in motion the events that culminate in the creation of the work and then exercising sufficient originality in its selection.

Because users of generative technology will not generally exhibit “the right type of authorship,” application of the two-pronged test can be defeated on the grounds that the user has not sufficiently constructed the events that led to the generation of the work. The consumer who purchases “77 Million Paintings,” puts the DVD into his DVD player and pushes the play button has in a sense set in motion the events that generated the work, but his contribution is *de minimis*. The *Stern* decision’s reluctance to discuss any attribution of authorship to the player who selects “the route and speed . . . for his spaceship and the timing and accuracy of his release of his craft’s bombs and lasers” indicates that users of generative technology, even when their contribution partially determines the expression of the work, have significant barriers to claiming any authorship.¹⁸⁹ The user in these instances simply has not constructed the component parts or events to warrant any attribution of authorship.

It is conceivable that generative technology that is less autonomous than BRUTUS, but less inert than a camera may hit the markets. This technology may blur the line between facilitating human expression and independently creating original works. An example one can imagine is a more advanced Mad Libs™.¹⁹⁰ A user of a product that is capable of producing original expression with sufficient creative human input may have a cognizable copyright claim where the product still acts largely as a tool. In applying the two-pronged authorship test, a user may satisfy both prongs by making sufficient contribution to the events that ultimately produce the work and exercising sufficient originality by way of artistic selection.

And finally, it is worth noting that generative technology can always be subject to explicit or implicit licensing. Depending on how the generative technology in question tips the scales, whether it is predominantly a tool to facilitate human expression or it is predominantly autonomous, courts may deem it reasonable to find that the programmer or manufacturer granted users an implicit license to reproduce or distribute works that are generated.

189. *Stern*, 669 F.2d at 856.

190. Mad Libs™ is a series of book products containing pre-written stories with key words left out. Users fill in the blanks and “[h]ilarity reign[s].” See Leonard Stern, *History*, MAD LIBS, <http://www.madlibs.com/history> [<http://perma.cc/3NLM-KU6T>].

CONCLUSION

Although the Copyright Office likely has good intentions, one has to feel that an injustice is being done to potential authors, the public, and copyright jurisprudence when works that require substantial investment (be it labor, monetary, or intellectual) are left defenseless while the authors of works of little to no significance can claim the full arsenal of exclusive rights under the Copyright Act.¹⁹¹

Putting aside the Office's all-or-nothing approach, the proposed two-prong test of causation and selection makes it possible to honor the originality involved in artistic selectivity while still protecting the sanctity of the public domain. If dissemination is of equal importance to creation in the copyright system, copyright should function to promote dissemination of works that are culturally or aesthetically valuable. Denying Slater and others copyright protection in their work will only reduce the number of the works available, thus reducing the number of works that eventually enter the public domain and works available for the fair use of others.

Moreover, the number of works being generated by technology without human interference or intervention presents difficult, but not insurmountable obstacles for copyright as it currently stands. While generative technology brings up similar "authorship" issues to more natural works, there are key differences. With both natural works and works produced by generative software, the two-pronged test presents one formula for allocating authorship equitably.

191. 17 U.S.C. § 106 (2012). The owner of copyright has the exclusive right to reproduce the work, prepare derivative works, distribute copies of the work, perform the work publicly, and display the work publicly.