

NATURAL CAUSES: WHEN AUTHOR MEETS NATURE IN
COPYRIGHT LAW AND ART. SOME OBSERVATIONS INSPIRED
BY *KELLEY V. CHICAGO PARK DISTRICT*

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Abstract

This article considers the interplay between author and nature in United States copyright law, using Kelley v. Chicago Park District as a catalyst. In Kelley, the Seventh Circuit repudiated Chapman Kelley's authorship of his enormous wildflower garden, Wildflower Works, partly on the basis that natural forces, rather than Kelley, were primarily responsible for the form of the work. The article has two broad purposes. The first is to critique the Seventh Circuit's denial of Kelley's authorship. The article argues that the Seventh Circuit misconceived Wildflower Works by conflating the work with the plants constituting it. This skewed its assessment of Kelley's authorship, failing to give sufficient weight to his selection and arrangement effort. The second, and primary, purpose of the article is to explore the ramifications of Kelley for other contemporary art employing natural materials and natural forces, and to more deeply examine authorship doctrine in this context. Using a number of examples of artists who collaborate with nature, the article explains how natural forces can disturb authorship, but may not defeat it. The aims of the article are to fuel discussion, prompt reflection, and question some deeper assumptions about the relationship between nature and authorship in copyright law.

“Art is concerned neither with things that are or come into being by necessity nor with things that do so in accordance with nature (since these have their origin in themselves).”

– Aristotle¹

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INTRODUCTION

*Kelley v. Chicago Park District*² concerned Wildflower Works, a “living garden” designed and installed in 1984 under the direction of Chapman Kelley, a renowned American landscape artist.³ The garden spanned 1.5 acres of Chicago parkland, and was set within gravel and steel borders in the shape of two ellipses the size of football fields.⁴ In his design for the garden, Kelley chose more than 50 different species of wildflowers based on aesthetic, cultural and environmental considerations.⁵ Kelley situated the wildflowers so they would bloom sequentially, changing colours through the warmer seasons and increasing in brightness towards the centre of each ellipse.⁶ Kelley funded the garden to an initial cost of \$152,000, and with a team of volunteers, maintained the garden, which was promoted as “living art.”⁷ The garden received critical and popular acclaim, at least for a time. Eventually, by 2004 Wildflower Works had deteriorated and the city of Chicago wanted to repurpose the land. Accordingly, Wildflower Works was dramatically modified, substantially reduced in size, and reconfigured from two ellipses to rectangular shapes.⁸

Kelley sued the Park District for violating his right of integrity under the Visual Artists Rights Act of 1990 (“VARA”).⁹ VARA only protects creations that meet the statutory definition of “a work of visual art” (defined to include a “painting, drawing, print, or sculpture”) in which copyright subsists.¹⁰ At first instance, the District Court held Wildflower Works could be considered as both a painting and a sculpture.¹¹ However, Kelley’s claim failed because Wildflower Works lacked sufficient originality to be eligible for copyright, and because VARA excludes site-specific art like Wildflower Works.¹²

On appeal, the Seventh Circuit doubted the District Court’s conclusions that Wildflower Works is a painting or sculpture; that it

comments made by Jessica Silbey on a draft of this article.

1. ARISTOTLE, *Nicomachean Ethics*, in 2 THE COMPLETE WORKS OF ARISTOTLE: THE REVISED OXFORD EDITION 1800 (Jonathan Barnes ed., 2014).

2. 635 F.3d 290 (7th Cir. 2011).

3. *Id.* at 291.

4. *Id.*

5. *Id.*

6. *Id.*

7. *Id.*

8. *Id.*

9. 17 U.S.C.S. § 106A (2017).

10. 17 U.S.C.S. § 101 (2017).

11. *Kelley v. Chicago Park Dist.*, No. 04 C 07715, 2008 U.S. Dist. WL 4449886, at *4–5 (N.D. Ill. Sept. 29, 2008), *aff’d in part, rev’d in part*, 635 F.3d 290 (7th Cir. 2011).

12. *Id.* at *6.

lacked originality, and that all site-specific art is excluded from VARA. However, it rejected Kelley's claim because "a living garden lacks the kind of authorship and stable fixation normally required to support copyright."¹³

This article critiques the Seventh Circuit's flawed reasoning on authorship, and explains Kelley's authorship and the court's misunderstanding of it. The court misconceived the work and thus the assessment of the authorship of that work. It conflated the work with the plants constituting it, and failed to give sufficient weight to the selection and arrangement effort undertaken by the artist, wrongly allocating to nature the primary responsibility for the material form of the work. The main purpose of the article is to interrogate the ramifications of *Kelley* for contemporary art utilising living material and natural forces. A number of commentators have expressed concerns that *Kelley* could exclude many such contemporary art works from copyright, and correspondingly, moral rights.¹⁴ The article tests those assertions. It scrutinises the important questions concerning the interface between nature and authorship in contemporary art generated by *Kelley*, particularly with respect to causation and creativity. The shadow cast by *Kelley* invites a rigorous exploration of authorship doctrine in copyright law. This is undertaken through the prism of a number of examples of contemporary art employing living materials and natural forces, such as wind-powered drawings, forms partially constructed by bees, and canvases left in natural environments. The article describes how natural forces can theoretically problematize authorship, but through descriptions of the artistic practice of these "nature artists," demonstrates the legitimacy of their authorial claims.

This article is limited to a discussion of the authorship issues generated by *Kelley*. *Kelley* also raises issues concerning both fixation and the very concept of the "work" in copyright law, particularly whether a garden *can* be a copyright work. Those questions are compelling and capacious enough to warrant a separate article by the author which explores the copyright status of gardens and naturally

13. *Kelley v. Chicago Park Dist.*, 635 F.3d 290, 303 (7th Cir. 2011).

14. See Lily Ericsson, *Creative Quandary: The State of Copyrightability for Organic Works of Art*, 23 SETON HALL J. OF SPORTS AND ENT. L. 359, 370-371 (2013); Brief for the Volunteer Lawyers for the Arts and the Arts & Business Council of Greater Boston as Amici Curiae Supporting Petitioner at 13-19, *Kelley v. Chi. Park Dist.*, 2 S. Ct. 380 (2011) (No. 11-101); Virginia M. Cascio, *Hardly A Walk In The Park: Courts' Hostile Treatment Of Site-Specific Works Under VARA*, 20 DEPAUL J. ART, TECH. & INTELL. PROP. L. 167, 170-72 (2009); Chin-Chin Yap, *The Un-Edenic State of Copyright*, ARTASIAPACIFIC (May/June 2011), <http://artasiapacific.com/Magazine/73/TheUnEdenicStateOfCopyright>; Sergio Muñoz Sarmiento, *Court: Not All Conceptual Art May Be Copyrighted*, CLANCCO (Feb. 16, 2011), <http://clancco.com/wpl2011/02/varamoralrights-sculptureoriginality/>.

kinetic art in a broader enquiry into the nature of the copyright “work.”¹⁵

This article is structured in three parts. Part 1 examines the Seventh Circuit’s findings with respect to the authorship of Wildflower Works. It briefly critiques the court’s treatment of originality and authorship and explains how the court’s failure to perceive Wildflower Works as a compilation blinded it to Kelly’s authorship. Those acts of authorship are then elucidated. Part 2 focuses on the causal dimension of authorship in copyright doctrine, and responds to the court’s assertion that Wildflower Works “[owes its] form to the forces of nature.”¹⁶ It critiques that claim in the context of Kelly’s authorship. Part 3 considers the potential for nature to disrupt authorship in contemporary art, examining the issues through a number of examples of art which employ natural forces and living elements. It considers intention as an element of authorship and whether authors must necessarily control the *particular* form of their expressive works. The conclusion briefly summarises the main points of the article, and suggests that natural forces should not preclude authorship and thus copyright subsistence in nature-art collaborations.

I. *KELLEY V. CHICAGO PARK DISTRICT* ON THE AUTHORSHIP OF WILDFLOWER WORKS

A. *Authorship and originality*

The Seventh Circuit considered Wildflower Works to be original, which it interpreted to mean “‘not copied’ and ‘possessing some creativity.’”¹⁷ It concluded “[n]o one argues that Wildflower Works was copied; it plainly possesses more than a little creative spark.”¹⁸ However, the court did not identify the creative spark, nor who supplied it. Describing as “misplaced” the Park District’s argument that the garden’s common elliptical shapes disqualified it from copyright protection,¹⁹ the court acknowledged that “an author’s expressive combination or arrangement of otherwise noncopyrightable elements (like geometric shapes) may satisfy the originality requirement.”²⁰ Note

15. Jani McCutcheon, *Shape Shifters: Searching for the Copyright Work in Kinetic Living Art*, 64 J. COPYRIGHT SOC. OF USA 309 (2017).

16. *Kelley*, 635 F.3d at 304.

17. *Id.* at 303. This is perfectly consistent with *Feist Publ’ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 345 (1991). “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.” *Id.*

18. *Id.*

19. *Id.*

20. *Id.*

that this comment only refers to Kelley's use of elliptical shapes (ie the geometric borders of the garden), not to the arrangement of the constituent elements of the garden, the plants.

The court then bifurcated authorship and originality, explaining that “[t]he real impediment to copyright here is not that Wildflower Works fails the test for originality ... but that a living garden *lacks the kind of authorship and stable fixation normally required to support copyright.*”²¹

Thus Wildflower Works is original, but not authored.²² Given the inextricable link between originality and authorship,²³ and indeed, their potential to merge into a single notion,²⁴ this is puzzling. If Wildflower Works possesses the requisite degree of creativity to be original, who but Kelley could have supplied it? This aspect of the judgement is confused, and results from a misconception of Kelley's intellectual effort in shaping the garden design. The Court stated:

[A]uthorship is an entirely human endeavor. Authors of copyrightable works must be human; works owing their form to the forces of nature cannot be copyrighted. ... A living garden like Wildflower Works is neither "authored" nor "fixed" in the senses required for copyright.

Simply put, gardens are planted and cultivated, not authored. A garden's constituent elements are alive and inherently changeable, not fixed. Most of 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. At any given moment in time, a garden owes most of its form and appearance to natural forces, though the gardener who plants and tends it obviously assists.²⁵

21. *Id.* (emphasis added).

22. Nor is it fixed, an issue further explored in a forthcoming article by the author, McCutcheon, *supra*, note 15.

23. See *Feist Publ'ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340 (“[O]riginal” and “authorship” are to be considered in tandem.” *Feist*, 499 U.S. 340, 361; Jane C. Ginsburg, *The Concept of Authorship in Comparative Copyright Law*, 52 DEPAUL L. REV. 1063, 1077 (2003) (“in most copyright/authors’ rights jurisdictions, originality is the overarching standard of authorship”); *Id.* at 1078 (“originality is “synonymous with authorship”); Justin Hughes, *The Personality Interest Of Artists And Inventors In Intellectual Property*, 16 Cardozo Arts & Ent. L.J. 81, 98 (1998) (“our courts, like our art professors and theater critics, are more concerned with creativity than authorship”); *id.* at 99 (“[In *Feist*] the Supreme Court packed the notion of creativity into the notion of originality . . . everything juridically original is also juridically creative.”).

24. This was recognised even by the Seventh Circuit in *Kelley*. 635 F.3d at 304 (“The Supreme Court has repeatedly construed all three terms [fixation, authorship and originality] in relation to one another [or] perhaps has collapsed them into a single concept.”) (quotation omitted).

25. *Id.* (quotations and citations omitted).

This statement demands a detailed rejoinder, and explodes a number of issues implicating authorship of contemporary art, which are explored in this article.

B. Kelley's authorial conduct

The Copyright Act lacks a definition of “author,” and the meaning of the term is contestable.²⁶ The Supreme Court has defined an author as one “to whom anything owes its origin; originator; maker”²⁷ and “the party who actually creates the work.”²⁸ However, it is doubtful that the author can be isolated from the doctrinal amalgam mandated by copyright arising in *original, fixed, works* of “authorship.”²⁹ The synergy of authorship and originality³⁰ demands human³¹ creativity,³² and “[t]he notion of creativity seems to be inexorably linked to the human mind.”³³ Thus originality ensures that an author is more than a labouring fixer: “authorship places *mind* over muscle.”³⁴ Authors translate *ideas* into protectable expression,³⁵ and exercise “subjective

26. See Russ VerSteege, *Defining “Author” For Purposes of Copyright*, 45 AMERICAN U. L. REV. 1323, 1338-1339 (1996) (“there is still no genuinely viable definition of “author”); Laura Heymann, *A Tale Of (At Least) Two Authors: Focusing Copyright Law On Process Over Product*, 34 J. CORP. L. 1009, 1009 (2009) (“despite the centrality of this figure in the Copyright Act, the statute doesn’t define the term, and commentators have yet to agree on precisely what characteristics this creature should have”); Jane Ginsburg, *The Concept Of Authorship In Comparative Copyright Law*, 52 DEPAUL U. L. REV. 1063, 1066 (2003); Chris Buccafusco, *A Theory of Copyright Authorship*, 102 VA. L. REV. 1229, 1295 (2016); Alan Durham, *The Random Muse: Authorship and Indeterminacy*, 44 WM. & MARY L. REV. 569, 571 (2002) (“Authorship, however, is so often characterized by what it is not that it is sometimes difficult to say, positively, what authorship is”).

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

28. *Cnty. for Creative Non-Violence v. Reid*, 490 U.S. 730, 737 (1989).

29. 17 U.S.C. § 102(a) (2017).

30. Hughes, *supra* note 23, at 98-99.

31. *Kelley*, 635 F.3d at 304 (“[A]uthorship is an entirely human endeavor. Authors of copyrightable works must be human”); *Naruto v. Slater*, No. 15-CV-04324-WHO, 2016 WL 362231, at *3 (N.D. Cal. Jan. 28, 2016) (“The Supreme Court and Ninth Circuit have repeatedly referred to “persons” or “human beings” when analysing authorship under the Act.”); Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. PITT. L. REV. 1185, 1199 (1986) (“In the long history of the copyright system, rights have been allocated only to humans.”). Note also that the duration of copyright is determined by the life of the author, and although this could ostensibly include non-human lives, the Act defines the author’s widow or widower (17 U.S.C. §101), terms ordinarily associated with human beings.

32. *Feist Publ'ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 345 (1991) (“Originality includes the requirement that the work possess “at least some minimal degree of creativity.”).

33. Daniel Gervais, *Feist Goes Global: A Comparative Analysis Of The Notion Of Originality In Copyright Law*, 49(4) J. OF THE COPYRIGHT SOC. OF THE U.S.A. 949, 975 (2002).

34. Ginsburg, *supra* note 23, at 1072 (emphasis added).

35. *Cnty. for Creative Non-Violence v. Reid*, 490 U.S. 730, 737 (1989).

judgment in composing the work.”³⁶

Chapman Kelley authored *Wildflower Works*. The Seventh Circuit is myopic to Kelley’s authorship because it misconceived the nature of the work. *Wildflower Works* is a compilation of unoriginal material.³⁷ The plants used by Kelley are natural “facts.”³⁸ The court erroneously ignores, or at best undervalues, Kelley’s compilation effort. To suggest that Kelley merely “assisted” in the form and appearance of the garden significantly understates his contribution. To correct the court, “gardens are *designed*, planted and cultivated.” Kelley did not merely “plant and tend” the garden, he *conceived* it. The court disregards Kelley’s authorship in selecting and arranging the elements of the garden in combination with the (individually unoriginal) structural elements of the garden. This failure to appreciate *Wildflower Works*’ status as a *compilation* informs and distorts the court’s assessment of Kelley’s putative authorship (or lack of it). The court states 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.”³⁹ This is a narrow perception of “the plants” at the expense of the *garden*. It disregards the overarching *compilation* of the garden, and fixates on its constituent elements, the plants.

The court ostensibly acknowledges the design and arrangement undertaken by Kelley. It recognizes that “*Wildflower Works*... was *designed* and planted by an artist” and “[o]f course, a human “author” - whether an artist, a professional landscape designer, or an amateur backyard gardener - determines the initial *arrangement* of the plants in a garden,” but then states:

This is not the kind of authorship required for copyright. To the extent that seeds or seedlings can be considered a “medium of expression,” they originate in nature, and natural forces—not the intellect of the gardener—determine their form, growth, and

36. Ginsburg, *supra* note 23, at 1063-1064. (Emphasis added).

37. Copyright may subsist in a compilation. 17 U.S.C. § 103 (2017). The Copyright Act defines a compilation as “a work formed by the collection and assembling of pre-existing materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship.” 17 U.S.C. §101.

38. Note that there is no statutory requirement that the constituent elements themselves be copyrightable. *See, e.g.*, U.S. Copyright Office, COMPENDIUM III: COPYRIGHT OFFICE PRACTICES §313 (2014) (“Although uncopyrightable material, by definition, is not eligible for copyright protection, the Office may register a work that contains uncopyrightable material, provided that the work as a whole contains other material that qualifies as an original work of authorship (e.g., a selection, coordination, and/or arrangement of uncopyrightable elements where the resulting work as a whole constitutes an original work of authorship).”).

39. Kelley v. Chicago Park District, 635 F.3d 290, 304 (7th Cir. 2011) (emphasis added).

appearance.⁴⁰

This statement is perplexing, because arrangement is *exactly* “the kind of authorship” that copyright is very familiar with. Copyright has long protected compilations of unoriginal material, provided the *selection and arrangement* of the material was sufficiently creative.⁴¹ Kelley’s arrangement effort was clear:

I made some very, very specific plans for [Wildflower Works] . . . they were very specific, they told where everything was going to be put . . . There were all the different varieties that we picked and I had to work out where they were going to be planted . . . I had to put a pattern down and so many of each thing [was] on that pattern. It couldn’t have been more specific. It was more specific than what I do with a brush.⁴²

The Seventh Circuit conflated the properties of a work – its medium of expression - with the work itself, and concluded that because the constituent elements of the work are not authored by a human, the work itself must also lack an author. All works, but particularly compilations, are an assemblage of media, which is rarely formed by the compiler’s intellect. Denying authorship because the plants were created by nature is like denying authorship of a painting because the artist had nothing to do with the manufacture of the paint. The court is making discretionary judgments about what kinds of media can populate a compilation. Clearly, in the Court’s view, that media can’t be living. This wrongly links authorship to the work’s media, conflicting with major tenets of modern copyright law, which concertedly uncouples the work from its medium of expression,⁴³ and certainly distances authorship from art,

40. *Id.* (emphasis added).

41. *See, e.g.*, Feist Publ’ns v. Rural Tel. Serv. Co., Inc., 499 U.S. 340, 348 (1991) (“These choices as to selection and arrangement, so long as they are made independently by the compiler and entail a minimal degree of creativity, are sufficiently original that Congress may protect such compilations through the copyright laws.”). Other jurisdictions also recognise compilation copyright. *See* Designers Guild v. Russell Williams, [2000] 1 W.L.R. 2416 (H.L.); *see also* IceTV Pty Ltd. v. Nine Network Australia Pty Ltd (2009) 239 CLR, at [99]; (Gummow, Hayne and Heydon JJ) (“If the work be protected as a ‘compilation’, the author or authors will be those who gather or organise the collection of material and who select, order or arrange its fixation in material form.”).

42. DePaul University College of Law, *Chapman Kelley v. Chicago Park District*, YOUTUBE (Aug. 16, 2013), [at 48.08 minutes], <http://www.youtube.com/watch?v=GArZHJnNXNI>.

43. This has resulted in protection changing from media-specific artifacts like “books” to the universal “work,” and statutory clarification of the irrelevance of media. A work may be “fixed” in *any* “tangible medium of expression.” 17 U.S.C. § 101 (2017). This wording was designed to clarify that “it makes no difference what the form, manner or medium of fixation may be.” H.R. REP. NO. 94-1476 at 52 [*hereinafter* HOUSE REPORT]. This explains the Copyright Office’s statement that “[a]s a general rule, the materials used to create a work have no bearing on the originality analysis.” COMPENDIUM III,

which “can incorporate *any* material and *any* process, when employed in the service of the imagination.”⁴⁴ There is no legal basis for disregarding the compilation effort of the author based on the nature of the compiled elements.⁴⁵

The court also fails to acknowledge the initial *selection* that occurs before the arrangement of the selected elements, which also results from the intellectual effort of authors. Arrangement cannot happen in a vacuum, certain *selected* elements need to be arranged. Kelley chose his 60 plant types from a myriad of species, and the shapes he employed from almost limitless combinations. Provided Kelley’s compositional choices for his garden are not obvious, prosaic, inevitable, “entirely typical,”⁴⁶ or (excuse the pun) “garden variety,”⁴⁷ they meet the low originality standard set by *Feist* (as acknowledged even by the Seventh Circuit).⁴⁸

An additional point needs to be made. In its reference to gardens lacking “the *kind* of authorship... required to support copyright,”⁴⁹ and gardens not being “... “authored” nor “fixed” in the *senses* required for copyright,”⁵⁰ does the Seventh Circuit suggest that there are, indeed, “kinds” or “senses” of authorship? As mentioned above, authorship is theoretically contested and undefined. If there are, indeed, different species of authorship, this further complicates authorship doctrine, suggesting that authorship as an organised principle in copyright law is unstable. It leaves us wondering what other “kinds” of authorship exist, how to discern them, and how to explain their exclusion from copyright. Does a spectrum of authorship types expand or contract authorship doctrine? It could suggest a more adaptive notion of authorship which might more flexibly accommodate evolving forms of contemporary art. However, that clearly didn’t occur in *Kelley*. This notional plurality of undefined authorship types equally encourages a decision-maker to make arbitrary decisions, and permitted the Seventh Circuit to determine

supra note 38, at 310.9. It is also consistent with The Berne Convention, which stipulates that “literary and artistic works . . . shall include every production in the literary, scientific and artistic domain, *whatever may be the mode or form of its expression.*” (Berne Convention for the Protection of Literary and Artistic Works, Sept. 28, 1979, S. Treaty Doc. No. 99-27, art. 2(1)).

44. Douglas M. Davis, *Art & Technology: Toward Play*, ART IN AMERICA, Jan. 01, 1968, available at http://www.artinamericamagazine.com/news-features/magazine/from-the-archives-art-technology-toward-play/?utm_source=Email&utm_medium=Sailthru&utm_content=Toward%20Play.

45. The nature of the elements may be very relevant to questions of fixation, a discrete issue pursued by the author in a separate article. McCutcheon, *supra* note 15.

46. *Feist Publ'ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 362 (1991).

47. *Id.*

48. *Kelley v. Chicago Park District*, 635 F.3d 290, 303 (“[Wildflower Works] plainly possesses more than a little creative spark.”).

49. *Id.* (emphasis added).

50. *Id.* at 304.

in a conclusory fashion that Kelley's is not the "right" kind of authorship. This seems to move close to the "dangerous undertaking"⁵¹ of arbitrating artistic merit through the proxy of authorship.

II. AUTHORSHIP AND CAUSATION

A. Causation in authorship

Kelley especially illuminates the *causal* dimension of authorship,⁵² which, while "embedded within the . . . overall framework of copyrightability . . . remains analytically and conceptually distinct."⁵³ The symbiosis of authorship and originality⁵⁴ in copyright law imposes a causal condition that authorship results from at least a minimal degree of human⁵⁵ creativity.⁵⁶ The elusive meaning of creativity⁵⁷ could include the creativity supplied, and indeed epitomised, by nature. However, the meaning of creativity in *copyright doctrine* mandates an *intellectual* element.⁵⁸ This requires that intellectual, not natural, pressure shape the work. Non-authorial forces can therefore disrupt the causal chain of authorship linking the author's mind to the material output.

Issues of authorial causation tend to surface in copyright law in the

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

52. For a sustained discussion of causal responsibility in copyright law, see Shyamkrishna Balganes, *Causing Copyright*, 117 COLUMBIA L. REV. 1 (2017).

53. *Id.* at 34.

54. See *supra* note 23.

55. See *supra* note 31.

56. See *supra* note 32.

57. See Russ VerSteeg, *Sparks in the Tinderbox: Feist, "Creativity," and the Legislative History of the 1976 Copyright Act*, 56 U. Pitt. L. Rev. 549, 562 (1995) ("delineating an exact definition for 'creativity' is probably futile").

58. See *Oxford Univ. Press, N.Y., Inc. v. United States*, 33 C.C.P.A. 11, 18-19 (1945) "[A]uthorship implies that there has been put into the production something meritorious from the author's own mind; that the product embodies the thought of the author . . . and would not have found existence in the form presented, but for the distinctive individuality of mind from which it sprang Running through all the cases is the controlling principle that for a thing to be the work of an 'author,' it must be something that is more or less the product of mental activity as distinguished from that which is purely mechanical." In the *Trade-Mark Cases*, 100 U.S. 82, 94 (1879), the Supreme Court said: "writings which are to be protected are the fruits of *intellectual* labor" that "are founded in the creative powers of the mind." In *Burrow-Giles Lithographic Co. v. Saron*y, 111 U.S. 53, 58 (1884), it was said that "writings . . . include all forms of writing, printing, engravings, etchings, etc., by which the *ideas in the mind of the author are given visible expression*." Note the other repetitive references to the *intellectual* aspect of originality in *Burrow-Giles*, 111 U.S.: "genius or intellect" at 58; "intellectual conceptions" at 58 and "intellectual conception" at 59; "originality of thought" at 59; "intellectual production, of thought, and conception, on the part of the author" at 59-60; "conception" at 60; "intellectual invention" at 60; and "intellectual creation" at 60. *Feist Publ'ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 347 (1991), cited both the *Trade Mark Cases* and *Burrow-Giles* as decisions which "defined the crucial term . . . 'authors,'" and expressly quoted their references to intellectual labour, powers of the mind and intellectual production, thought, and conception.

context of multiple human actors and the question of who contributes authorial input sufficient to make them the sole, or a joint, author. It also arises in cases of non-human contribution, from monkeys taking a selfie,⁵⁹ to supernatural beings.⁶⁰ It has hypothetically arisen in the context of accidental art.⁶¹ The intervention of technology can also seriously disturb authorial causation. An early photography case asserted that “the *only force* that contributes to the formation of the image is the chemical force of light.”⁶² Computer code now has a growing propensity to vitiate authorship.⁶³ And new modes of contemporary art employing living material, natural forces, and chance can generate incredibly complex questions of causal allocation, neatly exemplified by environmental artist Nils Udo: “[t]urning nature into art? Where is the critical dividing line between nature and art? This does not interest me. What counts for me is that my actions . . . fuse life and art into each other.”⁶⁴

B. Causation and Nature

The causal dimension of creativity demands that some evidence of the *author's* creativity emerge in the work. Authorship is a process, beginning with a mental conception and ending with a material fixation.⁶⁵ The critical question is what happens along that continuum. If natural forces disrupt, obscure or overwhelm the mental processes of the author, the author's intellectual imprint may be so diluted as to vitiate authorship.

59. See Camila Domonoske, *Monkey Can't Own Copyright To His Selfie, Federal Judge Says*, NPR (Jan. 7, 2016), <http://www.npr.org/sections/thetwo-way/2016/01/07/462245189/federal-judge-says-monkey-cant-own-copyright-to-his-selfie>.

60. See *Cummins v. Bond* [1927] 1 Ch 167, in which the plaintiff allegedly practised “automatic writing,” producing a work titled *The Chronicle of Cleophas* as the agent of a spirit.

61. See *Bell v. Catalda*, 191 F.2d 99, 105 (2d Cir. 1951) (suggesting that an “author” may adopt as his and consequently copyright an unintended variation caused by bad eyesight, defective musculature, a shock caused by a clap of thunder, or the results of a sponge flung in frustration at a painting).

62. *Wood v. Abbott*, 30 F. Cas. 424, 425 (C.C.S.D.N.Y. 1866) (emphasis added).

63. See Jani McCutcheon, *The Vanishing Author In Computer-Generated Works - A Critical Analysis of Recent Australian Case Law*, 36(3) MELBOURNE U. L. REV. 915 (2012); Annemarie Bridy, *The Evolution of Authorship: Work Made by Code*, 39 COLUM. J.L. & ARTS 395 (2015-2016); Annemarie Bridy, *Coding Creativity: Copyright and The Artificially Intelligent Author*, STAN. TECH. L. REV. 5 (2012); James Grimmelman, *There's No Such Thing As A Computer-Authored Work - And It's A Good Thing, Too*, 39(3) COLUM. J. L. & ARTS 403 (2016).

64. John K. Grande, *Nils-Udo: Nature Works* 18(7) SCULPTURE (1999), available at <http://www.sculpture.org/documents/scmag99/sept99/nils/nils.shtml> (quoting Nils Udo in *Art & Design Profile* No. 36, Special Issue “Art and the Natural Environment,” 1994, p. 59.).

65. This does not necessarily suggest that the mental conception must precede the execution. The mental conception may be contemporaneous with the fixation.

Seemingly in response to the “monkey selfie” fracas and *Kelley*, in 2014 the US Copyright Office clarified that it “will not register works produced by nature, animals, or plants.”⁶⁶ Significantly, this statement appears in a section headed “Works That Lack Human Authorship.” If the Copyright Office’s example of “works produced by nature... or plants”⁶⁷ is inspired by *Kelley*, it is misconceived. As explained above, Wildflower Works is not a work “produced by nature” or by “plants.” It is produced by Kelley *utilising* nature and plants. The Office’s statement is unobjectionable if it is limited to instances where nature, animals or the plants are indeed the *only* true “producers” of the work.

The more difficult causal questions arise when human and natural forces *combine* to generate works. At what point do these creations cross over from the work of nature to the work of an author? When do natural forces obscure authorship? Authorship demands originality, which is synonymous with creativity. As mentioned, the definition of creativity is obscure. Becker argues that originality “means simply that the product originates in the agent’s labor - that its *causal explanation* is in some important sense traceable to the agent *but not beyond*.”⁶⁸ Becker’s formula may preclude the influence of natural forces operating “beyond” authorship, at least to the extent that they eliminate or suppress the trace of the agent. Justin Hughes considers that “a judgment of originality or creativity”⁶⁹ produces *transformation*, and asks whether more than “identifiable difference” is required to effect transformation.⁷⁰ This article contemplates the legal effect of *nature* supplying, or significantly contributing to, the “identifiable difference.” The authorship-originality-creativity alloy demands some *human mental intervention* that causally accounts for the difference between the work and “the background order” referred to by Hughes:

creativity/originality requires a transformation not arising from the background order, whether that order is considered random or deterministic. But whatever the ontology, the candidate to whom we always turn to explain the transformation separate from the background world is the person – personal expression, personal intention, reflections of the person.⁷¹

66. COMPENDIUM III, *supra* note 38, at §313.2.

67. *Id.*

68. Lawrence C. Becker, *Deserving to Own Intellectual Property*, 68 CHI.-KENT L. REV. 609, 614 (1993) (emphasis added).

69. Hughes, *supra* note 23, at 105.

70. *Id.*

71. *Id.* at 106.

Authorship is also frequently expressed as an exercise of “control.”⁷² This clearly implicates causation, demanding either a quantitative or qualitative analysis of who, or what (in the case of nature), is *more* responsible for (or in *control* of) the material expression of the work. The remarkable force of nature may lead to an assumption that it will always best the feeble attempts at human control. However, the history of humankind is a narrative of, to borrow from *Aalmuhammed v. Lee*, humans “superintend[ing nature] by exercising control.”⁷³ It certainly describes the history of gardens. As Robert Frost said: “[n]ature does not complete things. She is chaotic. Man must finish, and he does so by making a garden and building a wall.”⁷⁴

This precarious tension between human control and natural force inspires artists. Witness the words of Jeff Koons in relation to *Split-Rocker*, a giant plant-festooned sculpture similar to his iconic *Puppy*:

I love the dialogue with nature in creating a piece that needs so much control. How many plants should be planted? How will these plants survive? While at the same time giving up the control. It's in nature's hands, even though you try to plan everything to make the plants survive. This sense of giving up control is very beautiful. The balance between control and giving up control reminds us of the polarity of existence.⁷⁵

C. Causation in Kelley

In *Kelley*, the ultimate issue is whether nature, or Kelley, *caused* the material expression of the work. How does copyright accommodate the collaborative venture between Kelley and nature? In apportioning causal responsibility, it is tempting to borrow from other areas of law which are replete with causation doctrine, such as negligence and contract, even if those doctrines usually allocate legal *liability* rather than *rights*. If we apply the but-for test, it is clear that Wildflower Works would not come into existence but for Kelley's actions. Conversely, the counterfactual indicates that the work would not have naturally arisen without Kelley's

72. *E.g.*, *Aalmuhammed v. Lee*, 202 F.3d 1227, 1234 (9th Cir. 2000) (discussing how an author “superintends the work by exercising control”).

73. *Id.*

74. Robert Frost, 1874 – 1963 (source unknown).

75. Reported at both *Jeff Koons Split-Rocker*, GAGOSIAN, <https://www.gagosian.com/exhibitions/jeff-koons-split-rocker> (last visited Sept. 30, 2017) and Sarah Cascone, *Jeff Koons Brings a Giant Flower Sculpture to Rockefeller Center*, ARTNET NEWS, (May 30, 2014), <https://news.artnet.com/art-world/jeff-koons-brings-a-giant-flower-sculpture-to-rockefeller-center-30623>.

intervention. In this sense, the garden “owes its origin”⁷⁶ to Kelley. However, the but-for test is notoriously problematic when multiple causes combine to produce a result.⁷⁷ This requires an apportionment of causal significance among the various factors.⁷⁸ Essentially, this necessitates an assessment of the comparative weight of each contribution, in this case nature and Kelley. In *Kelley*, the court implies that Kelley ceded authorship to nature. It concluded that the work “owes *most* of its form and appearance to natural forces,” and that “[*m*]ost of 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.”⁷⁹ Here the court *quantitatively* allocates causative responsibility for the form and determines that nature is primarily responsible.⁸⁰

As mentioned, the court’s causal analysis is flawed, because it was erroneously searching for authorship of the plants, rather than the garden. As Kelley has stated, “I think the court broke my... rights to authorship by giving the authorship to the seeds and the plants.”⁸¹ Of course Kelley is not the author of the plants. While he may have, strictly speaking, caused their germination as their “originator,”⁸² he did not *form* them. We cannot discern any of Kelley’s intelligence in them. Only the garden as a whole reveals Kelley’s intellectual imprint. Kelley’s design of the garden marks the distinction, recognised by Hughes, “between value that ‘inheres’ in the work and ‘new’ value”⁸³ and it is the source of his authorship. Thus in allocating authorship, or causal responsibility, the perception of the work is critical. The court wrongly assigned primary responsibility for the form of Wildflower Works to nature because it failed to perceive the work as a *compilation* of natural elements. It only saw the natural elements.

76. *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884). *See also Aalmuhammed*, 202 F.3d at 1232 (“The word ‘author’ is traditionally used to mean the originator or the person who causes something to come into being, or even the first cause, as when Chaucer refers to the ‘Author of Nature.’”).

77. Balganes, *supra* note 52, at 49.

78. *Id.* at 49-53.

79. *Kelley v. Chicago Park Dist.*, 635 F.3d 290, 302-306 (emphasis added).

80. Other commentators make a similar apportionment. *See, e.g., Charles Cronin, Dead on the Vine: Living and Conceptual Art and VARA*, 12(2) VANDERBILT J. ENT. & TECH. L. 209, 214 (2010) (“chance and nature hold the *laboring oar*,”) (emphasis added); *Id.* at 232 (the meaning and value of the work are attributed “*mainly* to naturally occurring phenomena”) (emphasis added); *Id.* at 233 (“*virtually total reliance* of Wildflower Works on natural elements *mostly* beyond the artist’s control”) (emphasis added).

81. DePaul University, *Chapman Kelley v. Chicago Park District*, YOUTUBE [at 58.45 minutes], <http://www.youtube.com/watch?v=GArZHJnNXNL>.

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

83. Hughes, *supra* note 23, at 105.

The court also described Wildflower Works as “inherently changeable.”⁸⁴ The implication is that Kelley has yielded authorial control of the form of the work to nature as a force of random indeterminacy. However, nature is, in fact, very predictable. While all of nature is protean, the cycles of nature are expected, coherent, repetitive *patterns* of change. Like the video game in *Williams v. Artic International*, the features of Wildflower Works “repeat themselves over and over.”⁸⁵ Thus change in itself does not disturb the causal link to Kelley’s authorship, because there are limits to the scope of change possible in Kelley’s construction.

I contend that in the case of Wildflower Works, nature is subservient to Kelley’s will. Nature controls the shape, colour, changing form, and longevity of the plants. But *Kelley* controls the plants and the design of the overall garden, which, as mentioned, is the true work. Rather than precluding authorship, nature is a deliberate *aspect* of Kelley’s authorship.

III. WHEN NATURE MEETS AUTHORSHIP IN CONTEMPORARY ART

A. Some examples on the art-nature continuum

The Seventh Circuit’s approach to causation and authorship has the potential to undermine or at least complicate copyright subsistence in many other kinds of contemporary art employing natural forces and natural elements. It also raises broader questions about the relationship between nature, authorship, and originality in contemporary art, which invite deeper exploration.

Numerous contemporary artists allow natural forces like gravity, velocity, wind, water or time, to influence the material expression of their artwork. Max Ernst swung a punctured tin of paint over his canvases to produce his drip paintings, and of course Jackson Pollock famously allowed his paintings to form from haphazardly allocated paint drips, spills and splatters. Princess Tarinan von Anhalt uses the force of a jet engine to hurl paint at a canvas.⁸⁶ Caroline Christie uses gravity to tilt liquid paint on her canvases.⁸⁷ Phillip Stearns⁸⁸ and Dries Ketels⁸⁹

84. *Kelley*, 635 F.3d at 304.

85. *Williams v. Artic International*, 685 F.2d 870, 874 (3d Cir. 1982).

86. Princess Tarinan von Anhalt practices “jet art,” in which she throws paint at a canvas in the force of a jet engine. Phil Scott, *Painting With a Learjet Engine*, AIR & SPACE MAG., (Dec. 2014), <http://www.airspacemag.com/flight-today/painting-learjet-engine-180953357/?no-ist>.

87. Caroline Christie uses “chemical combinations and manipulations of gravity” to create her abstract expressionist works. CAROLINE CHRISTIE-COXON, <http://www.carolinechristie.net/>.

88. Genista, *Artist Zaps 15,000 Volts Of Electricity Into film To Create Beautiful Abstractions*, BEAUTIFUL DECAY, Nov. 19, 2014, <http://beautifuldecay.com/2014/11/19/artist-zaps-15000-volts->

use electricity to shape their works. To varying degrees, the natural force determines the ultimate material form of these works, and there is a retreat from deliberate artistic control. Yet most would accept their status as artistic works.

Other works move further along the art-nature continuum, and arguably have a weaker claim to authorship. Cameron Robbins' *Wind Section – Instrumental* involves a wind-powered mechanical instrument able to produce large ink drawings on paper.⁹⁰ Robbins describes his work as follows:

The machine uses wind speed to drive the pen, wind direction to swivel the drawing board, and time/electricity to move the paper slowly along at 250 cm per week. An entire weather system leaves its trace over the days it takes to pass.⁹¹

Other iterations of the work place the machine and the paper outside, where rain can add an unexpected element, turning “the drawings into watercolours.”⁹²

In utilising the natural force of wind, the particular form of the drawings *cannot be directed* by Robbins. The Director of Tasmania's the Museum of New Art (MONA), David Walsh, has described how “Cameron Robbins gives nature a voice, but he's not telling it what to say.”⁹³ Similar aesthetic motivations can be found in the work of Tim Knowles, who attached hundreds of pens to the branches of a weeping willow, which then “drew” on paper placed at its base, directed by the wind.⁹⁴ These processes sound like the allegedly uncopyrightable output of “a mechanical weaving process that randomly produces irregular shapes in the fabric without any discernible pattern.”⁹⁵ Are these equivalent to the uncopyrightable “random and arbitrary use of numbers

electricity-film-create-beautiful-abstractions/ .

89. Genista, *Lightning Strikes: Artist Uses Electricity To Create Captivating Portraits*, BEAUTIFUL DECAY, June 24, 2015, <http://beautifuldecay.com/2015/06/24/lightning-strikes-artist-uses-electricity-create-captivating-portraits/>.

90. Cameron Robbins, *Wind Section – Instrumental/Sonic Wind Section*, CAMERON ROBBINS, <http://cameronrobbins.com/wind-section-instrumental-sonic-wind-section/>.

91. *Id.*

92. See Cameron Robbins, *Cameron Robbins Wind Drawings*, on file with the author.

93. E-FLUX, <http://www.e-flux.com/announcements/44580/cameron-robbinsfield-lines/>.

94. Tim Knowles, *Tree Drawing - Weeping Willow on Circular Panel [100 pen]*, TIM KNOWLES, <http://www.timknowles.co.uk/Work/TreeDrawings/CircularWeepingWillow/tabid/266/Default.aspx>.

95. See COMPENDIUM III, *supra* note 38, at § 313.2 (“the Office 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.”) Note, however, the real possibility that this definition, based on a lack of “*any creative input or intervention*” does not apply to Robbins, whose intervention is discussed further below.

in the public domain”⁹⁶?

Similar apparently undirected expression can be found in the art work of animals,⁹⁷ some bio art, such as slime moulds,⁹⁸ Aganetha Dyck’s work in which damaged found objects are restored by beehives,⁹⁹ Brad Troemel’s abstract installations created by ant tunnels,¹⁰⁰ Steven Kutcher’s abstract paintings made by the tracks of bugs,¹⁰¹ and the work of Jacek Tylicki, who “sends into the wind, the rivers or the forests sheets of canvas or paper, and leaves them for a long while in a natural environment, thus forcing upon Nature an attitude previously reserved to the artist: the creation of a form.”¹⁰² These works may lack sufficient human authorship to qualify as copyright works, if the author’s intellect is subordinated to the natural force.

This requires further reflection on the extent of authorial intervention in these “undirected works.” Cameron Robbins argues that his subjective aesthetic decisions impact the material output of his work. He recounts claims that his “machine is like a sausage factory sitting there in the wind manufacturing drawings while I am in a banana lounge with a martini.”¹⁰³ He denies that his machines are “automatic,” likening them to drawing *instruments*, which, like a piano, must be “played, maintained, and practiced to produce the most refined and compelling works.”¹⁰⁴ While employing chaos and chance, these “elements have to be managed. Parameters must be set as in any expressive endeavor – at the very least, the pen has to be kept on the paper to the desired degree.”¹⁰⁵ Thus Robbins moderates his highly sensitive and complex instruments and their constraints, refining them until they “do the type of drawings I’m interested in.”¹⁰⁶ He decides where and when to locate

96. *Toro Co. v. R & R Products Co.*, 787 F.2d 1208, 1213 (8th Cir. 1986).

97. See, e.g., Jessica G. Goldman, *Creativity: The weird and wonderful art of animals*, BBC Future (July 24, 2014), at <http://www.bbc.com/future/story/20140723-are-we-the-only-creative-species>.

98. See, e.g., Allison Meier, *Two Beings Collaborate on Art, One Human, Another a Slime Mold*, HYPERALLERGIC (April 30, 2013), <http://hyperallergic.com/69707/two-beings-collaborate-on-art-one-a-human-another-a-slime-mold/>.

99. Anna Marks, *Artist Fixes Damaged Objects By Placing Them in Beehives*, CREATORS (May 27, 2016), <http://thecreatorsproject.vice.com/blog/artist-fixes-damaged-objects-by-placing-them-in-beehives>.

100. Leslie Tane, *Brad Troemel Collaborates With Ants To Create Colorful Abstract Installation*, BEAUTIFUL DECAY (Nov. 18, 2014), <http://beautifuldecay.com/2014/11/18/brad-troemel-collaborates-ants-create-colorful-abstract-installation/>.

101. See STEVEN R. KUTCHER BUG ART, <http://bugartbysteven.com/> (last visited November 10, 2017).

102. Jacek Tylicki, [http://www.tylicki.com/](http://www.tylicki.com;); See also MARIO REIS, <http://www.marioreis.de/seiten/interview1.htm>.

103. Telephone interview with Cameron Robbins (Sept. 19, 2016).

104. *Id.*

105. *Id.*

106. *Id.*

the instruments, thereby deciding what weather patterns will influence the work, and how long they will be subjected to those forces. He decides when to stop the drawing process, and which drawings are good enough, rejecting around 60%.¹⁰⁷ While acknowledging external influences, Robbins makes clear authorial claims: “The drawings are *my* drawings, part of the machine, the installation, the weather, and the artwork.”¹⁰⁸

Agnetha Dyck collaborates with bees. She combines damaged found objects with bee hives and lets the bees do their work. At first glance, this sounds like a complete abrogation of authorship. She created neither the found object nor the honeycomb. But is it? To inspire her bees, Dyck encourages them “to make their honeycomb marks on the objects by painting with perfumes and pheromones,”¹⁰⁹ and “strategically adds wax or honey, propolis or hand-made honeycomb patterns to the objects prior to placing them into their hives.”¹¹⁰ Ignoring the adage, “never work with animals,”¹¹¹ Dyck acknowledges that this does not always go to plan: “[a]t least I like to think my methods are strategic. The honeybees often think otherwise and respond to what is placed within their hive in ways that make my mind reel.”¹¹² And yet Dyck does engage in a collaboration with the bees, sometimes even modifying the honeycomb, suggesting clear authorial input:

At times, the honeybees encourage me to add or delete honeycomb after they have worked on an object. As an example, by overextending their honeycomb, the honeybees encourage me to sculpt into this mass of waxed cell construction and return it to them for further consideration

Most often I accept their decision as to when an art work has been completed. Other times, if they have covered the object totally with honeycomb, I might carve into it or add to their construction The honeybees usually make the last creative decision. Their honeycomb construction and their take on structure is totally surprising. I am continuously amazed and in awe of their responses to new ideas. When they follow my suggestion I know that we are communicating and collaborating. If they do not follow

107. *Id.*

108. *Id.*

109. *Aganetha Dyck Bio*, Michael Gibson Gallery, <http://gibsongallery.com/artists/aganetha-dyck/>.

110. *Interview with Aganetha Dyck: Canadian Visual Artist*, MASON JOURNAL (Oct 24, 2011), <http://www.mason-studio.com/journal/2011/10/interview-with-aganetha-dyck-canadian-visual-artist/>.

111. *Ronald L. Smith*, WHO'S WHO IN COMEDY 160-163 (1992).

112. *Dyck*, *supra* note 109.

my suggestion, I follow theirs.¹¹³

Heather Barnett works with slime moulds, a single cell organism that grows in fascinating patterns. Similar to Dyck, she refers to herself as a “co-producer” with the slime moulds, and her work as “a collaboration of sorts.”¹¹⁴ She explains how she “can predict certain behaviours by understanding how slime mould operates,”¹¹⁵ and slime moulds can be motivated to modify their behaviour through the environmental conditions she sets, and using attractants and repellents such as light, moisture, and food.¹¹⁶ However, Barnett concedes that she “can’t control it, and the slime mould has the final say in the creative process.”¹¹⁷ Interestingly, both Dyck and Barnett allege that nature makes the final creative decision. And yet, this is not strictly correct, since both Dyck and Barnett determine when to capture nature’s communication. Barnett often photographs the slime mould’s meanderings, and in doing so she has made a decision that she likes the form, that it is “complete.” Similarly, Dyck decides when to part the bees from the found object, and reclaim it as an art piece.

Tylicki’s artistic practice differs from Robbins, Dyck and Barnett. Robbins’ machines always draw lines, Dyck’s works will always amalgamate honeycomb with a found object, and Barnett’s work will always involve slime moulds making their patterns. Their parameters are clearer than Tylicki’s, because Tylicki is less certain about what nature will do, other than make some kind of marks. Nevertheless, Tylicki’s intellect can be discerned in deciding the media to use (paper, wood, or canvas?), where to leave it (river, desert, earth, tree, meadow?), when to reclaim it (like Pollock deciding “enough drips”), whether to accept it (some, perhaps many, pieces would be considered “not right”), and how to frame it (which way is “up,” and should it be cropped?). All of these decisions involve Tylicki’s *authorisation* of the art.

The choices of Robbins, Dyck, Barnett and even Tylicki reflect the various choices of posing the subject, selecting the costume, positioning the draperies and determining light and shade that transformed Napoleon Sarony into an author when he photographed Oscar Wilde.¹¹⁸ Russ Versteeg explains how “[c]reativity... is an assembly process [which] generate[s] an infinity of combinations that persons either

113. *Id.*

114. Heather Barnett, *What Humans Can Learn from Semi-Intelligent Life*, YOUTUBE, (July 17, 2014), <https://www.youtube.com/watch?v=2UxGrde1NDA>.

115. *Id.*

116. E-mail from Heather Barnett, Artist, Swansea University (Oct. 20, 2016) (on file with author).

117. Barnett, *supra* note 121.

118. *See* Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 55 (1884).

accept or reject.”¹¹⁹ Chris Bucafusco argues that “[i]t is the creator’s choice about *how* to produce a given mental effect that receives copyright protection.”¹²⁰ Ginsburg notes that “if the nature of the task does not ineluctably determine the manner in which the putative author executes the work, then she is making choices that are subjective and most likely minimally creative.”¹²¹ These choices demonstrate “minimal personal autonomy.”¹²² They also represent “the personal reaction of an individual upon nature,” the “something unique ... something irreducible, which is one man’s alone” referred to in *Bleistein v. Donaldson Lithographing Co*¹²³ as the indicator of originality. There is human consciousness in these works. They all possess a certain synergy, a coalescent spark, of authorial impact, despite their intense partnership with nature.

These works are fundamentally different to the examples of “works produced by nature, animals, or plants”¹²⁴ cited by the Copyright office. The artists have not merely appropriated from nature (by, for example, claiming authorship in naturally formed drift wood,¹²⁵ interesting rocks,¹²⁶ or plants¹²⁷). What they create is “identifiably different from what occurs ...in the background world.”¹²⁸ While they have incorporated random processes in their authorship, the same randomised expressions would not occur in nature. They have not merely *discovered* marks made by nature. Tyllicki, for example, could not claim authorship of a sheet of paper marked by nature that he found drifting in a river. His authorship stems from his deliberate intervention in nature and his discretionary choices. Hughes suggests that

[s]omething will be considered “creative” only when it appears to come from neither a purely mechanical process, nor a purely random one. We identify this process that navigates between determinism and randomness - this process that produces the “non-mechanical new” - as something that goes on inside the individual

119. Russ VerSteege, *Rethinking Originality*, 34 WM. & MARY L. REV. 801, 832 (1993).

120. Buccafusco, *supra* note 28, at 1274.

121. Ginsburg, *supra* note 23, at 1085.

122. *See id.* at 1092.

123. 188 U.S. 239, 250 (1903).

124. COMPENDIUM III, *supra* note 38, at §313.2.

125. *Id.* at 313.2 (the Copyright Office will reject claims “based on driftwood that has been shaped and smoothed by the ocean”).

126. *Id.* (The Copyright Office will reject claims “based on cut marks, defects, and other qualities found in natural stone”).

127. *Id.* (“The Office will not register works produced by nature, animals, or plants”).

128. *See* Hughes, *supra* note 23, at 105 (“if ‘non-randomness’ is a requirement for something to be creative, it is because random organization of existing elements are not identifiably different from what occurs (has occurred or could occur) in the background world”).

person.¹²⁹

Hughes' formula only excludes the *purely* mechanical or *purely* random from the creative act. It acknowledges the scintilla of human intervention-creativity, which is all that *Feist* demands. These authors supply it.

B. Intention and Authorship

Nimmer has argued that “intent is a necessary element of the act of authorship.”¹³⁰ He notes that

[C]opyright law is remarkably unconcerned with any theory at all about what constitutes authorship--with one single exception: intentionality. Copyright protection arises only for works that reflect an intent to produce something personal or subjective.¹³¹

Jane Ginsburg acknowledges that “intent to be a creative author” is one of a number of “[c]ontending additional or alternative authorial characteristics” in authorship jurisprudence,¹³² but rejects Nimmer’s argument, finding support in *Bell v Catalda*¹³³ where Judge Frank suggested that an “author” may adopt as his and consequently copyright an unintended variation caused by bad eyesight, defective musculature, a shock caused by a clap of thunder, or the results of a sponge flung in frustration at a painting.¹³⁴

In *Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc.*,¹³⁵ the Tenth Circuit also acknowledged the possibility of unintended authorship:

Of course, this is not to say that the accidental or spontaneous artist will be denied copyright protection for not intending to produce art; it is only to say that authorial intent sometimes can shed light on the question of whether a particular work qualifies as an independent creation or only a copy.¹³⁶

129. *Id.* at 114.

130. David Nimmer, *Copyright in the Dead Sea Scrolls: Authorship and Originality*, 38 HOUS. L. REV. 1, 204 (2001).

131. *Id.* at 159.

132. Ginsburg, *supra* note 23, at 1066.

133. 191 F.2d 99, 105 (2d Cir. 1951).

134. Ginsburg, *supra* note 23, at 1085-88.

135. 528 F.3d 1258 (10th Cir. 2008).

136. *Id.* at 1268.

Before *Bell*, in *Chamberlin v. Uris Sales Corp.*¹³⁷ Judge Frank seemed more equivocal about “whether originality is precluded by lack of intention,” suggesting that

[i]f one made an unintentional error in copying which he perceived to add distinctiveness to the product, he might perhaps obtain a valid copyright on his copy, although the question would then arise whether originality is precluded by lack of intention.¹³⁸

That question was moot in *Chamberlin*, but Judge Frank went on to state:

It is not easy to ascertain what is intended and what inadvertent in the work of genius: That a man is color-blind may make him a master of black and white art; a painter's unique distortions, hailed as a sign of his genius, may be due to defective muscles.¹³⁹

Ray Patterson has lambasted the “embarrassment” of Judge Frank's “unsupported and unsupportable assertion” in *Bell*, arguing that “[t]he copyright monopoly is not appropriate for Judge Frank's accidental author” and the decision “moves copyright jurisprudence into the Alice-in-Wonderland realm of logic.”¹⁴⁰ Chris Bucaffusco's theory of authorship requires that the author “has the categorical intention that her creation is capable of producing mental effects in an audience.”¹⁴¹ Bucaffusco regards *Bell* as an example of the originality standard being “lowered nearly to the ground.”¹⁴² His theory of authorship would exclude accidental authorship. In asking why a person's intentions matter,¹⁴³ he notes that, “as a matter of common usage, most people would not refer to someone as an author who did not intentionally adopt that stance for herself.”¹⁴⁴ Bucaffusco, Patterson and Nimmer deny a place in copyright for “accidental authors.”

However, it is important to distinguish between accidental authorship and accidental expression. Judge Frank's examples are not, in truth examples of accidental authorship. His hypothetical author deliberately engages in the process of authorship, but is blindsided by unforeseen

137. 150 F.2d 512 (2nd Cir. 1945).

138. *Id.* at 513.

139. *Id.* at 513 n. 4.

140. Ray Patterson, *Nimmer's Copyright in The Dead Sea Scrolls: A Comment*, 38 HOUS. L. REV. 431, 431-432 (2001).

141. Bucaffusco, *supra* note 28, at 1262.

142. *Id.* at 1241.

143. *Id.* at 1263.

144. *Id.*

events that influence the material expression. Judge Frank was discussing the acts of a “copyist” engaged in making a mezzotint “version” of an existing painting. These were deliberate authors appropriating the random influences on their expression. We might, however, distinguish these copyists from Plutarch’s frustrated painter flinging a sponge at his painting.¹⁴⁵ This was simply an act of frustration, not an act of authorship. Unlike the above examples of contemporary artists employing random natural elements, the frustrated artist did not deliberately set up the random effect; nor was the painting deliberately abstract.

In the above examples of contemporary “nature” art, there is an intriguing mix of intention and lack of it. The works are not produced by accidental authors. Rather, they are authored accidents. Instead of causing a “variation unintentionally,”¹⁴⁶ these authors intentionally cause variations. They intend to produce variations, they just don’t intend to produce the *particular form* of those variations. They cannot possess such an intention, because these are randomised variations, scratchings ultimately made by nature which cannot be foreseen. But these authors *do* intend to produce *randomised* form. I would call their works “intentional accidents” or “moderated chance.” They are *deliberate* randomised productions within *chosen* parameters. Hughes explains how Aristotle “viewed the mental state of intending as focused on the means to achieve a given goal,”¹⁴⁷ and argues that “[a]n intention includes an awareness of a personal goal, awareness of a means to achieve that goal, and a commitment to pursue that means with personal actions.”¹⁴⁸ All of these conditions are satisfied in these examples; the goal is to produce random variations.

Whether authorial intention is a condition of authorship appears unsettled, particularly given the obiter status of Judge Frank’s comments. *Feist’s* prescription of creativity has also perhaps modified *Bell*, requiring at minimum a scintilla of brain power. This could at least exclude art caused by, for example, unintentionally tripping over an open can of paint, since it is a clear case of accidental authorship.¹⁴⁹

145. See *Bell v. Catalda*, 191 F.2d 99, 105 n.23 (2d Cir. 1951) (“A painter, enraged because he could not depict the foam that filled a horse’s mouth from champing at the bit, threw a sponge at his painting; the sponge splashed against the wall- and achieved the desired result”).

146. *Id.* at 105.

147. Hughes, *supra* note 23, at 140.

148. *Id.* at 141.

149. See Balganesch, *supra* 52, at 6. Although some commentators acknowledge that the post-hoc adoption of the accident may be sufficiently authorial. See, e.g., Durham, *supra* note 28, at 588 (“If ‘creativity’ requires deliberation, imagination, or other ‘work of the brain,’ one could find those attributes in the artist’s after-the-fact recognition of the value in his ‘mistake.’”) See also Heymann, *supra* note 28, at 1009.

However, if the *unintended* variation caused by the shock of a thunder clap during the process of authorship can be “authored,”¹⁵⁰ then why not these *intentional* accidents? We can see similar premeditated accidents in creating art while under the influence of mind-altering drugs,¹⁵¹ wearing a blindfold, a right-handed artist painting left-handed, or even Arthur Boyd’s use of long rods and sticks attached to a paint brush, “to introduce a remove from his direct hand work.”¹⁵² This could even include art that has been created while sleep-walking,¹⁵³ particularly once the sleepwalker becomes aware that this is a regular event and goes to sleep each night anticipating that art may greet them in the morning. The sleepwalker’s mind is still controlling the form, even if it is the unconscious mind.

C. Authorship and preconception: control over what?

These “intentional accidents” raise the interesting (and ultimately important) question of whether authorship is dependent on the author’s preconception or control over *specific* expression. Must an author intend to create, or have control over, *particular* expression, or just “expression”? Cameron Robbins, for example, has no direct control over the *particular* lines drawn by his instrument, but he does cause the wind to make lines. Is this enough for authorship? *Bell* would suggest so.

Oxford Univ. Press, N.Y., Inc. v. United States¹⁵⁴ stated that authorship requires “that the product embodies the thought of the author . . . and would not have found existence *in the form presented*, but for the *distinctive individuality of mind* from which it sprang.”¹⁵⁵ This suggests that the author’s mind must govern the “distinctive individuality” of “the form presented.” However, *Oxford Univ. Press* also clarified that authorship “must be something that is *more or less the product of mental activity* as distinguished from that which is purely mechanical,”¹⁵⁶ suggesting that the more important function of authorship is simply to exclude the purely mechanical. On their face,

150. *Bell*, 191 F.2d at 105.

151. See, e.g., HENRI MICHEAUX, MISERABLE MIRACLE (LA MESCALINE) (1956). (Author famously recorded (through poetry and drawing) his aberrant and deliberate experiments with mescaline); see also Reinhard Kuhn, *The Hermeneutics of Silence: Michaux and Mescaline*, 50 YALE FRENCH STUDIES 130 (1974).

152. Cameron Robbins, *Cameron Robbins Wind Drawings* (on file with the author).

153. See Matilda Battersby, *Meet Lee Hadwin, the ‘Sleepwalking Artist’ Who Can’t Draw When He’s Awake*, THE INDEPENDENT (Jan. 14, 2015), <http://www.independent.co.uk/arts-entertainment/art/features/forget-tracey-emin-s-bed-meet-the-sleep-walking-artist-9977382.html>.

154. No. 4491, 1945 C.C.P.A. WL 4002 at *1 (C.C.P.A. May 24, 1945).

155. *Id.* at *18.

156. *Id.* at *19.

none of the other, more recent, judicial statements on the mental element of authorship necessarily require a direct control over *specific* expression. They generally require some more nebulous notion of “intellectual labor.”¹⁵⁷

Some Australian decisions suggest that an intention to cause *particular* expression may be necessary. For example, obiter by the Australian High Court suggests that the author’s “independent intellectual effort”¹⁵⁸ must be “directed to the originality of the *particular form* of expression.”¹⁵⁹ In *Komessaroff v Mickle*,¹⁶⁰ the court doubted that a moving sand sculpture¹⁶¹ could be a work of artistic craftsmanship, in part because the pictures formed by the object are produced by “forces” and “not *directly produced by any human hand*”¹⁶² and the maker’s “action does *not directly bring about the spectacles* which result from adjustment of the position of the product.”¹⁶³

Becker requires an intention to author which confers authorship on a thing when

- (1) its causal history is traceable to the intentional states of an agent or agents; (2) those agents . . . are also *creating and realizing their mental representations of it*; [and] (3) those representations either constitute the artifact itself, or play a substantial causal role in its production.¹⁶⁴

Becker’s condition 1 excludes “natural objects that we merely

157. *Id.* at *20.

158. *IceTV v Nine Network Australia*, [2009] 239 CLR 458, 474 (Austl.).

159. *Id.* at 481; *see* *Fairfax Media Publications v. Reed International Books Australia* [2010] 189 FCR 109, (Austl.) (where Justice Bennett said that for copyright to subsist, one or more authors must have “expended sufficient effort of a literary nature *directed to the form of expression of the work*”) (emphasis added); *see also In JR Consulting & Drafting Pty Limited v Cummings* [2016] 329 ALR 625, (Austl.) (citing the full Court of the Federal Court even emphasised the requirement of particularity: “[a]s to the “correlative” relationship between authorship and originality, the contemporary question is simply this: Has the author deployed personal independent skill, labour, intellectual effort, judgement and discrimination in the production of the *particular expression* of the work?”) (emphasis in original); *see also Telstra Corporation Ltd v Phone Directories Co Pty Ltd* [2010] 194 FCR 142, 171 (Austl.) (noting Chief Justice Keane, CJ of the full Court of the Federal Court said: “none of the individuals who contributed to the production of the directories had any conception of the *actual form* in which they were finally expressed.”) (emphasis added).

160. *Komesaroff v Mickle* [1987] VR 703 (Austl.).

161. *Id.* at 703 (The headnote to the report describes the device as follows: “The product comprised sand, liquid and a layer of air bubbles which were enclosed in a thin rectangular clear frame. Miniature sand landscapes were formed when the sand trickled through the air bubbles and rested at the bottom of the frame. The product had a perspex stand and, when the product was turned over, a different sand landscape was produced.”).

162. *Id.* at 710.

163. *Id.*

164. Becker, *supra* note 72 at 613 (emphasis added).

appropriate,”¹⁶⁵ and conditions 2 and 3 exclude accidents and mere physical labour.¹⁶⁶ But does the condition that an author realise their “mental representation” require the *particular preconception* of a thing? If so, intentional accidents cannot be authored, because their particular expression cannot be preconceived. Strictly applied, a condition of preconceived particular form would deny authorship even to Pollock, since how could he foresee the *specific* form of such random, dense and complex drips?

Professor Ginsburg explains how machines may compromise authorship, because “the greater the machine's role in the work's production, the more the “author” must show how her role determined the *work's form and content*.”¹⁶⁷ But again, does this suggest the need for control over *particular* form, or just “form”? If the machine produced *randomised* form, would this suffice?

Alan Durham has explained the judicial antagonism towards randomly determined expression,¹⁶⁸ and courts have denied copyright subsistence in product part numbers because of their arbitrary allocation. In *Toro Co. v. R & R Products Co.*,¹⁶⁹ the “accidental marriage of a part and a number” lacked copyright subsistence because the numbers were assigned “without rhyme or reason” and “no effort or judgment went into the selection or composition of the numbers.”¹⁷⁰ In *ATC Distribution Group v. Whatever It Takes Transmissions & Parts, Inc.*,¹⁷¹ the court stated:

Even assuming, *arguendo*, that some strings of numbers used to designate an item or procedure could be sufficiently creative to merit copyright protection, the parts numbers at issue in the case before us do not evidence any such creativity. ATC's allocation of numbers to parts was an essentially random process, serving only to provide a useful shorthand way of referring to each part. The only reason that a “sealing ring, pump slide” is allocated number 176 is the random ordering of sub-categories of parts, and the random ordering of parts within that sub-category. Were it not for a series of random orderings within each category field, a given part could be 47165 or 89386. As such, the particular numbers allocated to each part do not *express* any of the creative ideas that

165. *Id.*

166. *Id.*

167. Ginsburg, *supra* note 23 at 1074 (emphasis added).

168. Durham, *supra* note 28.

169. 787 F.2d 1208 (8th Cir. 1986).

170. *Id.* at 1213.

171. 402 F.3d 700 (6th Cir. 2005).

went into the classification scheme in any way that could be considered eligible for copyright protection.¹⁷²

It seems important to the *ATC* court that the requisite creativity express *particular* numbers, rather than numbers per se. The result would presumably be different if a human had, laboriously (and inefficiently), manually selected and allocated numbers to each of the parts.

A strict application of these “numbers cases” could undermine authorship in nature-artist collaborations. There is a correlation between the “accidental marriage of a part and a number”¹⁷³ and these artistic “intentional accidents.” However, there are also differences. Most importantly, the nature authors *modify* nature. Lines appear where there were none before. Honeycomb encroaches anew on a broken statue. A new artwork emerges from the banks of a river. In comparison, the numbers cases involve previously existing, and unmodified, numbers. The numbers are merely *transferred* from the public domain to the part catalogue. There is no net change to the “natural order” of the numbers. The nature authors also engage in the numerous creative choices of setting parameters, selecting contexts, and encouraging, manipulating and finalising the natural process, described above, which influence the form of the work. The authors of the part catalogues merely choose to combine numbers with parts, but that is utterly prosaic and predictable, failing even *Feist’s* low originality baseline. There is a scintilla of arrangement, in combining the numbers with the part, but that arrangement does not stem from the author’s intellect, but from the random allocation made by the software. And there is no post hoc modification of the allocated numbers, unlike the interventions made by some of the nature authors. The numbers are not framed, nor subjectively rejected.

In comparison to the “intentional accidents” produced by these nature artists, Kelley leaves little to random indeterminacy, and the conception of his garden is laboriously planned. He utilises the natural processes of nature that inhere in the plants, but he *directs* them, like a conductor directs an orchestra. Importantly, and in contrast to the art discussed above, if Kelley had to reconstruct Wildflower Works in another location in substantially the same form, he could.¹⁷⁴ Similarly, although in some of his works Damien Hirst uses death and decay rather than life and growth, he deliberately orchestrates the disintegration of his

172. *Id.* at 709.

173. *See Toro*, 787 F.2d at 1213.

174. Of course, differences in geography, microclimate, soil type, and drainage would prevent identical duplication.

work,¹⁷⁵ which can be predictably recreated (or rather, re-destroyed). In contrast, the works produced by *Wind Section*, slime mould or the animals, or even the work of Ernst, von Anhalt, Dyck or Christie, could never be reproduced in substantially the same *precise* form due to the random effects of the natural process.¹⁷⁶

As discussed above, authorship necessitates a mental dimension. However, it is not clear that this requires the author to have a *precise mental conception*, nor that it be executed. Versteeg categorises the author as a communicator.¹⁷⁷ He suggests that “an author generally, consciously or subconsciously, conceives a mental image (either visual or auditory) of his original expression” prior to communicating,¹⁷⁸ but that this is not essential. He claims that “[i]t is entirely possible for an author to produce original expression without first forming a mental conception of that expression,”¹⁷⁹ which is consistent with *Bell*. It certainly accommodates the reality that expression is often improvised, and not carefully thought out before the act of execution. With much contemporary art, predetermination of precise form is surely the exception rather than the rule, particularly in abstract art, where artists often wait for the work to “reveal itself.”¹⁸⁰ Even conventional representational art is theoretically “accidental,” as the artist produces the work through such vagaries as fluctuating energy driving muscles of varying strength and dexterity, vibrations in the brush or pencil, the effect of changing light, mental distractions, moods and fatigue, and the dynamic properties of the paint or other media.¹⁸¹ And if authorship is contingent on preconception of form, it must be a flawed foundation. Not only does it assume a preconception, but one which is clearly delineated and static. This disregards the reality that mental concepts are

175. See, e.g., Damien Hirst, *A Thousand Years*, DAMIEN HIRST (2012), <http://www.damienhirst.com/a-thousand-years> (piece of art which consists of a cow's head which slowly putrefies in a glass display case).

176. Which is not to say that copyright should be denied because the original copy of the work could never be exactly recreated. Da Vinci could probably never recreate the peculiar and delicious ambiguity of the *Mona Lisa*.

177. Russ VerSteeg, *Defining "Author" For Purposes of Copyright*, 45 AMERICAN U. L. REV. 1323, 1339 (1996).

178. *Id.* at 1340.

179. *Id.* see also Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 311 (1988) (noting that there are “occasions in which the ‘execution’ step begins before the idea”).

180. See, e.g., Dries Ketels, *Engraved Groom*, DRIESKETELS (July 5, 2015), <http://www.driesketels.com/> (Belgian abstract artist Dries Ketels, who lets each of his watercolour paintings “become what it can become” with him simply “guiding.” He is just “the director who creates the music to which the paintings will dance”).

181. Alan Tormey, *Indeterminacy and Identity in Art*, 58(2) THE MONIST 203, 205 (1974) (“No art work is ever totally and directly determined by the artist's choices. Any work of even minimal complexity will exhibit more aesthetically significant properties than could conceivably have been the result of particular determinate choices of the artist.”).

often, if not usually, fleeting, hazy and mutable; as subject to accidental influences as a body responding to a clap of thunder. Indeed, Jessica Litman recognises that Judge Frank's metaphor in *Bell* "suggests that transformation is the essence of the authorship process. Some of this transformation is purposeful; some of it is inadvertent; much of it is the product of an author's peculiar astigmatic vision."¹⁸²

All of this seriously questions the Seventh Circuit's overstatement that "authorship is an *entirely* human endeavor,"¹⁸³ which ignores the extent to which all art is to some degree influenced by non-directed forces. If a conventional human author cannot, or need not, preconceive a work with any particularity before embarking on its creation, is there any obstacle to artists like Robbins abandoning the particular form of their work to nature? Durham, for example, argues that copyright should be accorded to John Cage's random musical work based on "choices made by the author that are reflected in the form of the work," even if "chance take[s] over in determining the ultimate form of the composition."¹⁸⁴ Thus while Cameron Robbins cannot control the wind's *particular* lines, he ultimately controls the circumstances that produce the lines. If we compare him to Pollock, does Pollock exercise *significantly* greater control over his drips than Robbins over his lines, such that Pollock is an author and Robbins is not? We can also contrast these fact scenarios with the notorious monkey selfie. We may have no idea what a monkey might do with a camera, but we do know that wind will always blow, ants will make tunnels, bees will make hives, and, in Kelly's case, flowers will bloom and grow.

That authors need not conceive nor execute *particular* form is supported by the reality that copyright has never been concerned with creating *particular* types of expression. There are no "right lines" in copyrighted art. Copyright is simply concerned with the production of original expression. Likewise, copyright is not an instrument designed to encourage great intellectual feats. The originality standard is imposed not to generate intellectually demanding masterpieces, but to avert propertization of the public domain through sheer investment. There is no innovation standard imposed under the originality criterion, which only insists on a threshold of creativity that could be described as negligible.¹⁸⁵ Because shopping lists and simple doodles attract

182. Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 1010 (1990).

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

184. Durham, *supra* note 28, at 637.

185. See *Feist Publ'ns v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 345 (1991) (noting that "originality requires independent creation plus a modicum of creativity" and that "the requisite level of creativity is extremely low; even a slight amount will suffice"); *Bell v. Catalda*, 191 F.2d 99, 102 (2d Cir. 1951) (setting the bar even lower. There, the Second Circuit held "[a]ll that is needed to satisfy both the Constitution and the statute is that the 'author' contributed something more than a 'merely trivial'

copyright, and merit is irrelevant to it,¹⁸⁶ it must follow that copyright is disinterested in the particularity of form. Thus why should we be concerned if artists outsource that precision of form to nature? In short, an author must exert some control over expression, but not *particular* expression. Insisting on control over *particular* expression will deny copyright in much contemporary art involving randomised elements, whether that randomness is produced by nature, software or some other means. And this affects a growing, indeed established, body of art, not aberrant fringe-dwelling oddities.

IV. CONCLUSION

Wildflower Works is authored. *Kelley's* assertion to the contrary requires correction. An unconsidered application of its reasoning on nature's authorial dominance risks undermining authorship, and thus copyright, in many forms of contemporary art utilising natural forces and living material. This creates a dissonance between copyright and significant genres of artistic practice, and risks destabilizing its integrity and legitimacy:

Copyright law relies heavily for its operation on widespread acceptance of its legitimacy (rather than the sporadic enforcement of its sometimes hefty sanctions). That legitimacy lies in the idea that copyright law promotes cultural flourishing, by giving the weight of law to ideas that artistic and cultural activities warrant recognition, respect and reward.¹⁸⁷

Conventional copyright theory, while contestable,¹⁸⁸ suggests that

variation, something recognizably 'his own.' Originality in this context 'means little more than a prohibition of actual copying'").

186. *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251 (1903) ("It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations.").

187. Lionel Bently & Laura Biron, *Discontinuities Between Legal Conceptions of Authorship and Social Practices: What, If Anything, Is To Be Done?*, in *THE WORK OF AUTHORSHIP*, 263 (Mireille van Echoud, ed., 2014).

188. The authors of those contests are too numerous to cite. For an overview of the major theories, see LIOR ZEMER, *THE IDEA OF AUTHORSHIP IN COPYRIGHT* 9–20 (2007); ABRAHAM DRASSINOWER, *WHAT'S WRONG WITH COPYING?* (2015); see also ROBERTA ROSENTHAL K WALL, *THE SOUL OF CREATIVITY: FORGING A MORAL RIGHTS LAW FOR THE UNITED STATES* (2009); Becker, *supra* n.72; ROBERT P. MERGES, *JUSTIFYING INTELLECTUAL PROPERTY* (2011); Shyamkrishna Balganes, *The Normativity of Copying in Copyright Law*, 62 *DUKE L.J.* 203 (2012); Jeanne C. Fromer, *Expressive Incentives in Intellectual Property*, 98 *VA. L. REV.* 1745 (2012); Diane Leenheer Zimmerman, *Copyrights as Incentives: Did We Just Imagine That?*, 12 *THEORETICAL INQUIRIES IN LAW* 29 (2011); William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 *J. LEGAL STUD.* 325 (1989).

copyright is designed to encourage authors to create and disseminate works.¹⁸⁹ Remove the incentive of copyright, and authors may be disinclined to create and disseminate. This may stultify the development of new art utilising natural forces and living materials, and correspondingly hamper the public benefit that copyright envisages. And while we may endlessly argue about why copyright exists, it seems uncontroversial to claim that the ultimate goal of copyright is to promote the socially beneficial outcomes of “progress.”

It could be argued that contemporary artists co-opting nature have a disinterest in, or remove from authorship that suggests they are not motivated by copyright. Professor Balganesh argues that

[w]hen the creative process evinces a significant lack of control on the part of the claimant in producing the expression, it generates a plausible inference that the creative process was unlikely to have been influenced in any significant part by the law’s inducement [of copyright] and is therefore undeserving of protection under this account.¹⁹⁰

As discussed above, much depends on whether the “nature artists” discussed in this article do evince this “significant lack of control... in producing the expression” (which I have suggested is contestable), and whether the “creative process” Balganesh refers to requires an artist to determine particular, or only general, expression.

Balganesh raises much larger issues beyond the scope of this paper, including the coherence of the incentive theory itself,¹⁹¹ and competing justifications for copyright which might reward these nature works based on their contribution to the artistic canon.¹⁹² At minimum, if these

189. Landes and Posner, *Trademark Law: An Economic Perspective*, 30 J.L. & ECON. 265 (1987); see Ginsburg, *supra* note 23, at 1068 (noting that 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”).

190. Balganesh, *supra* note 52, at 57.

191. see Fromer, *supra* note 200; Zimmerman, *supra* note 200; Heymann, *supra* note 28, at 1010; Alfred C. Yen, *Restoring the Natural Law: Copyright as Labor and Possession*, 51 OHIO ST. L.J. 517, 520-537 (1990); Mark A. Lemley, *IP in a World Without Scarcity*, 90 N.Y.U. L. REV. 460, 492-93 n.160-63 (2015); JESSICA SILBEY, *THE EUREKA MYTH: CREATORS, INNOVATORS, AND EVERYDAY INTELLECTUAL PROPERTY*, 292-95 (Stanford University Press 2015); Shyamkrishna Balganesh, *Foreseeability and Copyright Incentives*, 122(6) HAR. L. REV. 1569 (2009); KAL RAUSTIALA & CHRISTOPHER SPRIGMAN, *THE KNOCK OFF ECONOMY: HOW IMITATION SPARKS INNOVATION*, 168 (Oxford University Press 2012); Elizabeth L. Rosenblatt, *Intellectual Property's Negative Space: Beyond the Utilitarian*, 40 FLA. ST. U. L. REV. 441, 461 (2013); see Lydia Pallas Loren, *The Pope's Copyright? Aligning Incentives with Reality by Using Creative Motivation to Shape Copyright Protection*, 69 LA. L. REV. 1, 6-11 (2008); Elizabeth L. Rosenblatt, *A Theory of IP's Negative Space*, 34 COLUM. J.L. & ARTS 317, 319 (2011).

192. See Yen, *supra* note 205, at 537 (“[A]n author owns her mind's labor, and must also own the

nature works lack copyright because the author's desire for it is a precondition to copyright subsistence, the same rationale must eliminate most existing copyright. The majority of human communicative expression is created without a single thought of copyright, yet copyright subsists in it.¹⁹³ This also seems to impose an intentionality requirement, dividing copyright subsistence between those creating with the copyright reward in mind, and those creating without it. There are obvious problems with this. The subjective intention of the author is ordinarily opaque to third parties, and it could lead to many ingenious post-hoc explanations for the production of the work. Until the task of separating copyright -inspired expression from its counterpart can be undertaken (if it ever can be), there is a curious, perhaps unacceptable, incongruity in finding authorship in the prosaic and insignificant shopping list, but denying it in these highly imaginative nature works.

Whether a lack of copyright in nature-art collaborations worries artists is unknowable in the absence of empirical evidence. Copyright may seem less relevant to fine artists, given the primary value in their creative output is the unique material objects created by them, rather than the exploitation of copyright's conventional rights of reproduction and publication. Nevertheless, these rights afford significant mechanisms of control when, for example, artworks are appropriated and exploited against the wishes and interests of the author, and they may be a useful means of leveraging better economic outcomes for frequently impoverished artists.

Perhaps more importantly, as long as copyright remains a conduit to moral rights, the lack of it remains significant. Even if artists are disinterested in copyright's economic rights, they are usually interested in the personality rights encompassed by moral rights. The loss of moral rights may particularly rankle contemporary artists (it certainly troubled Kelley), as their honour and reputations may be compromised by mistreatment of the work, or false or non-attribution of authorship. Because copyright is the source of these moral rights, in the (perhaps) rare instances when contemporary artists may need to assert them, they may be disappointed, and disadvantaged relative to their conventional artistic peers, when courts exclude them, particularly based on a flawed application of authorship doctrine.

Copyright calibrates competing interests, and its structures are

creations of that labor, no matter how humble or accidental the result."). See also Balganes, *supra* note 52, at 59 ("The argument that a contributor deserves to be classified as the legal creator (i.e., author) of the work by virtue of his contributions may thus be seen as a claim about the virtue of that contribution (to the work/authorship), independent of whether such a classification might enhance overall utility either in the individual case or over the long-term.").

193. Think of all those billions of emails, text messages, and shopping lists.

designed to prevent or at least ameliorate harm occurring through the conferral of copyright. This is an admirable and important objective of copyright. However, as Ginsburg suggests, while the potentially harmful effects of recognising authorship, such as diminution of the public domain, may lead courts to deny it, “it makes more sense to reason in terms of intellectual contribution than backwards from possibly misidentified consequences.”¹⁹⁴ This warrants a brief contemplation of the consequences of conferring copyright on these nature works. In short, the effect would be benign.¹⁹⁵

First, unlike many controversial authorship claims, the public domain is not diminished by conferring copyright on nature-works. Dyck does not move honeycomb from the public domain to her sculptures. Robbins does not diminish the public repository of lines. Kelley leaves plenty of plants for others to play with.

If all of the other criteria for subsistence are satisfied, aren't copyright's purposes fulfilled? The prohibition on copying embedded in the originality criterion¹⁹⁶ is perfectly satisfied by these “intentional accidents,” since nature's random expression logically excludes reproduction of pre-existing form.¹⁹⁷ In most cases, the work will be sufficiently fixed.¹⁹⁸ The works are causally linked to the artist in a “but-for” sense. The originality requirement raises the most troubling questions. The creativity requirement injects the author's intellect into the subsistence mix. The copyright status of works produced collaboratively with nature will depend on the causal allocation between the mental force of the author and the natural force of nature. If the latter overwhelms the former, the work may not be sufficiently causally linked to the author. In most cases, as I have explained, these nature authors usually maintain sufficient control over the broad form of the work to preserve a sufficient causal link to it, even if they collaborate with nature. Subsistence will also depend on the meaning of “creativity,” and whether the mental element mandated by creativity requires a human author to determine the *particular* expression of a work, rather than expression per se. I have argued that copyright doctrine does not require authorship of particular expression, and there are no sound policy bases for demanding it. It is inconsequential that Cameron Robbins doesn't

194. Ginsburg, *supra* note 23, at 1086.

195. The particular effects of conferring copyright on Wildflower Works, or gardens more generally, which raise different issues, is explored in the author's separate article, McCutcheon, *supra*, note 15.

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

197. See Durham, *supra* note 28, at 631 (“indeterminate works have much in common with works shaped by the freest exercise of an author's imagination”); *Id.* at 633 (“[R]andom works are essentially unique.”).

198. A claim which is explained further in the author's a separate work, *supra* note 209.

shape the particular form of his lines, provided he is the originating cause of his line drawings and the intervention of nature doesn't obscure his will. There is no preferable net outcome by Robbins creating the lines rather than the wind. Indeed, with respect to Robbins, his hand-drawn lines may have been prosaic and uninspiring compared to those produced by the wind. As Robbins recognises, there is something very special about the fact that the wind made the lines, that they are graphic manifestations of nature at work.

The conferral of copyright is especially benign if, in contrast to joint authorship disputes, no one is made bereft by allocating authorship to the contemporary artist. It is interesting to contrast the nature-author relationship with that of joint authors. A joint author has full authorship status over the entire work even though they are only partly responsible for its creation, provided they achieve the status of author. A contributor will not be a joint author if they only direct from the sidelines, make suggestions, supply ideas, or make too insubstantial a contribution to form. The Seventh Circuit denied Kelley authorship because his minor responsibility for *Wildflower Works* didn't meet the authorial threshold. However, a complete *vitiating* of authorship due to *some* ceding to nature seems draconian, and doesn't adequately recognise the artist's role in catalysing and shaping the work. To borrow from a leading case on joint authorship, we need to "guard against the risk that a sole author is denied exclusive authorship status simply because [nature] rendered some form of assistance."¹⁹⁹ And there is a stronger argument that the contemporary artist is the deserving sole author in this scenario, because unlike joint authorship contests, there is no other human disputing the role. No putative joint author has been excluded from the copyright reward. Nature, while perhaps the greatest of all "authors," is hardly going to be offended if the only human candidate is accorded exclusive authorship status.

There is a causative spectrum encompassing the competing influences of nature and human author when contemporary artists employ nature as their accomplice. This can trouble authorship doctrine. But as *Kelley* demonstrates, when allocating causal responsibility, it is imperative to properly perceive the work, and not merely the media forming it, and to fairly acknowledge authorial effort. The Seventh Circuit's undervaluation of Kelley's contribution to the material form of *Wildflower Works* may infect analyses of other contemporary artists utilising nature in their creative practice. While some contemporary

199. *Childress v. Taylor*, 945 F.2d 500, 504 (2d Cir. 1991). (The original wording is "guard against the risk that a sole author is denied exclusive authorship status simply because another person rendered some form of Assistance.")

artists may deliberately and consciously abandon claims to authorship in deference to nature, others may regard nature merely as their muse, and insist on their authorial stamp. Artists who are, “[a]s near as [they] can be, the cause of the picture,”²⁰⁰ are authors.

200. *Nottage v. Jackson* 11 Q. B. Div. 627 (1883) (Describing an author of a photograph as “the person who effectively is *as near as he can be*, the cause of the picture which is produced, that is, the person who has superintended the arrangement, who has actually formed the picture by putting persons in position and arranging the place where the people are to be.”) (emphasis added).