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"STICKY METAPHORS" AND THE PERSISTENCE OF THE TRADITIONAL VOLUNTARY MANSLAUGHTER DOCTRINE

Elise J. Percy*
Joseph L. Hoffmann**
Steven J. Sherman***

"[A]s a result of discovering the world through language, for a long time I took language for the world."

—Jean-Paul Sartre (1964)¹

Introduction

This Article begins with a curious puzzle: Why has the traditional voluntary manslaughter doctrine in criminal law—the so-called "heat of passion" defense to a charge of murder—proven so resistant to change, even in the face of more than a half-century of seemingly compelling empirical and normative arguments in favor of doctrinal reform? What could possibly account for the traditional doctrine's surprising resilience?

In this Article, we propose a solution to this puzzle. The Article introduces a new conceptual theory about metaphor—the "sticky metaphor" theory—that highlights an important aspect of metaphorical language and metaphorical thought that has been almost completely overlooked in the existing literature of law, psychology, and linguistics.² We believe the "sticky metaphor" theory may turn

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^{1.} Robert B. Zajonc, Attitudinal Effects of Mere Exposure, 9 J. Personality & Soc. Psychol. 1, 3 (1968) (quoting Jean-Paul Sartre, Words 182 (1964)).

^{2.} We do not claim that the "sticky metaphor" theory is the sole solution to the puzzle described in the text, nor do we contend that it completely explains the resilience of the traditional voluntary manslaughter doctrine. Surely there are other reasons as well, including the law's general resistance to change, see infra text accompanying note 68, and normative arguments against expanding any defense to the crime of homicide, especially a defense as problematic as the "heat of passion" defense, see infra text accompanying notes 41–51. Rather, we would describe the "sticky metaphor" theory as a kind of inertial force that previously has not been, but must be, taken into account by anyone seeking to reform the traditional voluntary manslaughter doctrine.

The closest analogue to our concept of the "sticky metaphor" appears in the work of Zoltán Kövecses, a Professor of Linguistics in the Department of American Studies at Eötvös Loránd University in Budapest, Hungary. Professor Kövecses has recently written about the related concept of the "embodiment" of anger. We discuss Kövecses at greater length in Part

out to be highly significant to both the voluntary manslaughter doctrine in particular and the law in general.

* * * * *

Law is "a profession of words." Lawyers use language to define, to explain, to bind and limit, to justify, and—perhaps most centrally—to persuade. This is why it has been said that "[l]aw's foundations are rooted in rhetoric."

One of the most powerful tools of persuasive language, or rhetoric, is the metaphor. Metaphorical structures such as the "wall of separation" between church and state, the "marketplace of ideas" in free speech cases, and the "fruit of the poisonous tree" doctrine in criminal procedure law shape not only the way that lawyers and judges talk and write about the law, but also the way they think about the underlying legal concepts.

The potential influence of language on the development of the law makes it a powerful force that can be marshaled to serve the law's normative ends. But the power of language can also cause unintended consequences and effects. A powerful metaphor, for example, can lead to inferences and conclusions that would not be reached by the bounded and structured logic of standard legal analysis. "It is altogether likely that metaphoric 'reasoning' cuts across, indeed rolls right over, the subtleties of ratio decidendi." Metaphor, with its inherent indirection, may be unusually prone to

II, infra. See also Zoltán Kövecses, Metaphor and Emotion, in The Cambridge Handbook of Metaphor and Thought 380, 392 (Raymond W. Gibbs ed., 2008).

^{3.} David Mellinkoff, The Language of the Law, at vi (1963).

^{4.} Delia B. Conti, Narrative Theory and the Law: A Rhetorician's Invitation to the Legal Academy, 39 Dug. L. Rev. 457, 457 (2001).

^{5.} This metaphor apparently originated with colonial leader Roger Williams in the 17th century. See Roger Williams, Mr. Cotton's Letter Lately Printed, Examined and Answered, quoted in Perry Miller, Roger Williams: His Contribution to the American Tradition 98 (1953) ("[W]hen they have opened a gap in the hedge or wall of separation between the garden of the church and the wilderness of the world, God hath ever broke down the wall itself, removed the candlestick, and made His garden a wilderness"); see also Thomas Ross, Metaphor and Paradox, 23 Ga. L. Rev. 1053, 1064 (1989).

^{6.} This metaphor originated in Abrams v. United States, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting) ("[T]he ultimate good desired is better reached by free trade in ideas—that the best test of truth is the power of the thought to get itself accepted in the competition of the market"). See Steven L. Winter, Fast Food and False Friends in the Shopping Mall of Ideas, 64 U. Colo. L. Rev. 965, 971–72 (1993).

^{7.} This metaphor originated in *Nardone v. United States*, 308 U.S. 338, 341 (1939) ("[T]he trial judge must give opportunity, however closely confined, to the accused to prove that a substantial portion of the case against him was a fruit of the poisonous tree."). *See* Wayne R. Lafave, Jerold H. Israel & Nancy J. King, Criminal Procedure 509 (4th ed. 2003); Ross, *supra* note 5, at 1054–55.

^{8.} Arthur Allen Leff, Law and, 87 YALE L.J. 989, 1007 n.45 (1978).

producing such unanticipated results. "In extreme circumstances, a good metaphor may be so compelling that it altogether subverts its referent's original meaning." Legal commentators have long cautioned against this "dark side" of metaphor. Lord Mansfield famously opined that "nothing in law is so apt to mislead as a metaphor." And Justice Cardozo wrote, "Metaphors in law are to be narrowly watched, for starting as devices to liberate thought, they end often by enslaving it."

Nevertheless, for good or for ill, metaphor is essential to human discourse in general, ¹² and thus to legal discourse in particular. As one author aptly (and metaphorically) put it: "Legal discourse is pregnant with metaphor." As such, metaphor has become the subject of considerable and well-deserved scholarly attention, particularly in recent years. Scholars with backgrounds in cognitive science, rhetoric, and philosophy have broadened our awareness of the wide variety of types of legal metaphors and their important role in influencing thought. ¹⁴ Others have focused on the strategic use of metaphors in litigation and other contexts where legal issues are debated or decided. ¹⁵ Most agree that metaphors must

^{9.} Bernard J. Hibbits, Making Sense of Metaphors: Visuality, Aurality, and the Reconfiguration of American Legal Discourse, 16 CARDOZO L. Rev. 229, 234 (1994).

^{10.} Knox v. Gye, (1872) 5 L.R.E. & I. App. 656 (H.L.) 676 (Eng.) (quoting Lord Mansfield).

^{11.} Berkey v. Third Ave. Ry., 155 N.E. 58, 61 (N.Y. 1926).

^{12.} See Mark L. Johnson, Mind, Metaphor, Law, 58 MERCER L. REV. 845 (2007). See generally George Lakoff & Mark Turner, More Than Cool Reason: A Field Guide to Poetic Metaphor, at xi (1989) ("Far from being merely a matter of words, metaphor is a matter of thought—all kinds of thought: thought about emotion, about society, about human character, about language, and about the nature of life and death. It is indispensable not only to our imagination but also to our reason."); George Lakoff & Mark Johnson, Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought (1999); George Lakoff, Women, Fire, and Dangerous Things: What Categories Reveal About the Mind (1987); David E. Leary, Psyche's Muse: The Role of Metaphor in the History of Psychology, in Metaphors in the History of Psychology 1 (David E. Leary ed., 1990).

^{13.} Adam Arms, Note, Metaphor, Women and Law, 10 HASTINGS WOMEN'S L.J. 257, 257 (1999).

^{14.} See, e.g., Steven L. Winter, A Clearing in the Forest: Law, Life, and Mind (2001); Johnson, supra note 12; Ross, supra note 5; Elizabeth G. Thornburg, Just Say "No Fishing": The Lure of Metaphor, 40 U. Mich. J.L. Reform 1 (2006); Steven L. Winter, Re-Embodying Law, 58 Mercer L. Rev. 869 (2007); Steven L. Winter, Transcendental Nonsense, Metaphoric Reasoning, and the Cognitive Stakes for Law, 137 U. Pa. L. Rev. 1105 (1989).

^{15.} See, e.g., MICHAEL R. SMITH, ADVANCED LEGAL WRITING: THEORIES AND STRATEGIES IN PERSUASIVE WRITING (2002); Linda L. Berger, Of Metaphor, Metonymy, and Corporate Money: Rhetorical Choices in Supreme Court Decisions on Campaign Finance Regulation, 58 MERCER L. Rev. 949 (2007); Linda L. Berger, What is the Sound of the Corporation Speaking? How the Cognitive Theory of Metaphor Can Help Lawyers Shape the Law, 2 J. ASS'N LEGAL WRITING DIRECTORS 169 (2004); Michael R. Smith, Levels of Metaphor in Persuasive Legal Writing, 58 MERCER L. Rev. 919 (2007).

be chosen wisely and carefully, and that substituting a different metaphorical structure can often serve as an effective method to shift the terms of a particular legal debate.¹⁶

Not all metaphors, however, are created equal. Some metaphors are not so easily modified or manipulated to serve rhetorical purposes. Within the broad universe of metaphors, some seem more natural than others—almost as if they are not being "chosen" at all. For example, when we get angry, we "see red," our "blood boils," and we "explode." Such metaphors are deeply embedded in our thinking about anger. They pop into our heads almost spontaneously.¹⁷ These are the kinds of metaphors we will call "sticky."

What makes such a metaphor "sticky"? We believe that the metaphorical structure of anger—together with the lay theory, or "folk

[B]oth prosecutors and death-penalty defense attorneys ... view the call to act 'humanely' not in the context of some storied account of 'humanity at its best' acting 'humanely' as it puts someone to death, but exclusively within the narrow framework of an argument opposing capital punishment altogether. Within that limited frame of reference, the call to act 'humanely' becomes nothing more than a rhetorical throwaway.

But, for prosecution and defense alike, their rather constricted view of the issue, no matter how shared, may well restrict them from seeing the possibility of other arguments arising from other contexts—arguments that, both pro and con, may prove ultimately more persuasive. Prosecutors as well as defense lawyers need to see that their context, like any human context, is not universal. . . .

[L]ively rhetoric that animates truly spirited arguing can do more than simply strip away any cover talk meant to deceive others about what, in truth, we or they might desire or do. More potently, it can force our opponents and ourselves to discover other possibilities to which we may have both been blinded by sharing the same myopic context, a context that might give way to new, more panoramic ones as novel stories are conceived and fresh metaphors devised.

Id.

17. We speak of spontaneity here, rather than pure automaticity, in order to leave open the question of the precise degree to which the employment of such metaphors occurs outside of control or awareness. Various psychological events have been shown to occur without intention, while still ultimately entering into consciousness and even being subject to some deliberate control. See Frederica R. Conrey, Jeffrey W. Sherman, Bertram Gawronski, Kurt Hugenberg & Carla J. Groom, Separating Multiple Processes in Implicit Social Cognition: The Quad Model of Implicit Task Performance, 89 J. Personality & Soc. Psychol. 469, 470 (2005); SoYon Rim, James S. Uleman & Yaacov Trope, Spontaneous Trait Inference and Construal Level Theory: Psychological Distance Increases Nonconscious Trait Thinking, 45 J. Experimental Soc. Psychol. 1088, 1089 (2009); Jeffrey W. Sherman, On Building a Better Process Model: It's Not Only How Many, but Which Ones and by Which Means?, 17 Psychol. Inquiry 173, 179 (2006).

^{16.} E.g., Elizabeth G. Thornburg, Metaphors Matter: How Images of Battle, Sports, and Sex Shape the Adversary System, 10 Wis. Women's L.J. 225, 226 (1995); cf. Michael Goldberg, Against Acting 'Humanely', 58 MERCER L. Rev. 899, 904–05, 918 (2007).

psychology," of the emotion of anger that derives from it¹⁸—are both based on our normal human physiological experience of anger. This physiological experience includes a faster heartbeat, an increase in blood pressure, and a flushing of the skin of the face (i.e., one's face turns red).¹⁹ These are the same physiological responses that normally occur when one gets hot. In a physiological sense, we experience anger and heat in the same way. When we think and talk about anger, therefore, we naturally tend to use the metaphorical structure of heat and the buildup of pressure in a closed container,²⁰ a metaphorical structure that also includes excitation, the color red, and the potential for a violent explosion. Metaphors for anger like "hot-blooded," "his rage boiled over," and "I'm going to explode!" seem natural to us, given the human physiology of anger.

We could perhaps choose different metaphors to describe anger, but in light of our physiological experience of anger, it would not make sense (or at least not nearly as much sense) for us to describe anger as "wet," "heavy," or "lavender." Even more obviously, as a general rule we do not describe anger in terms of the opposite of heat, which would be cold. We say, "John burned with anger." We might even say—by way of juxtaposition—"John was furious, but he remained cool." What we do not say is that "John was icy cold with anger." The human physiology of anger constrains our choice of metaphors. 22

^{18.} See *infra* Figure 1, depicting our schematic model of how metaphor develops and then shapes lay theory, or the "folk psychology," of emotion and its effects. Throughout this Article, we will use the terms "lay theory" and "folk psychology" interchangeably.

^{19.} See Peter D. Drummond & Saw Han Quah, The Effect of Expressing Anger on Cardiovascular Reactivity and Facial Blood Flow in Chinese and Caucasians, 38 PSYCHOPHYSIOLOGY 190, 195 (2001); Paul Ekman, Robert W. Levenson & Wallace V. Friesen, Autonomic Nervous System Activity Distinguishes Among Emotions, 221 Science 1208, 1210 (1983); Raymond W. Novaco, Anger, in Encyclopedia of Psychology (2000).

^{20.} See Lakoff & Johnson, supra note 12; Lakoff, supra note 12.

^{21.} Notice that, in this particular metaphorical expression (and ones like it), the anger itself is not really "cool." Rather, the person is "cool," despite the presence of something "hot" that "burns" inside them (i.e., their anger). The contrast is the key to understanding the metaphor.

Even a common expression like "cold rage" is actually an exercise in juxtaposition—what we really mean to say is that the person has somehow managed to remain "cold," despite their highly aroused emotional state. The anger itself, however, cannot actually be "cold." One might think about "cold rage" in terms of nuclear fuel rods being used to generate electrical power—there's still a very "hot" nuclear reaction going on somewhere deep inside those fuel rods, even though we have somehow managed to figure out how to keep the rods, as well as the vessel that contains them, relatively "cool."

^{22.} As we explain *infra* Part II.C, we do not contend that sticky metaphors are completely constrained or eliminate all freedom of metaphorical choice. Rather, our claim is that, on a continuum, sticky metaphors are much more constrained than the typical metaphor.

The extent to which the nature and characteristics of the physical world constrain our choice of metaphors is the extent to which a particular metaphorical structure is "sticky." In many (perhaps most) situations, there may be a wide range of possible choices for the metaphors we use to describe a person, a thing, an action, or an abstract concept. We can describe love as "kind,"23 "wine,"24 "blind,"25 "blue,"26 a "battlefield,"27 or a "drug."28 But when we describe the physical attributes of a strong man, our metaphorical choices are much more narrowly constrained; he may be an "ox," a "bear," or a "man of steel,"29 but he cannot be a "ferret" or a "man of tissue paper." The metaphors for physical strength are sticky to a much greater extent than are the metaphors for love. The metaphors for physical strength appear self-evident, and an inconsistent or incompatible metaphorical structure would seem entirely inappropriate. Sticky metaphors are, in this respect, inherently dominant.

Metaphors for emotions share this same characteristic of stickiness. This is because emotions produce physiological responses—responses of the human body—that are evolutionary in origin and relatively consistent even across different cultures. The physiology of anger is remarkably similar to the physiology of heat, so the dominant metaphorical structure for anger is based on heat. The physiology of fear, on the other hand, includes goosebumps on the skin and a draining of blood from the face, which therefore pales. These are the same bodily responses that occur when a person becomes cold. The dominant metaphorical structure for fear is thus based on cold: "a chill ran down his spine"; "he was frozen with fear."

The relative stickiness of emotion metaphors complicates our conventional understanding of metaphor and its impact on the law. Where a legal doctrine is based in part on emotion, such as the voluntary manslaughter doctrine, metaphor can become much more than a mere rhetorical device. Because sticky metaphors are not chosen freely from an infinite or broad range of possibilities, they cannot easily be replaced with different metaphorical structures that might serve to reframe the relevant legal issue. Given

^{23.} The Seekers, Love is Kind, Love is Wine, on Seen in Green (EMI Records 1967).

^{24.} Id.

^{25.} ALICIA KEYS, Love is Blind, on THE ELEMENT OF FREEDOM (| Records 2009).

^{26.} PAUL MAURIAT, Love is Blue, on BLOOMING HITS (Philips Records 1967).

^{27.} PAT BENETAR, Love is a Battlefield, on Live from Earth (Chrysalis Records 1983).

^{28.} ROXY MUSIC, Love is the Drug, on SIREN (Island Records 1974).

^{29. 1} JOHN BYRNE & DICK GIORDANO, THE MAN OF STEEL (1986) (Volume 1 of a six-volume series of Superman comic books published by D.C. Comics).

their stickiness, such metaphors would seem to be exceptionally dangerous ones, much more likely to "enslave" than to "liberate" thought.³⁰

In this Article, we will begin by reviewing the legal doctrine of voluntary manslaughter, the so-called "heat of passion" defense. We will then develop our new conceptual theory of the sticky metaphor. Our account of sticky metaphors will be based on the latest psychology research about metaphor, language, and emotion. We will present a schematic model to illustrate how sticky metaphors for emotions develop, and how they can affect legal doctrine. We will analyze the doctrine of voluntary manslaughter as a prime example of the role of sticky metaphors in the law, demonstrating how such metaphors can constrain the law's evolution in ways inconsistent with prevailing empirical and normative views about how the law should change. We will use the same example of voluntary manslaughter doctrine to explore and contrast the metaphorical structures of the emotions of anger and fear. We will conclude with some observations about how the law, and lawyers, might try to deal with the problem of the sticky metaphor, and we will suggest some directions for future research into this fascinating realm at the boundary of law, linguistics, and psychology.

I. THE VOLUNTARY MANSLAUGHTER DOCTRINE

In the Anglo-American criminal law of homicide, common-law judges centuries ago developed the notion that some intentional killings—those committed in the "heat of passion" resulting from legally adequate provocation, and before the defendant had enough time to "cool off"—are less deserving of blame and punishment than other intentional murders.³¹ This so-called "heat of passion" defense³² does not completely exonerate the defendant; instead, it partially mitigates the defendant's crime from intentional murder down to voluntary manslaughter. In such cases, the

^{30.} See supra text accompanying note 11.

^{31.} See Joshua Dressler, Rethinking Heat of Passion: A Defense in Search of a Rationale, 73 J. CRIM. L. & CRIMINOLOGY 421 (1982). Leading cases on the voluntary manslaughter or "heat of passion" defense include Stevenson v. United States, 162 U.S. 313 (1896); Flanagan v. State, 46 Ala. 703 (1871); People v. Logan, 164 P. 1121 (Cal. 1917); State v. Yanz, 50 A. 37 (Conn. 1901); Maher v. People, 10 Mich. 212 (1862).

^{32.} See, e.g., Collins v. United States, 150 U.S. 62, 64 (1893) ("The instruction challenged did not, when taken in connection with the other parts of the charge, present the law inaccurately; for theretofore the judge had charged, substantially, that premeditation was necessary to the crime of murder; and also, quoting from some authority, that 'voluntary manslaughter is the unlawful killing of another without malice, upon sudden quarrel, or in the heat of passion.'").

defendant's punishment also gets substantially reduced from what would be imposed for intentional murder—generally by at least half, depending on the law of the particular jurisdiction.³³

The traditional version of the doctrine of voluntary manslaughter operates as follows: assuming that the prosecutor can prove that a defendant intentionally and wrongfully killed the victim, thus satisfying the basic definition of the crime of murder, the defendant may claim in response that the killing was provoked and therefore not murder.³⁴ In order to gain the benefit of the partial mitigation of crime and sentence, the defendant must prevail on both prongs of a two-pronged test: (1) Was the killing "adequately provoked" by some event that caused the defendant to kill in the "heat of passion"?³⁵ (2) Did the killing occur before the defendant had the chance to "cool off"?³⁶ Each of these two prongs, in turn, includes two sub-parts, which the law describes as "objective" and "subjective."³⁷ The law asks "objectively" whether a hypothetical "reasonable person" would have been provoked and would not have cooled off.³⁸ The law also asks subjectively whether the actual

^{33.} For example, in Virginia, the punishment for second-degree murder is five to forty years. VA. Code Ann. § 18.2-32 (2009). By contrast, the punishment for voluntary manslaughter, a Class 5 felony crime, id. § 18.2-35, is only one to ten years, id. § 18.2-10(e).

In Indiana, the sentencing scheme for homicides is somewhat more complicated. The punishment for murder, IND. CODE § 35-42-1-1 (2010), is either a prison term of forty-five to sixty-five years (and an advisory sentence of fifty-five years), id. § 35-50-2-3, or either life imprisonment without possibility of parole, id. § 35-50-2-8.5, or the death penalty, id. § 35-50-2-9, if certain aggravating circumstances are present. Voluntary manslaughter, id. § 35-42-1-3, can be either a Class B felony, with a prison term of six to twenty years (and an advisory sentence of ten years), id. § 35-50-2-5, or a Class A felony, with a prison term of twenty to fifty years (and an advisory sentence of thirty years), id. § 35-50-2-4, if it is committed with a deadly weapon.

^{34.} Voluntary manslaughter is not really a "defense" to a crime of murder. Rather, it is simply a lesser homicide crime than the crime of murder. Voluntary manslaughter is sometimes referred to as a "defense" because it is generally advocated to the jury by the defense lawyer, on behalf of the defendant, as an alternative to a murder conviction.

^{35.} See JEREMY HORDER, PROVOCATION AND RESPONSIBILITY (1992); Dressler, supra note 31; N.J. Finkel, Achilles Fuming, Odysseus Stewing, and Hamlet Brooding: On the Story of the Murder/Manslaughter Distinction, 74 Neb. L. Rev. 742 (1995).

^{36.} See HORDER, supra note 35; Dressler, supra note 31; Finkel, supra note 35.

^{37.} The law's use of the terms "objective" and "subjective" differs from the way those same terms generally would be used in science. For example, psychologists would use the term "objective" to refer to a condition in the real world that can be empirically studied, such as the actual defendant's state of mind. "Subjective," on the other hand, would refer to something that cannot be empirically studied—such as the state of mind of a hypothetical "reasonable person."

^{38.} See, e.g., Dandova v. State, 72 P.3d 325, 335 (Alaska Ct. App. 2003) (finding "heat of passion" defense unavailable to defendant because a "reasonable person would have cooled"); State v. Shane 590 N.E.2d 272, 279 (Ohio 1992) (holding that a reasonable person would not have been provoked under the circumstances of the case).

defendant was provoked and had not yet cooled off. ⁵⁹ The defendant will prevail, and receive the benefit of the voluntary manslaughter defense, only if all four of these issues—including both sub-parts of both prongs of the test—are resolved in the defendant's favor. ⁴⁰

The traditional voluntary manslaughter doctrine has been the subject of a great deal of academic commentary, most of it critical.⁴¹ For one thing, the traditional version of the doctrine is heavily gendered.⁴² The two paradigmatic common-law examples of "adequate provocation" are (1) mutual combat that results in death and (2) killings provoked by the witnessing of one's spouse committing an act of adultery.⁴³ Both examples almost always involve killings by men, who tend much more frequently than women to engage in mutual combat leading to death and also to respond with homicidal violence after witnessing a spouse's adultery.⁴⁴ One might even conclude that the whole point of the traditional doctrine was to partially exonerate men for behaving like "typical" men. Even contemporary applications of the voluntary manslaughter doctrine sometimes reflect the same gendered approach.⁴⁵

^{39.} See, e.g., State v. Schreiner, 944 A.2d 250, 260 (Vt. 2007) ("In order to establish manslaughter, four elements must be shown: (1) adequate provocation; (2) inadequate time to 'cool off'; (3) actual provocation; and (4) actual failure to cool off." (citation omitted)).

^{40.} See, e.g., Ex parte Fraley, 109 P. 295 (Okla. Crim. App. 1910); State v. Gounagias, 153 P. 9 (Wash. 1915); Dressler, supra note 31, at 465.

^{41.} For examples of such academic commentary, see Dressler, supra note 31; Reid Griffith Fontaine, Adequate (Non)Provocation and Heat of Passion as Excuse Not Justification, 43 U. MICH. J.L. REFORM 27 (2009); Dan M. Kahan & Martha C. Nussbaum, Two Conceptions of Emotion in Criminal Law, 96 Colum. L. Rev. 269 (1996); Stephen J. Morse, The Irreducibly Normative Nature of Provocation/Passion, 43 U. MICH. J.L. REFORM 193 (2009); Victoria Nourse, Passion's Progress: Modern Law Reform and the Provocation Defense, 106 Yale L.J. 1331 (1997); Samuel H. Pillsbury, Misunderstanding Provocation, 43 U. MICH. J.L. REFORM 143 (2009); Susan D. Rozelle, Controlling Passion: Adultery and the Provocation Defense, 37 RUTGERS L.J. 197 (2005); Emily L. Miller, Comment, (Wo)manslaughter: Voluntary Manslaughter, Gender, and the Model Penal Code, 50 Emory L.J. 665 (2001).

^{42.} See Rozelle, supra note 41; Miller, supra note 41.

^{43.} See, e.g., People v. Walker, 204 N.E.2d 594 (Ill. App. Ct. 1965) (mutual combat); Rowland v. State, 35 So. 826 (Miss. 1904) (witnessing adultery). See generally Dressler, supra note 31.

The law's label, "heat of passion," is revealing in that it links the "heat" of anger with the "passion" of sexual lust. Although "passion" is simply a synonym for lust in this context, rather than a metaphor, George Lakoff has pointed out that the metaphorical structure of lust is nearly identical with that of anger—i.e., heat and pressure in a closed container. See Lakoff, supra note 12, at 409–15.

^{44.} See David M. Buss, The Murderer Next Door: Why the Mind is Designed to Kill (2005).

^{45.} See, for example, the news report of the 2005 British case of Christopher Willsher:

Another problem with the traditional voluntary manslaughter doctrine is that it lacks theoretical coherence in terms of the goals of criminal law. The doctrine seems to be based on the idea that the person who kills while in the "heat of passion" in response to "adequate provocation" has behaved in a manner that is at least understandable, even if not entirely excusable. But the criminal law is also supposed to send a moral message to the entire society. Indeed, the criminal law helps society to define the core moral concepts of right and wrong in a way that also helps the society to define itself. If the criminal law is intended to serve these demonstrative and self-constitutive goals, then the traditional voluntary manslaughter doctrine seems wrong-headed. At a minimum, the traditional doctrine sends out a decidedly mixed and muddled moral message.

Finally, the underlying rationale for the traditional doctrine appears hopelessly unclear.⁴⁷ Some aspects of the doctrine make it seem like a partial excuse defense: the defendant is partially excused because the killing was largely the result of a provoking event that undermined the defendant's ability to exercise sound judgment, and thus is not a true manifestation of the defendant's character.⁴⁸ Other aspects of the traditional doctrine, however, make it seem like a partial justification defense: the provocation must be wrongful,⁴⁹ and the victim must be the same person who wrongfully provoked,⁵⁰ making the doctrine seem more like a form

An impotent husband who encouraged his wife to sleep with other men stabbed her to death when she told him that she was leaving for a lover 30 years her junior.

Christopher Willsher, 53, lost control and attacked his wife, Jeanette, with a kitchen knife, stabbing her 112 times. Willsher was sentenced yesterday to six years imprisonment after a judge at Plymouth Crown Court accepted his plea of guilty to manslaughter on the ground of diminished responsibility.

Simon de Bruxelles, Wife Stabbed 112 Times Over Affair, TIMES (London), July 6, 2005, at 11.

^{46.} See EMILE DURKHEIM, THE DIVISION OF LABOR IN SOCIETY 62-63 (W. D. Halls trans., Free Press 1984) (1893); M. Clarke, Durkheim's Sociology of Law, 3 Brit. J. Law & Soc'y 239 (1976); H.L.A. Hart, Social Solidarity and the Enforcement of Morality, 55 U. Chi. L. Rev. 1 (1968); Dale T. Miller & Neil Vidmar, The Social Psychology of Punishment Reactions, in The Justice Motive in Social Behavior 172 (Melvin J. Lerner & Sally C. Lerner eds., 1981).

^{47.} See Vera Bergelson, Justification or Excuse? Exploring the Meaning of Provocation, 42 Tex. Tech L. Rev. 307 (2009); Linda A. Malone, Is There Really a Difference Between Justification and Excuse, or Did We Academics Make It Up?, 42 Tex. Tech L. Rev. 321 (2009).

^{48.} Fontaine, supra note 41, at 45.

^{49.} Marcia Baron, The Provocation Defense and the Nature of Justification, 43 U. MICH. J.L. REFORM 117, 118 n.4 (2009).

^{50.} See, e.g., Foster v. State, 444 S.E.2d 296, 296 n.2 (Ga. 1994) ("We seriously question whether a charge on voluntary manslaughter is even authorized under the circumstances presented here [where defendant was provoked, but accidentally shot and killed an inno-

of "blaming the victim." Both of the paradigmatic examples of the traditional doctrine—mutual combat and witnessing adultery—clearly fit this latter description. The adultery cases are especially troubling, reflecting the same gender bias that can also be seen in the law's historic devaluation of married women as the "property" of their husbands.⁵¹

In a 2007 article published in the *Journal of Behavioral Decision Making*, Sherman and Hoffmann discussed the psychology and law of the voluntary manslaughter doctrine.⁵² Sherman and Hoffmann explained that the traditional formulation of the doctrine reflected a simplistic (and inaccurate) set of assumptions about the emotion of anger.⁵³ The doctrine seems premised on the view that anger is an emotional response that is caused by, and immediately follows, the occurrence of a sufficiently provoking event. Pursuant to this view, anger, once provoked, almost immediately begins to dissipate with the passage of time. Criminal law incorporates the "time course of anger" as reflected in this view, ⁵⁴ which explains why the traditional voluntary manslaughter doctrine applies only to cases of anger occurring in immediate response to the provoking event, and also why there is a separate "cooling off" prong to the traditional doctrine.

Sherman and Hoffmann observed that some of the law's assumptions about anger fail to correspond completely with psychological reality. Modern psychology research demonstrates that the emotions, including anger, do not always operate as the law seems to believe. The studies paint a much more complex picture of the emotion of anger. Provoking events do not always

cent third party]. Traditionally, the provocation which would authorize such a charge must arise from some action of the *deceased*, or at least that the defendant reasonably so believed." (citing MODEL PENAL CODE § 210.3 cmt. at 57 (1980))).

^{51.} See LORENNE M.G. CLARK & DEBRA J. LEWIS, RAPE: THE PRICE OF COERCIVE SEXU-ALITY 112–17 (1977) (noting that women have been treated as "objects rather than the subjects of property rights: women were among the forms of private property owned and controlled by individual men"). Such views were reflected in the criminal law's traditional rule that a man could not be convicted of raping his wife. Moreover, the traditional voluntary manslaughter doctrine—and especially the treatment of adultery cases—might be characterized as more protective of the husband's "property right" in his wife than as a protection of the personal integrity of the wife.

^{52.} Steven J. Sherman & Joseph L. Hoffmann, The Psychology and Law of Voluntary Manslaughter: What Can Psychology Research Teach Us About the "Heat of Passion" Defense?, 20 J. BEHAV. DECISION MAKING 499 (2007).

^{53.} Id. at 501-02.

^{54.} Id. at 502 fig.1.

^{55.} *Id.* at 502–06.

^{56.} For examples of psychology pieces discussing the complexity of anger, see Paula Niedenthal, Silvia Krauth-Gruber & Francois Ric, Psychology of Emotion: Interpersonal, Experiential, and Cognitive Approaches 15 (2006); P. Ekman, Levenson &

immediately generate angry responses; sometimes, anger builds more slowly, over time, as a person broods about the provoking event.⁵⁷ In other situations, anger results from a series of provocations, none of which, standing alone, would suffice to provoke such anger. These studies might support the extension of the voluntary manslaughter defense to cases involving brooding anger, successive provocations leading to a violent reaction, and the like.

Modern psychology research also demonstrates that anger is not the only emotion that can have strongly negative effects on decision-making and instigate violent, even lethal, responses. Intense fear, for example, may cause similar effects.⁵⁸ If fear can impair human judgment in ways that are comparable to the effects of anger, then those who intentionally kill as a result of fear (but not in what the law considers to be self-defense) may deserve partial mitigation of crime and sentence as well.

Modern proposals for reforming the law of voluntary manslaughter have sought to bring these insights from psychology research into the criminal law. The most significant such reform effort was spearheaded by the American Law Institute (ALI), a respected legal think tank that promulgated the Model Penal Code (MPC) in the 1960s.⁵⁹ The ALI, as one part of this comprehensive proposal to rationalize and modernize all of American criminal law, argued that the new crime of manslaughter (which encompassed the old crime of voluntary manslaughter) should be redefined as follows:

Criminal homicide constitutes manslaughter when . . . a homicide which would otherwise be murder is committed under the influence of extreme mental or emotional disturbance for which there is reasonable explanation or excuse. The reasonableness of such explanation or excuse shall be determined

Friesen, supra note 19, at 1209; Nico H. Frijda, Peter Kuipers & Elisabeth ter Schure, Relations Among Emotion, Appraisal, and Emotional Action Readiness, 57 J. Personality & Soc. Psychol. 212, 226 (1989); Nico H. Frijda, The Laws of Emotion, 43 Am. Psychol. 349, 350-51 (1988); Eddie Harmon-Jones & John J.B. Allen, Anger and Frontal Brain Activity: EEG Asymmetry Consistent with Approach Motivation Despite Negative Affective Valence, 74 J. Personality & Soc. Psychol. 1310, 1311 (1998); Jennifer S. Lerner & Dacher Keltner, Beyond Valence: Toward a Model of Emotion-specific Influences on Judgement and Choice, 14 Cognition & Emotion 473, 480 (2000).

^{57.} See Cheryl L. Rusting and Susan Nolen-Hoeksema, Regulating Responses to Anger: Effects of Rumination and Distraction on Angry Mood, 74 J. Personality & Soc. Psychol. 790, 800 (1998).

^{58.} Sherman & Hoffmann, supra note 52, at 510–13.

^{59.} See MODEL PENAL CODE (1963).

from the viewpoint of a person in the actor's situation under the circumstances as he believes them to be. 60

This proposed new MPC redefinition of the "heat of passion" defense was designed primarily to do two things: (1) emphasize the doctrine's proper characterization as a partial excuse defense, with the primary focus on the defendant's state of mind, rather than a partial justification defense that depends on the wrongfulness of the victim's conduct; and (2) broaden the scope of the doctrine beyond the traditional paradigms of mutual combat and witnessing adultery, as well as beyond the traditional emotion of anger.⁶¹

The MPC's new version of the manslaughter crime has received substantial scholarly attention, most of it positive, but has been adopted by relatively few state criminal statutes. The MPC version may have had an impact in terms of encouraging courts in non-MPC jurisdictions to construe the scope of the voluntary manslaughter defense somewhat more broadly than before. But it is safe to say that the ALI's bold attempt to reform the voluntary manslaughter doctrine has met with less than rousing success. Judges in the real world continue to be influenced by justification principles as well as excuse principles, and ultimately seem reluctant to extend the scope of the doctrine very far beyond the traditional paradigms and the traditional emotion of anger.

Sherman and Hoffmann hypothesized that this resistance to change might, in part, be a byproduct of metaphorical language and metaphorical thought. The colloquial label most frequently attached to the voluntary manslaughter doctrine—the "heat of passion" defense—clearly reflects its underlying metaphorical structure. The prevailing metaphor is that anger (as generated by the provoking event) equals heat/force/pressure in a closed container. The provoking event acts as the heat source, which causes the provoked person to become "hot" with anger, which in turn leads to buildup of pressure, which ultimately finds its release through an act of lethal violence. While the metaphorical structure neither completely justifies nor completely excuses the provoked killing, it provides a kind of explanation for the killer's lethal

^{60.} MODEL PENAL CODE § 210.3(1)(b) (1985).

^{61.} See id. \S 210.3 cmt.; Markus D. Dubber, Criminal Law: Model Penal Code 265–71 (2002).

^{62.} Fontaine, supra note 41, at 28 ("[N]umerous states have not adopted the MPC's language....").

^{63.} Joshua Dressler, Why Keep the Provocation Defense?: Some Reflections on a Difficult Subject, 86 Minn. L. Rev. 959 (2002).

^{64.} Baron, supra note 49.

^{65.} Sherman & Hoffmann, supra note 52, at 506-09.

violence that supports the law's traditional mitigation of crime and punishment.

Sherman and Hoffmann, citing the work of linguist George Lakoff, 66 speculated that the metaphorical structure that underlies the traditional voluntary manslaughter doctrine might also play some role in the law's adherence to that doctrine. According to the authors, "[T]he limitations of our metaphorical language—the language that, according to Lakoff, both defines and constrains our cognitive sense of the concept of anger—may be at least partly responsible for the law's adherence to tradition in this area." The authors also noted as possible contributing factors the law's general inertia, as well as the specific and well-documented reluctance of many legal decision-makers, no matter what the subject area, to base changes in the law on the latest scientific research.

In the next section, we will begin to outline the solution to the puzzle with which we started this Article. The new conceptual theory of the sticky metaphor, a theory based on the latest research but heretofore unrecognized in the literature on metaphor, will provide an explanation for the traditional voluntary manslaughter doctrine's persistent resistance to change. The new theory will also open up new and exciting areas of inquiry and empirical research, promising to change our conventional wisdom about metaphor and the law.

II. KILLING IN THE "HEAT OF PASSION": ANGER AND THE CONCEPTUAL THEORY OF THE "STICKY METAPHOR"

Metaphor, it seems safe to say, has always played an important role in the law. But only relatively recently has metaphor become the focus of significant scholarly attention and scientific study.

The conventional wisdom about metaphor and the law includes the following observations: (1) metaphors are everywhere, in the law and in life (indeed, some argue that no human thought is possible without them); (2) metaphors serve important rhetorical purposes and can be used by lawyers in pursuit of normative goals; (3) metaphors are powerful tools that must be chosen and wielded carefully in order to ensure that the proper normative ends are served and to avoid unintended consequences.⁶⁹

^{66.} LAKOFF & JOHNSON, supra note 12; LAKOFF, supra note 12.

^{67.} Sherman & Hoffmann, supra note 52, at 510.

^{68.} Id

^{69.} For a recent excellent symposium on the topic of metaphor and the law, see Symposium, Using Metaphor in Legal Analysis and Communication, 58 Mercer L. Rev. 835 (2007).

This conventional wisdom implicitly assumes that metaphors, like other rhetorical devices, are subject to relatively free choice. If a particular metaphor, or metaphorical structure, fails to bring about the desired rhetorical or normative result, then the lawyer should choose a different metaphor that can better serve the desired goal. As a defense lawyer trying to persuade a jury to find reasonable doubt about a defendant's state of mind (and therefore guilt), one might choose to talk about the mind as an opaque container: "you can't go into the defendant's mind and decide what exactly was going through it at the time he fired that shot"; "science hasn't invented the instrument which can look inside someone's head." The prosecutor in the same case might prefer to talk about the mind as a machine open to observation: "he calculated his next move"; "his mind went into high gear"; "at that point, the wheels started spinning."

We propose to challenge the conventional wisdom about the malleability of metaphor by taking a closer look at what psychologists and linguists have learned in recent years about metaphor, language, and emotion. Our examination of the latest scientific research will reveal the heretofore largely unnoticed existence of a special subset of metaphors that we call "sticky metaphors." Sticky metaphors are special because they are metaphors derived from physical experience. Because sticky metaphors are grounded in the physical world, they seem natural and unchosen. The relevant physical experience constrains our choice of metaphors; no matter how much one might wish to do so for rhetorical purposes, it is very difficult, if not impossible, to choose different metaphors that are incompatible with the physical experience. This is why sticky metaphors are inherently dominant.

In the sections that follow, we will introduce our conceptual theory of sticky metaphors. We will start by briefly reviewing the current state of psychological knowledge about emotion and anger. We will then present our schematic model of sticky metaphors for emotions, a model that describes how such metaphors originate and how they can influence the evolution of legal doctrine. We will use the specific example of the metaphorical structure for the

^{70.} See, e.g., Smith, supra note 15, at 930.

^{71.} See Anthony G. Amsterdam & Randy Hertz, An Analysis of Closing Arguments to a Jury, 37 N.Y.L. Sch. L. Rev. 55, 118-21 (1992).

^{72.} See id. The previously quoted "mind as a container" metaphorical expressions were actually used during the criminal trial that Amsterdam and Hertz studied—although they were used by the prosecutor, a fact that the authors found puzzling. The authors suggested that the prosecutor probably should have chosen the alternative metaphor of "mind as a machine."

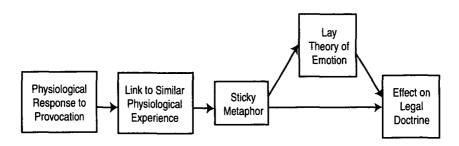
emotion of anger—a clear example of a sticky metaphor—to illustrate the development of sticky metaphors and their impact on the law. We will argue that the criminal law's adherence to the traditional voluntary manslaughter doctrine in part reflects the relative stickiness of the metaphorical structure for anger, which impedes the implementation of a more sophisticated and nuanced version of the doctrine. Our conceptual theory and schematic model helps to explain why the traditional doctrine is applied so unevenly and why it is so resistant to change.

Our schematic model of sticky metaphors for emotions, as shown in Figure 1, consists of five stages. The first stage is an event or series of events that triggers an emotion, which is experienced in part as a set of normal physiological responses. The second stage is the conscious or unconscious awareness that these normal physiological responses are similar to those typically experienced in a different setting or context. The third stage is the conceptualization of the particular emotion in metaphorical terms, based on the similarity in the physiological responses. The fourth stage is the development of a lay theory of the particular emotion derived from this metaphorical structure. The fifth and final stage is the effect of the lay theory of the particular emotion, and the sticky metaphor from which it derives, on the evolution of legal doctrine based on the same emotion.

^{73.} These five stages are meant to be conceptual and relational, not necessarily strictly sequential in the chronological sense. Kövecses makes a similar point in his discussion of the relationship between emotion metaphors and cultural models of emotion:

We should of course not imagine the process of the emergence of cultural models in sequential steps, going from experiential basis to cultural model. A probably more accurate way of thinking about it would be to say that the components . . . are all at work at the same time, mutually influencing each other. In the course of this joint evolution, the conceptualized experiential basis . . . and the emerging conceptual metaphors contribute to the basic schematic structure of the cultural model, while the simultaneously present cultural context fleshes out the details of the schema.

FIGURE 1



The voluntary manslaughter doctrine is based on emotion and emotional experience, especially those emotions that can lead to murderous impulses. Anger and fear are thus central to the voluntary manslaughter doctrine, as defendants frequently seek to invoke the doctrine when one or both of these emotions arise strongly in the aftermath of a provoking event. Because in practice the traditional voluntary manslaughter doctrine applies primarily to cases of anger, we will begin by describing our theory and model in terms of the emotion of anger. Later, we will do the same for the emotion of fear, and we will discuss some important differences between anger and fear that may explain why killings resulting from those two emotions are often treated differently with regard to the voluntary manslaughter doctrine.⁷⁵

A. What Psychology Has Learned About the Emotion of Anger

What do we know about the nature of emotions like anger? In modern psychology research, emotional experience is viewed as a syndrome involving several components.⁷⁶ The experience of emotion results from the interaction of physiological reactions, thoughts, behaviors, and an awareness of the physiological reactions.⁷⁷

^{74.} Manslaughter, in 6 WEST'S ENCYCLOPEDIA OF AMERICAN LAW 421, 422 (Jeffrey Lehman & Shirelle Phelps eds., 2d ed. 2005) ("The most common type of voluntary manslaughter occurs when a defendant is provoked to commit the homicide. It is sometimes described as a heat of passion killing. In most cases, the provocation must induce rage or anger in the defendant, although some cases have held that fright, terror, or desperation will suffice.").

^{75.} See id.; see also Joshua Dressler, Understanding Criminal Law 535–38 (5th ed. 2009).

^{76.} EMOTION AND CONSCIOUSNESS 1-2 (Lisa Feldman Barrett, Paula M. Niedenthal & Piotr Winkielman eds., 2005).

^{77.} See Niedenthal, Krauth-Gruber & Ric, supra note 56, at 14-15.

There is a long-standing debate in psychology about whether the result of this interaction of several components is a general form of arousal common to all emotions or an emotion-specific form of arousal. Schachter and Singer⁷⁸ and Zillmann⁷⁹ take the position that the arousal resulting from all emotions is the same. They argue that what differentiates the different emotions is merely the person's cognitive appraisal of this arousal. Thus, the very same arousal state might be interpreted and experienced as anger, fear, or disgust, depending on the surrounding cues and context.⁸⁰

More recent studies, however, have produced compelling evidence of emotional specificity, with different brain activations occurring for different emotions. For example, Harmon-Jones and his colleagues have demonstrated that the brain activation associated with the emotion of anger is quite different from the brain activation associated with other negative emotions. More specifically, anger is associated with activation in the left anterior cortical area of the brain. This research on the brain confirms that the emotion of anger is characterized by its own emotion-specific form of arousal.

The foundational empirical assumption underlying the traditional voluntary manslaughter doctrine is that strong anger can lead to highly aggressive and even homicidal behavior. Psychology research tends to confirm this assumption. Emotions are strongly linked to behavior. Emotions engage the body for behavior and prepare people for action. For anger, the predominant behavior—unless restraint is successfully engaged—is attack. Such behavior can be quite extreme and highly aggressive in nature. Psychologists have often demonstrated the extremely aggressive

^{78.} Stanley Schachter & Jerome E. Singer, Cognitive, Social, and Physiological Determinants of Emotional State, 69 PSYCHOL. REV. 379, 380, 395 (1962).

^{79.} Dolf Zillmann, Aaron H. Katcher & Barry Milavsky, Excitation Transfer from Physical Exercise to Subsequent Aggressive Behavior, 8 J. EXPERIMENTAL Soc. PSYCHOL. 247, 253 (1972).

^{80.} See Schachter & Singer, supra note 78, at 395; Zillmann, Katcher & Milavsky, supra note 79, at 253.

^{81.} See Charles S. Carver & Eddie Harmon-Jones, Anger Is an Approach-Related Affect: Evidence and Implications, 135 PSYCHOL. BULL. 183, 197 (2009); Jan Wacker, Marcus Heldmann & Gerhard Stemmler, Separating Emotion and Motivational Direction in Fear and Anger: Effects on Frontal Asymmetry, 3 EMOTION 167, 185 (2003).

^{82.} Carver & Harmon-Jones, supra note 81, at 187.

^{83.} Eliot R. Smith & Gün R. Semin, Socially Situated Cognition: Cognition in Its Social Context, 36 Advances in Experimental Soc. Psychol. 53, 53 (2004); Margaret Wilson, Six Views of Embodied Cognition, 9 Psychonomic Bull. & Rev. 625, 626 (2002).

^{84.} WALTER B. CANNON, BODILY CHANGES IN PAIN, HUNGER, FEAR AND RAGE 155 (1915); C. Nathan DeWall et al., Violence Restrained: Effects of Self-Regulation and Its Depletion on Aggression, 43 J. Experimental Soc. Psychol. 62, 74 (2007).

consequences of anger.⁸⁵ Thus, the law's assumption that anger can lead to lethal violence seems to rest on solid empirical ground.

Another important set of empirical assumptions about emotion underlying the traditional voluntary manslaughter doctrine involves the instigation of anger and the "cooling off" period. ⁸⁶ The traditional doctrine assumes that emotional arousal, especially for the emotion of anger, quickly reaches a peak and then begins to diminish with the mere passage of time, soon bringing the level of emotion below the "adequate provocation" threshold required for the application of the voluntary manslaughter doctrine. ⁸⁷ The doctrine's empirical assumptions about the "time course of anger" are depicted in Figure 2.

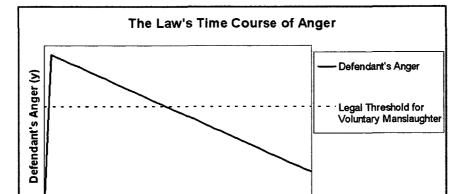


FIGURE 2

What can psychology research and theory teach us about the law's traditional view of the "time course of anger"? The assumption that anger reaches its peak shortly after the provoking event may hold true in some situations, but not in all. Bushman and his colleagues found that rumination after an emotionally provoking anger situation (for example, learning about an adulterous spouse) increases both the likelihood and the strength of the

Time After Provocation

^{85.} See, e.g., Brad. J. Bushman, Does Venting Anger Feed or Extinguish the Flame? Catharsis, Rumination, Distraction, Anger, and Aggressive Responding, 28 Personality & Soc. Psychol. Bull. 724, 729 (2002).

^{86.} See Sherman & Hoffmann, supra note 52, at 501-02.

^{87.} See Santana v. State, 688 N.E.2d 1275, 1279 (Ind. Ct. App. 1997) ("[A]lthough 'sudden heat can survive for a while beyond the act of provocation' . . . [defendant's] sudden heat could not have survived the span of approximately 30 minutes which separated the initial provocation from the shooting" (citations omitted)).

anger and of any accompanying aggressive responses.⁸⁸ In other words, anger may start out small but continue to increase long after the provoking event is over. Thoughts and subsequent events that occur for some time after the initial provocation can maintain or even exacerbate anger—as when people say, "The more I thought about it, the angrier I became."

The traditional voluntary manslaughter doctrine's assumption about a relatively short "cooling off" period also may be empirically questionable. One relevant research finding is that anger often lingers for quite a long time after the initial provocation. The action tendency for anger can be maintained until the moment when an emotion-relieving action is finally taken. The mere passage of time, by itself, is not always sufficient to reduce the provoked emotion.

In addition, research shows that attempts to suppress an emotion like anger often backfire, further undermining the law's assumption about "cooling off." During a particularly provoking event (for example, catching one's spouse in an adulterous situation, the paradigmatic voluntary manslaughter scenario), some individuals may try to remain calm and refrain from any outbursts of anger or aggressive action. Such attempts at emotional suppression, however, typically are accompanied by greater, rather than lesser, emotional arousal. One can manage to appear quite calm on the outside and yet experience an increased level of emotion internally. Moreover, the level of emotion commonly increases and intensifies even more after the suppression attempts cease. Thus, emotions such as anger can reach extremely high levels after an individual attempts to control them. This "emotion flooding" is

^{88.} Brad J. Bushman, Angelica M. Bonacci, William C. Pedersen, Eduardo A. Vasquez & Normal Miller, Chewing on It Can Chew You Up: Effects of Rumination on Triggered Displaced Aggression, 88 J. Personality & Soc. Psychol. 969, 980 (2005).

^{89.} See Frijda, supra note 56, at 354; Lerner & Keltner, supra note 56; Jennifer S. Lerner, Roxana M. Gonzales, Deborah A. Small & Baruch Fischhoff, Effects of Fear and Anger on Perceived Risks of Terrorism: A National Field Experiment, 14 PSYCHOL. SCI. 144, 155 (2003); Jennifer S. Lerner & Larissa Z. Tiedens, Portrait of the Angry Decision Maker: How Appraisal Tendencies Shape Anger's Influence on Cognition, 19 J. Behav. Decision Making 115, 130 (2006); Larissa Z. Tiedens & Susan Linton, Judgment Under Emotional Certainty and Uncertainty: The Effects of Specific Emotions on Information Processing, 81 J. Personality & Soc. PSYCHOL. 973, 978 (2001).

^{90.} See Lerner & Keltner, supra note 56, at 488-89.

^{91.} See Sherman & Hoffmann, supra note 52, at 505-06.

^{92.} James J. Gross & Robert W. Levenson, Emotional Suppression: Physiology, Self-Report, and Expressive Behavior, 64 J. Personality & Soc. Psychol. 970, 979 (1993); Daniel M. Wegner, Joanne W. Shortt, Anne W. Blake & Michelle S. Page, The Suppression of Exciting Thoughts, 58 J. Personality & Soc. Psychol. 409, 415 (1990).

^{93.} Jane M. Richards & James J. Gross, Composure at Any Cost? The Cognitive Consequences of Emotion Suppression, 25 Personality & Soc. Psychol. Bull. 1033, 1033 (1999).

similar in nature to the way that people tend to think more about an object (for example, a pink elephant) following attempts to suppress thinking about that object.⁹⁴

In short, current psychology research and theory support the foundational assumption of the traditional voluntary manslaughter doctrine that strong anger can lead to homicidal behavior. But psychology research and theory, as well as the clinical observations of psychologists, do not generally support the law's empirical assumptions regarding a quick onset of anger and a short "cooling off" period. How, then, can we account for the existence of the legal doctrine? How did such a doctrine—one that we now know to be incompatible with scientific evidence and with a good deal of everyday observation—arise in the first place? And why has it persisted for so long, when new evidence is continually being discovered that calls into serious question some of its empirical assumptions? We turn next to these important questions. Later, we will address the related question of how to account for the troubling fact that the voluntary manslaughter doctrine is applied more frequently to murders that are committed out of anger (usually by men) than to those committed out of fear (often by women).95

B. Stage One and Stage Two: The Physiological Experience of Anger and Its Similarity to the Physiological Experience of Heat

The first stage in our schematic model of sticky metaphors for emotions involves an event (or series of events) that generates an emotional response. As discussed in the preceding section, emotions are experienced as an emotion-specific set of physiological responses. The emotion of anger is typically characterized by the experience of one or more of the following physiological responses:

- flushing of the face
- flaring of the nostrils
- clenching of the jaw
- general muscular tension
- increase in heart rate
- increase in blood pressure
- increase in blood flow to the hands

^{94.} See Daniel M. Wegner, David J. Schneider, Samuel R. Carter & Teri L. White, Paradoxical Effects of Thought Suppression, 53 J. Personality & Soc. Psychol. 5, 11–12 (1987).

^{95.} See Rozelle, supra note 41, at 199 n.6; Miller, supra note 41, at 681-82.

- increase in skin temperature
- increase in perspiration⁹⁶

These physiological responses appear to be consistent across different cultures. 97

Most of the physiological responses associated with anger are exactly the same as the normal physiological responses to heat: the flushing of the face, the flaring of the nostrils, the increase in heart rate and blood pressure, the increase in skin temperature and perspiration. Interestingly, the physiological relationship between anger and heat also runs in the opposite direction—physical environments with higher temperatures have been associated with a greater incidence of aggression. This is consistent with Zillmann's excitation transfer model in which physiological responses produced by one cause (for example, ambient temperature) are interpreted as being due to a very different cause (for example, anger provocation).

The second stage in our model involves the process by which the physiological experiences normally associated with particular emotions are analogized to other physiological experiences that share certain similar outward characteristics, such as the comparison of anger and heat. In terms of the development of the traditional voluntary manslaughter doctrine, some particularly relevant writing in psychology discusses the way that people analogize the emotion of anger to the experiences of heat and of pressure in a closed container. Angry people might describe themselves as "burning with rage," "on fire," or "on the verge of exploding." In addition to the analogy of the "hot" person as a method for conceptualizing anger, the heat analogy also depicts the hot object, most commonly a pot or a kettle of water placed near a heat source.

As we experience the physiological responses associated with the emotion of anger, we become consciously or unconsciously aware of the close similarity between those responses and the ones normally experienced in connection with heat.

^{96.} Novaco, supra note 19.

^{97.} See Drummond & Quah, supra note 19, at 194-195.

^{98.} Craig A. Anderson, Heat and Violence, 10 CURRENT DIRECTIONS PSYCHOL. Sci. 33, 34 (2001); Craig A. Anderson, Brad J. Bushman & Ralph W. Groom, Hot Years and Serious and Deadly Assault: Empirical Tests of the Heat Hypothesis, 73 J. Personality & Soc. Psychol. 1213, 1221 (1997).

^{99.} See generally Zillman, Katcher & Milavsky, supra note 79, at 250.

^{100.} See Kövecses, supra note 2, at 156; Chen-Bo Zhong & Geoffrey J. Leonardelli, Cold and Lonely: Does Social Exclusion Literally Feel Cold?, 19 PSYCHOL. Sci. 838, 840 (2008).

^{101.} See LAKOFF, supra note 12, at 384-89.

^{102.} Kövecses, supra note 2, at 148.

This kind of similarity allows us to develop an understanding of the concept of emotion that would otherwise lie beyond our ability. As Lakoff and Johnson note:

[M] any aspects of our experience cannot be clearly delineated in terms of the naturally emergent dimensions of our experience. This is typically the case for human emotions.... Though most of these can be *experienced* directly, none of them can be fully comprehended on their own terms. Instead, we must understand them in terms of other entities and experiences.... 103

Growing evidence from research in psycholinguistics suggests that much of human cognition is "grounded" in these kinds of simple, concrete analogies of embodied experience. ¹⁰⁴ Such research emphasizes not only that humans use concrete experience to understand and communicate about concepts, but also that the reliance on these "embodied" analogies leads to particular ways of perceiving the world.

Research in psychological science provides some very interesting demonstrations of these effects. For example, engaging in unethical (or "morally impure") behavior increases the tendency to pursue certain bodily "purifying" tasks, such as hand washing. 105 Recent work on spatial metaphors has demonstrated that people believe that it takes more effort to travel "up north" than "down south" in a variety of contexts. 106 As evidenced by research on "power" metaphors, people who are physically located higher up (i.e., "above us") in vertical space are perceived as more powerful than those located below (i.e., "beneath us"). 107 With respect to emotion, recent work has highlighted the strong link between emotion metaphors and bodily experience: after an experience of social exclusion (being "left out in the cold"), people perceive the temperature to be lower and show an increased interest in eating warm foods. 108 In all of these cases, the behavior that results is a response to the experience as it is colored by the metaphor (e.g.,

^{103.} George Lakoff & Mark Johnson, Metaphors We Live By 177 (1980).

^{104.} LAKOFF & JOHNSON, supra note 12, at 6; LAKOFF, supra note 12, at 281.

^{105.} Chen-Bo Zhong & Katie Liljenquist, Washing Away Your Sins: Threatened Morality and Physical Cleansing, 313 SCIENCE 1451, 1452 (2006).

^{106.} Leif D. Nelson & Joseph P. Simmons, On Southbound Ease and Northbound Fees: Literal Consequences of the Metaphoric Link Between Vertical Position and Cardinal Direction, 46 J. MARKETING Res. 715, 716, 722–23 (2009).

^{107.} Thomas W. Schubert, Your Highness: Vertical Positions as Perceptual Symbols of Power, 89 J. Personality & Soc. Psychol. 1, 16 (2005).

^{108.} Zhong & Leonardelli, supra note 100, at 840.

"feeling dirty," "trudging up to the gas station," "looking down on those below me," "people behaving coldly") and not the raw experience itself (an unethical act committed, a particular distance to be traveled, another person to be perceived at some irrelevant vertical height, an unpleasant social situation to be endured). 109

C. Stage Three: Sticky Metaphors for Anger

The third stage of our model involves the conceptualization of the emotion of anger in metaphorical terms. The conscious or unconscious awareness of the similarity between the physiology of anger and the physiology of heat leads us to think about, and talk about, the emotion of anger by using the metaphorical structure of heat. In much the same way, given the physiological experience of facial flushing and increased heart rate and blood pressure associated with anger, the metaphorical structure for anger also includes the metaphor of pressure in a closed container—which is also the normal consequence of applying heat to a closed container containing fluid (in this case, the human body and its circulatory system). The metaphor of "anger = heat and pressure in a closed container" provides us with a way to think about the concept of anger, and it is also reflected in the language we use to describe anger: "I was seething"; "a burning rage"; "I felt as if my head would explode." Although the experience of anger is not identical to the experience of being in a sweltering auditorium, or of standing over a hot stove, it is a similar enough experience—because of its basic physiological characteristics—that it can be conceptualized in the same way these metaphors imply.¹¹⁰

These metaphors for anger are neither arbitrary nor accidental. Anger is not conceptualized as heat and pressure by mere happenstance, nor by free choice, as if one could easily substitute other metaphors. Heat and pressure metaphors are used for anger because they both share certain physiological characteristics.

Metaphors often inhere in physiological reactions to a particular situation, and such reactions are a very common origin of metaphors.¹¹¹ There are many examples, such as "feeling butterflies in

^{109.} See infra note 121 (explaining how George Lakoff's notion of an "embodied" metaphor differs substantially from the way we use that term in this Article).

^{110.} Cf. Ekman, Levenson & Friesen, supra note 19, at 1210; Robert W. Levenson et al., Emotion and Autonomic Nervous System Activity in the Minanghabau of West Sumatra, 62 J. Personality & Soc. Psychol. 972, 977, 986 (1992); Gerhard Stemmler, Physiological Processes During Emotion, in The Regulation of Emotion 33, 46, 54–55 (Pierre Philippot & Robert S. Feldman eds., 2004).

^{111.} LAKOFF, supra note 12, at 388.

one's stomach" and "my foot fell asleep." Metaphors that develop to describe such physiological experiences are thus quite different from metaphors that develop for abstract ideas. Running fast can be metaphorically described in various ways ("he runs like the wind"; "he's a gazelle"), but not in terms of anvils or snails. A redheaded person can be called "carrot-top," but cannot be called "broccoli-top."

All emotions involve bodily reactions, and such bodily reactions affect thinking, judgment, and decisions. ¹¹² Metaphors that are derived from emotions are thus "embodied," and these are the kinds of metaphors that are among the stickiest.

Because the human physiological responses to anger are universal, the metaphorical structure for anger—in its broadest sense—does not depend on culture. As Zoltán Kövecses wrote, "[T]he embodiment of anger appears to constrain . . . the kinds of metaphors that can emerge as viable conceptualizations of anger. This seems to be the reason why very similar metaphors have emerged for the concept in a variety of different cultures."

At the same time, Kövecses notes that different cultures, or even the same culture during different eras, may emphasize different aspects of the same "embodied" metaphorical structure. For example, as we have noted, the "embodied" metaphorical structure for anger includes both heat and pressure inside a closed container. In present-day Chinese, the primary metaphors for anger involve pressure but not heat, whereas in English both heat and pressure metaphors currently prevail. According to Kövecses:

This indicates that speakers of Chinese have relied on a different aspect of their physiology in the metaphorical conceptualization of anger than speakers of English. The major point is that in many cases the universality of experiential basis does not necessarily lead to universally equivalent conceptualization—at least not at the specific level of hot fluids, in the case of anger.¹¹⁴

This leads to his conclusion that "we should not expect any of the conceptualized responses associated with anger to remain constant

^{112.} Cf. Daniel Casasanto, Embodiment of Abstract Concepts: Good and Bad in Right- and Left-Handers, 138 J. Experimental Psychol: Gen. 351, 365 (2009) (noting that all emotions involve bodily reactions and that such bodily reactions affect thinking, judgment, and decisions); Daniel Casasanto & Katinka Dijkstra, Motor Action and Emotional Memory, 115 COGNITION 179, 182–84 (2010).

^{113.} Kövecses, supra note 2, at 160.

^{114.} Id. at 393.

in conceptualizing anger (and the emotions in general) throughout the ages. Experiential focus may change across time even within the same language." In short, even with respect to sticky metaphors, there may be enough "wiggle room" to emphasize one aspect of the "embodied" metaphorical structure rather than another. What one cannot so easily do, however, is adopt an entirely different metaphorical structure that is wholly inconsistent with the underlying physiological experience of the emotion in question. Anger can be hot, or anger can be like pressure, but anger cannot be wet or heavy.

The role of similarity in the development and use of such metaphors is much like the role of similarity in reasoning about causes and effects. For example, jaundice (known to cause yellow skin and eyes) was once thought to be caused by the consumption of yellow foods. In a similar way, large effects (e.g., an epidemic) are difficult to see as resulting from small causes (e.g., a bacterium or virus).¹¹⁶

As with all analogical reasoning, the effects of the analogies and metaphors involving anger go beyond the very real, but coincidental, shared characteristics that led to their original employment. Once one begins to conceptualize anger in terms of a similar physiological experience, the perception of the emotion takes on additional qualities, qualities that are inferred based on the metaphor rather than on the original experience itself. Put more simply, we tend to take metaphors literally.

Anger may share many physiological attributes with heat and pressure, but it is the conceptual notion of the boiling kettle on a hot burner, and not our physiological experience of anger, that tells us that the cause of the emotion comes from outside the person (from the victim, by analogy to the heating element), and also that, once the aggravating cause goes away, the anger should start to subside. Just as the kettle begins to cool down when it is removed from the heat source, the angry person should begin to cool down as time passes after the provoking event. Such implications, however, are often unwarranted. A good deal of evidence suggests that these similar-in-appearance but different-in-origin bodily experiences can turn out, in fact, to be very distinct in physiological terms—for example, tears due to a foreign object in the eye actually have a different chemical composition from tears pro-

^{115.} Id. at 395.

^{116.} Cf. Richard E. Nisbett & Lee D. Ross, Human Inference: Strategies and Shortcomings of Social Judgment 183–86 (1980).

^{117.} LAKOFF & JOHNSON, supra note 12, at 13.

duced by an emotional experience.¹¹⁸ Surely these similar but differentiated physiological experiences do not necessarily constrain behavioral reactions in the same way.

Unlike many traditional legal metaphors, which are employed as rhetorical or narrative devices in a flexible manner subject to a wide range of choice by the user, the emotion metaphor of the "heat of passion" is sticky because it is difficult to alter, being so strongly rooted in human physiological experience. Glucksberg has noted that language forces and constrains thought in a fairly strong way. 119 He suggests, however, that metaphors may not be nearly as constraining. Others, such as Clark, have used metaphors for time as an example. 120 According to his work, time can be viewed as linear, either horizontal or vertical, and time can also be viewed as possessing volume. Time can move with respect to the self, or the self can move with respect to time. Various metaphors can be used to capture these different views of time. For example, time can be viewed as a linear trajectory (e.g., "don't look back at the past") or as a substance possessing volume (e.g., "he has more time than he knows what to do with"). Other abstract metaphors (such as those for life and love) demonstrate a similar slipperiness with regard to metaphoric conceptualization.

Emotion metaphors based on physiological responses, on the other hand, are very different. Emotion metaphors like "anger = heat and pressure" originate in the body's reaction to an emotional provocation. Being grounded in human physiology, they could not be different than what they are. This is precisely what we mean when we call them "sticky metaphors." Such metaphors tend to be more limited than most in their potential scope, and more constraining on thought, language, and judgment. They are "embodied." ¹²¹

^{118.} William H. Frey II, Denise DeSota-Johnson, Carrie Hoffman & John T. McCall, Effect of Stimulus on the Chemical Composition of Human Tears, 92 Am. J. OPHTHALMOLOGY 559, 562, 565 (1981).

^{119.} Cf. SAM GLUCKSBERG, UNDERSTANDING FIGURATIVE LANGUAGE: FROM METAPHORS TO IDIOMS 60 (2001); Mary K. Camac & Sam Glucksberg, Metaphors Do Not Use Associations Between Concepts, They Are Used to Create Them, 13 J. PSYCHOLINGUISTIC Res. 443, 450 (1984) (noting that metaphors are not so constraining on thought).

^{120.} Lera Boroditsky, Metaphoric Structuring: Understanding Time Through Spatial Metaphors, 75 Cognition 1, 26 (2000); Herbert H. Clark, Space, Time, Semantics, and the Child, in Cognitive Development and the Acquisition of Language 27, 50–52 (Timothy E. Moore ed., 1973).

^{121.} In this context, we use the term "embodied" differently from the way that Lakoff often writes about "embodied" metaphors. When Lakoff uses the term "embodied," he is referring to metaphors like "good = up" and "bad = down." This kind of metaphor is "embodied," in Lakoff's sense of the term, because "up" and "down" have a physical aspect that can shape subsequent understanding and application of the metaphor. But such metaphors,

We do not claim that, in general, language or metaphors constrain thought in a tight and highly determined way. However, we do claim that certain metaphors—the sticky ones—constrain thought and judgment in a relatively strong way because of their grounding in bodily experiences, and thus their virtual inevitability as conceptual and linguistic devices. The linguistic relativity principle, as first proposed by Whorf, stated that differences among languages (in grammar, syntax, word frequency, etc.) would lead to corresponding differences in thought. Early studies were not especially supportive of this principle, at least in its strongest form.¹²³ The strong form of Whorf's principle asserts that language severely limits thought, such that subtleties of experience not labeled by one's language are literally imperceptible. 124 More recently, however, there has been a great deal of evidentiary support for a weaker form of linguistic relativity, 125 one positing that although language does not determine thought, there is still much room for language to influence thought. The weaker version of the linguistic relativity principle implies cross-linguistic differences in cognitive tendency rather than potentiality. It is this weak form of Whorf's principle that we endorse.

The stickiness of sticky metaphors is not an all-or-nothing quality. Metaphors exist on a continuum between sticky and flexible, depending on the degree of similarity between the concept or thing being described by the metaphor and the analogous concept or thing with which it shares at least some physical or physiological aspects. The physiological experience of anger is relatively well-defined and relatively narrow in scope, and maps almost perfectly onto the physiology of heat and pressure. An emotion associated with a less well-defined set of physiological responses, and which shares fewer similarities with another concept or thing, will be con-

at their inception, are essentially arbitrary. We could just as easily have said, "good = down," and "bad = up." These metaphors, in other words, begin as freely chosen or culturally contingent ones, and only later acquire the character of "embodiment." That makes them different from emotion metaphors, which are "embodied" at their inception, not arbitrary, and neither freely chosen nor culturally contingent. As Kövecses puts it: "Systematic links take us from (possibly universal) actual physiology of anger through conceptualized metonymy and metaphor to cultural models." Kövecses, supra note 2, at 391.

^{122.} Cf. Benjamin Lee Whorf, Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf 212–13 (John B. Carroll ed., 1956).

^{123.} E.g., Eleanor Rosch Heider & Donald C. Olivier, The Structure of the Color Space in Naming and Memory for Two Languages, 3 COGNITIVE PSYCHOL. 337, 350 (1972).

^{124.} Id.

^{125.} E.g., Lera Boroditsky, Does Language Shape Thought?: Mandarin and English Speakers' Conceptions of Time, 43 Cognitive Psychol. 1, 20 (2001); Elise J. Percy et al., Cognition and Native-Language Grammar: The Organizational Role of Adjective-Noun Word Order in Information Representation, 16 Psychonomic Bull. & Rev. 1037, 1041 (2009).

ceptualized in terms of a metaphorical structure that is less sticky. We will encounter an example of such a less-sticky sticky metaphor later in this Article, when we apply the same model and analysis to the emotion of fear.

Our metaphors for anger are very sticky. These metaphors are not mere rhetorical devices. Instead, they are so dominant in our thinking and our discourse—including our legal discourse—that they can scarcely be recognized as metaphors at all. In this way, our thinking about anger seems preordained. We cannot arbitrarily choose any rhetorical device to conceptualize anger; instead, we experience a strong tendency to think about anger in particular metaphorical terms. Such metaphors inhere in physiological responses to a situation. That is, the heat and pressure metaphors for anger are not freely chosen. They are the result of the similar physiological experiences associated with the two different situations. As explained by Lakoff, "[O]ur concept of anger is embodied via the autonomic nervous system and . . . the conceptual metaphors and metonymies used in understanding anger are by no means arbitrary; instead they are motivated by our physiology." ¹²⁶

D. Stage Four: The Development of a Lay Theory About Anger

The fourth stage of our model involves the process by which metaphorical thought and metaphorical language about an emotion develop into a lay theory, or "folk psychology," of the emotion, its operation, and its behavioral effects. The tendency for anger to be conceptualized in terms of heat and pressure has important implications for how people think about, and deal with, anger and its associated behaviors—that is, for how "folk psychology" theories about the emotion of anger originate and evolve.

Metaphors can develop into beliefs in the form of lay theories. According to Hong, Levy, and Chiu, "[L]ike scientific theories, lay theories serve the epistemic function of sense making." Such theories begin to develop in childhood, are often transmitted and encapsulated by cultural artifacts, such as the media, and are frequently employed as individuals try to understand their social

^{126.} LAKOFF, supra note 12, at 407.

^{127.} Ying-yi Hong, Sheri R. Levy & Chi-yue Chiu, The Contribution of the Lay Theories Approach to the Study of Groups, 5 Personality & Soc. Psychol. Rev. 98, 99 (2001).

^{128.} Jessica A. Cameron et al., Children's Lay Theories About Ingroups and Outgroups: Reconceptualizing Research on Prejudice, 5 Personality & Soc. Psychol. Rev. 118, 124 (2001).

^{129.} Michael M. Morris et al., Culturally Conferred Conceptions of Agency: A Key to Social Perception of Persons, Groups, and Other Actors, 5 Personality & Soc. Psychol. Rev. 169, 180 (2001).

world. 180 Metaphor often plays a vital role in the development of lay theories about psychology. As Steven Winter has observed, "Metaphor... refers to a tightly structured set of conceptual mappings in which a target domain is understood in terms of a source domain of more readily comprehended, embodied, or social experience." 181

Surely there are few areas of human behavior that culturally require more explanation, attention, and intervention than violent acts resulting from anger. Understanding and minimizing violent outbursts of anger has been an important social and cultural task throughout recorded human history. As such, we are motivated to ask questions about anger. Where does it come from? What behaviors can we expect to result from it? In the most straightforward sense, there are some direct (and non-metaphorical) observations and experiences that people use to address these questions (for example, "He got angry when he found his wife in bed with her lover," or "When two people fight, sometimes they can get so mad that they want to kill each other").

The research on metaphor, however, makes clear that the standard metaphorical devices for anger (heat and pressure) can easily lend themselves to addressing these important questions as well. As noted in the preceding section, metaphors for anger, such as a pot of water boiling on a stove, depict anger as something that stems from events and individuals that are external to the angry person ("he made me mad"; "his cheating wife drove him crazy, not his own jealousy"; "she pissed him off."). These metaphors strongly imply external causation. That is, the pot does not heat itself; rather, it is heated by the flame/electric coil/magnetic induction of the burner on the stove. The water in the pot merely reacts, in a manner that is relatively determined and perhaps even inevitable, to the heat provided by the burner. When the burner gets hot, it makes the water in the pot boil. In the case of an allegedly provoked intentional homicide, the tendency to view anger (boiling heat) as externally caused leads us to place relatively less blame on the defendant (pot of water) and relatively more blame on the victim (burner).

Also like the pot of water boiling on the stove, the natural tendency of anger is toward force and violence ("all that anger just caused him to explode"; "he flew off the handle"; "he blew up."), at

^{130.} Cf. Brian Lickel, David L. Hamilton & Steven J. Sherman, Elements of a Lay Theory of Groups: Types of Groups, Relational Styles, and the Perception of Group Entitativity, 5 PERSONALITY & Soc. PSYCHOL. Rev. 129, 135 (2001).

^{131.} Steven L. Winter, *The Color of Law, in* The Cambridge Handbook of Metaphor and Thought 368 (Raymond W. Gibbs ed., 2008).

least until enough "cooling off" time has passed after the original "heating" or aggravating event ("... but once he took that walk, he calmed down enough to control himself"; "simmer down!"). Assuming that the boiling pot is not moved off the burner to "cool off," then the dominant metaphors for anger tend to predict a certain kind of behavioral reaction. The heat and pressure metaphors imply a particular action tendency—a forcing outward, as in boiling or explosion. 132 One can expect a boiling pot of water to force itself outward, or to boil over. The worst situation, in metaphorical terms, would involve an overheated pressure cooker which, if left on the hot burner too long, might literally explode and kill someone. These standard metaphors for anger lead us to anticipate forceful action as the natural, probable, foreseeable, and understandable result of such an intense emotional experience. Relevant to the doctrine of voluntary manslaughter, in the case of extreme anger this anticipated force may turn out to be violent, even homicidal.

Lay theories of emotion link the emotion and its derived metaphors to behavior, as in the final act of intentional killing. For extreme anger, it is a simple and relatively short step from heat, pressure, and resulting violent behavior to killing. Thus, the voluntary manslaughter doctrine is easily applied to anger-induced killings. The lay theories derive from the metaphors that are used for the specific emotion because these metaphors are in a sense taken literally. Heat and pressure link easily to aggression, boiling over, and even homicide. In addition, these lay theories are based in part on the speed or temporal distance between the provocation and the killing. In terms of the lay theory, a fast response equals automatic, uncontrollable, and not-goal-directed action, and anger killings usually occur shortly after the provocation. A longer response time is taken to imply more reasoned action and thoughtful, rather than automatic, behavior. 133

^{132.} Kövecses, supra note 2, at 148-49.

^{133.} Empirical psychology research supports the conclusion that—as a general matter—automatic behavior occurs faster than reasoned behavior. See Jonathan St. B. T. Evans, Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition, 59 Ann. Rev. Psycholo. 255, 255 (2008). These differentiations of "faster" automatic processes and "slower" controlled processes in the psychological literature are far subtler than the associated lay theories would indicate. For example, psychological experiments in which automatic and controlled processes are mathematically dissociated demonstrate that controlled processes exert effects in less than one second of time. E.g., B. Keith Payne, Prejudice and Perception: The Role of Automatic and Controlled Processes in Misperceiving a Weapon, 81 J. Personality & Soc. Psychol. 181, 185 (2001). As a result, the lay notion that such processes can be differentiated by the passing of minutes or hours is out of step with psychological science, which shows that controlled processes can exert effects with great speed.

One might say that the effects of metaphorical stickiness can be found at both the level of the individual as well as the cultural level. That is, the "anger = heat and pressure" metaphor arises not only as one's own experience highlights the similarity of the emotional experience to the metaphor, but also on a cultural level, as such metaphors become widespread linguistic devices that help to shape a society's folk beliefs about how anger operates. Humans are motivated to understand and explain behavior, both our own and that of others. 134 Emotion metaphors provide a means of making sense of what would otherwise be confusing and mysterious experiences. Within a particular culture, metaphorical emphasis upon one or more aspects of the common physiological experience of a particular emotion can evolve into a shared metaphorical structure for the emotion that pervades the culture. As this occurs, the metaphor essentially "sticks" not only to our individual cognitive experience, but also to our socio-cultural conventions.

E. Stage Five: The Effect on the Law

The fifth and final step in our model involves the process by which emotion metaphors, and the lay wisdom or lay theory that employs such metaphors as a way to think about emotions, might affect the development of legal doctrine. In order to analyze this process, we will continue with our present focus on the "heat of passion" defense.

The traditional Anglo-American doctrine of voluntary manslaughter developed many centuries ago in the decisions of common-law judges. Of course, we can no longer study those early common-law judges to determine the actual process by which they reached their decisions. At the time, the science of psychology would have been either non-existent or in its earliest infancy, and thus no sophisticated psychological theories of emotion would have been available to the judges. A common-law judge seeking to understand, and thereby to morally evaluate, human behavior under conditions of extreme anger would have had no other choice but to turn to lay theory about the emotion of anger based on metaphorical language and metaphorical thought.¹³⁵

^{134.} Cf. Fritz Heider, The Psychology of Interpersonal Relations 60 (1958).

^{135.} A good example of such judicial reliance on lay reasoning about human psychology—including a frank admission that judges are less equipped than jurors to engage in such lay reasoning—can be seen in the voluntary manslaughter case of *Maher v. People*, 10 Mich. 212 (1862):

Although this common-law judicial decision process itself is no longer within our capability to observe or to study, the results of that long-ago process are apparent in the very language of the traditional voluntary manslaughter doctrine. The doctrine applies only to those who kill in the "heat of passion." The doctrine is denied to those who have, or who should have, "cooled off." The two paradigmatic examples of the doctrine both reflect the law's focus on anger as the particular emotion that is provoked and that undermines reason. The provocation of mutual combat, or of witnessing adultery, makes the defendant "hot," causing a buildup of "pressure" and leading ultimately to an "explosion" of lethal

But if the act of killing, though intentional, be committed under the influence of passion or in heat of blood, produced by an adequate or reasonable provocation, and before a reasonable time has elapsed for the blood to cool and reason to resume its habitual control, and is the result of the temporary excitement, by which the control of reason was disturbed, rather than of any wickedness of heart or cruelty or recklessness of disposition; then the law, out of indulgence to the frailty of human nature, or rather, in recognition of the laws upon which human nature is constituted, very properly regards the offense as of a less heinous character than murder, and gives it the designation of manslaughter....

To the question, what shall be considered in law a reasonable or adequate provocation for such state of mind, so as to give to a homicide, committed under its influence, the character of manslaughter? On principle, the answer, as a general rule, must be, anything the natural tendency of which would be to produce such a state of mind in ordinary men, and which the jury are satisfied did produce it in the case before them

It is, doubtless, in one sense, the province of the court to define what, in law, will constitute a reasonable or adequate provocation, but not, I think, in ordinary cases, to determine whether the provocation proved in the particular case is sufficient or reasonable. This is essentially a question of fact, and to be decided with reference to the peculiar facts of each particular case. . . .

Besides the consideration that the question is essentially one of fact, jurors, from the mode of their selection, coming from the various classes and occupations of society, and conversant with the practical affairs of life, are, in my opinion, much better qualified to judge of the sufficiency and tendency of a given provocation, and much more likely to fix, with some degree of accuracy, the standard of what constitutes the average of ordinary human nature, than the judge whose habits and course of life give him much less experience of the workings of passion in the actual conflicts of life.

Id. at 219-22.

136. See, e.g., People v. Dominguez, No. G026530, 2002 Cal. App. Unpub. LEXIS 363, at *10 (Cal. Ct. App. Apr. 23, 2002) (inquiring whether "the five minutes between the quarrel and the shooting provided either sufficient time to reflect, showing malice aforethought, or allowed a continuing buildup of emotional steam as a result of the quarrel which exploded into manslaughter"); Ex parte Fraley, 109 P. 295, 297 (Okla. Crim. App. 1910); State v. Gounagias, 153 P. 9, 12, 14 (Wash. 1915).

violence. 137 As in the case of actual heat applied to actual liquid confined in an actual closed container, it is the "heat" that is the true cause of the "explosion" 138—nobody would think to blame the liquid trapped in the closed container for exploding.

Regardless of how the traditional legal doctrine of voluntary manslaughter originated, what is most important to recognize is that the relative stickiness of the dominant metaphorical structure that underlies the traditional doctrine can help to explain why the doctrine has proven so resistant to change in modern times. We can talk all we want about the many normative and empirical arguments that favor either a broader or a narrower application of the doctrine—the Model Penal Code chose to advocate for a broader approach, ¹³⁹ although others have argued for a narrower one ¹⁴⁰—but all such arguments eventually run into trouble precisely because they are, or appear to be, incompatible with the metaphorical structure of anger. We continue to think, and to behave, as if the metaphor is literally true. ¹⁴¹

This sticky resistance to doctrinal change matters. For one thing, the resiliency of the traditional voluntary manslaughter doctrine means that the doctrine will continue to be employed in a gender-biased manner. We expect women to fight less and to attack less, and this is likely a reasonable expectation. Biernat has proposed a "shifting standards" model that helps to explain both this expectation and its consequences. Biernat's basic idea is that objects and people are judged with respect to their attributes by comparing them to other instances of their own relevant category or reference group. Elephants are judged with respect to other ele-

^{137.} See, e.g., People v. Walker, 204 N.E.2d 594, 595, 597-99 (Ill. App. Ct. 1965) (mutual combat); Rowland v. State, 35 So. 826, 827 (Miss. 1904) (witnessing adultery).

^{138.} See, e.g., People v. Rich, 755 P.2d 960, 1009 (Cal. 1988) (explaining that, for both voluntary manslaughter and second-degree murder, "the inquiry is whether the ordinary person would 'explode' because the victim resisted"); People v. Le, 69 Cal. Rptr. 3d 831, 841 (Cal. Ct. App. 2007) ("[Defendant's wife's] insult simply served as the spark that caused this powder keg of accumulated provocation to explode."); People v. Hammock, 385 N.E.2d 796, 799, 801 (Ill. App. Ct. 1979) (affirming trial court's decision to instruct jury on voluntary manslaughter when defendant stated that she killed as a result of an "explosion of rage"); State v. Madden, 294 A.2d 609, 621 (N.J. 1972) (stating that "[t]he conventional picture [of voluntary manslaughter] is that of a defendant who exploded in response to some injury or affront to which he was subjected by the deceased").

^{139.} See MODEL PENAL CODE § 210.3(1) (b) & cmt. (1985).

^{140.} See Nourse, supra note 41, at 1332, 1336-38; cf. Stuart M. Kirschner, Thomas R. Litwack & Gary J. Galperin, The Defense of Extreme Emotional Disturbance: A Qualitative Analysis of Cases in New York County, 10 PSYCHOL. PUB. POL'Y & L. 102, 131 (2004).

^{141.} See, e.g., Nelson & Simmons, supra note 106, at 722-23.

^{142.} See Buss, supra note 44, at 25.

^{143.} Monica Biernat & Melvin Manis, Shifting Standards and Stereotype-Based Judgments, 66 J. Personality & Soc. Psychol. 5, 5–6, 18 (1994).

phants, and mice are judged with respect to other mice. A very small elephant is much bigger than a very large mouse.

The same is true for judgments of men and women. A "tall" woman may be the same height or even shorter than a "short" man. With respect to aggression, because women are (accurately) expected to be less aggressive than men, a woman who is violent, or who kills when provoked, will likely be judged as more violent and more evil than a man who commits exactly the same acts. If homicidal women are indeed judged especially harshly due to the "shifting standards" problem, then the voluntary manslaughter doctrine will likely do them no good, and they will not benefit from its partial mitigation of crime and punishment. The voluntary manslaughter doctrine, like the law in general, is grounded in the male experience, and both the lay theory and the dominant metaphorical structure of the emotions to which the doctrine typically applies ensure that it will continue to be so applied.

III. Application of the "Sticky Metaphor" Theory to the Emotion of Fear

What about voluntary manslaughter cases that involve strong emotions other than anger? Here we shall give primary consideration to killings that are provoked by strong fear. Just as we analyzed anger from the point of view of our conceptual theory and schematic model, we will now analyze the emotion of fear in the same manner. This analysis will reveal that fear is very similar to anger in terms of the applicability of our model, that is, in the development of its embodied metaphors and in the influence of those metaphors and the resulting lay theories upon legal doctrine. However, the sticky metaphors generally used to describe fear and the lay theory of fear derived from those metaphors turn out to be very different from those that developed for anger. These differences have important consequences for the law.

A. Stage One and Stage Two: The Physiological Experience of Fear and Its Similarity to the Physiological Experience of Cold

Returning to our model, we must first identify the normal physiological characteristics of fear in response to a fear-provoking event or series of events, and then identify an analogous setting or context in which the same or similar physiological responses typically would occur. In the same way that the physiological

experience of anger bears a close similarity to experiencing heat, so the physiology of fear bears some outward similarity to the experience of feeling cold: including a decrease in skin temperature, shaking or trembling, a loss of blood from the face producing pale skin, and goosebumps.¹⁴⁴

In general, fear can be described as neurologically, cognitively, and behaviorally more complex than anger. While anger may be somewhat complex in terms of its origination because—despite the limits on the traditional voluntary manslaughter doctrine—it can arise quickly in response to a single provoking event, slowly as a result of brooding, or cumulatively in response to repeated provocations, it is relatively simple in terms of its behavioral consequences: anger usually leads to aggressive, attack behavior. Fear, on the other hand, is relatively complex in several different ways.

First, neurologically speaking, the brain regions involved in fear and the behaviors that follow depend upon the level of threat and especially upon the psychological distance from the threat. "Smaller defensive distances map to more caudal, subcortical, neural structures while larger ones map to more rostral, cortical, neural structures." In addition, fear is associated with different thought patterns than those associated with anger. Whereas anger is characterized by a pattern of appraisal that involves a sense of certainty, optimistic risk assessment, a sense of control, a feeling of power, and superficial and quick processing of information, fear, by contrast, is associated with uncertainty, pessimistic risk assessment, a feeling of powerlessness, and an overall sense of lack of control. One who is very afraid often feels powerless and unable to deal

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^{144.} Valentina Apresjan, Emotion Metaphors and Cross-Linguistic Conceptualization of Emotions, 612 Cuadernos de Filología Inglesa 179, 181 (1997) (Spain) ("Indeed, fear is linguistically conceptualized as cold because the feeling 'fear' and the sensation 'cold' share the same physiological manifestations "); Ekman, Levenson & Friesen, supra note 19, at 1209.

^{145.} Neil McNaughton & Philip J. Corr, A Two-Dimensional Neuropsychology of Defense: Fear/Anxiety and Defensive Distance, 28 Neuroscience & Biobehavioral Revs. 285, 286 (2004). McNaughton and Corr also make the related point that "fear" and "anxiety," although similar, trigger different areas of the brain and lead to different behaviors: fear leads to the standard fight/flight/freezing response, whereas anxiety inhibits a number of behavioral responses in a manner that enables the anxious person to approach the source of danger. Id.

^{146.} Lerner & Tiedens, supra note 89, at 117, 121-22.

^{147.} Id. at 147, 154.

with the threat. Both anger and fear, however, similarly undermine rational decision-making.¹⁴⁸

Just as anger is associated with certain behavioral tendencies, so too is fear. Unlike the case of anger, which is characterized by the single behavioral tendency to attack, however, the normal physiological responses to fear historically have been found to prepare the body for at least three distinct possible behaviors: flee, fight, or freeze. In this sense, the action tendencies that are produced by intense fear are more complex, and more difficult to predict, than those that result from intense anger.

Cesario's recent work has painted an even more complex picture of fear's behavioral outcomes, in which there are actually five distinct possible behavioral responses to fear: (1) flee, (2) freeze, (3) hide, (4) attack, and (5) assess risk. The particular response will depend on the nature of the threat and other features of the overall situation, such as the size of the threat, ease of escape, ambiguity of the threat, physical distance from the threat, and having a suitable place to hide. These responses to fear are preprogrammed, automatic, and evolutionarily determined.

Although we would agree with Cesario that there is a strong automatic and evolutionary component to typical fear responses, it is also true that there are numerous gender-based, social, and cultural components implicated by the responses to fear.¹⁵⁴ Thus, in addition to hard-wired components, there are also crucial learned aspects to fear behaviors.

B. Stage Three: Sticky Metaphors for Fear

Consider the language of fear, focusing on the dominant terms used to describe it. The words and expressions that we use for fear are markedly different from those that we use for anger. Whereas anger is hot, fear is cold. Many of our metaphorical expressions for

^{148.} See generally Terry A. Maroney, Emotional Competence, "Rational Understanding," and the Criminal Defendant 40-41 (Univ. S. Cal. Legal Stud. Working Paper Series, Paper No. 7, 2006).

^{149.} See JEFFREY ALAN GRAY, THE PSYCHOLOGY OF FEAR AND STRESS 26, 192 (1971).

^{150.} Joseph Cesario et al., The Ecology of Automaticity: How Situational Contingencies Shape Action Semantics and Social Behavior, 21 PSYCHOL. Sci. 1311, 1312 (2010).

^{151.} Id. at 1311.

^{152.} D. Caroline Blanchard et al., Human Defensive Behaviors to Threat Scenarios Show Parallels to Fear- and Anxiety-Related Defense Patterns of Non-Human Mammals, 25 NEUROSCIENCE & BIOBEHAVIORAL REVS. 761, 761 (2001).

^{153.} *Id*

^{154.} See id. at 766, 769 (discussing gender, social, and cultural components involved in responses to fear).

fear employ this notion of low environmental temperature: "he was frozen with fear"; "I felt an icy chill run down my spine." Despite the fact that the ambient temperature in a fearful situation might be perfectly comfortable, or even warm, the experience of terror can indeed create the distinct sense of coldness. As with anger, these metaphorical concepts develop based on similar outward characteristics—normal physiological responses to terror-provoking situations often resemble physiological responses to a cold environment, such as low skin temperature, pale skin, and shaking. ¹⁵⁵ As a result, the language of cold becomes both a conceptual and a linguistic device to think and talk about such emotional experiences: "when he saw the man, he froze." This "freezing" clearly implies the idea of passivity and motionlessness, almost like that of a dead body: "he was petrified"; "she turned pale with fear"; "a blood-curdling fear"; "he was scared to death"; "white as a ghost."

These metaphors, grounded as they are in embodied experience, represent another group of sticky metaphors. As a result, these metaphors, like those for anger, are often taken quite literally. Because our metaphors for cold derive from physiological experiences which are relatively narrow in scope, the metaphors themselves are similarly constrained.

Although the more complex nature of the emotion of fear suggests the possibility of alternative metaphorical structures for fear, the "fear = freezing cold" metaphor dominates. We believe that this metaphor is the one that often constrains the law with regard to how we treat intentional killings committed under the influence of the emotion of fear. In a sense, this process bears a striking similarity to our description of anger in that, as with anger, a sticky metaphor develops due to the similarity between an emotional experience and the experience of a particular environmental temperature. However, the particular sticky metaphors commonly used to describe fear suggest a full range of characteristics virtually the opposite of those that are implied by the dominant metaphors for anger. While anger metaphors might describe an explosion of heat from an external provoking source, fear is linked with an inward tendency toward a barely-quivering stillness. Such sticky metaphors are constrained and are inextricably linked to the emotions they illustrate. For example, it is difficult, if not impossible, to employ a "freezing" conceptualization for violent anger in response to provocation, or a "boiling over" conceptualization for violence resulting from fear.

^{155.} Apresjan, supra note 144, at 181; Ekman, Levenson & Friesen, supra note 19, at 1209.

C. Stage Four: The Development of a Lay Theory About Fear

The fourth step in our model is to integrate the sticky metaphor for fear into lay theories about fear. The relevant metaphors for anger lead people to expect an attack, a boiling over, an explosion. Not so for fear. The dominant freezing metaphors for fear predict the very opposite response: passivity and stillness. This leads to the development of a lay theory of fear in which we expect that individuals under conditions of terror will tend to freeze rather than to fight or to kill. For this reason, unlike anger, fear does not link so easily to a lay expectation of homicidal violence.

Unlike the cuckolded husband, bursting with the heat of his rage, the battered wife generally acts out of intense fear when she takes a life. And as a result of the different means of conceptualizing these emotions, the battered wife does not have the advantage of a lay theory for her emotions that (1) implies external causality of actions and (2) depicts a situation in which violent and forceful reaction is an understandable and predictable response. As a result, cultural responses to such a situation will ultimately be very different. Consider, for example, "She was scared of him" versus "He scared her," or "All that fear led her to coldly plot his murder" versus "All that fear just caused her to explode."

There is a related and important distinction between "hot" and "cold" behavior. "Hot behavior" (associated primarily with anger) appears not to be goal directed, whereas "cold behavior" (associated primarily with fear) *does* appear goal directed. Moreover, hot, impassioned behavior tends to be associated with a lack of free will and deliberation. To kill in *cold* blood is incompatible with mitigation for killing, ¹⁵⁶ and fear is cold. Given the aggressive nature of the emotion of anger, angry killings often occur with great speed, i.e., not much time may elapse between the origination of the anger and the killing. With fear (e.g., a battered wife), on the other hand, the fearful individual often lives with the fear-generating situation for a long time and may try out many possible solutions. The ultimate killing therefore often appears to be an act of free will and thoughtful behavior. ¹⁵⁸ In fact, the metaphors employed

^{156.} See Dressler, supra note 75, at 509–10 (explaining how "cold-blooded" killings fit the classic legal definition of first-degree "premeditated" murder, and premeditation is generally viewed as incompatible with the idea of a provoked, "heat of passion" killing).

^{157.} See generally Angela Browne, When Battered Women Kill (1987) (discussing the battered spouse defense).

^{158.} Note the normative irony here. Logic indicates that we should actually punish anger-driven killing more severely than fear-driven killing—because the provocation for anger-based killing is traditionally an adulterous partner or a male challenge. See supra text accompanying note 43. The provoking event is not an illegal act. For the battered wife who

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rationality itself (e.g., "coldly plotting," "coolly planned," "cool and collected") are far more compatible with the metaphors for icy fear than with those for burning anger, and may thereby impact perceptions of intentionality. That is, in terms of the metaphors used, the dominant conceptualization of fear is particularly consistent with that of planning and rationality, and so the display of fear by an actor may directly lead to inferences of a capacity for reasoned actions. ¹⁵⁹

It is important to note that the lay theory about fear does not closely correspond to contemporary research evidence about fear. Just as we saw that the lay theory of anger did not fit with scientific evidence (especially with regard to a rapid "cooling off" period), the lay theory for fear is likewise not supported by sound research findings. Rather than freezing, the more common responses to fear, in both animals and humans, are either flight or fight ¹⁶⁰. In fact, one important research finding was that an inescapable situation, where freezing might be the expected behavioral response, did *not* in fact produce freezing behavior. ¹⁶¹ Thus, both our expectations and our lay theories of freezing, under conditions of fear, are wrong. The metaphors, however, clearly indicate freezing, and they are sticky metaphors.

In sum, the behavioral responses to a threat are generally to fight or to flee, and these responses are automatic, rather than freely chosen. People freeze less than we expect, but the dominant metaphors, and the lay theory based on them, would seem to indicate otherwise.

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kills out of fear, the provocation is an illegal act, a felony—she was being beaten by her husband.

^{159.} Letter from Chen-Bo Zhong, Assistant Professor, Organizational Behavior and Human Resource Management, University of Toronto, to author (June 18, 2010) (on file with author). Zhong also suggested to us that the metaphors for rationality ("a cool head"; "cold-blooded") may themselves be examples of "sticky" metaphors. Upon reflection, we note that such "stickiness" may derive from the fact that people who are thinking rationally tend to share certain physiological characteristics—calmness, lowered pulse rate, lowered blood pressure, absence of agitated physical movements—with people who are actually cold. *Id.* In other words, the metaphors for rationality may well be, at least in part, "embodied" in shared physical experiences, which would tend to make them "sticky." On the other hand, there are also distinct metaphors for "rationality," e.g., "calculating," "machine-like," that would not be similarly "embodied."

^{160.} E.g., Cesario et al., supra note 150, at 1312.

^{161.} See id.

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D. Stage Five: The Effect on the Law

Moving to the fifth and final stage of our model, how might such metaphors, and the lay theories derived from them, influence the voluntary manslaughter doctrine? If our metaphors suggest that those who experience fear become cold, passive, and death-like, then perhaps it is predictable that the law may not expect people confronted with a frightening event to react violently. Instead, the law may expect them to "freeze" and do nothing, or perhaps to move away from the threat. If a fearful person instead reacts violently and kills the threatening person, the law may see such a violent reaction as abnormal and therefore deserving of full and severe condemnation and punishment, rather than viewing the reaction as understandable and therefore worthy of partial mitigation. And given the relative rarity of female killers, the law might be even more reluctant to extend mitigation to women than to men. 162 If legal doctrine is, indeed, affected by the metaphorical structure of thought and language, then it is predictable that the voluntary manslaughter doctrine will include relatively few cases of mitigated punishment for defendants who kill out of fear.

The process for anger and for fear, as they develop from physiological similarity to metaphorical structures to lay theories, is exactly the same. But in the case of anger, the metaphors and the lay theory are generally compatible with the assumptions and requirements of the voluntary manslaughter doctrine. Thus, the doctrine applies frequently to angry killings. In the case of fear, on the other hand, the metaphors and the lay theory are not so compatible with the law's assumptions and requirements. The doctrine consequently applies far less frequently to fearful killings, even though both of these emotions are very strong and both are capable of producing extremely aggressive behaviors.

IV. DEALING WITH THE PROBLEM OF STICKY METAPHORS IN THE LAW

In order to show how such metaphors have made it difficult to reform the traditional doctrine of voluntary manslaughter, we have defined and described a conceptual theory of sticky metaphors, presented a schematic model of how such metaphors arise and how they affect the evolution of legal doctrine, and examined the particular metaphorical structures for anger and for fear.

^{162.} See Biernat & Manis, supra note 143, at 18-19.

What, then, should the law attempt to do about the problem of sticky metaphors? What, if anything, can lawyers do to help their clients avoid being adversely affected by such problems, especially where those problems may prevent the law from acknowledging the true moral culpability of the lawyer's client, or from changing in an empirically or normatively preferable direction?

One possible strategy for lawyers dealing with the problem of sticky metaphors is to recognize the problem, and try to work within whatever "wiggle room" the relevant metaphorical structure might allow. For example, in the context of angry killings, the dominant metaphorical structure is all about heat and pressure. But a lawyer might try to emphasize either one or the other of the two components, heat or pressure, depending on the facts and circumstances of the individual case.

More significantly, even though the standard metaphors for anger involve heat in the form of a fire, flame, burner, grill, or some other acute source of heat that can be applied directly to a closed container, a lawyer might try to use a different kind of heat metaphor—a crock pot, or a simmering pot, or a slow burn—in an effort to nudge the metaphor a bit, and thereby serve the interests of his or her client. Such an approach, although subtle and still well within the boundaries of the dominant "heat and pressure" metaphorical structure, nevertheless might open up the possibility that the jury might conclude that anger can build up more gradually than the traditional voluntary manslaughter doctrine would suggest.

Along somewhat similar lines, 168 and assuming that the normative goal of the voluntary manslaughter doctrine is to mitigate the crime and punishment for those defendants whose acts of intentional killing are at least partially attributable to extremely provoking circumstances, rather than entirely to their own evil characters, then extreme fear should be able to serve as a plausible ground for invoking the defense. Even if fear is somewhat different from anger in its physiological effects, fear can nevertheless distort a person's decision-making enough to make the act of killing far less culpable than it would have been without the fear.

^{163.} The psychological naiveté of the traditional voluntary manslaughter doctrine renders the doctrine inapplicable to some angry killers as well as some fearful killers. But the mechanism of failure is different. In cases of anger, those killers whose anger builds slowly and cumulatively over time will lose because they do not fit within the standard metaphor for anger. In the case of fear, on the other hand, most killers lose for a different reason—namely, because the lay theory of fear itself doesn't fit within the voluntary manslaughter doctrine's metaphorical structure.

In the context of killings that result from extreme fear, such as a killing by a battered wife, a defense lawyer might try to describe the killer not as a person who might have been "frozen" with fear, but instead as one who "lashed out" like a "terrified caged/trapped animal." This metaphor differs from the normal one for fear because it invokes the idea of fighting, rather than freezing or fleeing, as the expected behavioral response to fear. The fighting of a trapped animal might be seen as an act partially devoid of free will, just as the lethal act of an angry, cuckolded husband might be partially devoid of free will. The benefits, in terms of possibly persuading the jury to think of the defendant more sympathetically, seem obvious. Lawyers may find it difficult to convince their clients to adopt such a strategy, however, because it implies that at the time of the killing the defendant was an animal, or somehow less than fully human. 164

If there are no helpful alternative metaphors within the same dominant metaphorical structure, then the situation becomes much more bleak. The stickiness of sticky metaphors may make it extremely difficult, if not impossible, for a lawyer to use the products of scientific research to trump or overcome the effects of the metaphor. Science is not favored in many courtrooms anyway, and an attempt to use science as a way to persuade the judge or jury to set aside a way of metaphorical thinking that is fully embodied, and therefore seems entirely natural and unchosen, would seem to be a Herculean task. ¹⁶⁵ Indeed, we suspect that such a task could be almost impossible to complete successfully.

Beyond these strategy suggestions for lawyers, one might imagine that the law should try to educate trial and appellate judges (who, unlike most jurors, are repeat players in the criminal justice system) about the problem of sticky metaphors, in the hope that those judges might be able to watch for, and perhaps even correct for, the possible negative effects of such metaphors. Certainly the law would benefit from a greater awareness of the nature and scope of this problem. But we do not see much reason

^{164.} Cf. Russell v. State, 849 So. 2d 95, 134 (Miss. 2003) ("Defense counsel did state, in trying to explain [Defendant]'s way of life in prison of being under constant control of guards as far as sleeping, meals and showers, as being like a caged animal. Defense counsel stated that Officer Cotton, in taking [Defendant]'s money and not delivering the yeast, was in effect poking a caged dog or a caged animal, and this is what caused the rage and help-lessness in [Defendant] which eventually caused him to kill Officer Cotton."). The trial jury rejected the defendant's manslaughter argument, and the conviction was affirmed on appeal. Id. at 102.

^{165.} See generally Richard Lempert, Between Cup and Lip: Social Science Influences on Law and Policy, 10 Law & PoL'y 167, 173, 186 (1988).

to be optimistic that, even with greater knowledge, the problem can be overcome.

The closest analogue might be the ever-present need to teach airplane pilots to trust in their instruments and not in their own senses, especially when flying at night or in similar conditions of low visibility. As a recent article explained:

Once called pilot vertigo or aviator's vertigo, spatial disorientation is a persistent killer. Federal Aviation Administration statistics show that the condition is at least partly responsible for about 15 percent of general aviation accidents . . . 90 percent of which are fatal. According to a 2004 study, the average life expectancy of a non-instrument-rated pilot who flies into clouds or instrument conditions is 178 seconds.... [N]o amount of expertise, training, or experience immunizes against spatial disorientation.... Humans maintain orientation and posture through a system of senses The system has evolved over eons, and is well adapted for Earth. But it is easily fooled. . . . [I]nstinct is worse than useless in the clouds [P]ilots must learn against all contradictory sensations the difficult discipline of an absolute belief in their instruments.... The only way to completely eliminate the problem ... is to develop fully automated aircraft. 166

The task of educating judges to ignore their deeply embedded, physiologically grounded ways of thinking about emotion, and substituting instead an "absolute belief" in scientific research, would seem to be almost as difficult as training pilots to trust their instruments over their own instincts. And we will probably never be able to eliminate the problem by converting to fully automated justice.

Conclusion

The goal of this Article has been to introduce the concept of the sticky metaphor, a concept that previously has received almost no attention in either psychology literature or law literature, and to discuss the concept in the contexts of anger, fear, and the voluntary manslaughter doctrine in the criminal law. We believe that sticky metaphors—especially in the area of emotion metaphors—are real

^{166.} Tom LeCompte, The Disorient Express, AIR & SPACE MAG., Aug./Sept. 2008, at 38-39, 41, 43.

and have a real potential to affect the law. In particular, we believe that the sticky metaphor of "anger = heat and pressure in a closed container" already affects the law; in our view, it is part of the reason for the persistence of the traditional voluntary manslaughter doctrine.

Many questions in this area remain unanswered. For instance, are there any significant categories of sticky metaphors other than metaphors for the emotions? What about the common metaphorical structure of describing emotional suffering in terms of physical pain ("it cuts like a knife"; "when she broke up with me, she hurt me so bad"; "my heart is broken")? Are such metaphors sticky, and if so, does their stickiness affect tort law and related legal doctrines? More generally, studies should be conducted to explore the extent to which emotion metaphors, as well as other kinds of metaphors, are truly sticky. Although the existing scientific evidence, as reported herein, strongly supports our conclusion that sticky metaphors exist, and can affect the law, direct proof of these propositions remains lacking.

In any event, the acknowledged centrality of metaphor to the law, and the conceded potential power of the metaphor, should make it a high priority to continue to expand our knowledge of metaphor and its effects. Learning more about sticky metaphors will not necessarily be easy—as Lakoff and Turner note, "[T]he things most alive in our conceptual system are those things that we use constantly, unconsciously and automatically" but that is no reason not to try.

^{167.} LAKOFF & TURNER, supra note 12, at 62.

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