Feeling at Home: Law, Cognitive Science, and Narrative

Lea B Vaughn, University of Washington - Seattle Campus
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LAW, COGNITIVE SCIENCE, AND NARRATIVE

Lea B. Vaughn*

“Art is a lie which makes us realize truth.”

-Pablo Picasso (1881 – 1973)

Abstract: What is the “how and why” of law’s affinity for narrative? In order to explain why the use of stories is such an effective teaching and presentation strategy in the law, this paper will consider theories and accounts from cognitive as well as evolutionary psychology, neuroscience, and, briefly, cultural anthropology. This account seeks to address “how” narrative helps us learn and use the law as well as “why” we are so compelled to use stories in teaching and in practice.

Brain science, simplified here, suggests that the first task is to “grab” someone’s attention. Emotionally charged events are more likely to capture our attention and to be remembered. Because of their emotional content, stories and narrative (which will be used interchangeably here) seize the attention of listeners and readers, students and jurors. In turn, this emotional fixation focuses attention on context and meaning. Studies suggest that this context is the platform that allows later and successive integration of details. Thus, stories “work” because they focus attention and provide a context for learning the “details,” i.e., the law. Moreover, the same principles that apply to the success of using stories in the classroom also bear fruit in practice. Our culture, and perhaps our genetic make-up, compel us to use stories as a way to both comprehend and transmit the law.

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*Professor of Law, University of Washington. A.B., 1975, Princeton University; J.D., 1978, University of Michigan. Support for this article was provided by the University of Washington Law School Foundation as well as the opportunity to present an earlier draft of this paper at the Legal Writing Institute Conference on Applied Legal Storytelling, Chapter Two: Once Upon a Legal Story (22-24 July 2009) at Lewis and Clark Law School (Portland OR). I would like to thank Profs. Kathryn O’Neill and Helen Anderson, as well as Hilary Dobel, for their support and comments although any errors are my own.
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I. Introduction

It is a summer evening. The air is warm and soft. Everyone has been well fed, and the children already lie, tangled with dogs, in sleep. A fire is not necessary on this summer’s night, but its absence draws us closer together. In a circle, we all sit cross-legged, comfortable with a life-time’s knowledge of the people around us. Although we are nomadic, we feel “at home.” And then the story begins . . . .

Somewhere in unrecorded, pre-literate time, the “naked ape” also became the primate that tells stories.1 No one knows when this event occurred, and we are still trying to uncover exactly “why” we tell stories.2 The invention of the printing press and the rise of electronic media have not slaked our thirst for story-telling; rather, new media have increased it. We read, we gossip,3 we blog, but whatever the form, we are constantly telling stories.

Law schools, on the other hand, have only lately and often reluctantly, acknowledged stories.4 Wedded to the Socratic method of Christopher Columbus Langdell and leery of appearing subjective, the law school classroom has traditionally been a place of hard analysis and probing questions. But for a first year student and even many upper level students, it is an uncomfortable place. The chasm between nearly any form of undergraduate studies and prior educational experiences generally does not prepare a law student to feel “at home” in the law school classroom. Partially to bridge that gap, many of us, often without knowing why, have begun to use stories in our classrooms.5 This venture is often successful, and allows many law students to make connections between their lives before law school and their unfolding lives as

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2 See generally, BOYD, supra note 1.

3 Gossip, in fact, is an important social and possibly adaptive behavior. Through gossip we access the trustworthiness of our conspecifics. “[T]he search for trustworthiness makes us avid consumers of gossip.” STEVEN PINKER, HOW THE MIND WORKS 405 (1997)[hereinafter PINKER].

4 See, e.g., Bret Rappaport, Tapping the Human Adaptive Origins of Storytelling by Requiring Legal Writing Students to Read a Novel, 25 T. M. COOLEY L. REV 267 (2008). Rappaport argues that Langdell’s characterization of law as a science, id. at 270, focuses on the use of “IRAC” to teach students to think like a lawyer. He notes that this approach “can suck the life right of of [the legal] conflicts” that are the study of law. Id. Similarly, see Kim Lane Schepppele, Narrative Resistance and the Struggle for Stories, 20 LEGAL STUDIES FORUM ½ (1996)(addressing both civil laws averseness to facts and stories as well as mainstream critiques of feminist and critical scholarship that employ stories to advance their arguments).

5 Although I will define stories below, it is not clear to me whether it matters that these stories are true, e.g. journalistic accounts, or fictional. One recent set of curricular materials, the Law Stories series [West Publishing] is based on the stories behind the cases. It is designed to supplement instruction “through the use of appellate-court opinions.” Fernand N. Dutile, Bringing Cases to Life: Education Law Stories, 35 J. C. & U.L. 131 (2008) The idea behind the series is to prevent students from seeing “cases so clinically that the people involved become nothing more than faceless, bloodless robots who merely provide the setting for our legal magic, manipulation, or mistakes.” Id. Many of these accounts, he avers, “read[] like a good novel.” Id. at 138.
lawyers, and students frequently comment that the stories help them to learn the related doctrine more easily and deeply. Indeed, exposure to story-telling prepares students for significant aspects of practice as well as making conceptually difficult legal ideas more intelligible.6

In conversations with colleagues7, we began to explore the ways in which we had begun using stories in our classrooms. (My current array of courses includes first year civil procedure, advanced procedural subjects [administrative law, legislation], labor law, and employment law.) Faculty used stories to help our students make deeper and faster connections to the legal materials covered. In my own classes, I have frequently used stories and extended narrative hypotheticals to enrich the class and focus learning. My metaphor for teaching the Federal Rules of Civil Procedure is that they are a set of rules for transforming the client’s narrative, or story, into a stylized narrative that is initially presented in the “complaint.”8 Ultimately, the competing stories that jurors and judges are told is mediated through the Federal Rules of Evidence and the Federal Rules of Civil Procedure at trial. This reality of the transformation of stories links the classroom to practice – novice students must learn “how” and “why” expert practitioners use narrative to advance client goals.

At the same time, my interest in the scientific literature in psychology and biology has deepened over the last decade. Advances in science and learning theory have far outstripped anything I learned as an undergraduate in the 1970s. My traditional scholarly research had focused on the problems of sexual harassment and domestic violence in the workplace.9 More recently, I have focused on the abusive workplace.10 Even in the driest of court opinions, these workplace problems manifest powerful narratives of inequality, violence, and personal, as well

6 Many would characterize lawyers as storytellers, and deem it a skill central to practice. The literature abounds with articles that analyze various aspects of this insight. For example, Prof. Menkel-Meadow argues in one of her articles that one of the things that a lawyer does is to transform a client’s narrative into legal documents such as a complaint. Carrie Menkel-Meadow, The Transformation of Disputes by Lawyers: What the Dispute Resolution Paradigm Does and Does Not Tell Us, 1985 J. OF DISPUTE RES. 25 (1985)[hereinafter Menkel-Meadow]. Similarly, Profs. Fajans and Falk argue that narrative techniques need to be brought back into pleading practice. Elizabeth Fajans and Mary R. Falk, Untold Stories: Restoring Narrative to Pleading Practice, available at http://works.bepress.com/elizabeth_fajans/20 (2008)[hereinafter Fajans & Falk].

7 My conversations started with Professor Katherine O’Neill, University of Washington School of Law (B.A. Stanford Univ., 1975; J.D., Columbia Univ. 1980). Prof. O’Neill’s companion paper to this one, presented at the same conference, is A Story with No End in Sight (manuscript on file with the author). She states: “My tentative thesis is that quality journalism can provide context and contemporary relevance for law students as they learn to ‘think like lawyers.’” In this, she wanted to “mitigate the abstraction of law school and to situate the study of law within the context of social events and the activities of major economic and political institutions.” To do so, she treated the journalistic accounts used in her class as a form of “storytelling” because the “use narrative techniques characteristic of storytelling.” The two journalistic stories upon which she relied in her contracts class were Peter J. Boyer, Ohio Postcard: Eviction –The Day They Came for Addie Polk’s House,” THE NEW YORKER, Nov. 24, 2008 at 48-53, and, Jonathan Karp & Miriam Jordan, Hose of Cards: How the Subprime Mess Hit Poor Immigrant Groups, Wall St. J. (eastern ed.), Dec. 6, 2007 at A.1

8 Menkel-Meadow, supra note 6; and Fajans & Falk, supra note 6.


10 Vaughn, In Denial: “Brain Rules,” Legal Norms and the Abusive Workplace, presentation at the University of Augsburg, Germany, for a conference titled Workplace Bullying and Protection against Discrimination in the Employer-Employee Relationship: Changes and Risks in an International Comparison (17 April 2010).
structural, affronts to human dignity. As I delved into the research on abusive workplaces, I was increasingly drawn to the literature in psychology and neuroscience to understand and explain the effects of these phenomena on workers. Serendipitously, much of this new research also has a bearing on how people learn. My interest in theories about teaching and my interest in workplace “narrative” happily converged as I have explored how this literature explains what captivates our attention and helps us to learn and practice the law.

So what does the scientific literature tell us? First, while our technology has taken us to the stars and unpacked the genome, we have not significantly evolved. Although the information we process has become overwhelmingly complicated, the way in which our brain works and learns has changed little from the days in which we ran across the savannah, looking for our next meal and hoping not to become someone else’s. The dilemma, then, for the law instructor is initially how to capture the attention of the student, help them to digest and organize complex patterns of legal doctrine, and then recall and apply it with a brain that is still cued to the dangers of the savannah rather than the law school classroom or courtroom. These same challenges – of capturing attention and developing understanding of the law – confront the practitioner dealing with clients and lay juries.

Brain science, simplified here, suggests that the first task is to “grab” someone’s attention because “better attention always equals better learning.” One of the features of stories that captures attention better than cases is their emotional content. Emotionally charged events are more likely to capture our attention and to be remembered. A beneficial consequence of this emotional fixation is that it focuses attention on the content, context and meaning of a story. Studies suggest that this context is the platform that allows later and successive integration of the details. Thus, stories “work” because they focus attention and provide a context for learning the “details,” e.g., the law. Moreover, the same principles that apply to the success of this strategy in the classroom can also bear fruit in the courtroom and in litigation documents.

In this article, I will discuss three bodies of knowledge that seek to account for how and why stories are such powerful devices for human learning. First, neuroscience and cognitive psychology seek to explain the “how” of learning. By explaining how attention, memory and learning occur in the brain, scientists have provided a useful and salient account of how stories

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11 Pinker surmises that we are probably not biologically evolving very much, in part because modern human life is not conducive to evolution through natural selection. Pinker, supra note 3, at 205. The basic structure of our brain was set in the Pleistocene:

From our day back to the time of Socrates and Plato is a mere 120 generations. If we go further back from their Athens to the invention of writing, agriculture, and the first cities, it is a lot longer: another 380 generations. But the Pleistocene itself—the evolutionary theater in which we acquired the tastes, . . . was eight thousand generations long.”

Dutton, supra note 1 at 23 as well as 42-43. See also, John Medina, Brain Rules: 12 Principles for Surviving and Thriving at Work, Home, and School 35-36 (2008)[hereinafter Medina]; and, Oliver Sacks, A Man of Letters: A Neurologist’s Notebook, The New Yorker 22, 26 (28 June 2010). Others, however, would argue that the attainment of human culture has allowed us to evolve in a way that escapes the constraints of natural selection. Steve J. Gould suggests this in some of his writing. Boyd, supra note 1, at 42. Steven Pinker, who occupies a stance somewhat closer to Gould’s than other evolutionary psychologists who will be discussed below, appears to agree: “My own view is that human brains evolved by one set of laws, those of natural selection and genetics, and now interact with one another according to other sets of laws, those of cognitive and social psychology, human ecology and history.” Pinker, supra note 3, at 206. This “nature versus nurture” debate will be briefly addressed below.

12 Medina, supra note 11 at 74.

13 Id. at 71-83.

14 Id. Medina’s very accessible book presents twelve “rules”, based on peer-reviewed science, that explain better ways to structure learning and working experiences. Medina’s scientific references are available at his website: www.brainrules.net.
help us to learn. Second, a brief look at cultural anthropology suggests that it is a universal feature of all human cultures that we learn and transmit knowledge by story-telling. Finally, evolutionary psychology, a relatively new field, posits that the appeal of stories goes beyond the cultural; rather, this mechanism for learning may be “hard wired” into our brains. That is, our appreciation of the arts, and particularly of story-telling and music, may be adaptations that have continuing use for learning given the plasticity of our brain/mind.

In the Part II of this article, I will briefly address what constitutes a “story.” Although this is a concept that is impossible to confine to one definition, the scientific sources used here tend to describe stories somewhat differently than literary theorists. Next, in Part III, I will describe the three “accounts” that shed light on why stories help us to learn, beginning with the the “how” of current neuroscience findings on learning, memory, context and attention, then moving, briefly, to cultural anthropology, and ending with the answer that is provided by evolutionary psychology: we learn from stories because we have evolved to do so. In the conclusion, I illustrate how these insights bear on learning as well as on practicing the law.

II: What is a Story?

Defining a “story”, as anything beyond something that has a “beginning, middle and end” can lead only to trouble. In addition to identifying the salient aspects as to what makes an account a “story” rather than an analogy, metaphor or parable, the largest obstacle is deciding whether the most effective part of a story comes from a fictional rather than factual aspect. Most stories have some tie to reality. Unless one is reading the most cutting-edge science fiction, most of the laws of physics will continue to obtain. Similarly, stories will be marked by forms of human organizations such as government and community. For this reason, I argue that while there may be some psychological advantages to using “fiction,” there can still be advantages to using factual stories, whether they come from newspapers and magazines or fuller, richer accounts, i.e. the actual narrative, of the cases we teach. In the end, it may not make a difference.

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15 Because cultural anthropology’s insights are fairly well established, and assumed by most of us, the space given to this account will be brief.

16 Evolutionary Psychology is not accepted by all authorities, and is contrary to the Standard Social Science Model (SSSM). See, e.g., PINKER, supra note 3, 44 – 58 and 165-171. As such, it constitutes a new paradigm for understanding certain human behavior and may account for “a” connection between culture and neuroscience. See, THOMAS KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS (1962).

17 Brain and mind will generally be used interchangeably in this article. Evolutionary psychology and neuroscience suggest that the two are more closely related, if not identical, than our received Cartesian dualism usually leads us to intuit.

18 Some legal academics, however, have adopted the model that Anthony Amsterdam and Jerome Bruner developed in their book, Minding the Law 113-114 (Harv. U. Press 2000) in which they state that the component parts of stories are (1) its grounding in the ordinary or everyday, (2) some type of “trouble” that disrupts ordinary expectations, (3) an attempt to address the disruption, that eventually leads to (4) a resolution. For an example of an article that adopts this model, see Carolyn Grose, Storytelling Across the Curriculum: From Margin to Center, from Clinic to Classroom, 7 J. ALWD 42 (2010) [Hereinafter Grose] and the references citied at fns. 20-25. She notes that this schema is typically called “the plot.” Id.

19 Ana Margarida Abrantes, Narrative – A Key Concept for Cognition and Culture, available at http://ssrn.com/abstract = 1409402 [Hereinafter Abrantes]. Abrantes has a different definition of narrative, choosing to develop a functional definition that highlights its use as a human strategy for dealing with “time, process and change. (citing David Herman, BASIC ELEMENTS OF NARRATIVE (2009)). Id. at page 1. As such, she deems her definition as “cognitive by nature.” Id. This definition, however, is not necessarily at odds with the one outlined above
Interest in stories and narrative have blossomed in the last two decades within the academy and in practice. For example, many students are now assigned materials or chapters from the LEGAL STORIES series to augment their understanding of the cases assigned for class. Some casebooks have framed their courses as an exploration of the tension between formalism and narrative, and include excerpts from literature or journalism in addition to cases. And, this focus is not limited to the teaching of doctrinal materials but can also be used to deepen the appreciation of a wide variety of practice materials. Similarly, many practice materials or journals, particularly in litigation, will include articles on the importance of using stories or narrative in writing briefs or addressing the jury.

III: How and Why Do Stories Help Us Learn?

A few words of introduction are in order before formally beginning this section. First, the sources used to compile this section are accessible to the lay reader. Second, I am not a which is more a more typical definition. For example, on the next page of Abrantes’ article, she identifies the four parts of a narrative or story to be the “situatedness,” the “structured event sequence,” the “rupture” and the “what it’s like.” These would be recognized more popularly as the setting, the plot, the conflict and what is represented or communicated to us in a particular story.

20 Id. at 37 and see the examples of this scholarship that she cites at footnote 2. See also Linda H. Edwards, Once Upon a Time in Law: Myth, Metaphor, and Authority, 77 TENN. L.REV. 883 (2010) (“Since at least 1983, when Robert Cover gave us Nomos and Narrative, and probably as early as James Boyd White’s The Legal Imagination, we have been on notice that the law has stories.”) [Hereinafter Edwards]. Noting, however, that stories are more frequently used in law and the legal academy is not to say that this was an easy transition. See, for example, Nancy Levit, Crowdsourcing the Work-Family Debate: A Colloquy – Reshaping the Narrative Debate, 34 SEATTLE UNIV. L.R. 751. Levit outlines the debate, particularly as it applies to family/workplace issues at pages 753 – 754 and the accompanying notes.

21 For example, I frequently assign a chapter or two from KEVIN CLERMONT, Ed. CIVIL PROCEDURE STORIES. (2004) in my civil procedure course.

22 Continuing with the civil procedure example, the casebook I have used most recently Subrin, Minow, Brodin & Main, CIVIL PROCEDURE: DOCTRINE, PRACTICE, AND CONTENT, 3rd ed. (2008) avers directly to this tension in their teachers’ manual. Similarly, the casebook, in the introductory materials juxtaposes United States v. Hall, and Martin Luther King’s Letter from a Birmingham Jail.

23 For example, to teach client interviewing, in addition to watching a live client interview, civil procedure students can read either of the following two articles on the connection between narrative and practice: Anthony V. Alfieri, Reconstructive Poverty Law Practice: Learning Lessons of Client Narrative, 100 YALE L.J. 2107 (1991); or Carrie Menkel-Meadow, supra note 6. The latter is particularly interesting because it addresses the way in which lawyer’s decode and recode a client’s “story” from everyday lay prose into something that can be acted upon by courts and other legal entities. James Boyd White also believes that law and translation are related. James Boyd White, An Old-Fashioned View of the Nature of Law, 12 THEORETICAL INQUIRIES IN LAW, Article 13 (January 2011) “[Law was the language into which this problem would have to be translated. . . .” Id. at 384. He illustrates this relationship in a discussion of a client interview where the client “will have a story to tell and a language in which to tell it.” Id. at 387. The lawyer’s task will be to “go from his or her language to the law and back again. . . .” Id. at 388.

24 Citing Steven Pinker’s book, THE STUFF OF THOUGHT (2007), Lorie Graham and Stephen McJohn note the growing use of cognitive science in the law to describe “how we reason, decide, intend, moralize, and perceive.” COGNITION, LAW, STORIES, 10 MINN. J.L. SCI. & TECH. 255 (Winter 2009). For obvious reasons, the use of cognitive science has been especially great in
literary theorist, psychologist or a scientist. My training has been, on the contrary, in philosophy, education and the law. This does not mean, however, that my reading of these materials from outside of my field is uncritical, but that it comes from an “outsider” rather than someone who has been formally trained in these domains.

A. How Do We Learn from Stories? : Lessons from Neuroscience and Cognitive Psychology

Of all of the developments in psychology, the advances in neuroscience and cognitive psychology have been perhaps the most helpful to people who teach. Psychology has shifted from a social science to a natural science, focusing on how the brain works as well as its traditional domains of human behavior. This can mean study of subject matter as remote from law

criminal law and in articles about law school pedagogy. One of the greatest services that any academic or public intellectual can be perform is to make some of their work available to as wide an audience as possible. Therefore, the information and insights that are developed below should be readily attainable to legal readers who wish to understand more about the connections between anthropology, psychology/neuroscience and law. Consider, for example, the following:

There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.


In fact, it is at our peril if we do not make a study of these subjects because of the way they bring insights to bear on nearly all realms of legal (and economic) study. Although I do not think the time will come when those fields “swamp” the law, we could all benefit by a closer alliance between these intellectual domains. Similarly, while I cite a number of well-known studies and books, I do not intend to provide exhaustive annotation of the various “law and” subjects implicated here. For more coverage, however, see, for example, Owen D. Jones, and Timothy Goldsmith, Law and Behavioral Biology, 105 COLUM. L. REV. 405, 411 and the accompanying notes (2005)[Hereinafter Jones and Goldsmith]. They begin by noting that “[u]ntil about forty years ago, legal thinkers were firm in the conviction that law was an autonomous discipline” which has broken down to become a wide variety of “law and” subjects. Id. Finally, this account of storytelling compels consideration of the new discoveries in cognitive science; their ultimate effects on legal theory and law cannot be ignored:

Each new generation of astronomers discovers that the universe is much bigger than their predecessors imagined. The same is also true of brain complexity. Every era’s most advanced technologies, when applied to the study of the brain, keep uncovering more layers of nested complexity, like a set of never-ending Russian dolls.

Christof Koch, Playing the Body Electric, Scientific American MIND 18 (March/April 2010)

25 Some argue that law professors have been reluctant to make themselves aware of advances in cognitive and educational psychology. “Despite significant advances in the science of learning, law professors today teach much as their own professors did a generation ago. Legal scholars and lawyers know surprisingly little about the cognitive science research that has unveiled new methods of harnessing the brain to work harder and smarter.” Deborah J. Merritt, Legal Education in the Age of Cognitive Science and Advanced Classroom Technology, 14 B.U. J. SCI & TECH. L. 39 (2008)[hereinafter Merritt].

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as the bio-chemical and electrical phenomena\textsuperscript{26} that make thought possible to studies of brain function in more manageable units like memory or attention. But whether you are a cognitive scientist or an evolutionary psychologist, both groups of researchers converge on the belief that “[t]he brain appears to be designed to solve problems related to surviving in an unstable outdoor environment, and to do so in nearly constant motion.”\textsuperscript{27}

Regarding the draw of stories in the classroom, there are three psychological phenomena that are most pertinent: (1) emotion and attention, (2) memory, and (3) the role of context and meaning, especially how these two latter concepts vary for novices and experts in a particular discipline. My thesis is that storytelling and narrative in law school improve the operation of each of these learning dynamics above and beyond the didactic recitation of cases.

1. Emotion and Attention: Emotion plays a critical role in the classroom on at least two levels. First, it can be important for creating an environment in which people can learn.\textsuperscript{28} Second, emotion is a “hook” that often grabs our attention.\textsuperscript{29} As John Medina notes for Brain Rule #4: “We don’t pay attention to boring things.”\textsuperscript{30} As he elaborates, “The more attention the brain pays to a given stimulus, the more elaborately the information will be encoded – and retained.”\textsuperscript{31} As it turns out, we are most likely to pay attention when our emotions are engaged.

Fear, whether on the savannah or in the classroom, is certainly an emotional hook. But in modern life, it is problematic. It is now well documented that stress and anxiety can interfere with the learning process. In fact, excessive stress can literally kill brain cells.\textsuperscript{32} For most people, this

\textsuperscript{26} Therefore, this article will not really depict at any great length the neural basis of learning, nor of brain anatomy. Simply put, learning is also exhibited at the level of the neurons as they grow and branch. See, e.g., *Henry Gleitman, Alan J. Fridlund and Daniel Reisberg, Psychology* (6th Ed.) (2004) at pages 154 – 156: “The Neural Basis for Learning.” As it pertains to this paper, however, the fact that learning occurs at the neural level throughout our lives establishes the basis for the claim that our brains are “plastic,” or capable of learning throughout our lifetime. This takes place mainly through the process of long-term potentiation in which a neuron can become more receptive to stimuli. This forms the cellular basis of learning and of memory.

\textsuperscript{27} *MEDINA, supra* note 11 at 4.

\textsuperscript{28} Although I will make passing reference to the effects of stress and a poor emotional environment on learning, that is not the major point of this article. Modern research reveals that a classroom needs to have an atmosphere that is conducive to learning in contrast to the cauldrons of fear that older lawyers may recall from their law school days. Granted, the fear may have constituted an emotionally salient stimulus that focused one’s attention, but it is not clear whether it helped one to learn. See, e.g., *MEDINA, supra* note 11 at 45.

\textsuperscript{29} “In short, adults learn by paying attention to what they want to learn, thinking about it, and then using the information repeatedly.” Hillary Burgess, *Deepening the Discourse Using the Legal Mind’s Eye: Lessons from Neuroscience and Psychology that Optimize Law School Learning*, at 21, http://ssrn.com/abstract=1586113 (2010)(on file with the author). She notes that adults, like children, do have to “choose to focus on specific stimuli.” *Id.* at 23 so it still pays to capture their attention. See also, Anthony J. Greene, *Making Connections: The Essence of Memory is Linking One Thought to Another*, SCIENTIFIC AMERICAN MIND 22 (July/August 2010)[Hereinafter Greene].

\textsuperscript{30} *MEDINA, supra* note 11 at 71.

\textsuperscript{31} *Id.* at 74.

\textsuperscript{32} *Id.* at 169-182 (Chapter 8: Stressed brains don’t learn the same way). Basically, as Medina develops in his chapter on stress, “not all stress is the same;" some hurts learning while other types improve it. *Id.* at 172-173. Stress and its associated physiological suite of reactions were originally designed, as will be noted in more detail below, to “help[ ] us manage the threats that could keep us from procreating.” *Id.* at 175. The fear associated with this kind of stress was evolutionarily useful – “Life-threatening events are some of the most important experiences we can remember.” *Id.* at 177-178. Being called on to recite a case, however, is not (or should not be)
is a picture perfect description of the first year of law school. While this kind of flight or fight response was useful on the savanna, the long-term stress that most of us feel in a long term learning situation is not helpful. During stress, our body is flooded with hormones such as adrenaline and cortisol “spurred into action by your brain’s hypothalamus.” If the stress is moderate, this can spur learning because it does mimic our prehistoric life, but “[i]f the stress is too severe or too prolonged, however, stress begins to harm learning. . . . In almost every way it can be tested, chronic stress hurts our ability to learn. . . . Specifically, stress hurts declarative memory (things you can declare) and executive function (the type of thinking that involves problem-solving.”

One of the advantages of story-telling, as opposed to traditional cold-call Socratic teaching, is that it can create an environment, and an emotional context, that is more conducive to learning. Many of us, when telling stories to our classes, change our affect and create an atmosphere of “immediacy.” What does this look like? It most likely means that we may come from behind our lectern, relax our body language and use a conversational style of instruction. Merritt notes that faculty who display “immediacy” “significantly boost their students’ interest in a subject.”

The most important aspect of a story and its relationship to emotion is that it is an “emotionally competent stimulus” or “ECS.” In fact, the more attention we pay to a stimulus, the more likely we are to encode and retain it in our memory. Additionally, our radar for the

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one of those events. Inappropriate chronic stress can lead to illness, a weakened immune response, harm to learning and memory, depression, and interference in the brain’s executive functions. \(\text{Id. at 176 – 180.}\)

33 \text{Id. at 174.}\n
34 \text{Id. at 178.}\n
35 Merritt, \textsuperscript{supra} note 25 at 39, 48 and the sources cited at fn. 36.

36 \text{Id. at 49} and the text accompanying fn. 40.

37 \text{Id.} She notes at fn. 39 that more gain, however, may come from establishing long-term relationships with students as a motivational cue. \textit{See also} MEDINA, \textsuperscript{supra} note 11 at 45: “[O]ur ability to learn has deep roots in relationships. If so, our learning performance may be deeply affected by the emotional environment in which the learning takes place. There is surprising empirical data to support this. The quality of education may in part depend on the relationship between students and teacher.”

\textsuperscript{38} MEDINA, \textsuperscript{supra} note 11, at 80. Medina colorfully describes the biochemical basis of an ECS and memory. “When the brain detects an emotionally charged event, the amygdala releases dopamine into the system. Because dopamine greatly aids memory and information processing, you could say the Post-It note on a given piece of information means that information is going to be more robustly processed.” \textit{Id. at 81. See also} JOHN D. BRANSFORD, ANN L. BROWN, AND RODNEY R. COCKING, \textsc{Eds.}, \textit{HOW PEOPLE LEARN: BRAIN, MIND, EXPERIENCE, AND SCHOOL} (2000). The volume is also available at \texthref{http://www.nap.edu}{http://www.nap.edu} [hereinafter BRANSFORD]. They state that “if their (students) initial understanding is not engaged, they may fail to grasp the new concepts and information that are taught.” \textit{Id. at 14.}

\textsuperscript{39} MEDINA, \textsuperscript{supra} note 11 at 74. For a more lyrical, narrative account of memory in the face of an emotionally competent stimulus, \textit{see Chapter 4: Marcel Proust: The Method of Memory} in JONAH LEHRER, \textsc{PROUST WAS A NEUROSCIENTIST} (2007; Mariner book edition 2008). In this chapter, Lehrer chronicles how Proust’s description of his memories, particularly of the famous madeleine, foreshadowed later scientific discoveries about memory. \textit{Id. at 81.} Leher notes that Proust explores how “time mutates memory,” \textit{id.} which we now know to be the case as “[e]very memory begins as a changed connection between two neurons.” \textit{Id. at 83.} That is, memory is a process, \textit{id.} at 85, that occurs, as Dr. Eric Kandel has theorized, at the nerve synapses. \textit{Id. at 91. See also} MEDINA, \textsuperscript{supra} note 11 at 57: “Kandel showed that when people learn something, the wiring in their brains change. He demonstrated that acquiring even simple pieces of information involves the physical alteration of the structure of the neurons participating in the process.” This
interesting is also shaped by our past experiences and genetic make-up. Thus, the fact, noted above, that storytelling is a universal way of signaling the intent to both entertain and transmit information tends to get our attention, particularly if the story has salience to what is being taught or to our own personal interests. “Emotionally arousing events tend to be better remembered than neutral events.”

To the extent that a story arouses emotions and interest, the more likely a student is paying attention and prepared to absorb the more difficult legal material that follows a story in the typical law school classroom. The other valuable component of a story is that it will give a person meaning for the details that follow. Small wonder, then, that accomplished trial lawyers tend to be marvelous storytellers, as they “instruct” the jury in the facts and the law.

2. Memory: Memory, although we have only one word for it, is now understood to be a very complicated and multi-part process. But the basics of memory “depend upon three basic processes: encoding, storage, and retrieval.” Basically, this means that information must be put in a form that our brain can accept and use. Second, we need a way to retain knowledge over time – which is the value of stories – and finally, we need to be able to retrieve the information we have stored into consciousness (and forget what is no longer useful or “true.”) Further, there are a complicated series of typology of memory. For the purposes of this article, the focus is on semantic memory (as opposed to episodic or procedural) – the memory that allows one to assimilate generalized knowledge.

Traditional descriptions of memory, generally called the “information-processing model,” describe memory as a three part phenomena:

constant physical change explains why each of us will, ultimately, have different “wiring” in our brains and that the strength of the memory is contingent upon the strength of the synaptic connection (which is why repetition matters). Id. at 57 – 62.

Scientists at McGill University recently confirmed Proust’s(and Kandel’s) intuitions and modern scientists’ theories when they were able to capture, for the first time, the image of a memory being made. “The finding provides the first visual evidence that when a new memory is formed new proteins are made locally at the synapse—the connection between nerve cells—increasing the strength of the synaptic connection and reinforcing memory.” Their study, published in SCIENCE, goes on to explain that this architecture allows humans to retain information stably yet flexibly over time. McGill University (2009 June 19). First Image of Memories Being Made. SCIENCE DAILY. Retrieved 29 July 2010 from http://www.sciencedaily.com/releases/2009/06/090618151331.htm.

This is particularly true for the novice learner. See, e.g., BRANSFORD, supra note 38, at Ch. 2: How Experts Differ from Novices. The volume is also available at http://www.nap.edu. A lawyer may pay more attention to a completely legal presentation because she will have the framework of information for which the details presented can be integrated. This is not true of a student or novice lawyer who is still developing that framework.

DOUGLAS A. BERNSTEIN, LOUIS A. PENNER, ALISON CLARKE-STEWART AND EDWARD J. ROY, PSYCHOLOGY (7TH ED.) 235 (2006)[hereinafter BERNSTEIN]. A complete explanation of the process is beyond the scope of this paper.

Id. at 236. Encoding is further broken down into three categories: acoustic (sounds), visual (memory as a picture) and semantic (meaning). A story has power, therefore, because it can be encoded through a sense (acoustic or visual) as well as semantically. Id.
In this model, our senses register information for a very short period of time, and if our attention is piqued, it might enter short term memory. Note how contingent memory can be – the presentation of a stimulus is not a guarantee of retention. Moreover, although memory is typically described as a linear process, it tends to be interactive and shaped by the experiences that contribute to your long term memory which in turn may influence whether you perceive something. For example, a three year old looking at a word may see an array of lines and circles; a literate adult would see a word. Consider this description of reading:

The act of reading illustrates all three stages of memory processing. As you read . . ., light energy reflected from the page reaches your eyes, where it is converted to neural activity and registered in your sensory memory. If you pay attention to these visual stimuli your perception of the patterns of light can be held in short-term memory. This stage of memory holds the early parts of the sentence so that they can be integrated and understood as you read the rest of the sentence. As you read, you are constantly recognizing words by matching your perceptions of them with the patterns and meaning you have stored in long-term memory. In short, all three stages of memory are necessary for you to understand a sentence.

These three systems, then, each describe a different type of memory, and the task facing a law school professor is to ensure that material communicated in class becomes part of a young lawyer’s long term memory of the law. Or in practice, that a client can understand communicated legal opinions or that a jury has a recall of the “story” to which jury instructions must be applied. The importance of the story lies in its ability to facilitate and enlarge short term memory, as well as to allow a student or lay listener to more easily relate new knowledge (legal materials) to previously assimilated knowledge.

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44 Memory is also shaped by culture. Medina describes an experiment involving memory of features of a visual scene that, on average, was recalled differently between people acculturated in Asia and people acculturated in urban America. Medina, supra note 11, at 76. Similarly, native New Guinea students can detect subtle changes in the jungle not detectable by urbanites. Id. at 75.

45 Bernstein, supra note 42, at 242. This example seems particularly apt for hearing or reading a story. It also makes the point that memory is useful because it develops a “web of connections between people and things . . . And it is the connections that let us understand cause and effect, learn from our mistakes and anticipate the future.” Greene, supra note 29 at 22.
Short-term memory is actually a component of working memory. Short-term memory allows us to store “limited amounts of information for a limited amount of time.” Working memory allows one to manipulate information held in short-term memory and is crucial to doing many types of work. Most pertinent here is the capacity of short term memory, or your immediate memory span. Unfortunately, most adults can retain only six or seven items for recall at a time for about twenty seconds, and all information that is to make it to long term memory “must navigate this passage to reach the brain’s long-term storehouse.” In a traditional law classroom, where the details and information come at one like a fire hose, this limited capacity is a real hindrance for learning. It didn’t matter when we were concerned with the five or six animals in front of us, and our need to identify them (will they eat us or can we eat them??), but when we’re trying to hold facts, issues, decisions, holdings, and reasoning in our minds, especially as novices, we do well to give up. But not to despair. These items for potential use in the memory can be singular items like numbers or words, but they can also be collective items or groupings which psychologists call “chunks.” As Bernstein et al note:

Chunks of information can become very complex. . . . People can build bigger and bigger chunks of information (Ericsson & Staszewski, 1989). . . .

Learning to use bigger and bigger chunks of information can enhance short-term memory. Children’s memories improve partly because they gradually become able to hold as many as seven chunks in memory, but also because they get better at grouping information into chunks (Servan-Schreiber & Anderson, 1990). Adults, too, can greatly increase the capacity of their short-term memory by more appropriate chunking (Waldrop, 1987). One college student increased his immediate memory span from seven digits to eighty digits (Neisser, 2000). In short, although the capacity of short-term memory is more or less constant –five to nine chunks of meaningful information –the size of those chunks can vary tremendously.

My hypothesis is that the use of stories provides a device enabling the law student to develop bigger “chunks” during the typical class. This means that legal information that is delivered with the story is more likely to be encoded and retained into long-term memory, which

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46 MERRITT, supra note 25, at 44: “[T]he brain contains two types of memory: long-term memory and working memory,” citing Reed, 41 EDUC. PSYCHOLOGIST 87, 88 (2006). Long term memory is vast, perhaps infinite, and holds all of our recollections and accumulated knowledge.
47 BERNSTEIN, supra note 42, at 243.
48 Id. but citing Baddeley, 2003 and Engle & Oransky, 1999.
49 MERRIT, supra note 25 at 45.
50 “Chunking” is “[t]he ability of the brain to perceive a coherent group of items as a single item or chunk.” DAVID A. SOUSA, HOW THE BRAIN LEARNS (3rd ed.)(2006). See also Lorie M. Graham and Stephen M.McJohn, Cognition, Law, Stories, 10 MINN. J.L. SCI. & TECH 255 (Winter 2009)[hereinafter Graham]. As we learn, we can aggregate small pieces of knowledge into one piece that becomes a new “chunk.” “Law school, in large part, consists of assembling chunked concepts. A tort, like battery, is composed of several elements, each of which breaks down into sub-elements. After enough practice, students and lawyers use “battery” . . . fluidly. . . .” Id. at 261. That is, as we learn the constituent elements of each tort, we can ultimately assimilate them into one chunk, e.g. battery or assault.
51 BERNSTEIN, supra note 42, at 245.
52 Graham, supra note 50, at 261 (2009)[“Law school, in large part, consists of assembling chunked concepts. A tort, like battery, is composed of several elements, each of which breaks down into sub-elements. After enough practice, students and lawyers use ‘battery’ as fluidly as ‘give.’ “
is nearly limitless in its size and indefinite, subject to disease and depth, in its time scale. While some of our long-term memory encoding is automatic, most of us must be very conscious of our attempts to move information into a permanent location. While educational psychologists often focus on various rehearsal and retention strategies, it may be that stories help by providing a hook for “chunking” legal information in a way that it can be encoded into long term memory. That is, the use of stories facilitates the move from novice to expert as students pack more content into each retrievable “chunk” of information. The students may remember the story as a “chunk” to which they can attach and retain various legal doctrines relevant to understanding the account as a legal story as well. They are also helpful because people tend to encode the general meaning of information rather than discrete details. For example, a story about an assault may help students move from holding each individual element of the doctrine of assault as a separate chunk into one more efficient chunk that contains all of the elements of an assault.

Similarly, stories can help us to recall information. “Stimuli that help people retrieve information from long-term memory are called retrieval cues.” Further, the ability of a stimulus to act successfully can depend upon the degree to which the cue relates to information that was stored at the time of learning. “Because long-term memories are often encoded semantically, cues related to the meaning of the stored information tend to work best.” For example, a story will provide a semantic context for legal doctrine until that doctrine has a meaning of its own. Thus, the doctrine of unconscionability may be triggered by thinking of the Bernie Madoff story read in contracts. Similarly, the fact that the memory is encoded with the meaning of the legal doctrine as elicited through the story on the ground, that is, that it is not an abstract principle of harm in the contracting relationship, but has memorable, evocative real world consequences on the ground, will also make retrieval of the classroom coverage and readings more likely. This chart, below, captures these relationships:

| Is Sense Present? |  
|-------------------|-------------------|
| No                | Yes               |
| Moderate          |                  |
| To                | VERY HIGH         |
| High              |                  |
|                  |                  |
| Is Meaning Present? |                  |
| No                | Moderate          |
| Very              | To                |
| Low               | High              |

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53 Bernstein, supra note 42, at 249.  
54 Id. at 250  
55 This scenario is overly simplistic since many other factors having to do with the actual story and the way it was told may contribute to memory. For example, psychologists tell us that a memory may also be context dependent (retrieval occurs best when it occurs in the same environment where the material was learned) and state dependent (whether a person was “sober,” as well as what “mood” they were in.)
3. **Context and Meaning: Experts and Novices:** A further contribution, consistent with anthropology, is represented by the story as a teaching device as it relates to memory retrieval. This arises from the effects of schemas on memory. Schemas are defined as “mental representations of categories of objects, events, and people.”

Stories could arguably, in light of the anthropological view of culture, be described as culturally shared schemas. In this sense, sharing stories has at least two advantages. In an era where law schools, thankfully, have sought out students from diverse backgrounds and ethnic groups, there may not be a shared canon of “stock” stories. Using stories in the classroom can provide that common vocabulary and experience – thus contributing to developing richer schemas as legal information is added as well as providing a level of emotional safety/comfort that makes learning possible.

Prof. Hilary Burgess notes that one of the most important parts of schemas is that they help students to both retain and transfer information to new situations, perhaps the essence of legal training. Drawing on insights from cognitive psychology, much of which is explained above, she argues that one of the most important things a professor can do in the classroom is to help law students create schemas, that is help them link new information to information that they already have, so that it can be retained in long term memory. Building on this information, she suggests that introducing concepts repeatedly over a “distributed period” and teaching it in multimodal ways, i.e., through multiple sensory avenues, is more likely to contribute to building better pathways in the brain for information integration and retrieval, i.e. learning.

One of the concepts Burgess uses comes from the research of John Bransford and his colleagues that focuses on the ways in which novices learn differently from experts. Burgess points out that “experts learn differently than novices,” because experts, who have established schemas, i.e. a context with meaning, can more easily distinguish between “crucial and less relevant information.” Students, for example, may analogize the court system to a family tree, and one of the responsibilities of a law professor is to help them to create a good organizational system for new knowledge.

Bransford and his colleagues focus extensive attention on the difference between novices and experts in the classroom. Basically, experts are “expert” learners within their discipline because they “have acquired extensive knowledge that affects what they notice and how they

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56 BERNSTEIN, supra note 42, at 255.
57 Menkel-Meadow, supra note 6, for example, discusses the use of stock stories in litigation.
58 Burgess, supra note 29, at 9.
59 Id. at 28. “The easier the concept is to integrate into an existing framework or schema, the easier the concept is to learn, understand and retain.”
60 Burgess’ discussion of this work permeates her article. Basically, she argues that current law school pedagogy results in “cognitive overload” because students do not have a way to organize the mass of information, via efficient chunking, into working memory and thereafter semantic memory. “When students are first introduced to a discipline they have not yet organized their information into ‘chunks.”’ Id. at 27. Merritt adds that “law school instruction probably exceeds the capacity of students’ working memory quite often. This problem is compounded by the fact that professors who have already combined these elements into larger schema, can accommodate more material in working memory than students can.” Merritt, supra note 25, at 48.
61 Id. at 28. See also, Merritt, supra note 25 at 46 (arguing that it is crucial to relate new information to date that is already in long term memory).
62 Id. at 29.
63 Id. at 30. She notes that the sooner this is done, the more rapidly a class can advance to more advanced topics.
64 BRANSFORD, supra note 38 at 17, 29 – 72. While their research focuses on the K-12 classroom, they note that “…the principles apply to adult learning as well.” Id. at 26.
organize, represent, and interpret information in their environment. This, in turn, affects their abilities to remember, reason, and solve problems.\textsuperscript{65} A student and a teacher will experience the same stimulus differently because of their past experience.\textsuperscript{66} In discussing an example from physics, Bransford et. al. note that the expert will start with major applicable principles, rationale and how to apply these to a problem while a student will probably approach the same problem by trying to recall and manipulate a memorized formula that they believe pertinent to the problem without seeing an underlying principle for selecting a particular formula.\textsuperscript{67} Moreover, experts are much more facile and fluid at retrieving information, as well as applying information to a new problem with understanding rather than as a result of rote memorization.\textsuperscript{68} Further, they point out importantly that “transfer,” or what I will call learning, is affected to the degree to which people learn with understanding rather than merely memorizing.\textsuperscript{69}

Similarly, Profs. Graham and McJohn, using the language of “metaphor” rather than of schema, point out that the value of metaphor, especially as found in stories, is a key feature of improving learning in legal education: “Lawyers deal with stories, not just legal rules or analogies.”\textsuperscript{70} Much of their article discusses the role that context, defined by them as metaphor, controls human thinking. “To change someone’s view, reasoned argument will never be sufficient. Rather, supplanting the metaphor that controls their thinking on the subject is required.”\textsuperscript{71} These metaphors help us to organize knowledge and reach both rational and emotional aspects of knowing.\textsuperscript{72} From a depiction of metaphor they move to story as a unit of thinking: “Most of our experience, our knowledge, and our thinking are organized as stories.”\textsuperscript{73} The remainder of their article focuses upon the ways in which stories can broaden out legal reasoning,\textsuperscript{74} as well as provide a framework for learning and understanding because they can constitute a “chunk”\textsuperscript{75} and have emotional content that makes it “easier to learn and remember.”\textsuperscript{76}

To expand my thesis further, then, I would argue that the use of stories in the law school classroom is valuable in helping the student novice become a legal expert. As students make a transition from undergraduate studies and non-legal life, stories can act as a transition, context and metaphor for assimilating a broad range of legal material. The stories can become a stage upon which cases are enacted with deeper meaning and context. Rather than learn didactically about unconscionability, the student who has read stories about the financial crisis as well has a framework that ties everyday knowledge to specialized legal knowledge. Of course, this calls upon the instructor to select narrative materials carefully in a way that re-enforces the structure of doctrine. In class discussions, a particular story may become emblematic for recall of a difficult

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\textsuperscript{65} Id. at 31.
\textsuperscript{66} Id. at 32. In this sense, learning the law resembles the language acquisition of young children. A young child may call all water-borne birds “ducks.” But, as they become older, having more experiences and making more connections, their ability to generalize and discriminate (“the yin and yang of learning and memory”) become more developed. Thus, the older child will identify ducks, geese, and swans. Greene, \textit{supra} note 29 at 27.
\textsuperscript{67} Id. at 37. They tie the development of a schema or context to more efficient “chunking”: “In each case, expertise in a domain helps people develop a sensitivity to patterns of meaningful information that are not available to novices.” \textit{Id.} at 33.
\textsuperscript{68} Id. at 43 - 44, 55-68. They note that many textbooks are not good at teaching people when to use knowledge or how to transfer it. \textit{Id.} at 43.
\textsuperscript{69} Id. at 55.
\textsuperscript{70} Merritt, \textit{supra} note 25, at 258.
\textsuperscript{71} Id. at 268.
\textsuperscript{72} Id. at 271. This foreshadows the work of evolutionary psychologists who increasingly argue that thinking involves both rationality and emotion.
\textsuperscript{73} Id. at 280.
\textsuperscript{74} Id. at 281.
\textsuperscript{75} Id. at 282-284
\textsuperscript{76} Id. at 283.
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doctrine and its context. Hopefully, the students move past memorization of rules into understanding of their application.

Finally, research on memory re-enforces the importance of context if one defines context as the web of connections between pieces of information held in the memory:

The discovery that memory is all about connections has revolutionary implications for education. It means that memory is integral to thought and that nothing we learn can stand in isolation; we sustain new learning only to the degree we can relate it to what we already know.77

These insights pertain to practice as well. In our roles as counselor or advocate, we are frequently required to bring clients or members of the lay public up to speed on a particular legal doctrine. Many of us have probably heard people complain about the prolixity and complexity of legal explanations. On the other hand, a client meeting in which some information is delivered as a narrative, e.g., “Here’s a story about a company that did this the wrong way,” will focus client attention and enhance their comprehension and retention of the content of our communication. It also explains why more comprehensible government regulations are frequently accompanied by examples – little stories that explain how a particular regulation works on the ground.

B. Cultural Anthropology

Around 30,000 years ago, a time that many think tracks the rise of civilization, something amazing happened.78 There were more grandparents.79 While it appears that humans have always told stories, it didn’t do young people much good if no one was available to tell them because food was scarce, and the story tellers were out hunting or gathering. Researchers in anthropology have pointed out that increased rates of survivorship among adults provided a cadre of people who could “watch and educate” the young.80 While increasing survivorship made wider territorial

77 Greene, supra note 29 at 24. This is supported by laboratory study that shows memory doesn’t exist in one location, but rather is “distributed across the entire cerebral cortex.” Id. His article can also be read for a concise explanation of the history of memory research and our current theories of memory.

78 There is no way to pinpoint with certainty, at this time, exactly when homo sapiens became modern man. For example, Prof. Hrdy, who is the major researcher behind alloparent theory, notes that we have “evolved only within the last 200,000 years.” Moreover, “. . .behaviorally modern humans, capable of symbolic thought and language, emerged more recently still, within the last 80,000 years.” Sarah Blaffer Hrdy, Meet the Alloparents, http://www.naturalhistorymag.com/features/09270/meet-the-alloparents (viewed 19 August 2009); Article adapted from Mothers and Others: The Evolutionary Origins of Mutual Understanding by Sarah Blaffer Hrdy (Harvard UP, 2009).

79 Posting to redOrbit, Piece of Evolution Puzzle Added; Grandparents Helped Spur Rise of Civilization, http://www.redorbit.com/news/science/73364/piece_of_evolution_puzzle_added__grandparents_helped_spur_rise/index.html (20 July 2009). For a modern version of this phenomena, see Betty A. Sichel, Beyond Moral Stories, at http://www.ed.uiuc.edu/EPS/PED-Yearbook/96_docs/sichel.html (viewed 11 June 2009). Sichel begins her article: “Tell me a story, Grandma.” She then describes much of alloparent storytelling as the transmission of moral education (which I see very closely akin to law) in which, citing Martha Nussbaum’s book, LOVE’S KNOWLEDGE (1990) and the work of child psychiatrist Robert Coles, depict literature as a form of “moral stories for moral education” (id. at 4) that help us become a moral person and expand our awareness and sensitivity to others. Id. at 6. These themes are shared in common by philosophers, anthropologists, cognitive psychologists and evolutionary psychologists.

80 Betty A. Sichel, Beyond Moral Stories, at http://www.ed.uiuc.edu/EPS/PEDYearbook/96_docs/sichel.html (viewed 11 June 2009). See also Hrdy, supra note 79, 3-4. Hrdy also believes that this cooperative breeding strategy “came before
spread possible, it also meant that a particular group’s collective wisdom could be transmitted to
the young rather than having each individual learn on the basis of private and limited experience.
This lays a foundation for not just the spread of civilization, but its ability to innovate on a
collectively shared knowledge base. As Lawrence Rosen as noted:

> Human beings possess the capacity to create the categories of their own
> experience, and this capability, having largely replaced instinct, came before –
> and was instrumental in creating—the animal we have become.\(^{81}\)

In this account, stories are successful in teaching because it is a cultural artifact that
allows us to transmit wisdom as well as to survive and flourish. More fundamentally, this shared
rearing, in Hrdy’s estimation led to the growth of empathy and “endowed [us] with a rudimentary
theory of mind,” laying the groundwork for cooperation among early humans.\(^{82}\) One could
speculate about the ways in which both the theory of mind, growing cooperation and the need to
maintain it, may have led to the development of early laws and social norms.

In the same way, law, like stories, creates another key domain of culture with which story
telling profoundly overlaps in its use of metaphor and fact creating.\(^{83}\) For example, Rosen argues
that one should see “law as constituted by culture, and culture (in no small way) by law, . . . [and
that it] is indeed an excellent storehouse of stories.”\(^{84}\) His study of law aims at showing that an
anthropological study of law reveals a great deal about human social ordering, and that “[l]ike art
and literature, through law we attempt to order our ties to one another.”\(^{85}\) As a cultural category,
law is also key as a form of reasoning. “Whether a legal system explicitly relies on metaphors or
implicitly works through analogies to recognized legal categories, metaphors serve as a vital
bridge connecting the style of legal reasoning to a society’s overall style of cultural reasoning.”\(^{86}\)
The difference, though, between an account derived from cultural anthropology to the one
discussed above arising from evolutionary psychology will not be a difference so much in the

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\(^{81}\) Lawrence Rosen, Law as Culture: An Invitation 3 (2006)[Hereinafter Rosen].

\(^{82}\) Hrdy, supra note 78, at 10. This social learning is important because it meant that
children and infants would learn to “read” people and how to attract their attention. Id. at 7. The
point here is that in this theory, empathy is believed to be a cultural acquisition rather than an
adaptation to group living as an evolutionary psychologist might argue. This nature versus
nurture, in terms of explanations for human behavior, is why I have chosen to treat anthropology
separately from psychology.

\(^{83}\) Rosen, supra note 81, at 9.

\(^{84}\) Id. at xii. This point of view is not necessarily at odds with the longer, and less
familiar, description of evolutionary psychology presented below. Every evolutionary
psychologist described makes room for culture and does not necessarily see it as adverse to natural
selection. To date, however, evolutionary psychologists have not focused on law in any serious
fashion. Accord, Linda L. Berger, The Lady, or the Tiger?: A Field Guide to Metaphor and
Narrative, 50 Washburn L.J. 275, 279 (2011)(. . . stories are entagled in culture)[Hereinafter
Berger].

\(^{85}\) Id. at 199.

\(^{86}\) Id. at 133. Rosen requires the concept of “metaphor” to pull together much of his
argument about law and culture. To that extent, it fits well with insights about law and literature.
As he states: “Metaphors are the glue of social and cultural life: They knit together the different
domains in which our concepts and our relationships exist with such force that they seem to be
features of the natural world. . . . Indeed, metaphors may be our species’ vehicle for keeping open
the possibilities of moving from one way of conceiving reality to another, of adapting to changing
circumstances by keeping alive the very mechanism through which cultural alteration is effected.”
Id. at 132. See also, Linda Edwards, Once Upon a Time in Law: Myth, Metaphor, and Authority,
observation of the behavior, but its sources. The anthropologist, then, will tell us we use stories because it is something we have done culturally from the beginnings of our social history.87

Finally, it is not necessarily the case that evolutionary theory, discussed below, and cultural theories are in opposition to each other. As we learn more about human history and brain science, it may well be that they are complementary and related phenomenon. For example, Jones and Goldsmith suggest that although there are variations between legal systems, they all “care about” roughly the same topics, e.g., sex, inheritance, family, property, and that they all express a number of social and normative attitudes towards these topics. As cultural studies have demonstrated the overlaps in “topics,” and “attitudes,” some evolutionary theorists have concluded that “[i]t is vanishingly unlikely that cultures across time and throughout the globe settled upon these same basic features of law because they happened to encounter one another. These features are almost undoubtedly an outgrowth of the effects of evolutionary processes on human brains functioning in social environments.”88

C. Evolutionary Psychology

In the distant future I see open fields for far more important researches. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. Light will be thrown on the origin of man and his history.

Charles Darwin, ON THE ORIGIN OF SPECIES89

With the publication of the late Dennis Dutton’s The Art Instinct,90 arguing that humans, by nature of their evolution, are drawn to and adapted for the arts, particularly music and narrative, the art and scientific worlds have been abuzz with debate – nature or nurture? Culture or instinct? Dutton’s compelling presentation draws heavily on the works of John Tooby and Leda Cosmides, scientists at the University of California – Santa Barbara, and as well as the more well-known

87 Rosen addresses some of the arguments regarding evolution and the possibility of evolved behavior in his book. Id. at 54 – 60. As he does with many phenomena, he sees “evolution” as a metaphor (at 57) and notes that “no one has persuasively specified the precise mechanisms through which social evolution is purposed to operate.” Id. at 56. In this, he relies on Stephen Jay Gould. Id. at 57.
88 Jones and Goldsmith, supra note 24 at 468. They amplify this finding on the next page:

Considering Topics and Content in light of evolutionary biology leads to the prediction that the normative content of legal systems will tend, over the entire globe, to reflect evolved, species-typical brains, even as the details of those legal systems will inevitably vary in many particulars. Legal systems will not be identical, because there is ample room for cultural differences and historical accident. . . . The evolved characteristics of the brain place some constraints on the range of outcomes of legal systems and define the universe of cultural differences from which those legal systems emerge. Id. at 469. By way of example, they point to the fact that nearly all cultures distinguish between crimes of passion and crimes of premeditation.


90 DUTTON, supra note 1. See also, Abrantes, supra note 19 at 3, “Humans have what we might call a narrative instinct.”
works of Steven Pinker of Harvard.\textsuperscript{91} Not long after the publication of Dutton’s work, it was joined by Brian Boyd’s \textit{The Origin of Stories}. All of this work asks us to consider our assumptions about narrative and learning, suggesting that rather than a product of culture, it is an adaptation that is part of the human psyche as a result of natural selection.\textsuperscript{92}

1. A primer in Evolutionary Theory

One of the most formative events in the life sciences was the publication of Darwin’s \textit{The Origin of Species} in 1859. It is only recently, however, that its impact has been felt in psychology.\textsuperscript{93} Regardless of its disciplinary setting, however, evolutionary theory remains constant in its basics: randomness and natural selection. That is, evolution is the result of two contradictory phenomena: randomness and natural selection. Randomness describes the reality of genetic change through mutations, and acting on only this principle, life on earth would not have advanced in any discernible direction. Natural Selection, on the other hand, is the tendency of speciated populations to select for those genetic mutations that confer survival of the gene. “Evolutionary change is then the mechanical consequence of variation in heritable differences between individuals whenever those differences are accompanied by differences in survival and reproduction.”\textsuperscript{94} Evolutionary psychologists argue that “all features of a species’ cognitive or

\textsuperscript{91}In addition to \textit{HOW THE MIND WORKS}, Pinker is also the author of four other popular press books: \textit{THE LANGUAGE INSTINCT} (1994), \textit{WORDS AND RULES} (2000), \textit{THE BLANK SLATE: THE MODERN DENIAL OF HUMAN NATURE} (2002), and \textit{THE STUFF OF THOUGHT: LANGUAGE AS A WINDOW INTO HUMAN NATURE} (2002). These are in addition to his prolific scholarly writings.

\textsuperscript{92}This theory is controversial, and most notably the late Steven J. Gould disagreed with this theory. My point in describing this theory is not to whole-heartedly endorse it, or to engage in an elaborate critique. That is beyond the scope of this paper. Nonetheless, whether it is ultimately proven right or wrong, it has shed a great deal of light into our understanding of the human mind. Many scientists dismiss accounts of human behavioral adaptations as “just so” stories. Although I don’t believe that Prof. Medina endorses evolutionary psychology, he does note “The brain is biological tissue; it follows the rules of biology. And there’s no bigger rule in biology than evolution through natural selection: . . . . “ \textit{MEDINA}, supra note 11, at 34. Although he agrees with evolutionary psychology that are brain evolved for life on the savannah, beyond this he states that there is a lack of evidence for precise adaptations. \textit{Id.}

Additionally, I am not arguing that by accepting a role for evolution that our behavior is determined. “The essential point is that biological processes, properly understood, provide no support for genetically deterministic views of human behavior, whether they arise from political motivations or from misconceptions.” Jones and Goldsmith, \textit{supra} note 24 at 428 and their discussion of genetic determinism, etc. at 484 following. Not surprisingly, they also adhere to the “is/ought” distinction. \textit{Id.}


\textsuperscript{94}Richard Lewontin, \textit{Not So Natural Selection}, \textit{NEW YORK REVIEW OF BOOKS} 34 (May 27, 2010) reviewing \textit{JERRY FODOR AND MASSIMO PIATTELI-PALMARINI, WHAT DARWIN GOT WRONG} (Farrar, Strauss and Giroux 2010). Leading up to this observation, he summarizes the modern theory of evolution by natural selection in four principles:

(1) The principle of variation: among individuals in a population there is variation in form, physiology, and behavior.

(2) The principle of heredity: offspring resemble their parents more than they resemble unrelated individuals.

(3) The principle of differential reproduction: in a given environment, some forms are more likely to survive and produce more offspring than other forms.

(4) The principle of mutation: new heritable variation is constantly occurring. \textit{Id.}

In continuing, he notes that “most” evolutionary biologists believe that study of particular populations can reveal the “story” of how selection operated in their particular case. \textit{Id.} These
neural architecture are adaptations, byproducts, or genetic noise." Adaptations are well known to students of biology as those changes that are present in an organism, including humans, because they perform a function that contributed to genetic propagation. Byproducts, on the other hand, have no adaptive function but operate because of the presence of a useful adaptation. For example, it appears that we are adapted to avoid or fear venomous snakes but our fear of nonvenomous snakes would be a byproduct of the adaptation. Noise is just that: expressions of the random arrangement and functioning of various genes.

2. Evolutionary Psychology – What is it?

Evolutionary Psychology (EP) is susceptible to both positive and negative explanations. For example, its adherents are quite vocal about what they are not. Pinker argues that EP is not sociobiology, a school of psychology popularized in the 1970s and 80s: “[T]here is no need to strain for adaptive explanations for everything we do. Our ancestral environment lacked the institutions that now entice us to nonadaptive choices, . . . .” On an even more strident note, Tooby and Cosmides reject what they call the standard social science model (SSSM), which privileges humans above other organisms by claiming that culture exempts us from the operation of evolution. From this vantage point, it is rabidly opposed to cultural anthropology assumption that all human development is explained solely by culture.

From a positive point of view, PE is an attempt to bring together advances in a number of fields: field anthropology, genetics, neurobiology and evolutionary biology to weave together a coordinated, elegant account of adaptive human behavior and brain development. It is focused on trying to explain why we have the kind of mind we have.

The methodology that is used by these scientists is typically referred to as a type of “reverse engineering.” These scientists begin with the assumption that the “mind is a system of organs of computation, designed by natural selection to solve the problems faced by our evolutionary ancestors . . . .” A concomitant assumption, borne out by neuroscience, is that changes are carried forward in our genes, and he cautions that “it is not traits that are selected but organisms.” Id. at 35 which may present an implicit criticism of evolutionary psychology, which at times seems to concentrate more on traits than on the human organism as a whole. See also Jones and Goldsmith, supra note 24 at 426 – 430 for an explanation of “foundational concepts” of evolution.


96 Significantly, Pinker argues that our attraction and use of literature and the arts are byproducts of an adaptation while Dutton, Boyd, Tooby and Cosmides argue that our attraction to beauty is an adaptation. In this, all four authors point especially to narrative and music.

97 Gould called much of what an evolutionary psychologist would call an adaptation a “spandrel.” This is an architectural feature, the space between two arches, that appears to be integral to design. It is, instead, a by-product of the design rather than a direct result of the design.

98 PINKER, supra note 3.

99 Id. at 23.

100 Id. at 21 – 23. See also, e.g., Bradley Duchaine, Leda Cosmides and John Tooby, Evolutionary Psychology and the Brain, CURRENT OPINION IN NEUROBIOLOGY 11(2), 225-230 (2001)[hereinafter Duchaine]; Leda Cosmides and John Tooby, Evolutionary Psychology: Theoretical Foundations, ENCYCLOPEDIA OF COGNITIVE SCIENCE, 54-64 (2003).

101 Id. at 21. Pinker notes, however, that one should not fall into the metaphor that the mind is the equivalent of a computer; it is not. He is adamantly that a computational theory of mind is not the equivalent of mind = computer. Most salient is the fact that a computer is a serial processor while the mind is a parallel processor. Id. at 26.

102 Much of what we know about brain structure and function is as a result of modern imagining technology. For an accessible review of these technologies, see Owen D. Jones, Joshua W. Buckholtz, Jeffrey D. Schall, and Rene Marois, Brain Imaging for Legal Thinkers: A Guide for
the brain is a system of organs or modules “defined by what they do with the information they have then available to them.” Similarly, they assume that the mind is a compilation of content-specific systems rather than content-general; each module was designed for a specific program rather than having general intelligence that could solve any problem a human confronted. Using the same principles of observation that inform evolutionary biology, the evolutionary psychologist looks at a behavior or function to determine what kinds of problems the particular module was designed, by natural selection, to solve.

Given this, the mind, in the opinion of these scientists, is not a blank slate nor is it any longer accurate to characterize humans as having a mind/body problem. We come with “sub-routines” if you will, hard-wired into us by natural selection. While these work with culture, they nonetheless limit our interactions with and ability to create culture. Similarly, if the brain is a physical system, a collection of organs that is part of our body, and it constitutes the mind, then there is really little reason to distinguish between the “mind” and “the body.”

Finally, one of the most salient contributions these scientists have made as it pertains to instructional settings, but acts as the connective theory to explain the attraction, in part, of emotions turn out to be the fulcrum for not only understanding why this may be true in narrative. As Pinker notes, not only are we thinking machines, we are feeling machines. Emotions, in this view, are indispensable adaptations that work with our intellect. The question,

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103 Pinker, supra note 3, at 31 but see also 27 – 31.
104 Id. at 21.
105 Duchaine, supra note 100, at 226.
106 Id. at 225. See also, e.g., Leda Cosmides and John Tooby, Evolutionary Psychology: A Primer, at http: www.psych.ucsb.edu/research/cep/primer.html (1997). Profs. Cosmides and Tooby maintain this website as a resource for those interested in evolutionary psychology, whether members of the public or other scientists.
107 Again, evolutionary psychologists distinguish themselves from sociobiologists in that they agree that culture is an operative factor in human behavior. Our innate structure of mind enables us to “create, transmit, and assimilate cultural phenomena.” John Tooby, The Emergence of Evolutionary Psychology 1, 2, EMERGING SYNTHESSES IN SCIENCE. PROCEEDINGS OF THE FOUNDING WORKSHOPS OF THE SANTA FE INSTITUTE (1985). For them, culture is not “the invisible hand” that explains all facets of human behavior. John Tooby & Leda Cosmides, Evolutionary Psychology and The Generation of Culture, Part I. Theoretical Considerations, ETHOLOGY & SOCIOBIOLOGY 10, 29-49, 30 (1989). Rather, our innate psychological structures created a phenomenon, culture, that now acts more quickly upon us than biological evolution. Id. at 35. The point, then, is that both natural selection and culture exert an influence on human behavior; they are not opposed nor are they sole operators. Id. passim. As such, Pinker notes that this is not sociobiology: “To say that the mind is an evolutionary adaptation is not to say that all behavior is adaptive in Darwin’s sense... [N]atural selection is not a puppet master that pulls the strings of behavior directly... Behavior itself did not evolve; what evolved was the mind.” Pinker, supra note 3, at 42. Pinker is also much more up front about the way in which this theory challenges conventional wisdom and “psychological correctness.” Id. at 44 – 55. He also faces the question of free will and morality, concluding, for him, that they are separate domains. Id. at 53 - 57. Finally, he notes, “Evolution and learning can also go on simultaneously, with innate structure evolving in an animal that also learns.” Id. at 177. Ultimately, having a lot of built in “machinery” only makes us “more intelligent and more flexible” so that “every part of human intelligence involves culture and learning... It is made possible by innate machinery designed to do the learning.” Id. at 33.
108 Pinker, supra note 3, chapter 6: Hotheads.
given reverse engineering, is “Why do we have emotions?” The answer is that emotions are an adaptation that allow us to choose among competing avenues of action, because “[a]n animal cannot pursue all of its goals at once.” Thus, thinking and feeling are fluid and interdependent, and we have, over time developed a repertoire of feelings that helped us survive life on the savannah, e.g. fear of snakes, disgust for certain foods, and in our emerging social groups, e.g. empathy, altruism, etc.

Finally, Pinker addresses the arts, generally finding that the arts are not so much an adaptation (although he makes an exception for narrative) as they are a by-product of other adaptations. They are, like a fondness for cheesecake or pornography, activities that exist because of our innate interest in pleasure. As he notes for music: “[M]usic is auditory cheesecake, an exquisite confection crafted to tickle the sensitive spots of an least six of our mental faculties.” He is willing, however, to make stronger claims for literature because of its role in human social life. First, it often partakes of gossip, a universal human pastime because it confers knowledge and “knowledge is power.” Second, it is also instructive, and here he compares novels to scientific experiments, pondering whether robots would invent literature. As such literature acts as a laboratory for trying out various human hypotheses about how others around us might behave in a given situation. He concludes, aptly for this paper, by observing: “The cliché that life imitates art is true because the function of some kinds of art is for life to imitate it.”

3. Is there an art instinct? Does fiction build adapted minds?

*Human beings across the globe expend staggering amounts of time and resources on creating and experiencing fantasies and fictions. The human fascination with fiction is so intense that it can amount to a virtual addiction.*

Dennis Dutton in The Art Instinct makes the most accessible argument for the proposition that humans possess an “art instinct.” Beginning his argument by noting that there is a cross-cultural experience of art along twelve dimensions, he notes that the “imaginative experience” may be the most important component of art. He then chooses to take up the inquiry posed by Tooby and Cosmides: “Evolutionary researchers want to know why the mind is designed to find stories interesting.” Wary of Pinker’s argument that our love of fiction is a byproduct, Dutton begins a careful proof of why our “addiction” would be an adaptation rather than an evolutionary byproduct. Basically, he puts forward three plausible reasons: (1) Fiction provides low-cost, low risk surrogate experience; (2) Stories provide a “vivid and memorable way of communicating information,” and (3) stories, by allowing exploration of “the other,” develop “adaptive interpersonal and social capacities. . . Stories provide regulation for social behavior.”

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109 Id. at 372.
110 Id., at 374 – 404. The discovery of the “mirror neuron” also supports this theory. This neuron is what causes us, in part, to mimic others. See also, e.g., Leda Cosmides and John Tooby, *Ch. 7: Evolutionary Psychology and the Emotions, in Michael Lewis & Jeannette M. Haviland-Jones (Ed), Handbook of Emotions 2nd Ed. (2000)* (Emotions are an adaptation that allow us to perform a type of executive function when choosing among competing goals and motivations. Similarly, they allow us to assimilate environmental clues about our conspecifics that led to a theory of mind.)*
111 Id. at 534.
112 Id. at 540.
113 Id. at 541.
114 Id. at 543.
115 DUTTON, supra note 1, at 109.
116 DUTTON, supra note 1, at 110. This last argument is particularly interesting for lawyers, and as I will argue in the conclusion, perhaps provides a bridge between law, cultural anthropology and evolutionary psychology. The most recent entry in the “art as instinct” debate,
Stories, story-making, and story-telling are remarkably biologically efficient ways to build a “store of experience” in the human animal. The variability for which humans are adapted in terms of terrain and situations cannot be handled by “mere” instinct, as we typically think of instincts as fixed behaviors to environmental stimuli. Stories allow us to experiment without threat to life and limb across a wide swath of human intellectual, narrative capital: “vivid gossip, mythologies, technical know-how, and moral fables.” As Dutton describes it, story-telling does not seem appreciably different than what Langdell hoped to accomplish through the Socratic method: “The ability to think counterfactually, case-based reasoning adds a capacity to interpret and so gain knowledge by drawing on analogies and identifying similarities in richly complex situations that are confronted in reality and contemplated in imagination.” The fact that we have an adaptive mechanism to deal with widely varying circumstances means that as we “outgrew automatic animal instincts,” the use of stories to template behavior meant that if we absorbed the lessons of stories, we could escape the “confusion and uncertainty in choices available for action.” In this sense, law and fiction/narrative are wedded by providing social ordering for our species, although law is arguably cultural (whatever that may mean) while narrative is adaptative.

But our distanced emotional experience of art and imagination was also an important adaptation. In their articles on emotion and evolution, Tooby and Cosmides inquire about our ability to fail to act on products of our imagination. That we can do so, in some sense is amazing, since modern fMRI technology has taught us that with mirror neurons and other behaviors, we can literally make the part of our brain associated with an action “light up” without undertaking the action. In fact, the ability to separate imagination, emotion and action are crucial to our survival because if we acted on the roar of every imagined predator, we would be, quite frankly, nervous wrecks! In technical terms, Tooby and Cosmides call this “decoupled cognition” or the ability to “play” at real activities or, as adults, to wile away hours in literary “decoupled cognition” reading novels or watching movies.

Published shortly after Dutton’s work, Brian Boyd has tackled the question of narrative straight on in his book, On the Origin of Stories: Evolution, Cognition, and Fiction. Building on the work of Tooby and Cosmides, Pinker, and Dutton, as well as Ellen Dissanayake, Boyd takes a slightly different approach to explaining why an affection for narrative or stories is adaptive behavior. First, he builds on Dutton’s idea that part of our attraction to art is that we enjoy playing. After a very careful discussion of nature versus culture, natural selection, and the evolution of intelligence, he focuses on the evolution of cooperation. He notes: “You and I need not only to share norms but also to know we share them, so that we feel the pressure not only to

see V.S. RAMACHANDRAN, THE TELL-TALE BRAIN: A NEUROSCIENTIST’S QUEST FOR WHAT MAKES US HUMAN, Ch. 7 and 8 (2011).

Id. at 113.

Id. at 114.

Id. at 120.

Boyd, supra note 1.

ELLEN DISSANAYAKE, WHAT IS ART FOR? (1988)

Boyd’s theory is not the only one available. For example, see PETER SWIRSKI, OF LITERATURE AND KNOWLEDGE: EXPLORATIONS IN NARRATIVE THOUGHT EXPERIMENTS, EVOLUTION AND GAME THEORY (2007). Swirski believes that the behavior of narrative was adaptive because it allows us to engage in thought experiments, particularly those that involve game theory as story in trying to estimate how other people will act in given situations. The fact that there are at least three prevailing explanations for a taste for narrative being an adaptation is concerning because it suggests, at the very least, that more research needs to be done so that either these theories can be unified, discredited (in the sense that a taste for narrative is an evolutionary by-product), or the one of the accounts can be validated as true.

Confirmation for the role of play as a possible adaptation in human behavior has recently been documented in MELVIN KONNER, THE EVOLUTION OF CHILDHOOD: RELATIONSHIPS, EMOTION, MIND (2010). Konner confirms that the development of cooperative breeding, or alloparenting, discussed above, was important in human development. Id. at 426 – 451.
resist the temptation to cheat but also to resist the temptation not to slacking in dealing with others who cheat.”124 Storytelling is a way to pass these norms on to others, but most importantly it was a way to “enlist cooperation.” “Stories arose . . . out of our intense interest in social monitoring. They succeed by riveting our attention to social information, whether in the form of gossip . . . for fiction.”125

A second compelling reason for the ascendency of narrative was play. Here, Boyd take on Pinker’s argument that a taste for the arts is a by-product of evolution, rather than an adaptation by concluding that given the costliness of art and play in terms of survival, it would have been “weeded out” if it did not serve an adaptive purpose.126 It allows us to play with pattern – whether it be patterns of human behavior, or visual forms in our environment. Because of this, art commands our attention in a way that was instrumental to the development of cooperation and sociality.127 Finally, he focuses on fiction because it helps us to understand and recall events, and is instrumental in the development of our theory of mind – the way that we understand other people.128 Boyd identifies several functions for fiction and narrative that contribute to our survival: it allows us to recall and understand events,129 understand other people through the development of social intelligence and a theory of mind,130 represent events in a way that allows us to test beliefs and manipulate reality so that “narrative may help us to make better decision[s]” by freeing us from information that came solely from our own perspective.131

The account from evolutionary psychology provides a compelling set of reasons for using narrative – we are adapted to use narrative. Particularly in law, narrative would be useful because it does involve attempts to secure compliance with social norms and involves social relations among people. Moreover, its “play” allows us to forecast, and understand more deeply, the behavior of others.

Conclusion

At the end of the day, around the academic fire pit, one wonders whether our ardent attention to stories is a result of culture or adaptation really matters. After all, for whatever reason, we are “hooked” on stories. “We have known for some time that stories are among the primary ways of making sense of the world, including the world of law.”132 But as I hope I have demonstrated, there are a number of reasons founded in cultural studies and cognitive science to use narrative in legal instruction:

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124 BOYD, supra note 2, at 63. At this point, the overlap with Swirski, see note 122, is most apparent. Boyd also hypothesizes, in passing, that this same need led larger social groups to “centralized systems of justice.”
125 Id. at 64. Another agent that ensured compliance with social norms, he notes, was religion. Id. Boyd does not distinguish between “true” accounts and fiction in ascribing this value to narrative. It is largely for this reason that I have chosen not to distinguish between fiction and journalism (not true and true accounts). Moreover, it should be noted that all of this behavior is pre-literate, that is, our interest in story came before our ability to write.
126 Id. at 80 – 96. This argument is made in chapter 6: Art as Cognitive Play.
127 Id. at 101.
128 Id. at 129 – 206.
129 Id. at 132 – 140. For example, he notes that “[c]omparison clarifies judgments.” Id. at 140.
130 Id. at 141-149.
131 Id. at 166. “As our brains expanded, we could apply the past to the present and futures still more flexibly. But we were still trapped within what we had witnessed and remembered ourselves. With narrative we could, for the first time, share experience with others who could then pass on to still others what they had found most helpful for their own reasoning about future actions. We still have to act within our own time, but with narrative we can be partially freed from the limits of the present and the self.” Id.
132 Edwards, supra note 20, at 886.
Stories command attention.

Stories engage emotion which is crucial to engagement of thinking.

Stories allow students to more quickly in building a schema for integration of legal materials so that they can move more quickly from a novice to an expert status.

We are adapted, arguably, for a variety of explanations, to benefit from narrative.

Indeed, in the course of writing this it was not unusual to find various academics advocating that “narrative theory and storytelling can be used . . . across [all] types of courses and types of lawyering.”

Grose, for example, argues that lawyers use stories against the backdrop of three particular variables: “the law, the facts, and the client’s goals,” and that in practice, “[s]torytelling is pervasive.” Because of this reality, she argues that pedagogy must incorporate storytelling as a way to (1) teach doctrine and skills; (2) to draw attention to values that underlie the law; and (3) help develop the students’ critical ability to question legal doctrine.

In the course of writing this, for example, I found that I had to re-evaluate my opinion of hypotheticals. In light of these theories, hypotheticals can be a type of “play” narrative that allow students to explore the law in what Boyd would argue is an adaptively useful way to explore dimensions of doctrine before encountering it in practice. Similarly, the cognitive psychologist would tell you that it also allows students to build a context for doctrine more quickly. In this sense, I would argue that hypotheticals are related to metaphor, or units of narrative, that help us “to understand new and unfamiliar concepts.”

Stories matter because, as James Boyd White and Carrie Menkel-Meadow tell us, those are the “presenting symptoms” when a client appears in our office. We are told a story, and it behooves legal educators to prepare students to intelligently and compassionately hear these stories even while the simultaneously translate these stories into vignettes of power to effectuate the client’s goals. In this vision, there is no real division between legal education and legal practice because the former should prepare the student for the latter. If the one constant, besides power, that is at play here is the story, the narrative, then it behooves us to teach students how to most effectively work with the story and to work with those in practice to understand how techniques to dealing with stories may change over time.

But these insights transcend the classroom. The insights described above suggest that at all points in the practice relationship, and whether one is engaged in dispute resolution or in transactions, narrative is crucial. At the beginning of the client relationship, understanding the power of narrative reinforces ethical duties to attend to a client’s story and goals. As begin to

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133 Grose, supra note 18, at 39. Her article explores the idea that narrative and storytelling can be used to teach “critical thinking and reflection about [students’] role as lawyers.” Id. at 41. This is based on the premise that “law is made up of stories that are constructed by lawyers, clients, and decision makers.” Id.

134 Id. at 44.

135 Id. at 47 – 48. She sees the use of narrative as important for meeting the goals set out in The Carnegie Report [WILLIAM M. SULLIVAN et al., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (Jossey-Bass 2007) as well as in ROY STUCKEY et al., BEST PRACTICES FOR LEGAL EDUCATION: A VISION AND A ROAD MAP (Clin. Leg. Educ. Assn. 2007).

136 Along these lines, consider John Mitchell et al, Can the Professor Come Out and Play: Scholarship, Teaching and Theories of Play, __ J. LEG. EDUC. ___ (2009).

“translate” the client’s story into something that the legal system can manipulate (in a positive sense), the importance of a sensitive rendering becomes paramount because such a translation enhances the power of a client’s position and the likelihood of reaching client goals. Similarly, using stories with opposing parties, judges, juries and other audiences can both inform and persuade. Even for other lawyers, as opposed to lay people involved in legal procedures, the use of a story can provide context that enables everyone to get up to speed quickly and in a meaningful manner.

In my most speculative moments, this research has led me to ponder the origins, and near universal global presence, of legal systems. So to return to the beginning.138 It is a summer evening. The air is warm and soft. The story begins . . . . One member of the tribe tells an elaborate and heart-felt story of a wrong done to him by another member of the group. Property was misused perhaps, and fishing nets were broken. Rather than seek relief in self-help, this story teller implicitly is asking the tribe to take his side in this tale of woe. Another member, likely older, recalls a similar story some years back. As tribe members shift their attention from the aggrieved to this new storyteller, he recites from memory his recollections of those events and what the tribe did in that circumstance – requiring the wrongdoer to make new nets for the aggrieved. Nodding in agreement, the tribe agrees and this story becomes precedent for misuse of fishing nets, only later to be broadened out to apply to any personal property. And thus, a legal system is born.139


139 Edwards, supra note 20, suggests that “law has . . stories” and describes a series of major cases as archetypes of particular types of stories. As our storytelling has evolved, in his account, she argues that “[u]nearthing the stories beneath the legal arguments in the Miranda and Hardwick briefs expands our academic understanding of how law develops” noting that “rescue” stories call for affirmation of existing law while “birth” stories call for legal reform. Id. at 908. This argument would overlap with the more scientific approach of Jones and Goldsmith, supra note 23, 474, Table 1, that law mirrors universal conflicts and issues that appear in all cultures, e.g. allocation of private resources, exchanges, sex, etc.