PLEISTOCENE BRAINS, MIRROR NEURONS, AND FAMILY DISPUTES: WHY NOT TO LITIGATE FAMILY DISPUTES

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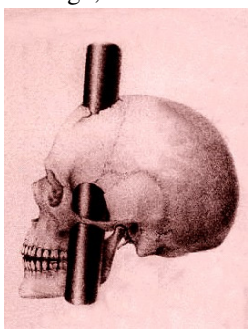
I. INTRODUCTION: Shall we litigate family issues?

A. Law as brains with brains.

From a neurological point of view, law is the interaction of brains (lawyer and client) about the interaction of brains with other brains (clients and third parties and opposing counsels and judges). Each human brain contains 100 billion neurons, each of which has 1,000-10,000 connections to other neurons. This complex neural architecture is alive with electrical connections, all floating in a neurochemical bath that influences the communication of each neuron with every other. Further, each brain forms a node in an intricate social web that fundamentally shapes its function. So, insofar as the subject matter of law is brains, law addresses a most complex subject.

As a lawyer, you know this complexity practically. No two cases are the same. Every personality responds uniquely, though troubling behavioral patterns emerge. The patterns surface in the hurly-burly of law cases: stress makes for bad decision-making, client memory retains little and distorts much, initial perceptions are tough to budge, blame outstrips compassion, money rules, and unbridled commitment to a fight can lead to insane results. Perfectly reasonable people make wildly unwise decisions in the grip of litigation. Why? **This paper addresses some neurological research that may change lawyers' views of human brain function and understanding of poor litigation outcomes. This paper suggests ways to reduce dysfunctional results in dispute resolution**.[1]

Law does not view itself as a brain discipline. The brain has been, until fifty years ago, a black box. Its operations nestled beneath layers of skin and bone. Opening the braincase to observation was always dangerous, and retracting surface tissue to peer at deep structures remains frequently fatal.



What humans knew of brain function, before the new technologies, we inferred from the accidents of history, from traumatic injury and disease. We learned from the dynamite tamping rod of Phineas Gage; the rod blew away a portion of his frontal lobe and, with it, his self-restraint. We learned differences between the right and left hemispheres of the brain when surgeons cut the corpus callosum connecting the hemispheres to treat life-threatening epileptic seizures. Brain lesions modified behaviors, muttering a murky message. We analogized from surgical examination and electrode implantation of other mammalian brains (mostly rats and monkeys). Overall, we guessed. Speculation was often as reliable as observation, because we could not see.

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[1] In this author's view, a ***"poor outcome"*** is a legal result in which, despite a rationally defensible adjudication of the dispute, the parties remain in conflict and experience sufficient motivation to renew hostilities. Poor outcomes may resurface as new litigation, renewed litigation, non-compliance with court orders, long-term disaffection between family members, persistent attempts to undermine the credibility and well-being of the opponent, injury to non-involved parties (often children and elderly persons), malpractice allegations where no malpractice occurred, refusal to pay attorney or other professional fees and costs, client dysphoria or depression, PTSD, secondary or acquired PTSD, attorney dysphoria or depression, or other avenues. Poor outcome participants frequently view the adjudicative process as defective.

"Good outcomes" leave the parties and attorneys and other professionals involved satisfied (if not entirely happy), invested in the success of the resolution, moving toward peace regarding the conflict, ready to make adjustments as needed when circumstances change, accepting the credibility and integrity of the opposing party, caring for children and other vulnerable parties, intact in their familial and friendship relations, in mutual trust with counsel, paying attorney bills and agreed settlement sums, stable emotionally, ready to move along with life. Good outcome participants value the process of dispute resolution employed.

Now, a host of new imaging technologies[2], coordinated with animal studies, offers a dramatic picture of the human brain, one that challenges traditional views of consciousness and rationality. This new picture argues that the brain consists in competing hordes of evolutionary mini-programs. Emotions emerge as evolutionary shorthand for how to survive common challenges, and they drive brain organization. Consciousness emerges at the top of this great unconscious welter, sometimes guiding, sometimes being driven by, these sub-cortical imperatives. And mirror neurons fundamentally link us to others, causing imitation, social bonding, and empathy. These same mirror neurons undergird language, the fundamental pick and shovel of attorneys and courts, and create the social and cultural fabric that generate the subject matter of law.

B. Bad outcomes in elder and divorce litigation.

How does this emerging picture of the brain relate to our legal profession? A client squirms at your conference table and tells a story. In elder cases, the story concerns the progress of dementia, or an embittered sibling taking an aging parent's money, or a parent behaving in an increasingly foolish and dangerous manner. In domestic cases, the client tells you a story of marital infidelity or abuse, of lives drifting apart, and children suffering. As we have been taught, we shoehorn those events into guardianship actions, or will challenges, or divorces. We employ adversarial procedures, derived from our conviction that testing assertions in intellectual combat leads to just outcomes. But our results are troubling. Families are sundered. Elders may be humiliated. Siblings cease speaking. Money often seems to be more important than relationships. And children are permanently scarred.[3] Why are our outcomes frequently poor? Why are our clients so persistently and uncharacteristically irrational? We comfort ourselves with clichés about client deficiencies. We "get our client under control," or we say "you know divorce" with a shrug of the shoulders, or we diagnose: "John's children have intense sibling rivalry." But these analyses ring hollow. The analyses leave out of the picture the judicial system, our legal training, our culture of juridical jousting, and attorney emotional problems.

I will argue that our litigation outcomes are poor because our practices fail to treat our clients' (and our own) brains as ancient organs ill-fitted to rationality under stress, especially in adversarial processes involving family matters. I will argue that litigation turns ugly because we unconsciously communicate to our clients (and ourselves) that we prepare for war. The clients mirror our attitudes and emotions (also) unconsciously. I will argue that attorneys share the trauma their clients' experience, despite appropriate professional objectivity and distance. I will finally argue that we should avoid litigating family matters, such as elder cases and sibling probate disputes and divorces, except as a last and infrequent resort for very limited categories of cases.

II. PLEISTOCENE BRAIN EVOLUTION: The Coppice of Consciousness

A. Homunculus.

Where and what am I? Common sense, and many philosophical and religious traditions, place "me" in my body, a subjective "I" watching, evaluating, and ultimately controlling my body, and, when possible, my circumstance. "I" am a homunculus, a little man inside my head. I face challenges not only from without, but also from within. "I" am not all that submissive to "me." I wish to do things that lie in my power, but I am unable to motivate myself to do them. I do things for which I find no plausible explanation. "I" struggle.

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[2] These imaging technologies include **PET** scans (positron emission tomography, now largely abandoned because such scans employ radioactive injections), **fMRI** (functional magnetic resonance imaging, which provides gross brain activity at near real time), **MEG** (magnetoencephalography, which measures micro-magnetic changes associated with the electrical firing of neurons in real time), and **TMS** (transcranial magnetic stimulation, which disrupts brain function in highly localized areas by rapid magnetic pulses).

[3] Wallerstein, Judith, Julia Lewis, and Sandra Blakeslee. *The Unexpected Legacy of Divorce: A 25 Year Landmark Study*. New York: Hyperion (2000).

Plato's Socrates, in the *Phaedrus* dialogue[4], tells the plight of the soul. In Plato's metaphor, the psyche has three parts, two of which are horses and the last a charioteer. One steed, glorious and obedient, is white; the other, black (of course), is deformed and recalcitrant. The charioteer guides this dynamic pair from his wheeled conveyance. The charioteer represents a "little man," the homunculus of human conscious experience. The noble steed represents our glorious tendencies, predilections toward temperance and modesty, strength and health. The white steed responds joyfully to the charioteer's voice, and knows no whip. The black stallion, however, rears his misshapen legs. He is stubby and thick-necked. The equine of night is given to license and self-adulatory thoughts. He is deaf, shaggy, and unresponsive to pain or admonition. Plato advises his charioteer, in the interest of sanity, to draw blood with the bit, and lavish the whip. The charioteer must drive the dark beast to its knees in anguish. Socrates teaches that the black stallion can be pummeled into submission by brutal measures, even if the stallion's compliance is forever churlish and uncertain.

Developments in evolutionary psychology and affective neuroscience challenge Plato's metaphor.

B. Pleistocene evolution.

Human brain architecture evolved under the environmental conditions of the Pleistocene Epoch (1.8 million to 10,000 years ago) in Africa. The Pleistocene is the sixth of the seven epochs that constitute the Cenozoic Era (65 million years ago to present). The Pleistocene epoch was characterized by average global temperatures significantly lower than today, with consequent extensive glaciations in the higher latitudes. Sea levels fell and rose with the expansion and retreat of glaciers as global mean temperatures fluctuated. East Africa's mean temperature varied from nine to sixteen degrees Fahrenheit below, to four degrees Fahrenheit above, current mean temperatures. Lake ecologies formed and dried up. Forests grew and burned away. Game animals migrated with the changes. Proto-humans had little choice but to follow.

For the hominid predecessors of *homo sapiens*, east Africa demanded flexibility. Move with the food and water, or perish. Coordinated action and cooperation were at a premium. When one among the troop stood to move, mood contagion inclined the rest of the group to follow suit. Coordination enhanced survival possibilities--so too, with running, laughing, crying, and yawning. Coordination meant survival: coordinated hunting and scavenging, coordinated gathering, coordinated child care, coordinated defense against threats, coordinated stress relief, coordinated sleeping.

Frans De Waal, a Dutch psychologist and primatologist at Emory University, tells a story of primate coordinated action.[5] An entire troop of baboons in a zoo gathered atop their habitat's rock and stared in the same direction. For a week, they abandoned eating, sex, grooming, and play. They stared. No human was able to identify their object. There were the mandatory fringe speculations that a UFO disturbed the troop. Not so. This was the monkey penchant for coordinated action gone somewhat awry. The African Pleistocene environment required coordinated attention of the sort De Waal's baboons exhibited, both to avoid becoming prey and to find food.

The Pleistocene epoch also rewarded a particular sort of memory—memory of people and places and actions. Brain developments that assisted these skills were adaptive. Hominids with such skills were more likely to survive. But Pleistocene Africa did not richly reward those with abilities to recall lists of irrelevant trivia. Pleistocene Africa rewarded genetic lines with the ability to comprehend what troop mates were communicating subliminally, to coordinate with those actions, to grasp the intention behind those actions, to vocalize and understand vocalizations of companions, and to recall where lay tangible threats and nutritious foodstuffs.

Over the 6.9 million years from *Sahelanthropus Chadensis* (the oldest hominid discovery to date) to modern humans (around 200,000 years ago), the hominid brain diverged from mammalian standard,

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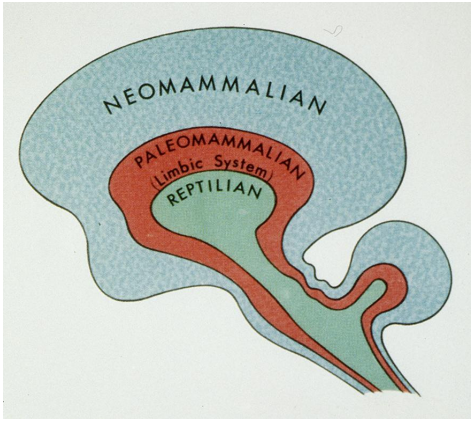
[4] *Phaedrus*, §§246, 253 *et seq*.

[5] De Waal, Frans. "The Empathy Instinct," *Discover*, October 2009 (at page 56), reprinted from *The Age of Empathy: Nature's Lessons for a Kinder Society*. New York: Random House, 2009.

adding bit by bit neural structures that underlie skills and orientations adapted to surviving without any specialized anatomical parts (claws or fangs) in the environmentally variable savannahs of east Africa. These neural structures comprise millions of tiny adaptations. One adaptation may concern distinguishing the jaw of males from females (that helps breeding success). Another might relate to fine distinctions among colors of red (that becomes adaptive in finding ripe fruit). Still another might consist in heightened ability to balance while moving (that assists in chasing prey or eluding predators). Ablation studies in primates and neurological disease and injury studies in humans indicate that tiny webs of brain tissues serve these sorts of purposes (and millions of others). And these millions of adaptive structures retained in the human breeding population are still doing these same jobs.

The millions of adaptive structures are not random. They have overarching structures: 1) triune hierarchical structure, 2) hemispherical structure, and 3) affective structure, and 4) atomistic structure.[6]

TRIUNE HEIRARCHICAL STRUCTURE. Evolutionary brain architecture follows engineering rules humans would be unlikely to adopt. Nothing adaptive is discarded. The brain has emerged by building atop older brain structures. Paul MacLean has famously described the human brain as triune.[7] As his image illustrates, the brain has not discarded its "eat, sleep, breed" reptilian roots, but rather encased and penetrated that brainstem in the limbic system, from which primary social and affective capabilities arise. Evolutionarily, emotions may be considered ancient memory, patterned behaviors responsive to common circumstances, but more sophisticated and subtle than reptilian activity.[8] Reptilian action is diverted and inhibited, becoming mammalian. Atop the limbic system, the neocortex wraps and penetrates both more ancient structures. Again, behaviors arising in the neocortex inhibit and redirect mammalian behaviors, creating complex primate behavior. Within this tripartite complexity, one must recall that every brain area has access to every other area by means of some neural pathway. In general, action emerges by triggers in the deeper structures commencing behaviors that are then modified or inhibited by the overlying structures.



To employ another image, if the human brain were an automobile, all brains would be Ford Model As at root. When better engines were invented, a better frame would be welded to the Model A and a six-cylinder engine laid right over the original. Windows would be taped on. Shocks and springs would be added to cushion the ride. Eventually an AM radio would be stuck in the dash. Finally, yet another frame of aluminum and structural steel would be added, and a V-8 engine welded to the power train. An eight track tape player, followed by a cassette player and then a CD player. Finally, web-linked video screens would be attached at each seat, and a GPS would be taped to the Model A gearshift. Throughout the process, mechanics of great skill would be working to integrate the disparate and time-diverse systems so the vehicle functioned as well as possible. The vehicle would drive by shifting the Model A transmission, engaging the Model A motor, which would then stimulate the six-cylinder engine to purr to life, followed

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[6] I make no attempt to be exhaustive here. The brain has other overarching structures, such as regional or lobe structure, non-cranial structures of the sympathetic and parasympathetic systems. Further, general knowledge of the functional structure of the brain remains in its infancy.

[7] MacLean, Paul. *The Triune Brain in Evolution*. New York: Plenum Press (1990).

[8] Panksepp, Jaak. "The Neuroevolutionary and Neuroaffective Psychobiology of the Prosocial Brain," in *Oxford Handbook of Evolutionary Psychology*. R. I. M. Dunbar and Louise Barrett, eds. Oxford University Press: 2007. At page 145, 151.

by the top eight-cylinder engine revving up, and either putting the car into motion or shutting down the lower engines.

HEMISPHERICAL STRUCTURE. The brain hemispheres differ.

In the Wada test, if an investigator injects a subject with anesthetic in the right carotid artery, knocking out the right cerebral hemisphere, the subject reports no special discomfort. But when the anesthetic wears off, the story changes to complaints about the procedure. One may conclude that the hemispheres have differing emotional responses.

One treatment for life-threatening epilepsy is sectioning the corpus callosum, which is the nerve bundle that provides primary connection between the right and left cerebral hemispheres. In split-brain patients, odd behavioral results ensue. When sexually-arousing images are exposed only to one eye, both hemispheres are aroused, but only the hemisphere connected to the eye viewing the image correctly interprets the arousal. The other hemisphere often equivocates or mis-identifies.[9] Interestingly, the split-brain patient's sense of identify and intention are unaffected.

Jaak Panksepp argues that this fact suggests that the root of the sense of self and bodily integrity lie in more ancient parts of the brain than higher cortical function in which the effects of severing the corpus callosum are evident. Panksepp identifies a deep brainstem structure as the root of self.[10]

AFFECTIVE STRUCTURE. Affective experience is mostly subcortical, that is, unconscious. Affective structure precedes consciousness.[11] The brain is organized into affective circuits (or columns) which commence in the reptilian brainstem structures as primal motivations, wind up through subcortical areas of the limbic system, and then climb toward the neo-cortex.[12] Jaak Panksepp argues for a (non-comprehensive) list of subcortical affective circuits, which he calls FEAR, RAGE, SEEKING, LUST, CARE, PANIC, and PLAY.[13] By these circuits, he does not intend the conscious experiences indicated by the English words. These words, rather, identify affective columns within brain structure that rise through the brain mediating the precursors of the emotions and motivations we experience.

ATOMISTIC STRUCTURE. Ultimately, the brain consists in millions of tiny adaptive neural webs that activate only under very specific circumstances, i.e., when the stimulus to which that particular web responds occurs.[14] Because all of the brain is tied to every other part of the brain by its billions of

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[9] The right hemisphere controls the left side of the body, and vice versa. The right hemisphere in most people is semi-linguistic, mediating rather primal emotion, aesthetic response, and affection recognition. The left hemisphere mediates socially constructed emotions, language, and serial information processing. The left hemisphere may be more upbeat, while the right hemisphere harbors a darker view of life. See Panksepp, Jaak. *Affective Neuroscience: The Foundations of Human and Animal Emotions*. Oxford University Press, 1998, at page 307-308, 318.

[10] Panksepp identifies the periaqueductal gray (PAG) as the neural substrate of a personal sense of SELF, by which he means a primal "fuzzy" SELF, not the cerebral identity self of which we are all aware. Panksepp, Affective Neuroscience, at 312.

[11] Panksepp, *Affective Neuroscience*, at 26.

[12] Panksepp asserts we do not yet know how far the emotional subcircuits extend in the brain. Panksepp, *Prosocial Brain*, at 147.

[13] Panksepp, *Prosocial Brain*, at 146.

[14] Neurological research indicates that memory may be encoded on a one-to-one cell to memory ratio, or at least a one-memory-to-small-number-of-neurons ratio. This is called the "grandmother cell" theory of memory. Research studies have found single cells that respond only to pictures of Jennifer Aniston, but not to pictures of Aniston and Brad Pitt. The same cell fails to respond to photographs of Julia Roberts. See Iacoboni, Marco. *Mirroring People: The New Science of How We Connect with Others*. New York: Farrar, Straus and Giroux, 2008. At pages 196-197.

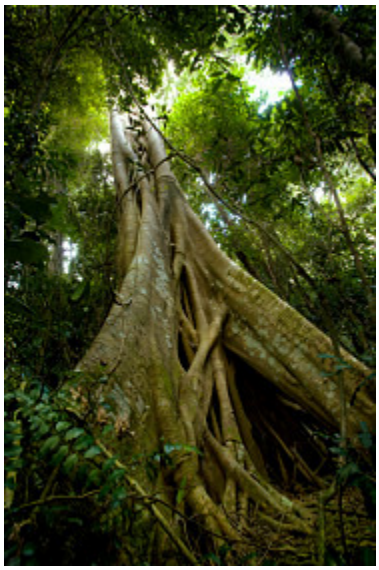
connections, the millions of parts can be considered individually, or atomistically. Marvin Minsky, an artificial intelligence researcher, contends that the brain should be so conceived, as a vast host of moderately independent "agents"[15] or "resources." Each resource competes with every other for pre-emption, that is, to be acted upon. The result is a semi-chaotic subconscious brew of neural signals being sorted for their relative intensity. Only the most powerful resources reach conscious evaluation and are acted upon willingly. Even these powerful, conscious resources are many, and require further sorting. Minsky calls the mind a "cloud of resources."[16] Neural atomism is the non-structured structure of the brain.

Ultimately, the message of neurophysiological research is that the human brain is a highly differentiated, numbingly complex cauldron of neural webs competing for time at stage center. Despite the cacophonous disputes going on in our heads, we experience only stage center.

C. Coppice of consciousness.

This complex view of human consciousness emerges from the various disciplines of neurophysiology and evolutionary psychology, facilitated by the multiple new imaging techniques. The facts beg a metaphor.

Consciousness surveys the canopy-top of a coppice[17] in which a million monkeys are at play.[18] In this image-story, *the brainstem is roots, clinging to the soil of basal existence. Limbic trunks, the affective columns rise above the roots, supporting the leafy cerebral canopy. Upon the many emotive trunks of the coppice of consciousness (those trunks being the affective columns of FEAR, RAGE, SEEKING, LUST, CARE, PANIC, and PLAY) cavort and squawk the million monkey resources of the brain, in their extravagant competition and interplay. And, atop the coppice canopy, successful climber monkeys pop their heads out into the clear air above the leafy cover. Consciousness peers at its coppice from above, noticing monkeys that emerge, but heedless of the coppice structure seething below the billowing leaves.*



The metaphor lacks the elegance of Plato's charioteer, but may be more accurate. To hazard a preliminary conclusion, one reason our litigation outcomes lag may be that we fail to comprehend the fundamental affective processes at play in our brains. Law speaks to the coppice top, but action leaps from affective motivations welling up from below consciousness. Everyone's million monkeys scoff at our heady, cortical blather.

D. Million monkeys at play.

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[15] Minsky, Marvin. *The Society of Mind.* New York: Simon & Schuster (1986).

[16] Minsky, Marvin. *The Emotion Machine: Commonsense Thinking, Artificial Intelligence, and the Future of the Human Mind.* New York: Simon & Schuster: 2006. At page 21.

[17] I am indebted to Jaak Panksepp for part of this metaphor. His extraordinary work on neuroaffective psycho-physiology contains his description of consciousness and human emotion as a tree. See Panksepp, *Affective Neuroscience*, at page 302.

[18] Coppices are various species of many-trunked trees. They propagate by means of sprouts and root suckers, rather than from seed. Firewood harvesters value coppice trees, because, once cut, a coppice tree sprouts multiple new trunks that can again be harvested. Coppices reproduce themselves locally without husbandry, and become small forests of genetically identical trees.

So, what of the million monkeys? Why has the conscious "I" missed their subconscious horde? Perhaps the million monkeys are not invisible, just ignored. I sometimes catch my toothpaste, when, bleary at sunrise, I fumble it toward the sink. I do not think, *Catch*, and then catch. I catch, and then think, *I caught*. The same sort of automatic intervention often occurs in sports. I sometimes catch basketballs I have not yet seen (and I am an utterly deficient basketball player). Walking is miraculous. Without conscious navigation, we all climb steps and ladders, avoid holes, lift our feet over lips and stumbling blocks, and generally stay upright.

Anecdotes and experiments reveal our subcortical fray. Monkeys conflict or link up to create more complex behavior pressures. The subconscious morass can emerge with unexpected results.

Blindsight monkey. Damage to the occipital cortex can impair vision, rendering a person blind. Some such sufferers, however, accurately locate moving objects in their field of vision, despite being completely blind. "Blindsight" may be mediated by deep brainstem systems, analogical to amphibian vision. The afflicted person knows something happened, without being able to identify what.[19] We are functioning with two senses of sight, which do not mediate identical information. These are monkeys on similar, but not identical tracks, giving consciousness slightly conflicted data as they travel the coppice.

Malleable monkey. Subjects who have been subliminally exposed to the words "thirst" and "dry" increase their drinking. They do not, however, report greater subjective thirst.[20] In the Pepsi blind taste-test challenge, subjects preferred the taste of Pepsi. But what Pepsi does not want you to know is that when the brand of soft drink was known, Coke won.[21] Value attribution monkeys are hard to shake, even when your taste buds disagree.

Monkeys can join forces. Captain Jacob Veldhyzen van Zanten was chief training captain on Boeing 747s for KLM. He was also chief of flight safety for KLM. On March 27, 1977, Van Zanten had just returned from leading a six month safety course. Van Zanten piloted a 747 bound for Las Palmas, one of the Canary Islands, and subsequent return to Holland. A small terrorist bomb in the Las Palmas Airport floral shop shut down the facility. Van Zanten was diverted mid-flight to Tenerife, a nearby island, to wait out the attack's aftermath. Van Zanten landed at 1:10 p.m., and began his vigil. In order not to run afoul of mandated rest period rules, Van Zanten would have to put his flight back in the air by 6:30 p.m., or he would be required to debark the passengers and wait until the next day. KLM's motto was "the people who make punctuality possible," and, so, the delay would be a black mark on his spotless career. Just as Van Zanten was prepared to take off, thick fog descended on the Tenerife airport. Van Zanten received a report that a Pan Am jet was taxiing. Van Zanten fired up the KLM engines. The co-pilot objected that they did not have air traffic control clearance. The co-pilot checked with the tower, and received an instruction to stand by. Van Zanten acknowledged that, then pushed the engines to full throttle. Ahead appeared a Pan Am 747 parked across the KLM runway. Van Zanten almost cleared the parked jet, but the KLM jet's belly hit the Pan Am. All aboard KLM 4805 were lost, some 584 persons, in Van Zanten's urgency.

Captain Van Zanten's commitment to his ideal of timely service, his insistence of complying with all relevant rules, and his fear of losing prestige by being late, conjoined to drive irrational behavior he was specifically trained to avoid.[22]

Monkeys in concert can overwhelm rational processing.

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[19] Panksepp, *Affective Neuroscience*, 307. See also Gazzaniga, Michael. *Human*. New York: Harper Collins (2008), at page 158-59.

[20] Iacoboni, *Mirroring People*, 221.

[21] Iacoboni, *Mirroring People*, 226.

[22] This account relies upon the descriptions contained in Brafman, Ori and Rom Brafman. *Sway: The Irresistible Pull of Irrational Behavior.* New York: The Doubleday Publishing Group, 2008, and Kilroy, Chris, *Tenerife Special Report*, at http://www.airdisaster.com/special/special-pa1736.shtml.

All monkeys are not equal. The Swiss government wanted a nuclear dump. They identified two likely locations and ran two public surveys of those populations. In the first, they proposed locating the nuclear waste facility beneath the town for the public good. 50.8% of the respondents approved. In the second survey, the government proposed siting the nuclear waste facility beneath the town in exchange for money, paying each citizen of the town 5,000 francs ($2,175) per year. Approval fell to 24.6%. When the government doubled the offer to 10,000 francs, and then tripled it to 15,000 francs, the locals stood firm. Only one citizen agreed to the dump as compensation was doubled and tripled.[23] The "take one for the good of all" monkey wholly outranks the "pay me" monkey.

Some monkeys make us smart. Three groups of students were offered SoBe Adrenaline Rush drink, which promises improved mental sharpness, and then tested with a word jumble. The control group worked the word jumble without drinking SoBe. The second group drank SoBe, waited for it to take effect, and signed an authorization for the researcher to charge their university account $2.89. The third group followed the second group's protocol, but was "given a discount" and charged only $0.89 for their SoBe. The expensive SoBe group outperformed both groups. But the discount SoBe group underperformed both groups. Researchers opined that the positive value attributed to the expensive SoBe affected their test performance.[24] That monkey makes us smart.

Some monkeys make us stupid. A chimp study reveals how strong self-motivation inhibits self-interested reasoning. Chimps were presented with two plates, one with more, another with less. If the chimp pointed to the plate with more treats, it was given to the adjacent chimp, and the pointer got the lesser plate. In hundreds of trials no chimp learned to point at the plate with fewer treats. The same chimps had previously been taught simple numbers. Every chimp learned to point at the smaller number to receive the larger portion of treats.[25] Potent reward monkeys inhibit reasoning.

Some monkeys refuse to work together. Ann Arbor's Community High offered alternative education, high on informality and creativity, low on attendance and teacher pay. The teaching staff was highly motivated and demand for entrance to the school great. Community High started a program to raise teacher pay and decrease truancy. If teachers, on a random day, had 80% of their class in attendance, then the teacher would receive a 12% bonus for that semester. Course completion by students rose dramatically, but test scores plummeted, as did overall GPA. Researchers were called in. They checked to see if the populations of other schools were having the same experience. They were not. They found a change in focus among Community High teachers. The teachers focused on their bonus rather than teaching. Students attended, but got less education.[26]

The "reward" monkey defeated the "altruism" monkey. When compelling rewards dangle, altruism suffers. Those monkeys don't collaborate.

Clamoring monkeys make monkeys clamor. Chronic stress creates a self-reinforcing loop, in which the higher cortical functions are tangibly suppressed.[27] Unfortunately (in our metaphor), clamoring monkeys also climb better than most monkeys. Monkey stress loops make more monkey stress loops.

Some monkeys want to fit in. A subject sits in a room with others she believes to be subjects, but are in fact actors. All are shown three lines of substantially different lengths, and then asked which line

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[23] Brafman, *Sway*, 132-35.

[24] Brafman, *Sway*, 55-57.

[25] Panksepp, *Affective Neuroscience*, 319.

[26] Brafman, *Sway*, 144-147.

[27] Angier, Natalie. "Brain Is a Co-Conspirator in a Vicious Stress Loop," *New York Times* (August 18, 2009).

among the three matches a fourth line. The actors go first, giving wrong answers. The subject is disturbed, and begins to question herself. 75% of subjects gave an answer they knew to be wrong in at least one round of the experiment. Powerful subcortical monkeys warn us about being contrarians. When just one actor gave the right answer, almost all participants answered correctly. With a little bit of permission, we are able to stand against the tide.

Our subcortical monkeys remain, for the most part, invisible to us as they stream up and down our coppice trunks. We see monkeys better in others than in ourselves, and we see them peek out in odd or pathological or experimental circumstances. Some monkeys, none of us ever see. The vast majority of brain function remains unperceived. All our thoughts appear to be mediated by ancient motivations channeled through affective states toward consciousness. If the coppice of consciousness mediates rationality as herein described, courtrooms are bound to be troubled.

E. Monkeys in the courtroom.

Our jurisprudence flowered primarily in rationalist Roman and British soils. The Romans borrowed heavily from Greek philosophy, especially Stoic rationalism. The British system, despite historical particularities, has been deeply influenced by Enlightenment rationalism. At its root is a semi-Socratic belief that assertions tested by antagonistic questioning are more trustworthy. At its fundament, adjudication amounts to a polite intellectual fistfight.

The instant a participant (clients and lawyers as well) senses pending conflict, his coppice monkeys grow restless. Stress rises in all participants, making it more likely that yet more stress will arise. Stress at conflict anticipation ramps up defense and flight monkeys, and tamps down monkeys that might support impartiality. As at Community High, the money at stake (in the pending issue and the attorney's fees involved) overwhelms other (more humane?) values. Our judicial process drives emotion-permeated participants into a "rational" process which renders them less-capable or incapable of objectivity. Participants emerge feeling demeaned, overwhelmed, and uncomprehending.

Under the coppice of consciousness view of the brain, it is no wonder that our courtrooms produce emotional and relational carnage. This revised view of the human brain may require that we, for the most part, scrap courtrooms and our theory of jurisprudence, if we wish to stem the bloodsport. Some lawyers are already doing that by moving outside the judicial system and creating a "coppice-friendly" dispute resolution environment. More on that subject later. First, another set of discoveries affects our view of the wisdom of litigating family matters.

III. MIRROR NEURONS: Feeling in Others' Heads

Our "coppices" are not alone. We socialize, and not from choice. We are wedded to one another at the deepest levels. Our identities slop over into one another. Our ideas are social constructs. Our livelihoods, genetics, and well-being converge to make us individuals. Philosophers and social scientists have called this fundamental sociality our "intersubjectivity." Intersubjectivity fundamentally challenges the solipsistic individualism of western cultures.[28]

To extend the "million monkeys at play in the coppice of consciousness" metaphor, our individual coppices are not alone, do not grow from themselves, and are directly influenced by the other coppice trees adjacent in the coppice forest. Seen from the perspective of consciousness, above the coppice canopy, it may be difficult to distinguish one coppice from another. They (literally) interleave. Or to use the philosophical coinage, our coppices exist in intersubjectivity.

What might be the neurological mechanism of intersubjectivity? In 1980, most neuroscientists would have shrugged their shoulders. Today, most would answer, "mirror neurons."

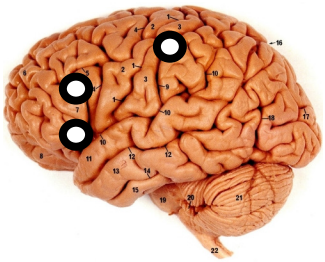
A. Discovery.

Giacomo Rizzolati, in Parma, Italy, in the 1990s, performed experiments tracking the firing of single neurons in the brains of macaque monkeys. The brain region of interest was in the premotor cortex, which consists in millions of neurons engaged in governing hand actions. The region is named F5; the

[28] Iacoboni, *Mirroring People*, 262ff.

team attached electrodes to single neurons in F5. Their purpose was to study the behavior of the single neurons during grasping tasks to which they put the macaques. An unexpected result emerged. *The neurons in question not only fired when the individual macaque grasped or handled an item, but also when the macaque observed another macaque or human grasp or handle an object.* Over a period of years, the team learned that Area F5 in macaques controlled not only macaque grasping, but also mirrored that same activity when another was observed grasping. Over time, they learned that about twenty percent of the neurons in F5 mirrored. The remaining eighty percent did not.[29]

B. Locations.



Mirror neurons, as presently understood, are located in three brain regions: Broca's area (which is an important language center), the parietal lobe, and, if initial investigations are confirmed, the presupplementary motor area (located in the frontal lobes).

C. Mirroring.

Human mirroring takes place on multiple levels: somatic, affective, and complex.

SOMATIC MIRRORING. Somatic mirroring, as in the macaque monkeys, creates an image of the actions of others in the perceiver's brain. When mirroring, the same neurons fire as when personally performing the action mirrored, but at a reduced firing rate.[30] Somatic mirroring underlies imitation and mimicry. Somatic mirroring lies beneath coordinated action, so essential to Pleistocene survival.

Somatic mirroring appears also to create our grasp of the intentions of others. When a person mirrors the actions of another in his brain, one grasps, without cognitive analysis, the aim of the mirrored action. The subcortical inference seems to be "If I were doing that, I would be intending such and such." We see grasping and hand motion toward the mouth. We automatically know "she wants to eat." So, in some sense, somatic mirroring makes us clairvoyant as to other's intentions. Without speech or cognitive analysis, we grasp what transpires in another's skull.

Some neuroscientists speculate that somatic mirroring undergirds our language skills.[31] These researchers believe that our thoughts derive from a neural picture of ourselves navigating through the world, which they call embodied cognition. Mirror neurons underlie the social components of this body-world map. Language is much the same. Words derive from body-world-social interactions. We "speak." Others imitate the mouth, tongue, jaw, breath actions and language is born. They call this embodied semantics.[32] And from the mirroring welter, cultures are born, as we imitate and vocalize and imitate the vocalizations, which influence our actions.

One of the mirror neuron hubs in the brain is Broca's area, which area is strongly associated with language production. When motor speech areas are incapacitated by TMS pulses, the ability of the subject to perceive speech sounds declines.[33] One can see mimicry in the subtleties of linguistic expression. Think of acquired accents, and our tendency to pick up the jargon of the groups in which we speak and listen.

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[29] Iacoboni, *Mirroring People*, 8-12.

[30] Iacoboni, *Mirroring People*, 133, 265.

[31] Rizzolatti, Giacomo and Leonardo Fogassi. "Mirror Neurons and Social Cognition," in *Oxford Handbook of Evolutionary Psychology*. R. I. M. Dunbar and Louise Barrett, eds. Oxford University Press: 2007. At page 189.

[32] Iacoboni, *Mirroring People*, 92.

[33] Iacoboni, *Mirroring People*, 105.

Iacoboni argues that gestures precede speech and all speech is informed by the gestures that accompany it. Mirroring gestures stimulates development of the brain's language centers.[34] He also cites studies that show listening causes auditors to mirror the speech heard with their tongue motor controls.[35]

Paula Niedenthal, social psychologist, asked two groups to detect facial expression changes in others. One group was free to imitate. The other group could not do so because they were required to hold a pencil in their teeth, which sorely limits facial expression. Penciled subjects performed poorly in facial recognition. With impaired mimicry, perceiving others' expressions and intentions is hobbled.[36] The process of identification of intention by mirroring apparently goes as follows: the muscle actions required for that expression are mirrored, after which the limbic system recognizes the emotion associated with those particular facial actions. In other words, somatic mirroring flows directly into affective mirroring.

AFFECTIVE MIRRORING. Mirror neurons undergird empathy. The precursors of empathy are neurologically hardwired into our brains. We empathize, directly sharing in the emotions of others. Crying babies make babies cry.[37] We laugh, cry, wince, smile, suffer embarrassment, discomfort, and express disgust in tandem. Behavioral synchrony is directly correlated to emotional rapport among group members.[38]

Social psychological experiments demonstrate that you are more likely to like a person who imitates your posture, language, and mannerisms. Maternal empathy is a survival necessity for infants. Mothers' mirror neurons and limbic systems respond strongly to images of their own and other babies.[39]

Vision is not required for affective mirroring. Matthew Hertenstein of DePauw University had 248 blindfolded students be touched by another student attempting to communicate one of the following: anger, fear, happiness, sadness, disgust, love, gratitude, or sympathy. The chance rate of correct correlation was 11%. Accurate identification of the communicated emotion occurred 50-78% of the time.[40]

An inability to empathize damages relationships. Alcoholics may, as a result of their disease, become less able to perceive the facial expressions of others. This can result in misreading emotional communication, with the result that the alcoholic takes offense where none was given or misses emotional cues. The result can be social isolation, as the failure of empathy ravages the alcoholic's social network.[41]

Affective mirroring can be dangerous. Stanford University School of Medicine has been following eighteen parents whose babies spent substantial periods in the campus neonatal intensive care unit (NICU). The technological atmosphere of the unit, combined with the usually premature birth, dramatic interventions, and the constant flow of bad news conjoined to create post traumatic stress (PTSD) in three parents. Seven others were considered at high risk of PTSD. Fathers were at greater risk of PTSD

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[34] Iacoboni, *Mirroring People*, 87.

[35] Iacoboni, *Mirroring People*, 104.

[36] Iacoboni, *Mirroring People*, 111-12.

[37] Gibson, Lydialyle. "Mirrored Emotion," *University of Chicago Magazine* 98, Issue 4 (April 2006), at http://magazine.uchicago.edu/0604/features/emotion.shtml.

[38] Iacoboni, *Mirroring People*, 110, citing Frank Bernieri's studies of young couples.

[39] Iacoboni, *Mirroring People*, 110, 127.

[40] Bakalar, Nicholas. "Five-Second Touch Can Convey Specific Emotion, Study Finds," *New York Times* (August 11, 2009).

[41] Healy, Melissa. "Study: Alcoholics Can Misread Faces," *Seattle Times* (August 13, 2009).

than mothers, but not until the child was released from NICU.[42] Autism may arise from defects of the affective mirror neuron systems.[43]

Where somatic and affective mirroring remain intact, large scale imitation produces a feedback loop. People imitate, vocalize about it, imitate and transmit the vocalizations, which affects the behaviors of others, which is itself imitated. Cultures emerge. Iacoboni speculates that our capacity to mirror others, and the communal bonds it creates, may be the ground of ethical thought and morality.[44]

COMPLEX MIRRORING. In the frontal lobes, a pocket of mirror neurons exists that differs slightly from the Broca's region and parietal mirror webs. Iacoboni calls these mirror nets "super mirrors."[45] "Complex" mirroring involves mimicking higher level human behavior than mere gestures. Ap Dijksterhuis ran a super-mirror test involving three groups. The first group was asked to think about characteristics of college professors. The second group was asked to think about characteristics of soccer hooligans. A third group was not asked to think about anyone. All three groups were then tested on a series of general knowledge questions. Those who pondered college professors outperformed all. And the control group outperformed the soccer hooligan ponderers. Dijksterhuis concluded that merely thinking about college professors makes one smarter, and ruminating on soccer miscreants makes one less intellectually agile. Mirroring affects the entire timbre of conscious performance.[46]

Iacoboni speculates that the super-mirror neurons of the frontal lobe may carve the sense of individuality out of the primal sense of "us" created by more generalized mirroring. Sometimes, the super-mirrors do not respond at all in mirroring circumstances, effectively shutting down classic motor neuron mirroring.[47] This amounts to an executive command, "Do not imitate that."

D. Families as mirror systems.

We mirror most profoundly our social intimates. Mirroring decreases as one proceeds outward through the concentric social circles that comprise our social lives. At the core of families, mirroring intensely bonds members. Each member occupies an essential component in the family system. Disruptions to any member ripple through the family. Lawyers enter the lives of families with systemic problems. Our individualistic legal obligations may cause us to lose sight of the mirror-intensive effects of legal action upon the entire family of our clients. Any threat to the family system presents a serious problem to every member. And where lies great threat or great promise, the reward or flight monkeys drown out rational enterprise.

E. Mirror neurons in the courtroom.

Family threat is palpable in courtrooms. People dress funny, building distance. The central player in the courtroom drama dresses most strangely of all, in a black muumuu. People speak strangely. Clients do not identify with the language or its non-conversational cadences. Odd rules, of which clients may be little aware, govern proceedings. Clients dislike the players and the room. The issues at stake terrify them: losing control of one's aging life, separating from a partner of decades, access to children, and money, money, money. In the coppice metaphor, client monkeys scream.

Courtroom clients are mirroring. The adversarial process creates combative participants. Clients mimic attorney aggression. Clients shrink at judicial scowling and grumbling. Courts impose settlements,

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[42] Tarkan, Laurie. "For Parents on NICU, Trauma May Last," *New York Times* (August 25, 2009).

[43] Iacoboni, *Mirroring People*, 174.

[44] Iacoboni, *Mirroring People*, 271.

[45] Iacoboni, *Mirroring People*, 203.

[46] Iacoboni, *Mirroring People*, 200-01.

[47] Iacoboni, *Mirroring People*, 203.

with dubious compliance results. Terror suppresses higher brain functions. Clients frequently claim they do not understand what is happening. Our clients grow dumber, weaker, nastier, and less patient than they would be most other days. So do I. So do you, I suspect. Our monkeys insure that result.

Perhaps we should reconsider litigation. Is it conducive to creating good outcomes? Should we enter courtrooms as a last resort, instead of our first move? It is possible to reshape family litigation, to change the structure of guardianship, probate disputes, divorce, parenting modifications, and child support disputes. Current litigation practices disregard the coppice complexities of the mind, preferring a patently false view of the client and attorney and judge as rational independent decision-makers. We may be rational, but only occasionally, and never about matters of emotional import.

The litigation process is our creation, even though we inherited almost all of it. It is ours now, and we can change it if we have the will to do so. New science, as described in this paper, tells us what we already knew—litigation does not well-resolve family disputes. We can construct dispute resolution approaches that reflect understanding of the coppice and mirrors of our brains. We can re-create or amend our practices. We can attend emotional and subcortical realities. We can model empathy, and increase client calm, tamp down conflict, reduce stress, level the playing field, and maneuver clients into a neural state where they can act on reasonable considerations. We can fashion settlements that clients can own emotionally, so that compliance follows without compulsion. We can decline to go on fomenting war, even though our legal tradition is one of battle. We can do better. For our clients. And for ourselves.[48]

IV. FAMILY LITIGATION DANGERS

Family litigation presents dangers, some of which I have discussed briefly, that deserve further scrutiny.

a. Settlement irresolution and fragility.

Litigated adjudications, imposed from the benches, seldom resolve the disputes they purport to address. Every family lawyer in attendance today has many divorces with post-dissolution actions born not of changed circumstances but rather of initial irresolution. Every probate lawyer has sibling disputes that surfaced in administration and simmer (or boil) on, despite final judicial resolution of the probate estate. Every contested guardianship leaves the losing opponent sniping about the care and circumstances of the incapacitated person. It makes little sense to impose solutions on parties who lack the concomitant emotional state to comply with the orders. Such impositions merely insure future contempt actions, noncompliance, and serial litigations. They also insure fractured families, ongoing stress, and terminated relationships.

b. Post-traumatic stress.

Litigation processes alienate and bewilder clients. They can suffer as do the parents of NICU babies. The stakes steal breath, and the outcomes smash hopes. Many suffer PTSD, which can debilitate and threaten life.

c. Secondary post-traumatic stress.

You are not immune. You are empathizing with and mirroring your clients. Buttress your professional objectivity and distance all you want. Mirroring and empathizing is neurologically hard-wired. You are feeling what your clients feel. All clients suffer. Some have PTSD. You can (do?) "catch" it.

Unlike your clients, you do not have one matter in dispute. You do disputes for a living, and drink in the emotions of many persons. If you have secondary PTSD, your suffering is likely to transmit to those of your clients not yet suffering. They are mirroring you.

Small wonder that attorney substance abuse and suicide rates are elevated.

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[48] Here endeth the sermon.

d. Disease.

Persistent stress facilitates disease. Divorcees are twenty percent more likely to suffer chronic health problems than their similarly situated married friends. Ohio State researchers examined immune response correlated with marital stress. Their benchmark was time to heal from small wounds. Married subjects received eight small blisters from a suction cup on the arm. The couples spoke. Some had supportive conversations, but others ended in conflict. Where the discussion entailed conflict, the blisters took a full day longer to heal. Where the conflict was intense, the wounds took two days longer to heal.[49] Litigation creates long-lived stress. It fosters disease.

e. Pessimism.

Persistent stress, and the emotional components of poor litigation outcomes, can cause depression. Pessimism, the shy sister of depression, besmudges life with unrelenting anticipation of distress and misery. Litigation induces pessimism for clients and attorneys alike.

f. Schadenfreude.

Run amok, the stresses of litigation can induce schadenfreude, a German crossover word for taking pleasure in the misfortunes of others, and especially for diminishing the import of their suffering. In the *Wizard of Oz*, the Munchkins reveled in schadenfreude when, skipping with joy, they sang, "Ding dong, the witch is dead. Which old witch? The wicked witch," after Dorothy's Kansas residence crushed the hag. Most attorneys experience schadenfreude, because the long term stress of litigation induces it. Clients need empathy, but continual empathy threatens to destabilize the attorney. A small wall rises, over which empathy crawls, but with a silent prayer for distance, and quiet joy when the client suffers of their defects.[50]

g. Loneliness.

The coppice and mirror research shows that we are wholly social creatures, not so reasonable as we might wish, and possessed by motivations of which we are barely aware or utterly unaware. Because of our hard-wired sociality, the gravest pain that can be inflicted is social ostracism. Our worst criminal penalty, short of death, is solitary confinement. Social connection balances our bodies and minds, salves our pains. To share and be understood begins healing. To be alone for extended periods is to tempt pathologies. Social isolation equals smoking, high blood pressure, obesity, and lack of exercise as a predictor of illness and early death.[51]

Litigation breeds isolation. For attorneys, it means long hours in front of a computer, scrubbing the intellectual toilets of client messes. For clients, family litigation frequently signals the end of critical relationships. Even when an attorney sits among friends, the legal complexities and obligations of confidentiality can reinforce emotional distance.

Loneliness makes one stupid. R. F. Baumeister's team created three classes of subjects. All answered two questionnaires. After pretending to evaluate the questionnaires, the first class, each individually, was told that their futures were rosy. They would have meaningful relationships throughout life. Long, blissful marriage awaited, and friends who care about you deeply. These were the Rosy Belonging folks. The second class was told that their friendship would wither. If they married, it would

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[49] Parker-Pope, Tara. "Divorce, It Seems, Can Make You Ill," *New York Times* (August 4, 2009).

[50] Gibson, *Mirrored Emotion*.

[51] Cacioppo, John T. and William Patrick. *Loneliness: Human Nature and the Need for Social Connection.* New York: W.W. Norton & Company, 2008. At page 93.

end miserably, with repeated failed attempts to find better spouses. The longer they lived, the more alone they would be. These were the Miserably Alone group. The control group was told that they were accident prone, and they would break bones repeatedly in their lives. These were the Clumsy Control people. The team inquired as to the mood of the participants, and then had them complete the General Mental Ability Test of the Graduate Records Examination (GMAT). Predictably, the Rosy Belonging folks performed best, the Clumsy Control group fell next, and last came the Miserably Alone group. Even the *prospect* of social isolation diminishes one's ability to process high level detail.[52]

Western culture propagates isolation. 2004 survey respondents were 300% more likely to indicate they have no one with whom to discuss important matters. Household size has fallen 10% in the last twenty years. Single parenthood has risen from 25% to 33% in the last twenty years. In the last ten years, there has been a 30% rise in people living entirely alone.[53] So, you and your clients are unlikely to get any help with social bonding from American culture.

h. Sociopaths.

Some pathological persons lack the ability for affective mirroring. They live in a perpetual self-focus, and find no need to make a place for others. Empathizing with such persons can create havoc. The social exchange grows one-sided and utilitarian. Client sociopathy (and its weaker sister, narcissism) present dangers to attorneys, and make clients' live social hell.

V. FAMILY LITIGATION DECISION TREE

a. Primary Dispute Resolution.

Attorneys should devote themselves to creating a new model for resolving family conflicts. That model should abandon the adversarial mindset and adopt a negotiations approach. (I have found the Harvard Negotiations Project's little book, *Difficult Conversations*, to be especially helpful. I provide an epitome of that book with these materials, for the time-challenged.) A negotiations model would flee the courthouse and litigation model, employ mental health professionals to help manage the emotional components of disputes, and emphasize education and peacemaking.

Presently, such approaches are characterized as "alternative dispute resolution." This designation presumes that litigation is normative. But litigated resolutions no longer conform to the best science available. Both the coppice model of consciousness and the mirroring evidence predict better outcomes from non-adversarial, emotionally intelligent, low stress, longer term, highly educational dispute resolution processes.

Completing such dispute resolution processes should be ***prerequisite*** to the litigation system. Judges should refuse to consider cases that have not previously engaged meaningful (by which I mean weeks, not hours) non-litigated dispute resolution. Attorneys should educate themselves to be emotionally and socially adept, and seek litigation as an infrequent and last resort. Courtrooms should be reserved for conflict with or between persons with intractable problems of violence, substance abuse, intractable mental illness, or psychological pathology.

Normal people should resolve disputes in facilitated settlement proceedings.

b. Collaboration.

As you have guessed, I am involved with just such efforts. Collaborative law attempts to integrate these insights into its practices. The parties contract to stay out of court. Information exchanges freely. Adversarial thinking and talking are excluded. The professional teams include persons of needed skill sets,

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[52] Baumeister, R. F. and C. N. DeWall, J. J. Ciarocco, and J. M. Twenge, "Social exclusion impairs self-regulation," *Journal of Personality and Social Psychology*, Vol. 88 (2005): 589-604, as reported in Cacioppo, *Loneliness*, 39-41.

[53] Cacioppo, *Loneliness*, 52-53.

most often two collaboratively trained attorneys to help the client think and process proposals, one or two divorce coaches to help the clients achieve emotional stability, a child specialist to educate parents and speak for the children, and a certified divorce financial analyst to organize financial information and project the long term effects of proposed settlement agreements.

Parties proceed in respectful dialogue, which emphasizes balancing power between the parties. All team members are free to propose solutions to the problems confronted, which are conceived as "brainstorms" rather than bargaining positions. The professional team creates a safe place for the disputants to talk and listen. And the professional team speaks freely with one another, with the clients' informed consent to such exchanges. This creates an avenue to address problems the professionals experience in the dispute resolution process. When the parties settle, attorneys draft appropriate instruments, and present the agreed resolution to the court for approval.

Collaboration acknowledges that coppice consciousness teems with subliminal motivations, and makes room to address such problems with a divorce coaching professional. Collaboration accepts that emotional urgencies create most of dispute intensity and attempts to eliminate stressful encounters. Collaboration accommodates clients' inability to think clearly by giving them attorney time and counsel in a structured framework with a large education component. Collaboration addresses human mirroring by modeling collaboration between counsels and all team members. If clients wonder how to collaborate, they can just mirror their team. Collaboration treats dispute resolution as a series of problems to be solved, rather than a war to be fought. Collaboration leaves clients with revised, but intact, relations with their opponent, with their self-respect, and with a settlement to which both sides are committed.[54]

Give up litigating family matters. Litigation harms clients, their families, and you. Introduce collaboration and collaborative attitudes into your practice. Collaboration accommodates the way human brains really work.

VI. RESOURCES

a. Epitome of *Difficult Conversations* (see below)
b. Family Litigation Decision Tree (see below)
c. International Academy of Collaborative Professionals website: collaborativepractice.com
d. King County Collaborative Law website: kingcountycollab.org

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[54] Here recommenceth the sermon.

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EPITOME

Stone, Douglas, Bruce Patton, Sheila Heen. *Difficult Conversations: How To Discuss What Matters Most.* New York: Penguin Books, 1999.

Douglas Stone studied law at Harvard Law School, where he worked for ten years in the Harvard Negotiation Project. Bruce Patton co-founded the Harvard Negotiation Project, and teaches negotiation at Harvard, from which law school he also graduated. Mr. Patton co-authored *Getting to Yes*. Sheila Heen lectures at Harvard in negotiations and writes on conflict management and communications.

Introduction. Difficult conversations are those you find difficulty having. Whether you avoid or engage the talk, you run risks. You cannot soft-pedal a difficult conversation. Tact is not what's missing. The Harvard Negotiation Project has helped thousands make such conversations more productive and less stressful. Everyone has a difficult conversation to have.

I. The Problem.

Chapter 1: Sort Out the Three Conversations. Difficult conversations share underlying structure: 1) factual, 2) emotional, and 3) meaning. Talk about the facts frequently bogs down in the assumption we know the truth, we know another's intentions, and we can assess blame. Disputed facts seldom make conversations difficult; rather, conflicting perceptions, interpretations, and values cause the problem. We do not know the intention of others, unless they tell us (and then they may still be wrong). Blame deflects people from understanding causes and making changes. Difficult conversations are mostly about feelings. Meaning in conflict usually touches identity: who am I and who are we together? Fears and anxiety about these answers may cause you to become

unstable, which impedes constructive conversation. Avoid persuading or coercing. Seek understanding the other's viewpoint. This will foster openness. Difficult conversations can be opportunities for learning about another person, rather than an argument.

II. Shift to a Learning Stance.

The "What Happened?" Conversation.

Chapter 2: Stop Arguing About Who's Right: Explore Each Other's Stories. Arguing fails. We think, "You are causing this problem," and so assert, impute, and blame. As we do so, the other person does the same. Each person's story makes sense, within their own framework. We tend to trade conclusions rather than comprehend the reasons beneath assertions. Insisting on change makes that very change less likely. People have perspective; they see the world in their own way. Each has information, interprets that data, and draws conclusions. But we have different information, because we tend to notice and ignore different things. And both parties lack all the relevant information. Assuming we know all that is needed is a problem; assume you need to learn critical information from the other party. Our interpretations of experience depend on past experiences, and those experiences form rules we live by. The conclusions we draw from interpretation of experience reflect self-interest. We have ample reason to be humble about how right our version of any story may be. Instead of arguing about our certainties, we are well served by choosing a stance of curiosity—toward the other, and toward ourselves. There are parts of our own story we know poorly. Accept both stories, even in their conflicted facts. This is the "And Stance." Understand the other's story. Use your imagination to stand in their shoes.

Chapter 3: Don't Assume They Meant It: Disentangle Intent from Impact. In argument, people frequently think they know the other's intentions. They don't. We assume intention from negative impact on us (though we tend to give ourselves a break under similar circumstances). One may occasionally encounter a bad actor, one whose intentions are bad, but seldom. If we assume bad intent, we frequently proceed to impute bad character, which, when the other hears our view, generates defensiveness. That affects how the other treats us, and not for the good. Once the other explains his good intentions, he frequently believes that his good intentions sanitize his bad impact and hurt will automatically subside. It doesn't. Further, having some good intentions does not mean one does not simultaneously have poor intentions. Our motivations are complex. To avoid all this, *disentangle impact from intent*. 1) Clarify for yourself what happened, its impact on you, and your hypothesis about the other's intention. 2) Tell the other what happened, its impact on you, and your hypothesis about why they did what they did. Ask their intentions. 3) Expect some defensiveness. If you are the person being talked to, tolerate accusations so you can plumb the feelings of the other person. Explain your motivation/intention, then openly reflect on the other possible motivations that might explain your actions.

Chapter 4: Abandon Blame: Map the Contribution System. Blame reduces an errant person's ability to change the errant behavior by making them fearful of consequences. Contribution examines the contribution of each player to failure and asks how to change so a negative outcome does not again occur. Blame is costly; it makes people less forthcoming, and resistant to needed change. Blame frequently misses the system interactions that created the entire problem. Mapping contribution to problems does not mean avoiding your feelings, or focusing only on your own contribution, or blaming the victim. We frequently contribute to problems by 1) avoidance, 2) being unapproachable, 3) our pasts intersecting with another's past in incompatible ways, and 4) dysfunctional roles we play. If you cannot find your contribution, reverse roles or seek objective perspective. Find a balanced view of contribution. Shifters think they did not contribute to a problem. Absorbers think only their contribution to a problem mattered. Admit your contribution early in conversation. Encourage the other to find their contributions. Be clear in your explanations and explicit about what you and the other person should do differently in the future.

The Feelings Conversation.

Chapter 5: ***Have Your Feelings (Or They Will Have You)***. Feelings are powerful and are expressed whether we want to or not. Bottled feelings poison relationships. Difficult conversations must address feelings. Frequently, feelings are the substance of the problem. Avoided, they leak (or burst) into conversations. Also, unexpressed feelings block effective listening. Share your feelings with skills. Start by 1) sorting your feelings, 2) negotiating with your feelings, and 3) sharing feelings (not judgments). To sort feelings, first you have to find them. Learn the contours of your own emotions. Recognize that feelings are normal, good people have bad feelings sometimes, your feelings are as important as those of others, "simple" feelings often need unbundling, hidden feelings can mask other feelings, and accusations hide strong feelings. Negotiate your feelings by amending your thinking. Reassess the facts, look into your assumptions, map your contribution to the problem. Your feelings will shift toward openness. Once identified, express feelings carefully by a) putting them into words because they are important, b) speaking of their full spectrum (not just anger, but anger, shame, uncertainty, longing), and c) don't evaluate your (or the other person's) emotions. Just listen without judgment or monopolizing. After expressing the emotions, the other party must acknowledge that your emotions are important to you and have been heard.

The Identity Conversation.

Chapter 6: Ask Yourself What's at Stake. Difficult conversations confront others, but also us. Our identity is challenged. Common identity issues are: 1) competence, 2) goodness, and 3) lovability. Identity struggles define life and growth. They cannot be avoided, and are frequently painful. To cope better with the identity struggles in difficult conversations, a) avoid all-or-nothing thinking (I am competent or I am not competent), b) avoid denial, c) avoid hyperbole, and d) avoid letting criticism serve as the only information defining you. Ground your identity by knowing your identity issues and accepting yourself: mistakes, mixed intentions, and contribution to problems. Ultimately, for every problem in one's life, each actor makes a contribution, for good or ill or both. Life and behavior are just that complex. To regain balance when your identity is shaken, i) don't try to control the other person's response, ii) prepare for their likely response, iii) get perspective by thinking of yourself months or years in the future, long after the conflict has subsided, and iv) take needed breaks. Remember that the other person is simultaneously having their own identity struggles with the conversation. Consider raising the issue expressly.

III. Create a Learning Conversation.

Chapter 7: What's Your Purpose? When to Raise It and When To Let Go. Which difficulties warrant having a difficult conversation? There is no right answer; attempt to think clearly. Process the three issues: feelings, identity, and distortions or gaps in your perception. Avoid difficult conversations if: 1) the real issue is inside you, 2) the problem is better solved by changing your actions than talking, or 3) your purpose in having the conversation is not clear or achievable. Conversations may fail if a) you want to change the hearer rather than influence him, b) sacrifice long-term benefit for short-term peace, or c) you hit-and-run. Give important conversations substantial time. Some relationships cannot be saved. One must let them go. This is a complex process, different for each person. Some liberating ideas: i) You do not have to fix things, just do your best, ii) the other person is probably struggling too, iii) this conflict is not who I am, and iv) letting go does not mean you do not care. In the difficult conversations you decide to have: 1) learn the other person's story, 2) express your thoughts and feelings, and 3) work on solving the problem together.

Chapter 8: Getting Started: Begin from the Third Story. Don't start a difficult conversation inside your view. The other side thinks that your view is the problem, not the solution, and it triggers defensiveness. 1) Start in the third story, the story an objective third-person might tell, for example, a mediator. Mediators characterize the parties' stories as different, not right or wrong, better or worse. 2) Invite the other person to reach mutual understanding and engage in problem-solving. Make the other a partner in solving the problem. Be persistent. When delivering bad news, say the bad news up front. If asking for something, do not demand. Invite an exploration of an idea. If past conversations have gone wrong, talk about how to talk about the topic. Use this map for difficulty conversations: 1) third story (objective), 2) their story (facts, impact, contributions, feelings, identity), 3) your story (facts, impact, contributions, feelings, identity).

Chapter 9: ***Learning: Listen from the Inside Out***. Humans need to be heard. Listening well helps others listen to you. Good listening is authentic; the listener says "I need to understand," not "I understand." Skills of good listening: ask questions, paraphrase, repeat, acknowledge, sit attentively, and keep eye contact. None of this will matter, if the other does not believe you care and are genuinely curious. Authenticity is critical. Listen to your internal voice: be aware of it, negotiate with it, and occasionally stop the difficult conversation if you find your internal voice too loud to continue. **Inquire**. Avoid rhetorical questions, and questions intended to make a point. Use open-ended questions, and follow up for more information. Invite the other to answer; do not demand. **Paraphrase**. Paraphrasing lets you check your understanding of what the other is saying, and lets them know they have been heard. **Acknowledge**. Every person wants to have his or her feelings acknowledged. Acknowledge what the other is feeling before problem-solving. Acknowledging another's feelings is not agreeing with them. The empathetic listener struggles to understand another from that person's perspective.

Chapter 10: ***Speak for Yourself with Clarity and Power***. Self-expression begins internally. One must negotiate with yourself that your views and feelings are as important as those of others and deserve to be heard with respect. We can sabotage ourselves by trying to speak without doing our best. Failure to express yourself precludes important relationship. If you struggle to express yourself, it is something to work on. Start with what matters most to you, what lies at the heart of the matter and what is at stake. Speak directly; don't sidle up to the point or ease in. When you have complex feelings or perceptions, state each, despite their conflict. Don't leave pieces out. To be clear: 1) avoid stating your view as truth, 2) share the basis of your view: information, experiences, interpretations, and 3) don't exaggerate frequency. Avoid "always" and "never." Help your listener. Try to give them your story in a manner that works for them individually: visual, auditory, charts, metaphors. Ask for paraphrase. Ask how and why they disagree. Confidently express your own story.

Chapter 11: ***Problem-Solving: Take the Lead***. Take the lead in difficult conversations. Reframe unhelpful expression. Reframe truth statements as different stories. Reframe accusations into intentions and impacts. Reframe blame as mutual contribution. Reframe judgments and characterizations as feelings. Reframe "what's wrong with you" statements as "what's going on for them" statements. Choose the "And Stance." Validate the other's view, and explain the importance of your own. If the conversation gets stuck, listen. Persist in listening. Stubbornly hear the other and seek to be heard. If nothing works, name the dynamic that is happening. Say something like, Each time we get to this point we seem to get stuck. I feel like you get angry and divert the conversation. To solve problems, 1) recognize each tries to persuade the other to agree, 2) suggest a fair test to divergent assumptions, 3) say why you remain unpersuaded, and remain open to being persuaded, and ask what

would persuade them, 4) ask the other's advice. Do joint brainstorming about difficult issues. If no solution is reached, ask what standards ought to guide such an issue. People's differences make compromise necessary. Finding solutions that accommodate both parties affirms the fundamental principle of mutual caretaking. If no agreement emerges, be clear about the choices you are making and be willing to accept the consequences of your decisions. Most difficult conversations are really a series of conversations.

Chapter 12: ***Putting It All Together***. Prepare for a difficult conversation: 1) Imagine What Happened?, Feeling, and Identity conversations. Your confidence about knowing the other person's viewpoint should be shaken. 2) Decide whether to have the conversation. 3) Start with the objective viewpoint of a mediator, framing the problem. 4) Explore both stories. Reframe as needed to keep the talk constructive. 5) Brainstorm solutions. Address issues sequentially, if possible. If no agreement, address standards for what a solution should look like, with mutual caretaking in mind. Keep communication open.

FAMILY DISPUTE DECISION TREE:
PDR: PREFERRED DISPUTE RESOLUTIONS

Respectful Dialogue and Difficult Conversations.

If tensions exist, teach respectful communication and how to have difficult conversations.[55]

Family Systems Therapy.

If a dispute is emerging, refer to family systems therapy.[56] Refer individual members to individual therapy, as needed.

Informal mediation.

If a dispute has flared into express disagreement, involve respected opinion leader (pastor, rabbi, family friend, elder) to mediate.

Professional Facilitative Mediation.

If informal mediation fails, meet with professional facilitative mediator[57] for a multi-meeting series.

Collaboration.

If facilitative mediation fails, form a collaborative team[58] to protect and support the disputants as they work out a compromise. Expressly decline to litigate.

Shuttle Mediation.[59]

If collaboration fails, a shuttle mediator gently pressures the disputants to settle. Here, agreement of the parties becomes increasingly unlikely.

Cooperative Litigation.[60]

If shuttle mediation fails, one enters the court system. Preferring low conflict, non-inflammatory approaches, cooperative litigators help preserve family integrity. Agreement of the parties is possible, but unlikely.

Litigation.[61]

If the disputants cannot settle cooperatively, then adversarial litigation ensues. Litigating families are likely to suffer permanent damage. Agreement of the parties is unusual.

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[55] See epitome of Difficult Conversations above.

[56] See Taylor, Alison. *The Handbook of Family Dispute Resolution: Mediation Theory and Practice.* San Francisco: Jossey-Bass (2002).

[57] "Facilitative mediation" entails face-to-face meetings in which the goal is improved communication and transformative insight, leading to settlement of particular issues.

[58] A "collaborative team" entails face-to-face meetings with a team of professionals, including two attorneys, a coach with social/psychological training to help the disputants address their emotions, and a financial specialist (if pertinent) and a child specialist (if pertinent). The parties work out terms of settlement, and agree to do so outside the litigation system.

[59] In "shuttle mediation" the mediator travels between the separate rooms in which she meets with the disputants. The emphasis is on keeping emotions low and settlement pressure high. This is "litigation lite."

[60] "Cooperative litigation" differs from normal litigation in attitude. Every effort is made to reduce disputant tensions, to avoid nuclear positions, and to make only proposals calculated in good faith to promote settlement.

[61] Litigation processes disputes per the rules of civil procedure. In family matters, litigation seldom resolves disputes, but rather insures disputant dissatisfaction and future rounds of contention and litigation.