The Psychology of Hate Crimes as Domestic Terrorism

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A Constructivist Epistemology of Hate

Milton J. Bennett

I claim that the most central question that humanity faces today is the question of reality. And I claim that this is so, regardless of whether we are aware of it or not, because everything that we do as modern human beings, either as individuals, as social entities, or as members of some non-social human community, entails an explicit or implicit answer to this question as a foundation for the rational arguments that we use to justify our actions ... and that this question can be properly answered only if observing and cognition are explained as biological phenomena generated through the operation of the observer as a living human being. (Maturana, 1988a, p. 25)

All organisms behave, but, as far as we know, only humans also explain behavior. Organisms routinely destroy other organisms for various reasons, but only humans ask *why*. One answer is "hatred." Clearly it is not necessary to hate another organism in order to destroy it, but the idea is commonly invoked as an explanation for human violence. Has this always been the case with us humans? Or is "hate" (and other explanations of behavior) some kind of evolutionary adaptation? If so, what kind of evolution is involved in the development of explanations, and how might they serve to support individual and/or species survival? In other words, what are some of the epistemological roots of "hate" and what are some of the ontological¹ consequences of constructing such an explanation?

The Context of Constructivism

This chapter includes some original observations and references to sources that are uncommon or controversial in current social science, so I will begin by defining its conceptual territory. "Constructivism" is used here to refer to the epistemological position in which human observers are necessary for knowing, and thus, we are necessarily participants in the construction of knowledge, both individually and collectively. The position has roots in sociology (e.g., Berger & Luckmann, 1967), psychology (e.g., Kelly, 1963; Watzlawick, 1984), linguistics (e.g., Lakoff & Johnson, 1999), pedagogy (e.g., Piaget, 1954; von Glasersfeld, 1995; Vygotsky, 1978), communication theory (e.g., Bateson, 1972), and, of course, the philosophy of science (Kuhn, 1967). In another work (Bennett, 2013a), I have suggested that constructivism is the reading of quantum mechanics (particularly the Copenhagen school) into social science. As such, constructivist epistemology contrasts with traditional systems theory, which can be seen as a reading of Einsteinian relativity into biology and social science, and with much of traditional sociology and psychology that depends on Newtonian assumptions of causality.

Variations on the idea of constructivism include "constructionism," a position association with symbolic interactionism in sociology (Goffman, 1974; Mead, 1934) and experiential learning in education (Dewey, 1960; Papert & Harel, 1991). *Constructionist* writers tend to avoid taking an ontological position, leaving unanswered the question of whether there is an absolute reality underlying our necessarily interpretative understanding of it. Instead, they focus on the social construction of knowledge, sometimes with the political agenda of deconstructing the power dynamics of such constructions (e.g., Derrida, 2007; Foucault, 1984). *Constructivist* writers, on the other hand, tend to treat reality itself as a construction of human perceptual discrimination and its metaphorical elaboration in shared language (Bennett, 2013b; Phillips, 1995).

The form of constructivism that addresses ontological issues most forcefully is variously termed "radical constructivism" (von Glasersfeld, 1995), "cybernetic constructivism" (Foerster, 1984), or "autopoiesis" (Maturana & Varela, 1992). In the radical (root) constructivist view, reality is both experienced and understood as an ongoing co-ordination of organism and environment. Here is a statement of that position by von Glasersfeld (2002), in reference to Piaget's constructivist departure from traditional evolutionary theory:

In the theory of evolution, the biological living space of each organism is hemmed in by the limits entailed by its physiological make-up and by the obstacles presented by its environment. Both these are given conditions over which neither the individual nor the species has control. In contrast, in Piaget's theory of cognition, a relative, labile equilibrium is possible only in the space generated by the active avoidance of, or continual compensation for, perturbations. The conceptual difference between the two essentially parallel theories resides in the source of the restraints. On the biological level the factors that limit survival are in no way determined by the organism itself. On the cognitive level, however, perturbations that impede equilibrium spring from the mutual incompatibility of goals the organism has chosen and/or of the means used to attain them. (p. 10)

In cybernetic constructivist terms, explanations of traditional evolution are first-order cybernetic events—they seek to explain how selfcontrolling systems adapt to changing environments. Second-order cybernetic explanations seek to explain how observing systems (such as human beings) interact with their observations to generate adaptation.

The criterion of constructivism is the degree of inclusion of the observer into that which is observed. Insofar as the observer is assumed to be separate from the observation, it is possible to make the Newtonian assumption objects of observation have an objective existence—that all observers looking in the same direction will see the same thing, so to speak. An interim position is the Einsteinian assumption that an absolute reality might exist, but our view of it is necessarily constrained by our perspective (contexualized observation). In the full-blown constructivist position, the observer becomes part of the observation (but not all of it—this is not a solipsistic position). By being part of the observation, all explanations must be to some extent recursive, or self-reflexive; that is, they must include the act of explaining as part of the observation. Here is the idea stated by Maturana (1988a):

The praxis of living, the experience of the observer as such, just happens ... Because of this, explanations are essentially superfluous; we as observers do not need them to happen; but when it happens to us that we explain, it turns out that between language and bodyhood the praxis of living of the observer changes as he or she generates explanations of his or her praxis of living. This is why everything that we say or think has consequences in the way we live. ... (p. 27)

In this chapter, I will explore the constructivist idea that explanations of behavior (including the explanation of *hate*) are consequential for the reality of violence, and that we can only address manifestations of violence by understanding how we have been and continue to be changed by our

explanations of that violence. This idea derives from the intriguing hypothesis posited by Jaynes (1976) that consciousness (in the sense of self-reflexive awareness) is a relatively new co-evolutionary adaptation unevenly distributed and fitfully practiced by human beings. An implication of this hypothesis is that some of the major geopolitical differences in how violence is explained may be attributable to how consciousness is evolving differently among different groups of people. I will return to this idea in the last section of the chapter.

The Recency of Consciousness

In 1977, at the beginning of my academic career, I read a book that profoundly influenced my understanding of consciousness, culture, and communication. In preparation for writing this chapter, I reread the book with the perspective of nearly four decades of work on those topics, and it still strikes me as a significant insight into human experience—including the experience of hatred and its explanations. The book is *The Origin of Consciousness in the Breakdown of the Bicameral Mind* by Julian Jaynes (1976). In this section, I will explore Jaynes's hypothesis that self-awareness including the capability of considering individual motivation—is a relatively recent human evolution. I will consider the implications of this possible newness of consciousness on what we now refer to as "critical thinking," including the analysis of behavior such as domestic terrorism and hate-motivated crimes.

Jaynes' idea of consciousness (self-reflexive awareness) as a form of adaptive behavior is consistent with contemporary treatments of the topic by evolutionary psychologists (e.g., Dawkins, 1989; Dennett, 1991). However, Jaynes takes the unique position that this kind of consciousness is a relatively recent development, dating from 3,000 to 4,000 years ago or about the time of early Mesopotamian society. Prior to that time, people did not routinely think of themselves as individual actors but rather as what we might today call "manifestations of group consciousness." With this phrase I am calling attention to the depth of Jaynes' assertion. He is not simply referring to "collectivism" as that idea is used today (Kim, 1995). People in collectivist societies are able to perceive themselves as individuals and actors, but they more or less reject "self-reliance" in favor of interdependence with the group. Jaynes is saying is that people *did not perceive themselves as individuals and actors at all.* At that time we all lacked a selfreflexive context—we had not yet created the concept of "self."

To understand this condition, we need to do something that Jaynes advocates throughout his book: we must assume that our ancestors were profoundly different from ourselves. As I have pointed out frequently in my own intercultural work, the "assumption of difference" demands an empathic shift of context (Bennett, 1979). In this case, rather than shifting from one contemporary cultural context to another, we need to shift temporal context. As with other kinds of empathy, the shift involves making an alternative set of epistemological assumptions to generate a "facsimile world view." By temporarily adopting the alternative worldview, one can briefly experience the world "as if" the experience were one's own.

In this case, we must assume that there is no "we" to do the assuming. Things are not objects of perception, since that would assume a perceiver. Things simply exist. There is no perspective or opinion regarding things, since that would assume a point of view, or an agent. There is no self-awareness (or self-concept, or self-doubt, or self-esteem, etc.), since there is no concept of self to begin with. Individuals may have peculiarities, but they do not have identities. In a way, this is the "object-less" (and thus self-less) state of some zazen meditation practices (Suzuki, 2011). But importantly, the condition Jaynes is describing was not a suspension of active consciousness—it was itself the entirety of awareness.

Jaynes points out that most organisms operate successfully without a concept of self. They orient and adapt to environments and communicate among themselves without needing to see themselves as agents of their behavior. The idea of a "self" as we understand it in current human terms was (is?) really not necessary to species survival. And, apparently, for most of human history, people were born, acquired competencies, and passed on knowledge to later generations, all without self-reference. According to Jaynes, the initial unique quality of human beings was not consciousness—it was language.

The idea of language as a human evolutionary adaptation is fairly common (e.g., Chomsky, 1965; Pinker, 1994). And other organisms such as hive insects also communicate with symbolic references (Dyer, 2002). However, Jaynes argues that a particular quality of human language allowed human organisms to coordinate themselves in larger groups than could other complex organisms such as apes, and that the larger group gave humans a major competitive advantage. Packs, hives, or troops use a rudimentary forms of communication in which there is a set code that allows a behavior to stand for (symbolize) something else. For instance, a bee's dance can signify food in a particular location from the nest (Dyer, 2002). Humans also use language for this purpose, but in addition they can use language metaphorically (Lakoff & Johnson, 1980, 1999). Metaphors allow us to generate new concepts: to conceive, for instance, that a circle of people is like a net, and that it could be slowly tightened in order to trap a prey.

In Jaynes' (1976) words, "The grand and vigorous function of metaphor is the generation of new language as it is needed, as human culture becomes more and more complex" (p. 49).

For the empathic exercise at hand, it is crucial to think of metaphoric language as a shared code, not as an individual instinct. In other words, human language did not (nor does it now) reside in individuals. Language exists in the interaction among people, as initially stated by Edward Sapir (1958) below and expanded by Benjamin Lee Whorf (1956):

We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation. (Edward Sapir)

We dissect nature along lines laid down by our native languages. The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary, the world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds—and this means largely by the linguistic systems in our minds. We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it this way—an agreement that holds throughout our speech community and is codified in the patterns of our language. (Benjamin Lee Whorf)

Both Sapir and Whorf emphasize the community aspect of language (highlighted in bold), which is consistent with the role Jaynes hypothesizes for language in early human development. In other words, language did not need the concept of "self" or "individual" to work. Language was simply the codification of a community agreement to coordinate itself in a particular way.

It is interesting that many strong critics of the Whorf or Sapir hypothesis (such as Pinker, 1994) are also proponents of language as a natural attribute of individuals. They criticized Sapir and Whorf for "linguistic determinism"—the idea that language caused individuals to perceive in certain ways. Indeed, it is easy to find examples of human perception that is inconsistent with particular syntactic or semantic conventions of a particular language (Berlin & Kay, 1969). But, in fact, Sapir and Whorf were never actually speaking about individuals at all. They were referring to an entirely group-based phenomenon of using metaphoric structures (what we would now call "memes") to coordinate communal behavior. That is, they were positioning their observations about language at a group level of analysis, while their detractors were leveling their criticism from an individual level of analysis (see Bennett, 2013a, pp. 13–16, for a discussion of levels of analysis in the context of language and culture).

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Further, Whorf and Sapir illustrate the constructivist idea that how we conceptualize (facilitated by how we "language") is part of our experience of reality. This aspect of their work has been noted by the contemporary cognitive linguist George Lakoff (1987) in his effort of resurrect linguistic relativism from years of being misunderstood by positivists:

Whorf was right in observing that concepts that have been made part of the grammar of a language are use *in* thought, not just *as objects of* thought, and they are used spontaneously, automatically, unconsciously, and effortlessly ... I am convinced by Whorf's arguments that the way we use concepts affects the way we understand experience. ... (p. 335)

The reason for dwelling on the group-level functioning of language is because it is unusual in modern times to think of language in this purely distributive way. An exception mentioned above is the idea of "memes," a term coined by Dawkins (1989) to refer metaphorically to the evolutionary function of ideas. He suggests that, like the self-replicating physical structure of a gene, ideas can self-replicate in groups to become part of the group's adaptive repertoire. It is precisely this quality of language that Jaynes suggests was the glue that allowed relatively large groups of selfless humans to coordinate themselves for evolutionary advantage.

Of course, the major proponents of evolutionary advantage these days are the evolutionary psychologists and other proponents of the "Darwinian paradigm" (Wright, 1994). Beginning with E. O. Wilson's seminal work on sociobiology (1975), evolutionary psychology has applied the idea of adaptation to an increasingly broad range of human behavior. Of particular interest to the topic of this chapter are applications to sociology and criminality such as those made by Walsh (2006). Consistent with the contemporary mainstream of environmental psychology, he makes the case that "biological" is not the same as "genetic"—that variation in biological condition is just as likely to be due to environmental factors as to genetic factors. The important point is that behavior should be understood as adaptive in biological terms. In this particular tenet, environmental psychology is not different than the assumption of constructivist autopoeisis made by Maturana (1988a). The constructivists, however, add the idea that we observers are the ones creating the explanation—the "story," as Steven Jay Gould (1978) once controversially called it. This allows the constructivists to both acknowledge the biological roots of behavior and to incorporate the narratives of observer and actor as factors in adaptation. A contemporary example of this approach to hate crime can be found in the personal construct analysis of Anders Behring Breivik's "declaration" that preceded his bombing and murder rampage in Norway (Winter & Tshudi, 2015). In this chapter, I agree with Winter and Tshudi that understanding the story we have about why people behave as they do and, perhaps more importantly, the story people have about themselves and their behavior, is a "perquisite for preventative and restorative strategies" (p. 139).

So, if people had language but not a sense of self, how would communication be experienced? The answer Jaynes gives, somewhat disturbingly, is that people heard voices. Stay with me, here. Human beings do hear voices that are not associated with other real people talking, perhaps more frequently than we might expect. And the phenomenon is not simply a symptom of some forms of schizophrenia. According to one meta-research study (Beavan, Read, & Cartwright, 2011), roughly 13 percent of subjects in various studies (adjusted for differences in methodology, culture, definitions, etc.) reported hearing voices, not necessarily associated with any mental illness. Another study directly motivated by Jaynes' hypothesis found 71 percent of a population of 375 university students had heard disembodied voices such as their own thoughts (39%), the voice of God (11%), or other "conversations," none of which were associated with mental health problems (Posey & Losch, 1983). The phenomenon is explored in scholarly depth by McCarthy-Jones (2012), and websites such as that of the International Hearing Voices Network attest to its ongoing popular relevance.

Jaynes assumes that the modern phenomenon of auditory hallucination is a residuum of an earlier time when language was not experienced as an exchange among individuals. "Languaging" was simply a behavior like other behaviors such as sleeping or eating. In routine situations, languaging was used to coordinate relatively complex situations such as crop management or team hunting. In nonroutine or stressful situations, Jaynes suggests that the group language was experienced by individual people as an authoritative voice providing direction for action. Leaving aside the neurological mechanism he suggests for this (the "bicameral mind"), the important point for our purposes is that complex actions could be coordinated in a large group without any concept of human agency. What people heard were "voices of the gods," and they were infallible and omnipotent. One did not decide whether to obey or not, since there was not yet the concept of a decider. We fashioned images of these gods (often with their mouths open, as if speaking) or preserved the bodies of god-kings, thus providing a localization of the communal voice. While most of the evidence Jaynes brings to bear on this assertion is more or less "Western," he includes enough observation about other world regions to support speculation that this was a transcultural phenomenon.

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So we did what we did, including smiting each other to death, without a second thought. We did not kill others because we hated them, but because we were directed to do so by the voices. Killing was not taking the life of a person; it was simply doing something that caused something else to change, or stop.

Jaynes suggests that modern-day schizophrenia is the primary remaining example of the bicameral mind. He quotes Eugen Bleuler (1950) about the lack of agency evident in schizophrenic patients:

...conscious feelings rarely accompany the automatisms which are psychic manifestations split off from the personality. The patients can dance and laugh without feeling happy; can commit murder without hating; do away with themselves without being disappointed with life ... the patients realize that they are not their own masters. (p. 423)

In this sense, schizophrenia is a failure to create the concept of self the failure to depart from the normal state of our ancestors. It apparently is not difficult to recreate this state in controlled conditions. For instance, in his famous experiments on obedience, Stanley Milgram (1963) demonstrated that a large majority of people would obey an authority figure's instruction to deliver ostensible shocks at a "dangerous" level to human subjects—despite the fact that they commonly expressed hesitation and anxiety. In other words, most people were willing to suspend their selfdoubts in the face of a powerful, authoritative voice. In his study of the Milgram experiments, Charles Hampden-Turner (1970) supports this interpretation:

...the obedient subjects displayed an extraordinary disassociation between words and acts. Some would laugh unaccountably and uncontrollably while administering torture, but nearly all kept up a running commentary on their own compassion and good intentions. "He's getting hurt. I'm stopping this." "No sir – I'm not going to kill that man." "What about his bad heart?" "I'm not going to give him 450 volts!" But they did, again and again. (p. 105)

More recently, Phillip Zimbardo (2007) reviewed the 1971 Stanford prison experiment in which students who were given the role of guards in a simulated prison suddenly exhibited extremely cruel behavior. In this case, there was no immediate authority figure to voice commands; according to Zimbardo, it was the structure of the situation itself that commanded the behavior.

Birth of the Self

How did our once normal automated communication behavior and response to stress-induced hallucinated commands become a pathological condition, or at least a decried spasm of unconsciousness? One explanation favored by current environmental psychologists (Kurzban, 2011) is that unconscious behavior is not at all pathological. It is simply modularized automaticity—instinctive behavior that has evolved as adaptations to particular environments. Such behavior is not necessarily consistent—changing hierarchical or other situational conditions might elicit different automatic behavior. Leaving aside the evolutionary psychology idea of modules, Jaynes' argument is also evolutionary in that it involves adaptation to a changing environment.

Jaynes suggests that about 3,000 years ago, there were cataclysmic upheavals in the social and physical environment that threw various groups into each other's path. The ones that survived were those that realized that they were hearing different voices than the strangers:

It is impossible to calculate what percentage of the civilized world died in these terrible centuries toward the end of the second millennium B.C. I suspect it was enormous. And death would come soonest to those who impulsively lived by their unconscious habits or who could not resist the commandments of their gods to smite whatever strangers interfered with them. It is thus possible that individuals most obdurately bicameral, most obedient to their familiar divinities, would perish, leaving the genes of the less impetuous, the less bicameral, to endow the ensuing generations. . . . Consciousness must be learned by each new generation, and those biologically most able to learn it would be those most likely to survive. (pp. 220–221)

In other words, the idea of a unique perceiving self became adaptive, in that it allowed people to see how other humans were experiencing things differently—that they were hearing different voices. In so doing, the more conscious individuals may have at least sometimes avoided entering into "kill or be killed," and thus more often survived to procreate.

Jaynes was writing before the concept of meme had been constructed, but I suspect he would have used that term to describe the evolutionary process of developing consciousness. Remember that he attributes consciousness to the ability of language to create metaphor. In their work on the metaphorical roots of language, George Lakoff (1987) and Mark Johnson (Lakoff & Johnson, 1980, 1999) have paralleled and extended Jaynes' observations about how language builds itself. Beginning with simple denotations of physical bodies and other objects, metaphorical connections are made to more abstract concepts. For instance, the ideas of "inside" and "outside" as applied to groups are metaphorical extensions of our skin boundary. "Moving forward in time" is a metaphorical extension of facing in one direction or the other, and so forth. My comments below are informed by these sources, but they are my own speculation and are not meant to represent the other authors.

In my reading of Jaynes and others (e.g., Blackmore, 2013; Dennett, 1991; Penrose, Hameroff, Stapp, & Chopra, 2011) on the development of consciousness, there is a tectonic movement from our viewing the world as unknowable *Ding an sich*, to a world dictated by gods and god-kings, to a world caused by natural forces, to a world where the meaning of events rests fundamentally on human authorship. I do not think this is a teleological movement in the sense that there is some ideal end-state toward which we are moving. On the contrary, I suspect we are retroactively describing what Maturana terms "ontogenic drift" (1988b):

A living system while living is necessarily in a dynamic relation of correspondence with the medium through its operation in its domain of existence, and to live is to glide through a domain of perturbations in an ontogenic drift that takes place through the realization of an ever changing niche.

In the case of human beings, we have drifted toward greater mastery of our physical environment by creating more complex social (linguistic) structures. Of course, the social structure of one group is the social environment of another group, so as we dominated nature, we also drifted into an increasingly complex social environment (Rozzi, Hargrove, Armesto, Pickett, & Silander, 1998). Like a river flowing over the landscape, we are carving channels that direct our drift in particular directions for a while, and then shift to other directions as conditions change. In some cases, we may meander among porous channels, adapting quickly to changing constraints. But sometimes we carve a canyon, where our flow is heavily constrained and change of direction occurs relatively slowly.

Metaphoric language is a deep canyon for human beings. Humanity without language is nearly inconceivable, to the extent that language use is usually taken to be the very definition of being human. In other words, language is not so much something we *do* than it is something we *are*. In terms of levels of belief system generated by Daryl Bem (1970), it is a "0-order belief"—a belief that is unquestionable because (1) it has an inherent empirical basis (fire will burn you) and/or (2) it has an unquestionable authoritarian base (mother or god or king) says so. And because the role of language as an adaptation is mostly out of awareness, it is also difficult for us to imagine the products of language as ontogenic adaptive strategies. By "products

of language," I mean the figure or ground distinctions supported by language that fill our world with distinct objects and events. (cf. Brown, 1972). As the general semanticists once argued (Hayakawa, 1990; Korzybski, 2010), the abstract (metaphoric) quality of language tends to become reified into specific things, and then we forget that those things have an independent existence only because our linguistic/perceptual systems distinguish them from the "kaleidoscopic flux" of general activity.

The 0-order belief in reified language is why we sometimes have a fightor-flight response to sticks on the ground. Our perceptual systems are activated not only by snakes but also by sticks and other long objects on the ground that might be snakes. This is not because human babies are born with an instinctual fear of long, narrow things. Infants are apparently only instinctually afraid of heights and rapidly approaching objects (Walk & Gibson, 1960). Instead, it is because infants in places where snakes are a threat acquire the abstract category of "snake" as part of general language acquisition—a figure or ground distinction that inclines them to respond to long things on the ground in general. It probably served us well evolutionarily to have the snake response be at the 0-level; it is better to assume (unquestioningly) that the stick is a snake and be wrong than to pause to consider and be right (but dead).

In the Ding an sich condition of our ancestors supposed by Jaynes, the symbols for things had the same order of existence as the things themselves. Rather than words being used (by an agent) to symbolize things as a modern human could describe, words were like the thing itself-that is, they were metaphors. In the co-ontological relationship of language and reality, language generated figure or ground distinctions that were useful for humans, and once generated, they became things themselves, the legacy of metaphors that humans passed to their children to allow them to continue to organize themselves and the world in adaptive ways. Like "snake," other symbolic metaphors like "mother," or "food," or especially "god" defined broad categories that were immediately evocative. I use these particular terms advisedly, since they may still be among the strongest of reifications. The word "food" can itself initiate salivation, the word "mother" comfort, and the word "god" awe. As I read Jaynes, he suggests that all early language had this quality. Certainly early cuneiform writing systems such as Sumerian (and the remaining example of such systems, Chinese) are consistent with the idea that words were like the phenomena they represented.

As abstractions piled up and become reified, language could more easily refer to itself. For instance, the word *word* derives from Latin *verbum* (*verb*), which in turn is derived from Proto-Indo-European *were*, meaning "to say or speak" (online etymology dictionary, etymonline.com). The movement

is from concrete action to abstract thing, where the thing is a metaphorical extension of the action. So by referring to speaking, "speaking of speaking," so to speak, we construct the idea of "word" as a constituent of speaking—the thing that is being spoken.

The construction of "self" follows the same process. When we attend to our attending, we metaphorically create the thing that is doing the attending, which is "self." However, before we can make this simple self-reflexive loop, we need to have constructed the idea of "attending" itself. This is easily accomplished (in retrospect) by metaphorically extending the joint actions of "giving" and "looking," as in "give it a look," or "pay attention." Then when we pay attention to paying attention—that is, we reify paying attention—we construct the constituent of paying attention, which is "self."

In a nutshell, this is what Jaynes says has been happening for the last 3,000 years. We are reluctantly being drawn into a world in which our own creation of consciousness is transforming the very core of our experience. It is a collective existential crisis, an ontological nightmare. The gods are mostly silent, and the few humans who blatantly claim to hear their voices are either locked up or imprisoned within the walls of cults. Left are the soothsayers who only claim a close relationship with the departed gods, and who offer guidance based on their interpretation of the divine signs. Like children deprived too early of parental presence, we as a species are not particularly self-confident. The offer of connection with our hidden parents is still seductive, and soothsaying is a lucrative business!

We, at the end of the second millennium A.D., are still in a sense deep in this transition to a new mentality. And all about us lie the remnants of our recent bicameral past. We have our houses of gods which record our births, define us, marry us, and bury us, receive our confessions and intercede with the gods to forgive us our trespasses. Our laws are based upon values which without their divine pendancy would be empty and unenforceable. Our national mottoes and hymns of state are usually divine invocations. Our kings, presidents, judges, and officers begin their tenures with oaths to the now silent deities taken upon the writings of those who have last heard them. (Jaynes, 1976, p. 317)

The irony pointed to directly by Jaynes is that our attempt to avoid the responsibility that we have created for ourselves is killing us. In our preconscious condition, we could survive and even thrive in a world in which our language-based group coordination gave us a competitive edge. Perhaps wholly or partially because of that success, we were forced into confrontation with other groups of preconscious humans, and only the more conscious survived. But the evolutionary adaptation of consciousness comes at a high cost—the loss of the gods and their emissaries, the god-kings. In our desperate attempts to resurrect their guidance, we risk recreating the cataclysmic social conditions that killed the gods (and many of us humans) in the first place.

Violence and Fitful Consciousness

With the idea of consciousness as a recent and still fitful evolutionary development, we can consider explanations of violence in some innovative ways. I began the chapter by suggesting that all organisms, including humans, routinely destroy other organisms for various purposes. Human consciousness allows us to reflect on our violent behavior—to consider why we destroy other organisms. Some explanations are obvious and straightforward: We kill animals (or plants) so we can eat and procreate, and we kill predators, bacteria, virus vectors, and a host of other organisms that might kill us. While the Jains of India and some vegans might object to the justification for this violence, it is not difficult to make a basic survival case for the actions.

But what about killing each other? Why do we do that? Perhaps in some cases we are responding to existential threats, but not nearly as often as claimed. The kill or be-killed scenario romanticized by the National Rifle Association to justify gun ownership is apparently quite rare, compared to the number of accidental or circumstantial deaths attributable to the defensive weapons themselves. The various domino wars fought in just my lifetime have mostly turned out to be, in the words of von Clausewitz, extensions of politics by other means. Win or lose, we quickly became friends and trading partners of our former enemies. Still, the rationale remains that personal or systematic violence might be just another case of killing in order to survive.

The original form of intraspecies violence was probably group versus group, as evidenced in numerous observations of ape and chimpanzee attacks (Ghiglieri & Bilmes, 2000). This is consistent with Jayne's observation that early man was in fierce competition with other groups of hominoids and protohominids. Initially, such competition would not necessarily have been for limited resources. It could simply have been because the other group generated some kind of stress, perhaps just by being an interruption in routine behavior. Under those conditions, the voices of gods or god-kings would instruct people to kill the other group. No other motivation was necessary.

There is an interesting possibility that we could observe these original forms of violence in modern-day cults. As I have defined it in earlier research (M. Bennett, 1997), cults are groups characterized by relatively

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impermeable boundaries, rigid roles, and charismatic leadership. The belief system of such groups is unimportant; the definition can be equally applied to traditional or "new" religions, political ideologies, or spaceship visitations. Nearly all the groups practiced the erasing of self-concept, frequently through food and sleep deprivation, disorientation, and other "brainwashing" techniques. The literature on cults—frequently written by former members—shows that it was fairly common for hard-core members to experience auditory hallucinations of their leader's voice giving commands. In other words, it appears that cults emulate, to some degree, the conditions of non-conscious human groups controlled by god-kings.

Taking a well-known example of cult behavior—Jim Jones' Peoples Temple—we can see what non-conscious violence might have looked like. First, people were encouraged to consider the group as their primary family. Eventually all ties with external family members were severed—a technique also use extensively by the Unification Church (Moonies) in its heyday. People in the group were told repeatedly that they were the chosen ones—also a technique used by too many mainstream and cult groups to mention. The combination of isolation and exaltation created an ongoing altered (i.e., suspended) state of consciousness. People were actively encouraged to eschew any sense of individual self and to meld into the group consciousness. In other words, Jim Jones along with many other cult leaders was very good at simulating the conditions described by Jaynes as typical of our preconscious ancestors.

Reports of real or imagined violence were quite common in my study of cult groups. As the boundaries of the group became more impermeable, behavior in the group moved toward entropy—that is, it became crazy. In nearly all cases this included at least some paranoia. In many cases, weapons were amassed as a precaution against attacks from the outsiders. If such an attack actually occurred (as it did with the Branch Davidians in Waco, Texas, in 1993), the result was usually catastrophic—a fulfillment of apocalyptic prophecy almost certainly ending in violent death. Paranoia in other groups may have been less violent, but still crazy. For instance, the Rajneeshees during their tenure in Oregon during the 1980s felt threatened by local authorities and attempted to win a local election. To ensure their success, they planned to poison local voters with salmonella spread throughout the town's salad bars. And, of course, one of the most famous explosions of violence was People's Temple in Guyana, where first a visiting U.S. congressman was murdered and then most of the group committed suicide. In all of these cases, reports of perpetrators or survivors indicate that the violence was not chosen, but ordained by the voice of the leader.

While cult violence is disturbing enough, another question is why someone neither schizophrenic nor a cult member would kill another organism for no discernable reason of survival. What about pulling wings off of flies, or drowning cats for fun, or trophy-hunting endangered species? In the first two cases, we generally assume that such people have "violent tendencies" and may have them seek therapy or, in the case of Stephen King, record their fantasies in print and celluloid. (King, in his book Carrie, writes "People don't get better, they just get smarter. When you get smarter you don't stop pulling the wings off flies, you just think of better reasons for doing it.") As King's popularity attests, many people are fascinated and possibly titillated by gratuitous violence. In the case of trophy hunting, the rationale I have heard is that it is a legitimate demonstration of manhood, like bullfighting (but at longer range). Maybe in these cases an explanation is superfluous-they are random acts of mindless violence. But if we were to invoke the idea of recent consciousness, we might speculate that these acts are meant to demonstrate the efficacy of a nascent self that is incapable of establishing mature self-authorship. That is, these people could be demonstrating superiority over their helpless victims for the purpose of feeling a little bit conscious—"look at what I did..." This speculation echoes the observation by Hawley and Vaughan (2002) noted by Dunbar in the Introduction to this volume, that violence can serve to enhance the self-esteem of the aggressor.

Paradigms of Violence

Thomas Kuhn (1967) has famously argued that science progresses through revolutions in ways of knowing, or paradigm shifts. It seems likely that this is true not just for science but also for all systems of human knowledge. Certainly that is the underlying notion used by Jaynes (1976) to suggest that self-consciousness is a relatively recent development in human history. So, following the general idea of paradigms and paradigmatic shifts, we can at least speculatively trace the epistemological history of a social phenomenon—in this case, hate-based violence. I will be using a rendition of paradigms presented by John Briggs and David Peat (1984) in a physical science context and modified by me for application to social science (Bennett, 2013a).

The notion of scientific paradigm is rooted in post-enlightenment Western culture, most specifically in the European societies that experienced the scientific revolution (roughly the period from the mid-sixteenth through the eighteenth centuries). Ways of knowing outside of this geo or historical context are, of course, equally important to the histories of other societies. Of particular note is the "golden age" in the Islamic world (eighth through mid-tenth centuries) and the Tang Dynasty in China (seventh through tenth centuries). During those times scientific progress was relatively swift, but it is unclear that scientific development was as revolutionary in those societies as it was in Europe. Based on my reading of these histories, I believe that a key factor in the revolutionary impact of science in society is the *reconciliation of secular and sacred*. If that reconciliation is weak—if science and religion are maintained as separate ways of knowing—then scientific progress is less revolutionary. Society is more dramatically affected if science is integrated into the prevailing religious worldview. Recall that Isaac Newton, the epitome of the scientific revolution in Europe, was respected for his profound belief in the religiosity of scientific inquiry. That belief represents a more developed reconciliation of secular and sacred than that of the earlier scientific pioneers Copernicus and Galileo, whose works were banned by the Catholic Church and ridiculed by Protestants.

Prescientific paradigms, including worldviews in which science is held relatively separate from religion, are consistent with Jaynes' description of non-conscious ways of knowing. Where causality is firmly rooted in supernatural causes (gods or God, animistic forces, etc.), intraspecies violence is simply one manifestation of these forces. Hatred, if it exists at all as an identifiable feeling, is irrelevant to violence that has been directed by gods, godkings, or the soothsayers who claim to speak for them. For instance, in the contemporary case of a non-conscious worldview I described earlier, members of People's Temple probably did not hate Representative Ryan. They simply were instructed to kill him by their god-leader Jim Jones, and they complied. Even Jim Jones did not need to hate Rep. Ryan—he only needed to see him as a threatening presence to justify killing him.

I would further speculate that *alter-enlightenment worldviews*—a term I use to describe ways of knowing in which science may have developed but which did not involve the reconciliation of the sacred and secular that occurred in Europe—tend to support the existence of god-decreed killing. It is unclear that there is more intraspecies killing in societies with alter-enlightenment worldview than in those with post-enlightenment worldviews. It is just that the explanations differ. In alter-enlightenment societies, killing can be justified as the result of supernatural displeasure with infidelity or blasphemy. Post-enlightenment societies are more likely to explain their violence in terms of personal or collective threat, as we shall see in the following paragraphs.

Newtonian Paradigm

The original post-enlightenment scientific paradigm is generally referred to as Newtonian. The notion of a mechanical universe describable with natural laws, the idea that God gave humans the ability to observe that universe in an objective way, and the conviction that natural events are both predictable and controllable are all appropriately attributed to Isaac Newton (Damasio, 1994). While Newton's work was undeniably important for scientists, it is the crossover into general society that made them revolutionary. In the mid-nineteenth century, Auguste Comte became the father of sociology by arguing that the principles of natural science (positivism) should be applied to the prediction and control of human society. These same principles became mainstays of allopathic medicine, genetic evolution, and behaviorist psychology. Many (but not all) of these causal explanations shared the assumption of modernity—that human progress was moving toward an ideal state.

The explanations of human behavior generated within a Newtonian paradigm change the causal agent from supernatural forces to natural forces. Disease is not a punishment from the gods, but rather a natural and treatable conflict of pathogens and immunity. Famously, modern humans are not the direct creation of God, but rather the result of millions of years of natural selection. And people behave as they do not because they are obeying voices of the gods (usually), but rather because they are enacting genetic tendencies and environmental conditioning.

This shift is still a fitful one, however. According to a survey reported in the journal *Sociology of Religion* (Schieman, 2010), 56 percent of U.S. Americans believe that God is in control of all earthly events, although they are less likely to blame God directly for natural catastrophes, where only 44 percent think so. And of the 57 percent of U.S. Americans who believe God has a hand in human evolution, 33 percent believe that God created people just as they are now; the others accept the Newtonian view that evolution is God's design (Pew Research Center, 2013). Eighty percent of U.S. Americans pray regularly—55 percent of them every day (Pew Research Center, 2015), and according to Schieman (2010), 82 percent report that they depend on God to help and guide them in making decisions.

In other post-enlightenment societies, most of which are less religiously observant than the United States (only 51% of EU citizens believe in God, according to European Commission, 2005), secular explanations of events are more pronounced. This shift in causality, combined with the meta-phorical construction of the "self" discussed earlier, means that people both individually and collectively are assumed to have at least some responsibility for causing things to happen.

In the case of personal violence, the causal picture is not completely clear, as might be expected in this first scientific paradigm. Individuals are legally assumed to be responsible for intraspecies violence (e.g., murder), but "natural forces" such as genetic damage (mental retardation or mental disease) or abusive socialization may be used as a defense. The idea of an efficacious self is well in place, but people may still appeal to their helplessness in the face of inexorable natural forces. And in some secular circumstances, even the traditional prescientific explanation of "God made me do it" (religious freedom) may be invoked as a legal defense.

A particularly troublesome holdover from preconscious days is the argument that violence by men against women is an expression of natural genetic tendencies (e.g., Ghiglieri & Bilmes, 1999). This is just a simple substitution of a natural force (genetics) for the supernatural force (God) who directs how violence is applied. Even today in alter-enlightenment societies God may be quoted as saying it is the right of men to control women, including the use of violence "when necessary."

As an explanation of intergroup violence, the Newtonian paradigm allowed a scientific rationale for the ancient tendency of gods to order the mass killing of threatening outsiders. Now, the justification for wars of dominance or ethnic cleansing could be that it was civilized people attempting to protect their way of life from contamination by barbarians or savages. Colonial wars were conducted with the avowed aim of either containing the contamination or converting the barbarians to be more civilized (i.e., more like the colonizers). Meanwhile, modern forms of slavery exploited people for economic purposes with the rationale that some people were simply savages—they were not even barbarically human, so it was justified to own them as chattel.

The fitful post-enlightenment reconciliation of sacred and secular is illustrated by the U.S. American phenomenon of "civil religion" (Bellah, 1967). This term refers to the more or less nondenominational invocations of God that accompany public or political events such as national sport competitions (e.g., Superbowl), pledging allegiance to the flag, swearing in political leaders, and expressing condolences to fallen soldiers or civilian flood victims. Since the terrorist attacks against the World Trade Center in New York on September 11, 2001, civil religion has been invoked relentlessly by U.S. American presidents and pundits to justify what seems to many to be a religious war with terrorists (Pew Research Center, 2002). Because of our species history with gods' voices, it may be comforting for us to feel that "God is on our side" and that God is more or less dictating our actions. However, letting God too much into everyday political life may well strain our nascent reconciliation of secular and sacred. Now 14 years after September 11, it does appear that there is a growing polarization of science believers and religion believers, as is evidenced by attitudes toward global climate change. Secular scientists overwhelming believe that

human beings are causing worrisome changes in the planet's climate and that we should alter our behavior. Inexplicitly to the scientists, sacred religionists do not believe that human beings would be allowed to change the climate unless it was God's will. Either way, sacred religionists do not for the most part feel responsible for the situation and look for other explanations (or conspiracies) for why secular scientists are issuing warnings.

Looking at it in historical context, the Newtonian paradigm in its social manifestation appears to be a transition state between non-consciousness and incipient self-awareness. God is more likely to be relegated to a background "prime mover" position, and people take at least some responsibility for discovering the laws of nature that govern our behavior as human beings. But, in many ways, non-consciousness is preserved by substituting natural law for God's law, allowing thoughtless violence to continue under the guise of behavioral compulsion.

Einsteinian Paradigm

At the turn of the twentieth century, Albert Einstein challenged many of precepts of Newtonian physics by his reconceptualization of space, time, and gravity. These ideas indeed had profound implications for physics, but the major factor in his work constituting a paradigm shift was the introduction of "observational context" into physics. In the Newtonian view, the position of observers was unspecified, implying (implicitly, of course, in deference to the Church) that observers occupied a God-like omnipresence. They could observe events objectively, since all events were like objects, and those objects could be fully recognized. In contrast, Einstein held that empirical observations could only be made from one's particular position in the universe. In other words, he introduced the concept of an observer's point of view. While the idea of "perspective" already existed in various arts, it was a game-changing assumption in physics. The observer was no longer an implied god; instead, observers' views were necessarily restricted by their relative speed and position.

In social applications, the Einsteinian paradigm reinforced the idea of *context*. Systems theory supplanted behaviorism as the prevalent explanation of human behavior (family systems, social systems, organizational systems, political systems, economic systems, etc.). Cultural relativity supplanted the hierarchy of civilization. In all cases, events were seen to necessarily exist in some definable context. Behavior in these contexts was not a simple response to stimuli, but a relatively complex interplay of roles, rules, and systemic boundaries. It is not an overstatement to say that the modern idea of group is completely enabled by this paradigm. Without the concept

of relativistic context, the idea of a group culture (national, ethnic, organizational, etc.) and cultural identity could not exist. And while the new "relative self" was not the objective thing implied in the Newtonian paradigm, it was nevertheless a fairly static reification of the roles and rules of cultural conditioning.

The shift from an absolute self to a relative self is still occurring. For instance, in the introductory programs I have conducted on intercultural communication, the idea that cultural context constitutes a kind of perceptual filter is often surprising to participants—sometimes even incredible. People cling to the notion that their experience of reality must be the same one that other people are having, and that cultural difference really is just difference in customs and style. When it is undeniable that people are looking at the world differently, rather than appreciating how contexts both enable and limit perspective, many people treat the difference as *bias*.

The concept of bias is a liminal condition between the more absolutist Newtonian paradigm and the more relativist Einsteinian paradigm. Typically the idea of bias or prejudice is treated as an abrogation of a "human right" that is assumed to be universally true. The assumption that there is a single reality in which a universal concept of fairness can be defined is Newtonian. However, the assumption that people can be defined in terms of group membership is Einsteinian. This creates a condition of paradigmatic confusion (M. Bennett, 2013a, p. 23) wherein a problem is defined in one paradigm and a solution is drawn from a different paradigm. In this case, the problem is defined in relativistic terms as one group attempting to impose its view on another group (bias and prejudice), and the proposed solution is an absolutist one of imposing universal human rights. Applying the solution creates a paradox wherein reducing bias demands that we deny group membership to the victim of the bias. This is why antibias programs are not very effective. The perpetrator of bias does not see what is wrong with having opinions about people (they do not see that bias is prejudice against a group), and the recipient of bias does not like giving up his or her identity as the price of reducing bias.

Another problem for intergroup relations is the assumption of cultural relativity itself. The initial idea of cultural relativity proffered by Franz Boas (1948) was an assault on the then-prevalent notion of hierarchy of civilization. By making culture only definable within a context, he countered the notion that ways of being were only variations on a universal reality by shifting to the paradigm of mutually exclusive perspectives. In the process, however, he defined away the common ground necessary for communication. Theoretically, people of different cultures could not communicate because they did not and could not share the same experience of socialization within

one or the other cultures. Cultural groups could be studied by anthropological field workers, but few normal people could easily shift among the cultural worldviews represented by different groups. It is this assumption of incommensurability that underlies much of the critical theory approach to cultural studies today. The self is not an object as it is in the Newtonian paradigm, but it is still a reification of cultural roles and rules.

If people cannot truly understand each other across cultural context—if they cannot empathically adapt to different worldviews—then the only basis for communication is a kind of assimilation to a common framework. The question then becomes, who has the power to establish the framework? The answer is the dominant group—dominant because it has the power to set the framework, to establish the rules. Attention then goes to how to mitigate abuse of the dominant groups' power, or how to distribute that power more equitably. Members of the dominant group tend to be puzzled by this attack on their privilege, since they see the establishment of a common framework as necessary, and they do not see why it should not be theirs. Members of nondominant groups are also puzzled, since they usually recognize that adapting to the dominant culture is part of the game, and they do not object to that group using power, only to its abusing power.

Several other excesses of political correctness owe their existence to the Einsteinian paradigm. For instance, "cultural appropriation"—the inappropriate enactment of customs outside of their home cultural context—is based on the idea that only natives of a culture can perform their customs authentically, and anyone else who tries is abusing privilege. Notably at this time in the United States, gender relations are also fraught with relativistic extremism. If men and women are inextricably locked into their contexts, and if men are always dominant by virtue of their group membership, then women are always relatively powerless in relations with men and gender relations can only be understood in terms of power. Conflict between men and women has the necessarily dominant male as abuser or perpetrator and the necessarily nondominant female as victim. It is ironic that the idea of cultural relativity that was meant to curb the violent excesses of colonialism and imperialism has spawned its own form of political violence.

Quantum Paradigm

At approximately the same time as Einstein was formulating his paradigm shifting theory, Niels Bohr and others were generating another paradigmatic theory—quantum mechanics. In physics, relativity theory and quantum mechanics constituted a simultaneous double blow to the Newtonian paradigm. However, the implications of quantum theory have been much slower than those of relativity in causing a shift in social science. Perhaps that is because quantum theory is even more complicated and counterintuitive than relativity theory.

The two implications of quantum theory that are slowly making their way into social science are (1) the inevitable involvement of the observer in that which is observed and (2) the probabilistic nature of events. In the quantum paradigm the observer is not just located in a context with a perspective. The observer (which could be any measurement, including direct human perception) is an inextricable part of the event being perceived. In this paradigm, any measurement (perception) of reality is a "choice" to pay attention to one thing and not another—to construct particular figure or ground distinctions. Of course, the choice is not necessarily a conscious one—it may simply be the adaptive behavior that we have drifted into. For instance, in this view, an IQ test is neither a measure of objective reality nor a measure of that reality biased by the cultural context of its creators. Rather, the IQ test "collapses" a myriad of things we might observe about a human being into this particular set of responses. Or, to take the famous philosophical conundrum, "Does a tree falling unheard in the forest make a sound?" The (rather cumbersome) answer in a quantum paradigm would be, "The event of 'sound' necessarily includes an observer that has distinguished the air compression that constitutes this event." The fact that many organisms have ears that can hear sound means that they have evolved (drifted) into a relationship with their environment in which paying attention to air compression is adaptive.

Because an observer is necessary for an event to occur, and because that relationship is an ontogenic one, we cannot say that events have an a priori existence. Rather, they have a *probability* of existing, depending on the state of both the observer and its environment. For instance, in a famous set of experiments conducted by Lettvin, Maturana, McCulloch, and Pitts (1968) on this topic in physiology, a microelectrode was implanted into the optic nerve of a frog. When spots moved across a screen in fly-like ways, the frog's optic nerve would fire. However, if the spots moved in nonfly-like directions, no activation occurred. In other words, the frog could only see things that were relevant to his survival. The quantum view of this phenomenon is not "selective perception." Selective perception is an Einsteinian concept, since it assumes that the stimulus (the fly) has an independent existence that could be perceived or not, depending on the context (relevance to the frog). The quantum view is that nerve activation is always just a probability, and the probability is low when the stimulus is not relevant. In other words, movement of objects is not important under some circumstances; the frog therefore does not distinguish the phenomenon, and, in a parallel to the definition of "sound" mentioned above, the movement does not occur (as far as the frog is concerned).

We can describe other organisms, including human beings, in terms of probabilistic perceptual processes. It is easiest to imagine if we are trying to perceive something for which our senses have not co-evolved. For instance, particle theory in physics predicted mathematically that nearly massless particles, completely invisible to normal measurement and with no known consequence in our normal reality, were swirling around and through us by the trillions per second. Eventually this particle—the "neutrino"—was measured by a cloud chamber device *built especially to measure it.* In Newtonian terms, this particle was discovered, but in quantum paradigm terms, it was invented. We could say that neutrinos had a probability of existence (that is, they were within viable parameters of our co-evolved reality), but for that probability to become high enough to attain existence, we needed to observe them. Like many other quantum phenomena, it was thus a kind of self-fulfilling prophecy; the assumption of existence generated an act of observation that generated the existence.

In its application to social science, the quantum paradigm brings selffulfilling prophecy into prominence as a central feature of constructivism (Watzlawick, 1984). Following on the idea mentioned above of IQ as a construction, the famous "Pygmalion" experiment conducted by Robert Rosenthal and Lenore Jacobson (1968, 1992) illustrates the self-fulfilling prophecy aspect of IQ. In the experiment, teachers were told that an IQ test administered to all their students had predicted that some students would improve their IQ during the year. In fact, there is no predictive IQ test, and the "intellectual bloomer" students were selected at random. None of students were told the IQ results. At the end of the year, a significant number of the students who were "expected" to improve did so, compared to all students. Placebos operate in a similar way, creating an expectation of effect that is fulfilled by the expectation itself, not by any other physical cause (Weil, 2004). Like neutrinos, improvements in IQ or health condition have a viable probability of existence. The expectation that they do exist, combined with appropriate measurements (cloud chamber, IQ test, or subjective perception), can combine to "collapse the probability" into the actual condition.

Continuing with our consideration of "self" in paradigmatic context, here the self is neither an object in an absolute reality nor a player in a systemic context. Rather, the self is the process of observation itself—the carrier of expectation and collapser of probability. The observation of ourselves is the process of distinguishing ourselves; it is a paradoxical self-fulfilling prophecy wherein paying attention to our self creates the thing that is paying attention.

A Constructivist Epistemology of Hate

The quantum paradigm puts personal and group violence into a different kind of focus. Intraspecies violence obviously has a viable probability of existence among human beings. In Newtonian terms, such violence is explained in more or less the same terms as voices of the gods—external factors cause it to happen. In Einsteinian terms, violence may be part of the systemic fabric of one context or another—thus the idea of "a culture of violence" sometimes attributed to environments where violence is common. But in quantum terms, intraspecies violence is the actualization of an expectation. Considering the history of violence in our species, the expectation of its existence lies deep within our ontogenic construction of reality. That is, violence is adaptive to the world we have created.

Assuming we carry the expectation of violence in our collective worldview, what is the measurement, or observation, of that violence that allows it to actualize? One obvious place to look in contemporary society is the media depiction of real or imagined violence. Of course, this is not an original idea. Wimmer and Dominick (2009) report that research into the influence of media on social behavior has been conducted since at least the 1920s, frequently at a rate four times that of any other media research. According to them, research attempting to show direct causality between media depictions of violence and the actual perpetration of violence has been mixed, with the tentative conclusion that media may exacerbate existing tendencies toward violence. An alternative interpretation of these data in quantum terms could be that media acts as an observational apparatus to collapse the probability of violence into a reality. And indeed, "cultivation theory" (Gerbner, Gross, Morgan, Signorielli, & Shanahan, 2002) suggests that real fear can be created entirely through media. Reports or depictions of violence in media generate fear of "real" violence in one's local environment, making defensive or offensive violence more likely. Further, the more *fictional* crime one watches on TV, the higher the fear of violence, irrespective of one's perception of local crime rate (Jamieson & Romer, 2014).

It is important to avoid paradigmatic confusion here. The suggestion that TV watching collapses the probability of violence into something actual (fear and/or violent action) is different than the Newtonian statement that TV watching causes violence. If the latter were the case, we could reduce violence simply by reducing its depiction in the media. While such a reduction might have some effect, it is theoretically unlikely to touch the deeper issue of how our expectation of violence acts as an adaptive strategy. As long as we have that expectation, it is relatively easy to generate fear through alternative channels such as informal network communication, political rhetoric, or, of course, the actual experience of violence in wars or criminal encounters. The quantum paradigm implication for the reduction of violence is that the expectation of violence needs to be lowered.

A Paradigmatic Treatment of Hate and Violence

How we attempt to treat violence depends on the paradigmatic explanation we bring to bear on its explanation. By definition, preconscious violence is untreatable by any application of consciousness. If god-kings are telling people what to do in real or hallucinated authoritarian voices, it is unlikely that any argument (rational or otherwise) will suffice to affect behavior. This was certainly the lesson of my study of cult members. Arguments about the truth of cult tenets were completely impossible, since the very fact of arguing made one a suspicious outsider without credibility. Even appeals to emotion such as the grieving of family members were discounted as satanic attempts to subvert the conviction of members. While people did leave cult groups, it usually was due to dissatisfaction with hypocrisy or abuse within the group rather than through critical thinking. Unfortunately, one of the more successful methods of extracting people from cults was kidnapping and "reprogramming" (Patrick & Dulack, 1976).

Anyone mildly familiar with history is aware that fear, isolation, and exclusive truth make up a very dangerous combination. Yet we continue to fall into that condition. And each time we finally realize that the reality supported by the combination is no longer adaptable to our contemporary social environment. Once the condition is established, a violent end is virtually assured. The best we can hope for is to avoid the condition next time.

Newtonian Treatments

When consciousness—however fitfully—has constructed a self-object, we can take action to reduce the potential of violence. In this paradigm, the self is experienced as both a pawn of outside forces and as a perpetrator of action. So the legal concept of "personal responsibility" and its consequences are comprehensible. If one is caught breaking the law, the expected consequence will be punishment. Saying that, however, is considerably less than assuming the operation of critical thinking, which requires the concept of "context" to work. For instance, the hope that prospective punishment will act as a deterrent to violence is based on the idea that one could imagine a future context in which one's freedom was curtailed (by prison) or even that one's life was taken (by capital punishment). The Newtonian paradigm does not support this level of contextual agility, so its coupling with direct punishment represents a case of paradigmatic confusion. In other words,

the only deterrent to violence here is aversion to more punishment after some has already been administered.

It is unlikely that someone operating with a purely Newtonian consciousness would comprehend the idea of a hate crime. Group-based hatred again assumes a modicum of contextual, relativistic thinking to generate the idea of an alternative group, no matter how hated it might be. The Newtonian motivation for killing someone from a different racial or sexual orientation group is more likely to be construed as a personal affront—as if the existence of the offending person was itself a threat. In any case, the idea that harming someone might be punished more severely if that person is from a protected group is highly unlikely to be any more effective as a deterrent than punishment in general.

Assuming that behavioral conditioning is not the acme of our hope for reducing violence, and that the objective consciousness of Newtonian thinking is not conducive to any other kind of control, we could turn our attention to helping incarcerated perpetrators develop alternative forms of consciousness. Among many possibilities along these lines are the documented successes of meditation or biofeedback (Hilsheimer & Quirk, 2006) as ways of helping people feel more empowered. It is probably a mistake to consider such techniques appropriate only to people with a more developed sense of self. On the contrary, it is easy to set up the techniques as causal tools: do this exercise and you get this effect. This cause and effect is understandable in a Newtonian frame, and it can lead to a more contextualized sense of self in which the exercise of personal responsibility is more likely.

Einsteinian Treatments

The explanations of violence in this paradigm move toward more groupbased models. Perpetrators are likely to see themselves as protectors of the group or warriors for the cause. This self-awareness is different than the unconscious obedience to a god-king, in that it is seen as chosen among alternative actions and represents a kind of heroic action. Violence on behalf of white supremacy groups, black pride groups, women's rights, gay rights, right to life groups, environmental action groups, and so forth can all more or less fit into this definition. The problem is that one's own group is seen as virtuous and other groups are seen as less human or less real than one's own. Thus, violence against the other group is more justified than their violence against one's own.

In my work with intergroup communication, I have devised a grouplevel model of ethnocentrism moving through developmental stages toward ethnorelativism (M. Bennett, 1986, 1993, 2013a). The Developmental Model of Intercultural Sensitivity (DMIS) is instructive about how people can address the dehumanization of others and thus reduce the potential of violence against them. In the first stage of *denial*, people experience their own culture as "central to reality" and others as being different is some vaguely defined way. As long as people stay isolated, this condition is not particularly dangerous. But if people are forced into contact with the difference, they may fall into ethnic cleansing (directly or via political action). Since the other is not perceived with the complexity that one sees one's self, "to destroy you is no loss" (the title of a book about the Cambodian genocide by JoAn Criddle, 1998). To avoid this kind of violence, it is important that other groups be recognized in cultural terms, that is, as having a differently complex worldview. This, of course, was the original idea of cultural relativity promulgated by Franc Boas.

The beginning of the humanization of others generates a condition I call *defense*. At this stage, people perceive others as more human, but in simplistic and stereotyped ways. Immigrants and refugees may be seen as "coming to take our jobs" no matter what the circumstances of their move. Americans are aggressive, Irish are drinkers, Brazilians are fun loving, and so forth. While these stereotypes may fuel prejudice and segregation, they are less dangerous than having no stereotypes at all. Others are at least somewhat recognizable as human, and that is sufficient to curtail some of the excesses of group violence. Yet even though *defense* makes genocide less likely, the negative stereotypes associated with it may fuel more individual hate crimes.

The probability of stereotype-driven hate crimes can be reduced by a move toward *minimization*, the last of the ethnocentric stages. In this stage, others are seen as basically like one's self, either in terms of basic humanity or in adherence to some underlying religious or secular system of values. This is a position of tolerance, which may act as a temporarily hedge against violence ("It's a small world after all"). A huge amount of effort goes into facilitating the movement from *defense* to *minimization*, since its immediate benefit in reducing prejudice is so obvious. Not so obvious are the continuing effects of the underlying ethnocentrism. For instance, people at *minimization* tend to underestimate the detrimental effect of their cultural privilege since they falsely assume that people have equal opportunity. In any case, *minimization* is not very stable. People can easily retreat to *defense* at the instigation of demagogic politicians or particularly biased media treatments of the others.

Quantum Treatments

If people see themselves more in quantum terms as dynamic co-creators of reality, they are capable of appreciating that other people are creating different but equally complex realities. This is the crux of *acceptance*, the first of the ethnorelative stages. By recognizing others as equally but differently human, the potential of killing them is reduced, but not eliminated. People kill their partners and others that assumedly they see as equally human all the time. Aside from the irrational drives of jealousy and revenge, we kill one another indirectly by failing to empathize. We may perceive the others as equally human, as equally complex, but as misguided or dangerous and deserving of poverty, homelessness, or some other kind of misery.

The move to empathy is our ability to take perspective—to understand the other by placing ourselves not in their shoes, but in their experience. This is the basis of *adaptation*. If we can truly do this, we generate the potential for being more intentional in our construction of expectation and more coherent in observation of ourselves and others. From a quantum perspective, this means that we can collapse the probability of more peaceful and respectful interaction with others into reality.

The DMIS stage of *integration* suggests that we can intentionally exercise consciousness in a way that is adaptive to the interconnected multicultural world we have co-created. According to the Jaynes hypothesis, this is the direction in which we have been slowly drifting for the last 3,000 years. But even if we do not buy Jaynes' argument about the origin or development of consciousness, it still seems like a good idea to become more adaptive to our complex, pluralistic environment. In the specific case of hate crimes and domestic terrorism, being more adaptive means accepting the idea that we are co-evolutionary partners in a world where such things exist. So, rather than simply decrying the behavioral and/or cultural causes of such behavior, we can look to the contribution we may be making with our own consciousness.

First, do we see *ourselves* as helpless victims of circumstance? If so, then how can we argue that others should not be? And to whom are we bequeathing the power to create reality? Is it to people who fan our fears and then say they will save us—people who aspire to be god-kings and want us to unconsciously obey their voices? In other words, are we ourselves still avoiding the responsibility of being conscious?

If at least some of us do take on the responsibility of consciousness in this area, it means that we cannot solely depend on Newtonian treatments of the issue. While the use of force and punishment may be necessary to stop the violence, these solutions will not keep it from occurring again. And we cannot hope that Einsteinian solutions of cultural relativity and political correctness will bring more than temporary conditions of tolerance. Rather, we need to collectively change our expectation of what kind of world we want to live in and act intentionally in ways that are consistent with our expectations. In other words, we would intentionally try to create the conditions that demand the behavior we desire.

For instance, we would recognize that supporting political or corporate leaders who want to be god-kings perpetuates the story that such people are better adapted to the role. Could be, but then we need to redefine the role. We would be aware that waiting for the inequitable distribution of wealth to spawn revolution supports the story that primates are violently acquisitive. Maybe so, but building an alternative expectation would not be first time we intentionally changed our behavior. We would know that acquiescing to education of our children that avoids critical thinking is damning us to a future of less intentionality and lower chances of shortterm change. It really is our story, and we can make it a better one.

Glossary

Consciousness: *How are we aware and intentional?* As it is used by Jaynes (1976), consciousness is mostly about the use of language. He takes language to be the codification of perceptual distinctions. While all organisms make such distinctions, language represents the extension of those distinctions into a system that enables broader and more intentional communication among groups of humans. When language is *self-reflexive*, it allows us to be aware of our own role in making particular distinctions that are codified.

Epistemology: *How we know what we know*? In the particular *constructivist* sense used here, it is the analysis of human assumptions about the nature of reality and their consolidation into cultural and scientific *paradigms* (von Glassersfeld, 1984).

Ontology/Ontogeny: *What is the nature of existence?* In a constructivist sense, it is exploration of how constructs are objectified (reified) into the things we experience, and the extent to which objects are separated from the process of their construction (Maturana, 1988b).

Phenomenology: *How do we experience things?* This concern is almost always constructivist, in the sense that it refers to how we focus *intentionally* through concepts to generate particular experiences (cf. Husserl, 1982; Merleau-Ponty, 1962).

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