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ARTICLE

Re-examining Acts of God

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I. INTRODUCTION

For more than three centuries, tort law has included the notion of an act of God as something caused naturally, beyond both man's anticipation and control.[1] Historically, the doctrine applied to extraordinary manifestations of the forces of nature, including floods,[2] earthquakes,[3] blizzards,[4] and hurricanes.[5]

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1. *See, e.g.,* Forward v. Pittard, 99 ENG. REP. 953, 956-57 (1785).

2. Courts differ in their categorization of floods, which might or might not be acts of God, depending on the magnitude of the flood and whether or not such flooding is common in the area. *See* United States v. Atl. Richfield Co., No. CV-89-039-BU-PGH, 1996 U.S. Dist. LEXIS 22885, at *18 (D. Mont. July 1, 1996) (finding that floods as acts of God depends on circumstances of location and magnitude); Webb v. Platte Valley Pub. Power & Irrigation Dist., 18 N.W.2d 563, 568 (Neb. 1945) (not all floods will be acts of God, depending on how extraordinary or unprecedented the flood is).

3. *See* Mega Const. Co. v. United States, 29 Fed. Cl. 396, 497-98 (1993) (earthquake could be an act of God, but court here did not find clear evidence of causation of the damages at issue); Bracco v. Lackner, 462 F. Supp. 436, 445 (N.D. Cal. 1978) (listing earthquakes among acts of God); Shannon v. Russell, 203 B.R. 303, 314 (1996) (same). *See also* Holister v. Maynard, 29 C.C.P.A. 1249, 1255 (1942) (contract describing earthquakes as acts of God); York v. Jones, 717 F. Supp. 421, 425 (E.D. Va. 1989) (same).

4. *See, e.g.*, McKinley v. Hines, 215 P. 301, 302 (Kan. 1923) (holding that while some blizzards are acts of God, the event in question was not sufficiently severe to be an act of God since similar scale events had occurred in the past).

5. *See* Skandia Ins. Co. v. Star Shipping AS, 173 F. Supp. 2d 1228, 1240 (D. Ala. 2001) (describing a hurricane as a "classic case of an act of God," but also hinting that this is only true of a hurricane that causes "unexpected and unforeseeable devastation" and that, therefore, some hurricanes might not be acts of God). *See also* Apex Oil Co. v. United States, 208 F. Supp. 2d 642, 655 (E.D. La. 2002) (finding that not all hurricanes are unanticipated and therefore would not qualify as an act of God even if meeting other criteria); Freter v. Embassy Moving & Storage Co. 145 A.2d 442, 444 (Md. Ct. App. 1958) (even

Despite the significance of the doctrine, particularly in large-scale disasters, scholars rarely engage the act of God defense critically.[6] However, recently, the doctrine has received more substantial criticism. Denis Binder argued that the doctrine should be repudiated as merely a restatement of existing negligence principles.[7] Joel Eagle criticized the doctrine, suggesting that it should not exclude liability for damages resulting from Hurricane Katrina, but his argument rested more on an issue of fact—whether the hurricane was foreseeable—than a critique of the doctrine itself.[8] With so little attention given to this ancient doctrine, scholars have yet to consider the implications of major theoretical shifts in both law and geography that repudiate a separation of "the human" from "the natural." Notably, this neglect has continued despite significant grappling with defining "nature" and "natural" in other legal contexts such as patents,[9] federal food and drug regulations,[10] and public lands management or wilderness protection.[11]

hurricanes are not always acts of God—nor is a single determination about an event necessarily valid across the miles thus a named hurricane may be an act of God in one place, but not twenty miles away); Laurencia Fasoyiro, *Invoking the Act of God Defense*, 4 ENVTL. & ENERGY L. & POL'Y J. 1, 1-2 (2009) (discussing the difficulty of predicting the behavior of hurricanes and their patterns). Strong winds may also in and of themselves be acts of God. *See, e.g.*, Fairbrother v. Wiley's, Inc., 331 P.2d 330, 337 (Kan. 1958) (whether wind is act of God depends on foreseeability of winds of this scale); Jacobson v. Suderman & Young, Inc., 17 F.2d 253, 254 (5th Cir. 1927) (same).

6. *See* C.G. Hall, *An Unsearchable Providence: The Lawyer's Concept of Act of God*, 13 OXFORD J. OF LEGAL STUD. 227, 227 (1993) (noting the lack of analysis on the concept of acts of God); Denis Binder, *Act of God? or Act of Man?: A Reappraisal of the Act of God Defense in Tort Law*, 15 REV. LITIG. 1, 3-4 (1996) (noting lack of analysis of the concept of an act of God and citing limited recent publications).

7. *See* Binder, *supra* note 6, at 4, 77-79.

8. *See* Joel Eagle, *Divine Intervention: Re-examining the "Act of God" Defense in a Post-Katrina World*, 82 CHICAGO-KENT L. REV. 459 (2007). Laurencia Fasoyiro also recently commented on the act of God doctrine, but focused on its application in environmental statutes rather than the utility and clarity of the doctrine itself. Fasoyiro, *supra* note 5, at 2-3.

9. *See* Dan L. Burk, *Feminism and Dualism in Intellectual Property*, 15 AM. U. J. GENDER & SOC. POL'Y & L. 183, 194-96 (2007) (discussing the problems of defining "natural" and the nature-culture or nature-human divide in patent law procedures which require establishing that a patentable project is not a "product of nature").

10. *See* Daniel L. Kegan & Diane S. Lidman, *United States Federal Food and Drug Administration May Consume Food Trademarks*, 87 TRADEMARK REP. 199,

Currently, the acts of God doctrine continues its traditional uses in tort, contract, and insurance law, while also being enshrined in new environmental statutes as a method of creating a limit on liability when the polluter might not reasonably have anticipated circumstances—albeit a strict construction of the doctrine.[12] For example, the Comprehensive Environmental Response, Compensation, and Liability Act applies the acts of God doctrine,[13] as does the Oil Pollution Act.[14] Yet, it is precisely this context of environmental issues that places the most pressure on the theoretical validity of the defense.[15] With increasing awareness of the human role in climatic and weather changes, dividing human from natural or divine action is far from uncomplicated.

This article discusses the origins, applications, and utility of the acts of God defense, particularly with an eye towards establishing its theoretical foundations and the reliance on the classical human-nature divide. The article will demonstrate how the crumbling classical divide is already causing shifts in legal doctrines across areas as diverse as food and drug law, wilderness

205 (1997) (discussing the FDA's movements towards defining "natural"); A. Bryan Endres, *United States Food Law Update: Labeling Controversies, Biotechnology Litigation, and the Safety of Imported Food*, 3 J. FOOD L. & POL'Y 253, 261-71 (2007) (discussing the history of FDA labeling laws particularly as related to defining "natural").

11. *See* Lee Godden, *Preserving Natural Heritage: Nature as Other*, 22 MELB. U. L. REV. 719, 724 (1998) (exploring property and preservation laws in Australia that implement ideas of the nature-human divide); Gregory H. Aplet, *On the Nature of Wildness: Exploring What Wilderness Really Protects*, 76 DENV. U. L. REV. 347, 347-48, 366-67 (1999) (examining the Wilderness Act of 1964 and the wilderness idea, which includes a separation of the human from the natural); Sandra Zellmer, *A Preservation Paradox: Political Prestidigitation and an Enduring Resource of Wildness*, 34 ENVTL. L. 1015, 1015-17 (2004) (examining the Wilderness Act of 1964 and public lands management, including the separation of man from wild).

12. *See* Fasoyiro, *supra* note 5, at 2-3.

13. Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9607(b)(1) (2006).

14. Oil Pollution Act, 33 U.S.C. § 2703(a)(1) (2006).

15. The application of the act of God doctrine within environmental cases has previously been criticized. *See* Brian J. Stammer, *"Nothing We Could Do": The Defense of Act of God in Environmental Prosecutions*, 4 ENVTL. L. & PRAC. 93, 93-95 (1993).

protection, and patents.[16] Then through a deeper engagement with the geographical theory responsible for our renewed vision of the human-nature relationship, the argument establishes a critique of the act of God defense as it has been traditionally formulated. In the final analysis, the article suggests that the act of God defense must be shifted to remove any reliance on a strict divide between human and natural action.

II. THE ACTS OF GOD DOCTRINE

The idea of an act of God dates at least to the sixteenth century opinion in Shelley's Case, which found that the death of a party to the contract made performance impossible due to an "act of God."[17] The doctrine therefore emerges in a reference to general fairness—that a defendant might not be held responsible for the consequences of an event that he had no ability to prevent or predict, even with the best possible intentions. As the court in Shelley's Case explained, it was an event that "no industry can avoid, nor policy prevent."[18] In an attempt to give life to this notion of fairness, the courts in Shelley's Case and other early decisions drew lines between those acts which were natural and those which were caused by man, so as to forgive man for those acts that were beyond his anticipation or control. As such sympathetic cases of contract breach were brought to the attention of courts, the doctrine of acts of God developed.[19]

Over the years, the doctrine solidified to include multiple elements. In a recent Congressional definition, an act of God is "an unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable and irresistible character, the effects of which could not have been prevented or

16. *See* Kegan & Lidman, *supra* note 10, at 205 (discussing the FDA's movements towards defining "natural"); Endres, *supra* note 10, at 261-71 (discussing the history of FDA labeling laws particularly as related to defining "natural").

17. Wolfe v. Shelley, 76 Eng. Rep. 199 (1581). The act of God doctrine continues to be available in the context of contracts—a context that will be largely omitted in this essay, which will focus exclusively on torts. *See, e.g.*, Florida Power Corp. v. City of Tallahassee, 18 So.2d 671, 675 (Fla. 1944) (applying the act of God doctrine as a defense to a contract).

18. Wolfe v. Shelley, 76 Eng. Rep. 220 (1581).

19. *See* ARTHUR A. CORBIN, CORBIN ON CONTRACTS § 1324 (1962).

avoided by the exercise of due care or foresight."[20] This definition includes multiple elements: (1) "natural" causation; (2) a lack of foreseeability;[21] (3) that "nature" must be the exclusive or sole cause; and (4) the effects must not have been preventable by reasonable due care or foresight of the defendant.[22] While the concept of acts of God cannot be reduced to simply the idea of "forces of nature," acts of God are understood to be a subset of these,[23] thereby immediately raising the question of which acts are natural and which are human.[24]

While many courts emphasize the defendant's ability to anticipate the disastrous event,[25] the very heart of the doctrine

20. Oil Pollution Act, 33 U.S.C. § 2701(1) (2006); Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601(1) (2006).

21. Additionally, where the defendant failed in another duty, such as a duty of inspection that might have made the damages foreseeable, the act of God doctrine will not apply. *See* Chesapeake & O. Ry. Co. v. Biliter, 413 S.W.2d 894, 898 (Ky. Ct. App. 1967).

22. *Id.*

23. Binder, *supra* note 6, at 16.

24. An act of God is often defined as an "event in nature," then additional qualifications are added. *See, e.g.*, Corrington v. Kalicak, 319 S.W.2d 888, 892 (Mo. Ct. App. 1959) (act of God is a natural event); Tel Oil Co. v. City of Schenectady, 718 N.Y.S.2d 410, 413 (App. Div. 2000) (an act of God must be from "exclusively natural causes"); Joseph Resnick Co. v. Nippon Yusen Kaisha, 241 N.Y.S.2d 134, 136 (Civ. Ct. 1963) (act of God is an event that "happens by the direct, immediate and exclusive operation of the forces of nature"). One of the most significant additional qualifications is the element of scale, which moves an event from natural to act of God. *See, e.g.*, Southern Pac. Co. v. Los Angeles, 55 P.2d 847, 849 (Cal. 1936) ("unusual volume" pushes natural event to an act of God); Trout Brook Co. v. Willow River Power Co., 267 N.W. 302, 305 (Wis. 1936) (flood becomes act of God due to extraordinary level of rainfall).

25. *See* Fasoyiro, *supra* note 5, at 9-10. A previous event of the same magnitude indicates that the defendant should have been prepared for a subsequent recurrence. *See* Fairbury Brick, Co. v. Chicago R.I. & Pac. Ry. Co., 113 N.W. 535, 537 (Neb. 1907) (earlier rainfall of similar proportions should have directed defendant to be prepared); Gulf, Colo. & Santa Fe Ry. Co. v. Pomeroy, 3 S.W. 722, 724 (Tex. 1887) (history of similar events made the event in question foreseeable and therefore not an act of God). Some cases suggest that the act of God defense does not apply unless the disastrous event is of the largest scale on record—thereby highlighting the significance of foreseeability in the analysis of the doctrine. *See, e.g.*, McKinley v. Hines, 215 P. 301, 302-03 (blizzard not an act of God since it was not the worst in the region recorded). *But see* Garfield v. City of Toronto, 220 O.A.R. 128 (Ont. Ct. App. 1895) (previous events of the same scale did not necessarily prevent the act of God doctrine from applying). Courts frequently apply the act of God doctrine where the event in question is described as "unprecedented." *See, e.g.*, Sutliff v. Sweetwater Water

rests upon the court's strict interpretation of the human-nature separation. Within the doctrine, an act of God occurs only when the event in question is caused *exclusively* by forces of nature without any human action or interference.[26] The courts find that "[a]n act of God must be caused exclusively and directly by natural causes"[27] because when "the cause . . . is found to be in part the result of the participation of man, whether it be from active intervention or neglect, the whole occurrence is thereby humanized and removed from . . . acts of God."[28] This emphasis carries over into the federal environmental statutes, which require that nature be the "sole cause" for an act of God.[29] In discussing the doctrine, courts repeatedly expound on the doctrine's limitation to those events that are "direct, immediate, and exclusive operation of the forces of nature, uncontrolled or uninfluenced by the power of man and without human intervention."[30] As one court explained, "human activities cannot have contributed to the loss in any degree."[31] For an event to be a legal act of God, the natural event must have been the "sole and immediate cause of the injury," with no "co-operation of man, or any admixture of human means."[32]

Where an act or omission of the defendant combined with an unprecedented natural force to cause the damages, the courts will not apply the act of God doctrine; the doctrine is limited to circumstances where there is no concurrent causation.[33] Courts

Co., 186 P. 766, 767 (Cal. 1920) (unprecedented flood); Enters. v. New York, 614 N.Y.S.2d 653, 654 (App. Div. 1994) (noting that "[f]undamentally, an act of God is an unusual, extraordinary and unprecedented event").

26. Shea-S&M Ball v. Massman-Kiewit-Early, 606 F.2d 1245, 1249 n.6 (D.C. Cir. 1979).

27. *Id.*

28. Fred Drew Constr. Co. v. Mire, 89 A.2d 634, 636 (D.C. 1952).

29. Oil Pollution Act, 33 U.S.C. §§ 1321(f)(1)-(3); Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9607(b)(1).

30. Butts v. City of S. Fulton, 565 S.W.2d 879, 882 (Tenn. Ct. App. 1978).

31. Cangialosi v. Hallen Constr. Corp., 723 N.Y.S.2d 387, 387 (App. Div. 2001).

32. Michaels v. N.Y. Cent. R.R. Co., 30 N.Y. 564, 571 (1864).

33. *See* Schweiger v. Solbeck, 230 P.2d 195, 200 (Or. 1951) (where defendant's accumulation of logging debris was a concurrent cause of the damages, the act of God doctrine did not apply); Okla. Ry. Co. v. Boyd, 282 P. 157, 163 (Okla. 1929) ("commingled" causation is not acceptable to prevent the defendant's liability); Inland Power & Light Co. v. Grieger, 91 F.2d 811, 816-17

have been strict in applying this requirement and place upon the defendant the burden of proving that the natural event was the sole cause of damages.[34] Even if the defendant proves that an act of God occurred, he will still remain liable so long as the plaintiff is also able to prove that the defendant's actions were an additional cause of the damage.[35] In other words, the act of God must be the sole proximate cause of the plaintiff's damages.[36] The act of God must not only be a cause but also the "entire cause" for the doctrine to preclude liability.[37]

Over the years, the doctrine was expanded to the context of insurance cases and, indeed, became a standard clause in many different types of insurance contracts.[38] Insurers were willing to insure against human negligence, but if God was out to get you, they (perhaps quite reasonably) were not willing to take your side.[39] Insurance contracts for commercial facilities would, for example, exclude liability for flood damage and lightning strikes.[40] In contrast, policies that insured farms frequently cover acts of God but exclude damages resulting from human negligence.[41] In both types of insurance policies, recourse is

(9th Cir. 1937) (where causation is concurrent, the defendant is liable for the whole of the damages); Harris v. Norfolk S. R.R. Co., 91 S.E. 710, 711 (N.C. 1917) (same).

34. Barnet v. N.Y. Cent. & Hudson River R.R. Co., 222 N.Y. 195, 198 (App. Div. 1918) (burden is on defendant to prove there is no concurrent negligence).

35. *See, e.g.*, Ark. Valley Elec. Coop. v. Davis, 800 S.W.2d 420, 423 (Ark. 1990) (when an act of God combines with negligence, the defendant is still liable); Frederick v. Hale, 112 P. 70, 75-76 (Mont. 1910) (where an act of God and defendant's actions were concurrent causes of the damages, plaintiff could recover).

36. Dye v. Burdick, 553 S.W.2d 833, 839 (Ark. 1977) (requiring sole proximate causation for the act of God doctrine to exclude liability).

37. Slater v. S.C. Ry. Co., 6 S.E. 936, 937 (S.C. 1888).

38. Chism v. Allstate Ins. Co., No. 06-10483, 2007 U.S. Dist. LEXIS 48575, at *2 (E.D. La. July 5, 2007) (citing an "act of God" provision as a "standard exclusion" within a modern insurance policy).

39. *See, e.g.*, *id.* at *1-2 (plaintiff seeking to recover against insurer, where insurer claims Hurricane Katrina was an act of God; determination of liability of the insurer depends on whether the act of God exclusion applies).

40. *See, e.g.*, Farm Bureau Mut. Ins. Co. of Ark., Inc. v. Jackson, CA07-182, 2007 Ark. App. LEXIS 759, at *4 (Nov. 7, 2007) (citing insurance policy by Farm Bureau, which defined "wind, rain, lightning" as acts of God).

41. *See, e.g.*, R & R Farm Enters. v. Fed. Crop Ins. Corp., Dep't of Agric., 788 F.2d 1148, 1149 (5th Cir. 1986) (citing policy covering acts of God but not human negligence).

frequently made to the courts to determine whether damages resulted from human action or an act of God.[42]

III. THE CLASSICAL HUMAN-NATURE SEPARATION

The nature-human separation has long been a part of Western culture. Despite the prevalence of Darwinian models of evolution, which should complicate our ideas of nature as unchanging, nature has been seen as older than humans, existing both before and separate from them.[43] Paralleling the central division of geography, between the human and the physical,[44] human action and causality have been studied separately from the physical with humans *reacting to* so-called natural events rather than participating in their creation. In short, the natural has been defined so as exclude the human.[45] Culturally, the division became so strong that nature was idealized as something "untainted" by humans.[46] Thus, concepts such as "organic" and "natural foods" have been defined—both legally and culturally—by excluding (and discounting the value of) human interventions.[47]

In part, the nature-human separation was an inevitable product of our understanding of space itself—our tendency to view humans as the actors and the world as the background or stage, necessary but not pivotal for the storyline. With space historically viewed as an "inert container,"[48] scholars across fields tended to make physical geography merely a "backdrop to

42. The frequency of such provisions within insurance contracts is illustrated by the decision of Florida to enact a statute protecting policy owners from decisions to cancel their policies due to claims made because of acts of God. FLA. STAT. § 627.4133(3) (2009).

43. David Lowenthal, *The Place of the Past in the American Landscape*, *in* GEOGRAPHIES OF THE MIND: ESSAYS IN HISTORICAL GEOGRAPHY 89, 102 (David Lowenthal & Martyn Bowden eds., 1976).

44. Franklin Ginn & David Demeritt, *Nature: A Contested Concept*, *in* KEY CONCEPTS IN GEOGRAPHY 300, 302 (Gill Valentine, et al. eds., 2009).

45. *See id.* at 5.

46. Lowenthal, *supra* note 43, at 102.

47. *See* Ginn & Demeritt, *supra* note 44, 300-01.

48. Margaret C. Rodman, *Empowering Place: Multilocality and Multivocality*, *in* THE ANTHROPOLOGY OF SPACE AND PLACE: LOCATING CULTURE 204, 205 (Setha M. Low & Denise Lawrence-Zuniga eds., 2003).

historical events."[49] Such understandings are now largely archaic, sinking behind a variety of new understandings of space as socially constructed and contested. In his now classic work, Soja contested the old understandings, proclaiming that "space itself may be primordially given, but the organization, use, and meaning of space is a product of social translation, transformation and experience."[50] Massey elaborated, imploring us to not "deprive it of politics."[51] Crang meanwhile emphasized the human-space connection, not merely culturally, but ontologically, confirming that humans are "not bodies moving through space-time but making it."[52] Although these critiques of the earlier view of inert space are now widely accepted, the historical tendency to view space as a container for human action must be continuously recalled because the earlier view engendered and sustained the nature-human divide.

Unsurprisingly then, as views of space changed, the nature-human separation became suspect. Philosophically, these observations are rooted in Foucault's embrace of the spatial, which united theory of geography and philosophy[53] and, more concretely, in hermeneutic phenomenology and Heidegger's observations on vision, distance and dwelling.[54] Drawing on these strands of philosophy, terms such as wilderness and nature represent a way of seeing the world, a particular and chosen view placing the human outside and away from the object of vision.[55]

49. Neil Smith & Anne Godlewska, *Critical Histories of Geography*, *in* GEOGRAPHY AND EMPIRE 1, 2 (Neil Smith & Anne Godlewska eds., 1994).

50. Edward W. Soja, *The Socio-Spatial Dialectic*, 70 ANNALS ASSOC. AM. GEOGR. 207, 210 (1980).

51. Doreen Massey, *Politics and Space/Time*, *in* PLACE AND THE POLITICS OF IDENTITY 141, 142 (Michael Keith & Steve Pile eds., 1993).

52. Mike Crang, *Rhythms of the City: Temporalised Space and Motion*, *in* TIMESPACE: GEOGRAPHIES OF TEMPORALITY 187, 194 (Nigel Thrift ed. 2001).

53. *See* Chris Philo, *Foucault's Geography, in* THINKING SPACE 205, 205-06 (Mike Crang & Nigel Thrift, eds. 2001).

54. For a discussion of Heidegger and the impact on geography, *see* Julian Thomas, *The Politics of Vision and the Archaeologies of Landscape, in* LANDSCAPE: POLITICS AND PERSPECTIVES 19, 22-25 (Barbara Bender ed. 1993).

55. This summary represents a general trend in our understandings of nature but does not reflect a belief that our notions of nature are unchanging. Indeed, as historians turn to examining environmental history, we are discovering the specifics of the variations. *See, e.g.,* Ursula Lehmkuhl, *Historicizing Nature: Time and Space in German and American Environmental*

Distance and a sense of human superiority[56] flow naturally from this separation, as does a sense that nature is passive, while humans are active.[57] The result is that "[i]n our everyday language, we tend to treat nature and society as separate entities. If something is social, then almost by definition it can't be natural."[58]

As geographers recognized this process of social construction, their investigations turned to the impact of our visions of nature. While the model of social construction may be applied to many concepts, geographers have maintained that some, such as nature, are keywords—particularly powerful representations of the world that are likely to be manipulated.[59] In other words, "[t]he language and ideas that are used to identify, describe and explain the natural world are influenced by the kinds of societies people live in, believe in and/or want to secure."[60] As Braun and Castree described in their influential study *Remaking Reality: Nature at the Millennium*, when we construct our particular—and culturally located—visions of nature, those representations then generate consequences for our understandings of ourselves and our environment.[61] Representations of landscapes relate to culture and identity, as well as larger themes such as the process of colonization.[62] Particular landscapes became equated with

History, in HISTORIANS AND NATURE 17, 17-18 (Ursula Lehmkuhl & Hermann Wellenreuther eds., 2007).

56. As Paul Cloke and Ron Johnston observed, "binary thinking . . . is rarely symmetrical: it usually involves 'us' considering we are superior to 'them.'" Paul Cloke & Ron Johnston, *Deconstructing Human Geography's Binaries, in* SPACES OF GEOGRAPHICAL THOUGHT: DECONSTRUCTING HUMAN GEOGRAPHY'S BINARIES 1, 3 (Paul Cloke & Ron Johnston eds., 2005).

57. It is important to note that there is a scale to this distance, and, historically, women and indigenous people have been represented as "closer" to nature than the more "civilized" male.

58. STEVE HINCHLIFFE, GEOGRAPHIES OF NATURE: SOCIETIES, ENVIRONMENTS, ECOLOGIES 10 (2007).

59. *See* NOEL CASTREE, NATURE 111 (2005) (discussing and accepting Brian Harvey's conclusion that nature is a keyword).

60. *See* Hinchliffe, *supra* note 58, at 27.

61. *See* B. BRAUN & N. CASTREE, REMAKING REALITY: NATURE AT THE MILLENNIUM 3-6 (1998).

62. On the process of colonization and imagery of nature and landscape, *see* STEPHEN DANIELS, FIELDS OF VISION: LANDSCAPE IMAGERY AND NATIONAL IDENTITY IN ENGLAND AND THE UNITED STATES 5 (1993); Christopher Tomlins, *The Legal Cartography of Colonization, the Legal Polyphony of Settlement:*

moral norms—forests with lawlessness,[63] mountains with a lack of civilization[64]—justifying the imposition of outside rule. As the examples of mountains and forests suggest, the process of moral mapping varied across environments. Representation favored certain areas over others, resulting in a multidimensional moral geography. Then, drawing on certain favored representations, national identities were rooted in symbolic homelands, which encoded the more desirable social norms and values.[65] Therefore, by thinking of nature and land in particular ways, we are not only able to change the meaning of these terms but also to change ourselves.

While these critiques of the simple nature-human dichotomy have been accepted as logically valid and philosophically coherent, theorists have yet to move beyond acknowledgement to face the deeper question: if "human" and "nature" are not separate, discrete categories, then how can we accurately understand the concepts—and specifically their overlap, connection, or integration? By invoking the model of social construction, we risk perpetuating the division in some ways. If what we mean by social construction is simply that our terminology is flexible and culturally specific and therefore not to accurate to "the world," then we continue to imply the existence of a separate "nature," continuing on as it is but without accurate description. As Hinchliffe explained, "there is an assumption here that the knowledge of nature is being polluted, or watered down, by social and/or political matters. And, the inference is

English Intrusions on the American Mainland in the Seventeenth Century, 26 L. & SOC. INQUIRY 315, 315-16 (2001); John L. Comaroff, *Colonialism, Culture, and the Law: A Forward*, 26 L. & SOC. INQUIRY 305, 309 (2001). For an example of how these visions of nature differ depending on cultural context, *see* THOMAS M. LEKAN, IMAGINING THE NATION IN NATURE: LANDSCAPE PRESERVATION AND GERMAN IDENTITY 1885-1945 15 (2004) (giving an account of the German concept of landscape, as contrasted with the American).

63. *See* Stephen Daniels, *The Political Iconography of Woodland in Later Georgian England, in* THE ICONOGRAPHY OF LANDSCAPE: ESSAYS ON THE SYMBOLIC REPRESENTATION, DESIGN AND USE OF PAST ENVIRONMENTS 43, 44 (Denis Cosgrove & Stephen Daniels eds., 1988).

64. *See* JAMES C. SCOTT, THE ART OF NOT BEING GOVERNED: AN ANARCHIST HISTORY OF UPLAND SOUTHEAST ASIA 20 (2009).

65. *See* DANIELS, *supra* note 62, at 5; WENDY JOY DARBY, LANDSCAPE AND IDENTITY: GEOGRAPHIES OF NATION AND CLASS IN ENGLAND 1-4 (2000). Darby explains her project as being rooted in the question of "how landscape functions as a repository of social, economic and political history." *See id.* at xv.

often that nature itself remains unmoved by all of this huff and puff."[66] To avoid this error, we must instead do more than simply acknowledge our representations of nature as social constructions. The challenge is to take seriously the implications of geographical research into the relationship between human identity and nature, while also realizing that nature "cannot be easily located, described or used."[67]

Unfortunately, rather than face the complexity of the human-nature relationship, we have retained our habits of speaking of human relationships *with* and *to* nature,[68] of "human *use* of the earth,"[69] contemplating the "'scene' *upon which* human culture develops,"[70] and, drawing on Foucault, seeing the corporeal as "*imprinted by* history."[71] These concepts connote passive and receptive forms of nature as a space for human action. Drawing on this traditional way of speaking even recent work in the field of geography describes events from "flood and forest fires to animal attacks and crop diseases" as "non-human interventions"[72] despite the fact that there is scientific evidence that ties the frequency and origins of all of these events to human actions.[73] Because we have not substantially developed a new understanding of "nature" and "human" as integrated, we easily fall back to the old dichotomy. Other fields such as law, which

66. Hinchliffe, *supra* note 58, at 35.

67. *See id.* at 47.

68. Denis Cosgrove, *Prospect, Perspective and the Evolution of the Landscape Idea*, 10 TRANSACTIONS INST. BRIT. GEOGR. 45, 55 (1985) (emphasis added).

69. DENIS COSGROVE, SOCIAL FORMATION AND SYMBOLIC LANDSCAPE 2 (1984) (emphasis added).

70. Kenneth R. Olwig, *Recovering the Substantive Nature of Landscape*, 86 ANNALS ASSOC. AM. GEOGR. 630, 644 (1996) (emphasis added).

71. Judith Butler, *Bodily Inscriptions, Performative Subversions*, *in* THE JUDITH BUTLER READER 90, 104 (Sarah Salih ed. 2004) (emphasis added).

72. Michael Woods, *Engaging the Global Countryside: Globalization, Hybridity and the Reconstitution of Rural Place*, 31 PROGRESS IN HUMAN GEOGRAPHY 485, 498 (2007).

73. For a discussion of the human role in generating climate change through greenhouse gas emissions, *see* Mike Hulme, *Abrupt Climate Change: Can Society Cope?*, 361 PHIL. TRANS.: MATHEMATICAL, PHYSICAL & ENGINEERING SCI. 2001, 2002 (2003). For a discussion of human causation and climate change related events such as heat waves, heavy rainfall, storms and flooding, *see* John F.B. Mitchell, *Extreme Events Due to Human-Induced Climate Change*, 364 PHIL. TRANS.: MATHEMATICAL, PHYSICAL & ENGINEERING SCI. 2117, 2117 (2006).

draw upon social science for their theoretical bearings, follow suit.[74]

IV. THE HUMAN—NATURE SEPARATION IN LAW

Law is itself a site of cultural production, developing concepts such as the ideal of nature through legal texts and decision-making.[75] In the U.S., law reinforced the idea of wilderness as excluding the human and, through the Wilderness Act of 1964, specifically set out both practice and policy in terms of this separation.[76] The Act defines wilderness regions as being "in contrast with those areas where man and his own works dominate the landscape," noting the "primeval character and influence" of wilderness.[77] At the same time, the Wilderness Act defined the purpose of the wildness not in terms of any inherent value but in terms of its value as a "resource" for human use, enjoyment and consumption.[78] The Act specifically allows for the harvesting of minerals and timber, along with surveying and prospecting activities,[79] while forbidding development, permanent settlement, and road construction. The law drew upon existing cultural ideas to frame the notion of wilderness and then, with its own tools, generated a series of social practices embodying that peculiar notion of the wild. As the Wilderness Act demonstrates, law produces culture, but simultaneously, law is *re*productive and referential, and incorporates widely accepted cultural notions and scientific conclusions.

In the context of recent food and drug law developments, the separation of human and nature has distilled in the question of

74. Very few legal scholars show evidence of being aware of the philosophical conclusions from other fields on the human-nature dichotomy. For an Australian exception, *see* Godden, *supra* note 11, at 720, 724. While a few American articles discuss the problem of the human-nature separation (such as those already cited within this article), generally those discuss the problem without reference to the modern philosophical literature. *See, e.g.*, Andrew Long, *Defining the 'Nature' Protected by the Endangered Species Act: Lessons from Hatchery Salmon*, 15 N.Y.U. ENVTL. L.J. 420, 457-59 (2007).

75. David Delaney, *Making Nature/Marking Humans: Law as a Site of (Cultural) Production*, 91 ANNALS ASSOC. AM. GEOGR. 487, 489 (2001).

76. Wilderness Act, 16 U.S.C. §§ 1131–1136 (2006).

77. *Id.* § 1131(c).

78. *Id.* § 1131(a).

79. *Id.* § 1133(d)(2)(3).

product labeling—the issue of what is "organic," "natural" or "unprocessed."[80] All foods sold in our markets require some forms of human participation from picking and shipping, to roasting and freezing, to dyeing, waxing, and genetically altering. Separation of the human and the "natural" is increasingly being recognized in this context as more a scale than a division—hence the origins of popular language such as "minimally processed."[81] Some examples are particularly confusing. Roast turkey, for example, may be visibly enhanced using beet coloring extracts. The beet coloring extracts are a naturally occurring, not human engineered product, but in nature the beet coloring would not be found within the turkey.[82] In such cases, application of the term "natural" becomes increasingly complicated. Such circumstances—particularly in the context of strong American rules regarding food product identification and misleading statements—have encouraged manufacturers to demand federal government standards defining "natural."[83] As a result of the changing of regulations within the FDA, trademarks have also been affected.[84]

In the context of public land use within the United States (U.S.), there is also a significant debate about what is natural and what is human. Traditionally, the definition of "wilderness" in federal law has incorporated a sharp separation of human and natural activities; wilderness is a place "untrammeled by man."[85] The issue continues to be raised as some public lands are designated as "wilderness" while others are not. The point remains significant because there is a long tradition within American history of using public lands for numerous—often environmentally destructive—uses such as mining; such uses were not only tolerated but, actually encouraged by the federal government.[86] Currently more than sixty percent of public lands

80. *See* Endres, *supra* note 10, at 261.

81. *Id.* at 263.

82. Example is drawn from *id.* at 263.

83. The Sara Lee Corporation petitioned the FDA, while Hormel foods petitioned the FSIS. *See id.* at 264, 270.

84. *See generally* Kegan & Lidman, *supra* note 10.

85. Wilderness Act, 16 U.S.C. § 1131(c); *accord* Aplet, *supra* note 11, at 352 n.30.

86. *See* United States v. Union Pac. R.R. Co., 353 U.S. 112, 114-17 (1957) (discussing the history of mineral uses of public lands).

are used in some type of development, including mining and lumbering.[87] The wilderness distinction—one which rests upon the division of human and nature—is critical to preservation.

The historic nature-human separation, as embedded in both science and Western culture more generally, has been significantly influential at a theoretical level in the development of legal doctrine. Doctrines of property ownership affirm that nature becomes a possession through labor—thereby affirming nature and human as separate but for the very specific human intervention of labor.[88] Similarly, legal doctrine largely treats land as a commodity, individual pieces being entirely interchangeable if commercial value is equal.[89] Because human attachment to land is a mere emotionality, law need not recognize such attachments. (The Wilderness Act itself includes one example of this rule of exchange of property for its "equal value" or a "similar parcel" of value). This position is, of course, reflected in legal decisions on group land rights, religious access to land for Native Americans, eminent domain, and, most notably, in the colonization process where law enabled views of Native American land as empty.[90] Although there are many legal doctrines incorporating the human-nature separation, the idea is crystallized perhaps most clearly in the doctrine of acts of God, which dates back three centuries in the law of the United Kingdom, U.S., and other commonwealth countries.[91]

V. RE-EXAMINING ACTS OF GOD IN A POST-CLIMATE CHANGE WORLD

The act of God doctrine gives life to the nature-human separation, specifically in the context of causation. For an event to be an act of God, it must be "a direct, immediate and exclusive operation of the forces of nature, uncontrolled and uninfluenced

87. *See* Zellmer, *supra* note 11, at 1023.

88. CAROL M. ROSE, PROPERTY & PERSUASION: ESSAYS ON THE HISTORY, THEORY, AND RHETORIC OF OWNERSHIP 11 (1994).

89. Jill Fraley, *Reparations, Social Reconciliation, and the Significance of Place: A Legal and Philosophical Examination of International and Indigenous Cases in American Courts and Their Global Implications*, 31 HUMAN. AND SOC'Y 108 (2007).

90. *See id.*

91. *See* Binder, *supra* note 6, at 3.

by the power of man, and without human intervention."[92] The human and the natural have been treated here as wholly separate; thus evidence that "any factor other than the natural event . . . even slightly contributed to the [environmental damage] will destroy this element, and consequently, the entire defense."[93] The determining factor for an act of God is that it "proceeds from the forces of nature alone, to the entire exclusion of human agency."[94]

Courts have clung to this striking separation of the human and the natural, despite environmental historians challenging the issue of solely "natural" causation,[95] and despite strong evidence that there is no separation (such as evidence that global warming increases the frequency of hurricanes).[96] Although one of the very foundations of global climate change is the idea that "anthropogenic climate change. . . [can be] distinguished from the natural variability of the earth's climate,"[97] courts continue to act as though simple lines can be drawn between the human and the natural. Indeed, a recent commentator described the act of God defense as meaning "something in opposition to the act of man" and applying only to those things that "could not happen by the intervention of man, [such] as storms, lightning and tempests."[98] Further, the commentator stated that "an act of God . . . proceeds from natural forces alone, to the exclusion of human agency."[99] The courts draw a solid line between "earthquakes, fires, storm, hurricanes, tornadoes," which are acts of nature and "the inadequate design, construction, inspection, and maintenance [of structures, which are] acts of people," and allocate causation of damages between the two actors differently.[100]

92. Fasoyiro, *supra* note 5, at 2.

93. *See* Eagle, *supra* note 8, at 483.

94. Rice v. Or. Short Line R.R. Co., 198 P. 161, 164 (Idaho 1921).

95. *See* Eagle, *supra* note 8, at 492.

96. Eduardo M. Peñalver, *Acts of God or Toxic Torts? Applying Tort Principles to the Problem of Climate Change*, 38 NAT. RESOURCES J. 563, 574 (1998).

97. *See id.*, at 565.

98. *See* Binder, *supra* note 6, at 7.

99. *Id.* at 18.

100. *Id.* at 19.

Indeed, the factual specifics of legal cases have given birth to years of interpretation about precisely where to draw that line.[101] With decades of decisions purporting to specifically determine the human-nature divide, it is hardly surprising the courts are challenged by recent developments in the social and environmental sciences questioning the ease of drawing a line between human and natural causation. Since the mid-twentieth century, the question has been slowly rising to the forefront, beginning with cloud-seeding operations in the 1950s. At that time, questions were beginning to form regarding human liability for events previously considered naturally caused. By 1966, a report to the U.S. Senate Committee on Commerce detailed the possibilities of legal liability for "weather and climate modification."[102] The National Academy of Sciences-Natural Resource Council and the National Science Foundation generated similar reports.[103] By 1950, at least one state court decision had been issued in a case of alleged weather modification.[104] A small body of a dozen or so cases followed by 1965,[105] however the issue lapsed as cloud-seeding fell out of favor. However, the issue did not lapse before one judge who suggested that, "perhaps the term 'act of God' should be replaced by a concept which reflects the possibility of human causality as well as that of the divine."[106]

The issue of weather modification has reemerged in recent years, particularly in the context of flooding. Flooding has

101. *See, e.g.*, Rix v. Town of Alamogordo, 77 P.2d 765, 770 (N.M. 1938) (agreeing with trial court's decision to apportion damages between human action and natural forces); Johnson & Johnson v. Dundas, 4 D.L.R. 624, 687 (Ont. 1945) (apportioning damages and holding defendant liable for only the portion resulting from "normal" natural forces). To some degree these cases are the exception; most cases find that concurrent causation entirely precludes the act of God defense from applying. *See, e.g.*, Kennedy v. Union Elec. Co., 216 S.W.2d 756, 762-63 (Mo. 1948). Thus, most of the work of courts in drawing a line between human and natural action involves determining whether or not to apply the act of God doctrine.

102. Legislative-Reference-Service, *Weather Modification and Control* § 89th Congress (Sen. Rep. No. 1139 1966).

103. *Id.*

104. Slutsky v. City of N.Y., 97 N.Y.S.2d 238, 239-40 (Sup. Ct. 1950).

105. Ralph W. Johnson, *Legal Implications of Weather Modification*, *in* WEATHER MODIFICATION AND THE LAW 76, 76-102 (Howard J. Taubenfeld ed., 1968).

106. Joseph Resnick Co. v. Nippon Yusen Kaisha, 241 N.Y.S.2d 134, 137 (Civ. Ct. 1963).

increased substantially in Appalachia in the wake of mountain top removal mining. So-called "hundred year floods" are occurring annually in some regions and this flooding has been scientifically linked to the removal of the mountaintops (the spongy green layers of vegetation and topsoil, which absorb rain and prevent rain from simply rushing straight to the valleys.)[107] As one court recently noted, flooding may result from "topographical and climatic conditions of the region, . . . the nature of the drainage basins as to the perviousness of the soil, [and] the presence or absence of trees or herbage which would tend to increase or prevent the rapid running off of the water."[108] Yet, courts have been unwilling to hold mining companies responsible for the vast amounts of destruction (suffered by local, impoverished, populations) due to this specific type of mining. Floods are, as the mining companies maintain, acts of God. The nature/human divide obscures human intervention, even though we have known for decades that flooding is highly linked to "the presence or absence of trees or herbage which would tend to increase or prevent the rapid running off of the water."[109]

However, in the era of global climate change, courts can hardly pretend that causation can be determined to be "natural" or "human." Storm patterns and frequencies are changing.[110] Growing seasons are shifting.[111] Glaciers are melting and seas

107. *See* RONALD D. ELLER, UNEVEN GROUND: APPALACHIA SINCE 1945 40 (2008).

108. Frank v. County of Mercer, 186 N.W.2d 439, 443 (N.D. 1971).

109. *See* Binder, *supra* note 6, at 15; *see also* Butts v. City of S. Fulton, 565 S.W.2d 879, 882 (Tenn. Ct. App. 1977) (human activities—construction work—had changed the shape of the landscape in ways that prevented the previous natural pattern of run-off during a heavy storm).

110. *See* Mitchell, *supra* note 73, at 2117 (generally discussing the human role in causing extreme climate events and referring specifically to heavy rainfall, storms and flooding); J.C.R. Hunt, *Floods in a Changing Climate*, 360 PHIL. TRANS.: MATHEMATICAL, PHYSICAL & ENGINEERING SCI. 1531, 1535 (2002) (discussing the potential for change in the occurrence of cyclones); Mark A. Saunders, *Earth's Future Climate*, 357 PHIL. TRANS.: MATHEMATICAL, PHYSICAL & ENGINEERING SCI. 3459, 3468-69 (1999) (discussing the current and anticipated changes in hurricane patterns).

111. *See* Mitchell, *supra* note 73, at 2117 (human causation of heat waves); Hulme, *supra* note 73, at 2006 (discussing human causation of global warming and cooling in different areas and using the example of Greenland's increasingly extended warmth); Virginia H. Dale, *The Relationship Between Land-Use Change and Climate Change*, 7 ECOLOGICAL APPLICATIONS 753, 753-62 (1997)

rising.[112] Hurricane frequency in the Atlantic has sharply increased.[113] Events of large and small magnitude have origins in human action—and governmental inaction. Global climate change will present courts with the kinds of difficult factual situations that make it impossible to pretend the old act of God divide should stand untouched. Even though a particular defendant in a given case may not have been demonstrably at fault, the act of God doctrine remains analytically flawed because it requires that "nature" be the sole cause of a phenomenon to the exclusion of all human action. In effect, the doctrine asks parties to the case to prove the impossible—to prove that nature can be absolutely separated from the human. The act of God doctrine is analytically unsupportable—and yet it continues to be applied.

Yet this ontological reality is the logical conclusion of earlier critiques: to speak of landscape, as a mere repository for human action is to deny ontological truths. If nature is not exclusive of humans, then nature *in and of its being includes the human.* The human and the natural *share corporality* in the double sense of having nature in common as a characteristic and having it in common as a shared assets. Drawing on Crang's development of concepts of space as ontological, with humans creating space-time, human-nature may be understood as multiple points of space-time intersection—points where humans

(discussing the reciprocal relationship between land use and climate change and explaining how agriculture causes climate change, while climate change also changes agricultural patterns); *see also* Martin Parry, *Climate Change, Global Food Supply and Risk of Hunger*, 360 PHIL. TRANS.: BIOLOGICAL SCI. 2125, 2137 (2005) (suggesting that the food supply will change in the future due to changing temperatures and such issues as water availability and the heat tolerance of plants).

112. For a discussion of past documented sea level increases and anticipated future increases, *see* Saunders, *supra* note 110, at 3467-68, 3470-71. For a discussion of coastal flooding as a result of sea level rises and the anticipated population movements as a result, *see* Norman Myers, *Environmental Refugees: A Growing Phenomenon of the 21st Century*, 357 PHIL. TRANS.: BIOLOGICAL SCI. 609, 702 (2002). Hunt, *supra* note 110, at 1535, agrees, noting the anticipated future sea increases. Hunt also discusses the glacier melt. *See id.* at 1535. For a case study in past and future glacier melt, *see generally* Myrna H.P. Hall & Daniel B. Fagre, *Modeled Climate-Induced Glacier Change in Glacier National Park, 1850-2100*, 53 BIOSCIENCE 131 (2003).

113. *See* Saunders, *supra* note 110, at 3468-69; Mitchell, *supra* note 73, at 2117. Hurricanes and cyclones are anticipated to increase further in the future. *See* Saunders, *supra* note 110, at 3470-71; Hunt, *supra* note 110, at 1535; Mitchell, *supra* note 73, at 2117; Hulme, *supra* note 73, at 2006.

not only generate ideas of nature but are generative of the physical world and humankind.[114] The human condition is not just to experience the world through a body but also to be physically created by our environment and to experience that environment through time.

By engaging the history of the categories of "natural" and "human," we can analyze the process of "bounding or bordering."[115] We can reflect on what we have embraced or avoided through our categorizations. Perhaps at the deepest level, the tightly policed borders of our historic categorizations of the human and the natural reflect our very existential crisis: a worry that life is fleeting, that bodies do indeed return to dust, that we are more like the other animals than we imagine. Hierachicalizations have been a constant in this analysis: nature is either idealized above the human (to be kept pure and unadulterated, free of chemicals and genetic engineering) or denigrated below it (to be mastered and rendered passive "resource" to be acquired and used). Through these notions, our categories have lent political support to many debates. And by being either above or below, humans have avoided the idea that we are *a part of* the natural.

Embracing a human-nature ontology complicates determinations of causality (while rendering them more accurate) but also frees us from the restrictive Western dichotomies that have supported environmental destruction (with the human having mastery over nature), as well as gender oppressions (with the female regarded as more linked to the body, closer to nature and thereby less intellectual). Through this embrace we open ourselves to recognizing truths long held by other cultures. For instance, Laguna Pueblo symbolic geography speaks of a "spiritual being who represents an aspect of nature, and may appear either in the human shape of an animal (like Spider Woman) or in the form of a person."[116] In this way, humans and nature are understood as coterminous—neither aspect being less than, more than, or apart from the other. Shapes and perceptions

114. *See* Crang, *supra* note 52, at 194.

115. Reece Jones, *Categories, Borders and Boundaries*, 33 PROGRESS IN HUMAN GEOGRAPHY 174, 175 (2009).

116. Edith Swan, *Laguna Symbolic Geography and Silko's Ceremony*, 12 AM. INDIAN. Q. 229 (1988).

are fluid, generating even intersections (as in the "human shape of an animal") while the ontological remains the constant. Only such a recognition of the shifting intersection—the mutual createdness, not just in idea and category, but in being itself—will generate new perspectives in social policy.

With respect to the acts of God doctrine, this suggests that our current legal frameworks are deficient. By continuing to embrace the doctrine, we resist bringing our legal concepts into line with modern scientific understandings—and implicitly perpetuate the public myth that our actions are without climatic consequences. In light of other excellent work on the doctrine, which has argued that the act of God defense adds nothing substantial to our analysis of negligence,[117] the doctrine might be eliminated in favor of a renewed emphasis on the causation analysis. If, as Binder has suggested, the doctrine does not aid our decision-making process, then its usefulness is easily outweighed by the negative impacts of continued application, both in terms of public perceptions of the human-nature divide and in aligning law with our scientific understandings of the world.

VI. CONCLUSION

This article contends that it is critical to move beyond simply recognizing "nature" as a social construction excluding human content. If "nature" is not what we have thought, we must seek now to determine what, indeed, it *is*. If we continue to speak of nature as something separate from human, we are denying the logical conclusion that nature does not exclude the human: the human and the natural share basic beings. The two cannot be meaningfully separated. This article argues that this recognition is critical in the current legal landscape, which in drawing on years of culture and science, has defined legal doctrine within the framework of a nature-human separation. In particular, doctrines of causality have sought to separate the human from the natural to determine liability in tort and contract. But most significantly, we now continue to separate the human from the natural while failing to admit the fiction within the doctrine. The

117. *See* Binder, *supra* note 6, at 3-4.

public is increasingly aware that large-scale climatic changes can have a human causal component. For the courts to continue to see human and nature as strictly separate in climatic event causation is to press the public's faith in the courts. While courts do, at times, choose to employ legal fictions, this remains a controversial practice,[118] and one that may do damage to the public's perceptions of the rule of law.[119] While legal fictions are generally understood to "enabl[e] the law to do [that] which previously could not be done,"[120] there is a genuine question here of whether the court should, as a matter of public policy, continue to pretend that humans are not actors in climatic events, thereby perpetuating moral ignorance of environmental consequences of our modern lives.

118. Louise Harmon, *Falling Off the Vine: Legal Fictions and the Doctrine of Substituted Judgment*, 100 YALE L.J. 1, 1-3 (1990).

119. Jeremy Bentham, for example, deeply hated the device of legal fictions and was offended by their use. Bentham was particularly concerned with the idea of a legal fiction for what it did to the public's understanding of law. *See* Harmon, *supra* note 118, at 4. I would add that if, as many commentators have suggested, the primary function of law is to decide conflicts and prevent force from being the determining factor, then giving articulated reasons for decisions without being confusing or misleading to the public is of primary importance. For a further discussion of the significance of reasoned articulation that makes sense to the public, *see* Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARVARD L. REV. 1089, 1090-92 (1972).

120. Timothy S. Hall, *Legal Fictions and Moral Reasoning: Capital Punishment and the Mentally Retarded Defendant After Penry v. Johnson*, 35 AKRON L. REV. 327, 351 (2002).