The Mythic Reality of the Autonomous Individual

with John A. Teske, "Editorial Overview"; Edwin C. Laurenson, "Agency, Freedom, and the Blessings of Opacity"; Phillip Cary, "Philosophical and Religious Origins of the Private Inner Self"; Anindita N. Balslev, "The Enigma of I-Consciousness"; Lene Arnett Jensen, "The Cultural Development of Three Fundamental Moral Ethics"; Amy Banks, "Developing the Capacity to Connect"; John A. Teske, "Externalism, Relational Selves, and Redemptive Relationships"; Kenneth J. Gergen, "From Moral Autonomy to Relational Responsibility"; Steven L. Winter, "Reimagining Democratic Theory for Social Individuals"

EXTERNALISM, RELATIONAL SELVES, AND REDEMPTIVE RELATIONSHIPS

by John A. Teske

Abstract.   The dangerous level of individuality in contemporary Western culture is informed by a conception of mind, self, and soul as internal to the central nervous system. The historical development of this view has produced a bounded and self-contained individual at odds with communal life. Happily, scientific and philosophical studies of mind are coming to view the human mind as embodied, enactive, encultured, and embedded in social and technical networks, and as a construction not limited to the boundaries of the individual organism. Mental phenomena are hybrids of events in the head and events in the world to which they are often coupled, not least of which are with other people. There are mutual and reciprocal implications of this externalism for a number of religious themes. Our understanding of redemption might better be bound to our relationships with others, including our bodies and our sexuality, rather than to a private, individual relationship with the sacred.

Keywords: cognition; community; empathy; externalism; history; individuality; intentionality; interdependency; intersubjectivity; memory; part-whole; relationality; sexuality; social construction; technology

We must love each other or die.—W. H. Auden.

The dangerous level of individuality in contemporary Western culture is informed by a presumption that the mind, self, and soul are internal to the

John A. Teske, PhD, is Professor of Psychology at Elizabethtown College, One Alpha Drive, Elizabethtown, PA 17022, USA; e-mail teskeja@etown.edu.

central nervous system. This conception of an internal/external boundary has roots as far back as the early modern emergence of science (Berman 1989), the historical development of which has produced an increasingly bounded and self-contained individual at odds with most forms of communal life (Cushman 1990). Happily, scientific and philosophical studies of mind are coming to view the human mind as embodied, enactive, encultured, interwoven with a social and technical web, and as a construction not limited to the boundaries of the individual organism (Wilson 2004). Originating a generation ago in the *content externalism* of Hilary Putnam (1975) and Tyler Burge (1986), that the semantic content of mental states is often dependent on factors external to the subject, the last decade has seen the emergence of a substantially stronger *process* or *vehicle externalism,* that the structures or mechanisms making various mental states possible may themselves extend beyond the skin (e.g., Hurley 1998; Clark and Chalmers 1998). Amongst the external structures that carry information relevant to completing an action, which can be operated upon to accomplish that action, certainly the commonest and most important of these is other human beings with whom we sustain ongoing and historical relationships.

The thesis of the present essay is that vehicle externalism can be rooted in a relational ontology of self, and a primary intersubjectivity, which have mutual and reciprocal implications for a number of religious themes. I have argued elsewhere that redemption must be social (Teske 2000). I believe that our redemption has its origination in our most intimate relationships, where we must swallow our projections in order to heal our real, living, reciprocal, and mutual relatedness. Conceptions of isolated individuality entail great risks in our projective attempts at symbolic completion destined not only to fail, but also to damage the real possibilities of loving interconnections with each other. The redemption that is tied to faith, hope, and love may be led astray when confused with need-based understandings of our relationships, as it is *caritas* that may better lead to the development of faith in each other and our futures together, and our embedding in corporate (embodied), collective (enactive), and communal (relational) life.

EXTERNALISM

Externalism is, quite simply, the view that "the mind ain't in the head." It asserts that the constitution of thoughts, beliefs, and desires often include, even require, states and processes external to our biological organism. That does not mean that the mind is locatable outside the individual's head as heads and also bodies are proper parts of a mind; these are *mereological,* part-whole, relationships. It requires that a person is both embodied and immersed in the world. The "somatic marking" that may be central to our

conscious experience (Damasio 1999), and our external interdependencies, both developmental and social, are only accomplished with functioning bodies. Mental phenomena are hybrids that couple events in the world to physical processes in the nervous system. According to Mark Rowlands (2003), this the most important development in the philosophy of mind in the latter half of the twentieth century. I will argue that for meaningful social, emotional, and cognitive lives, the most important of such couplings are those both within and between other people and ourselves.

Content externalism, or "taxonomic externalism," put forth by Putnam (1975) and Burge (1986), turns on Brentano's Thesis, around before Freud, that mental events are essentially and nonreductively *intentional*, that is that they refer to or are "about" events outside themselves. The "demon" behind Cartesian dualism, the possibility that the mind could exist with only a demon to delude it, presupposes what Gregory McCulloch (2003) calls the "Demonic Dilemma," an ontological distinction between mind and world, and between a self-contained mind and a mindless world. But this leaves either a mind cut off from the world, leaving no account of how intentionality could come into being in the first place, or a mind without content or subjectivity. Either intentional properties are a sham, or there is nothing to which intentions can be directed. To ask "what is a mental representation?" is to ask what it is to be directed to the world; if it is merely the reliable causal effects of objects in the world, like marks on Locke's *tabula rasa*, then there is nothing to make it a mental representation. Locke "shuffles" between an understanding of an "impression" as a mark on a tablet, and as a kind of knowing something (Rorty 1979, 146); as if writing something on a chalkboard would mean that the chalkboard knows it. McCulloch argues that a brain in a vat, in a null environment, would have no intentionality. Or *pace* Wilson (2004) or Thompson (2007) that the vat, since it would have to duplicate many of the properties and processes of the body, including all of the external events to which its sensorimotor couplings would connect it, would constitute a surrogate body, bodily processes then still being part of the minimally sufficient conditions for consciousness. No body, no consciousness.

It is on similar bases that Putnam (1975), in his twin earth arguments, shows that the meaning of a mental representation depends on, is necessarily individuated by, the events in the world to which it refers. Imagine two identical people, in exactly the same physical state, including every detail of their nervous systems, both experiencing themselves as seeing a tree; one on a world in which there is a such a tree, the other on a twin earth identical to the first, short that one tree. One person is seeing a tree; his twin is hallucinating. Two mental states, seeing and hallucinating, are individuated not on the basis of anything going on inside the head or the nervous system. It is something in the world, not something in the head,

which distinguishes between different intentional states such as memory, imagination, or even hallucination.

Phenomenological externalism, the next step, follows from the view that phenomenological content, the content of your experience, is in the mind. Combined with Putnam's moral, this entails that the mind is not just in the head. McCulloch (2003) argues that since phenomenology has to do with the subjective, and externalism with the objective, then the objective has to be invoked to understand the subjective; in short, that the subjective must be *inclusive* of the objective. There is a sense of this even in Jean-Paul Sartre's assertion: "It is not true that . . . the union of soul and body is the contingent bringing together of two substances radically distinct. On the contrary, the very nature of the For-itself [consciousness] demands that it be body" (1958, 309). So, there is a tight relation between I-consciousness and being embodied. We also see this spelled out in more neurophysiologic detail in Damasio's "somatic marker" hypothesis (1994). From here, McCulloch argues for an epistemological distinction, that, while not incorrigible (contra Descartes), ". . . knowledge of the intentional is both radically distinct from and privileged with respect to scientific knowledge" (2003, 13).

Granting privileged status to the "intentional stance" (cf. Dennett 1987) has powerful repercussions for the human sciences, since as the historian R.G. Collingwood (1993) makes clear, we have to think ourselves into thinkers' positions to understand their experience as, without doing so, their words, their beliefs, and their actions would be meaningless. One does not need to mimic a causal trajectory, but one does need to mimic the thinking to acquire knowledge of minds. Consistent with Collingwood's view of history is that of sociologists in the *Verstehen* tradition (Martin 2000), and even primate ethologists like Barbara Smuts (1985) have argued for the epistemic necessity of attention to individual, embodied, subjective points of view. One is reminded of Nagel's subjective definition of a conscious organism as "there is something it is like to *be* that organism" (1974, 435). While this may be quite unlike the physical sciences, other philosophers in the externalist tradition (Thompson 2007; Wilson 2004) argue that in a mature science of mind, first person phenomenological methods and objective scientific experimentation must be mutually informative, not merely in terms of correlations, say, between brain events and naive subjective experience, but in terms of the greater sensitivities and richer phenomenologies involved in more disciplined first-person methods, like those of the contemplative traditions.

Vehicle externalism, or "location externalism," takes a further step. In addition to denying the logical or semantic independence of the possession of mental properties from a world of objects, properties, or events external to the subject, vehicle externalism denies that even the mental particulars

need be spatially located inside the skins of mental subjects. Rowlands (2003, 6) suggests that there is no principled reason for not supposing that as "... the structures and mechanisms that allow a creature to possess or undergo various mental states are often structures and mechanisms that extend beyond the skin of that creature," so too the mental states themselves (cf. Rowlands 2009 for a more recent account of his position and his response to several objections). If externalism is true of the architecture that allows us to perceive, remember, reason, or use language, then it is true of the processes that the architecture implements. The external structures can be as likely to carry the information relevant to accomplishing a task, and to the extent that they are manipulated and transformed by the organism to accomplish those tasks, they can be said to be parts of the process. For example, a causal explanation of how you multiply multidigit numbers (or even add them) would have to include (for most of us) a pad of paper, and the little procedures like "carrying" that you have to do, to explain how the multiplication is accomplished, and to explain how you understand it. It requires those external components for a full explanation of what is going on. Why would manipulating an external structure be any different in principle than manipulating one that is attached to or incorporated within one's body?

Andy Clark (2003) asks how we answer the question "do you know what time it is?" in the context of contemporary culture. You say "sure," and you look at your watch, one of the prototypic nonverbal movements of modern civilization (or even, these days, reaching into your pocket). You do not say "No, I don't know what time it is, but I am wearing a watch, so let me check it." How is that different from hearing "Do you remember the first telephone number you ever had when you were a kid?" You do not say "No, but let me check my memory, and I'll get back to you," even though that is in effect what you do. It may take you a few seconds, or, as we age, even a few minutes before it "comes to you." "Oh yeah, that was *CEdar 6 – 1968*." But that *is* still "knowing it," is part of what might be involved in retrieving a bit of knowledge or memory. But how is that different from consulting a journal for old memories, one of your own published papers for an argument, or your watch for the time? What if those memories required accessing chips that were implanted in your head, or even ones that were implanted somewhere else, or not implanted at all? What if they were in chips that you carried around in your pocket? Like the experience you might have of feeling "brain-damaged" when your cell phone is not working. It is not "brain-damage," but it may be "mind-damage." Rowlands presents an evolutionary argument against developing genetically expensive encephalizations that might well have selective disadvantages to downloading them to the environment, as beavers do with dams, where the capacity to manipulate the environment obviates the necessity of internalizing it, whether initially adaptive or exaptive. This

is true for external information bearing structures like the "optic array" in James J. Gibson's (1979) "ecological approach" to visual perception, where "information processing" begins with the manipulation of the optic array in active sampling. You do something like this when you are driving at night and your windshield is a little foggy; you can actually see better if you move your head back and forth a little bit, so you can better detect the invariants in the optic array. Wilson (2004) also cites examples from the socially distributed cognition of seafaring navigation, and the deictic coding of eye-movements in animate vision, to the maxim of robotics, that the world is its own best model.

An externalist approach to mental events also includes a whole range of day-to-day external memory aids, from knotted strings, shopping lists, and marks on calendars, to books, and the whole panoply of symbolic artifacts in a literate culture. Memory for an argument might consist in the capacity to flip through a book, scan the relevant portions of each page, until one comes across the argument. I am reminded of a conversation with my brother, a Chicago lawyer. Sitting in his study where he has a whole wall of law books behind him, I am expressing proud amazement at what it means to "know the law." He smiles and says, "I really don't know a whole lot more law than you do, but I know where to look it up, and you don't." His knowledge base is in how he interacts with a whole set of resources with which he has a long-standing history. By the externalist view, there is no principled reason not to include that history, and those resources, as part of what you might attribute to his *mind.* Maybe this is the reason college professors spend so much time in book-lined rooms.

The manipulation and exploitation of information-bearing structures is also likely to have been important in the historical development of some of the abilities that they make possible, as in code memorization, or the development of capacities for reading and writing. There is a huge difference in how our brains are shaped, and how we interact with the world, and how we use this important set of external memory structures. I could not be giving a talk if I did not have some text in front of me. Students think we are so smart, but we have the notes in front of us, to which they do not always have access, though they may dimly know that much reading and preparation might have gone into their preparation. Indeed, as documented by Luria (1976) and Vygotsky (1978), many of our higher cognitive functions have been socially scaffolded in ways that are contingent on historical changes in social life and organization. We think of our higher cognitive functions as being produced by the basic equipment of the brain, but there are historical developments, learned through socialization, which are also necessary to make them possible. We are evolved to have remarkably plastic brains, which are what makes us historical beings, including substantial changes in how our brains are

shaped developmentally to do what we so take for granted as part of intellectual functioning.

I am regularly critical of my colleagues in psychology as being duly concerned with cognitive and emotional development, and to have improved in the last decades in their attention to its evolutionary roots, but then to have forgotten that they are missing the important developments of the millennia of human history. Such history is valuable precisely *because* we have evolved such neuroplasticity, and the long period of childhood dependency necessary for making use of it, which allows us to be the historical beings we are. We probably have a lot of the higher mental processes of which we make so much, including linguistic ones and many of the social practices and social constructions they make possible, because we are the sort of historical beings we are. Such abilities have been so shaped by the symbolically rich environment around us that we cannot make a principled separation between our ability to remember and our ability to exploit ambient information, from the formalisms that reduce complicated arithmetic calculations to an iterated set of simpler steps, to the use of technological artifacts which we find increasingly indispensable for the performance of a task. When I say, "I have to balance my checkbook; where's my calculator?" am I just punching buttons in a particular rule-governed order? Is my calculator actually doing the addition and subtraction? No, I am doing it *with my calculator*. My brain is not doing the addition and subtraction, but *I am*. The mental actions that I attribute to my mind certainly *require* a brain, in all sorts of interesting and complicated ways, but are not limited to it. The brain is a proper part of the mind, but it is not even physically and causally all that the mind includes. To the extent to which the cognitive burden is distributed, so too is the epistemic credit. Wilson (2004) calls this "wide computationalism."

Just as literacy can substantially reduce our internal memory load, so too can a series of external supports provide for substantially reduced dysfunction in Alzheimer's patients. A study in St. Louis (Edwards, Baum, and Morrow-Howell 1994), showed a set of patients, who performed rather poorly on standard psychological tests, living alone and functioning quite adequately with homes stuffed full of cognitive prostheses, like message centers about what to do and when, memory books to record events, and even labels and pictures on doors. When I put a white-board next to my study door, and learn to regularly check for what I should not forget as I leave for a meeting, I am offloading memory support, even if I still harbor the illusion that I do not really need it. Why are our uses of pens, notepads, and even perceptual prostheses like eyeglasses any different, however they might be taken for granted as external components of cognitive function? When external aids improve memory in the same way as do on-board internalizations, are we not entitled to take credit for so remembering?

Merlin Donald (2001) has suggested that human cognitive evolution has reached the stage of the externalization of memory, a stage just as important as the development of language. Mimesis and language, although themselves coevolved with culture (cf. Deacon 1998), still depend on the internal memory capacity of individuals. Biological memory is impermanent, its medium is fixed, and its format is constrained. The emergence of literacy, and other skills involving symbioses with symbolic external storage, allows memory to be externalized in ways that are enduring, refinable, and even capable of reformatting. You have probably noticed this yourself, when you keep a journal, or write messages for friends, that once something is written down it becomes more objective, external. When you say something, you have some level of plausible deniability: "You didn't hear me," or "you misunderstood what I said." When you write something down, you cannot deny it. We grade students on what they write, not what they think, though they may later tell us that the answer they did not write is really what they were thinking all along. External storage also, via the use of a spatialized external information space, allows us to harness vision for reflective thought, to change the part of the brain used for thinking, to interrelate information and images in novel ways. It makes it possible to develop new cognitive strategies that are socially organized and can be institutionalized to survive the replacement of member individuals. External storage thus makes possible an even more thorough invasion and use of the brain by cultural programming, especially institutionalized education, the development and elaboration of new devices (from wax tablets to manipulable computer imaging systems), and new visual symbolic codes. This may change the role of biological memory to be more symbiotic with cultural artifacts, and increase demands on certain areas of the brain that, given its neuroplasticity, can expand their territory at the expense of other functions (e.g., the loss of rote verbal memory skills and visual imagination that may come with literacy).

In *Natural-Born Cyborgs* (2003), Andy Clark argues that we have been human-technology symbionts since at least the invention of words, and that what is distinctive about our long developmental dependency and our neuroplasticity is precisely our ability ". . . to enter into deep and complex relationships with nonbiological constraints, props and aides" (p. 5). Pens, paper, wristwatches, scratchpads, notebooks, calculators, cell phones, and internet access are just the current and newest layer of our extended cognitive systems, expansions of our consciousness by temporal extension, scaffolding, embodiment, and embedding (Wilson 2004). Certainly offloading computation to calculators, memory to written text, or temporal orientation to clocks can and has altered our brains historically and developmentally. It is an illusion to believe that the normal understanding of mind and person is limited to the boundary of our

skin, as "our sense of self, place, and potential are all malleable constructs ready to expand, change, or contract at surprisingly short notice" (Clark 2003, 33). In addition to more exotic phenomena, like induced "out-of-body" experiences (Metzinger 2009), or the experiences of patients with prosthetic limbs (Ramachandran and Blakeslee 1998), are the experiences we all have with our favorite motorized prosthetic, the automobile. When someone "bumps into you" you do not experience it as someone bumping into the plastic and metal device inside of which you happen to be located, but feel it as a violation of your personal space, even as assault, or worse (as in the violation I felt as I watched two men breaking into my car, parked in front of my house). This should be obvious to anyone who has wondered about the ownership of a benumbed arm upon awaking, or whose rear end knocked something off a bookshelf. As these boundaries of our subjective sense of ourselves can both expand and contract, so our "minds" may also expand and contract. We are as much made up of the social and technological matrix in which we exist as organisms as by the neural events, conscious and unconscious, which occur inside our skin.

Vehicle externalism. If our neuroplasticity makes it possible for us to be "natural-born cyborgs," one of the crucial lessons of our extended developmental dependency must certainly be how much our externalism is rooted in biologically embodied relationships with other human beings. I remember when I was growing up; every single time we got in the family car, my father would say to my mother, "Honey, could you remind me to . . . ." While his vocalization may simply have helped reinforced his memory, he was also offloading it. Couples often do this when there are memory specializations between them, when one will remember the birthday of every member of both sides of the family, for which the other will not have a clue, while the latter remembers all the places they ever went on vacation, when the first is equally clueless. We distribute memories socially, making "mind" equivalently distributed. It should be clear that the position being put forth here is that mental life is both embodied and embedded in the world, not just located within the nervous system; the nervous system is a necessary part, but is a proper part, not the whole construction. While there are endogenous, dynamic patterns of neural activity that inform and are informed by the sensorimotor coupling between organism and environment, part-whole relations are dynamic and coemergent, making autonomy a system-level, relational property. Alicia Juarrero's work (1999) argues that intentions have *mereological*, whole-to-part relationship, with the neuromuscular causalities by which they are implemented. We can bump this up a step, and talk about a similar whole-to-part connection between social relationships and intentions as exist between intentions and the causal properties of specific motoric responses. Two or more such (dynamic, autonomous) systems are said to be *coupled*, when the conduct

of each is a function of the conduct of the other. You cannot explain the conduct of each without addressing its coupling with the other. A *structural coupling* is produced by "the history of recurrent interaction between two or more systems that leads to structural congruence between them" (Thompson 2007, 45), so they are altered by that connection. One such structural congruence is produced in the dynamic coemergence of interiority and exteriority, in which the autonomous self-production of an "inside" also, and necessarily, specifies an "outside" to which it is normatively related. So too "I" and "We."

Evan Thompson (2005; 2007) argues against thinking about consciousness and subjectivity as *interior*, as the coemergence of internal/external or self/other "depends formatively and constitutively on the dynamic coupling of self and other in empathy" (2005, 263; cf. also Krueger 2009 for a related position on empathy and the extended mind). This is addressed more directly by Amy Banks (2011) in these pages, so I will not detail the neurophysiology, but point out specific levels of empathy that are parts of how we construct our relationality. Intersubjectivity is primary, experiences of individuality, or interior and exterior, of self and other only develop within the context of an empathic *coupling*. What the existence of mirror neurons implies is that there is not an initial distinction between you and not-you; you have to learn to separate what is you and what is somebody else, and it is that learning that makes it possible for you to start producing what we might call more representational consciousness. Self and other enact each other reciprocally within such couplings. "One's consciousness of oneself as a bodily subject in the world presupposes a certain empathic understanding of self and other" (Thompson 2007, 382). Human subjectivity is intersubjectivity from the outset, emerging developmentally and "configured by the distributed cognitive web of symbolic culture" (382).

The first level of empathy is that of our involuntary affective and sensorimotor coupling, how you feel when you are around people doing different things. This is a powerful set of mechanisms by which we are linked to each other biologically and physiologically. Sensorimotor coupling is mediated by a population of "mirror neurons," which respond similarly whether preparing one's own or observing the movements of another. There is also an affective resonance that has to do with our capacity to read and mimic facial expressions, automatic processes of mimicry, by which, via our own facial feedback, we feel what someone else feels. There is also a set of circuits for producing patterned interactions between the orbito-frontal cortex and the limbic system. The measurable nonverbal duet in empathy includes matched patterns of arousal, and even complementary breathing (well summarized in Goleman 2006). Some of the mimicked facial expressions, like fear, for example, get routed directly through the amygdala (Ohman and Mineka 2001). I probably have a fear of dogs

because my mother did. When she was around dogs, my face would mimic her expression and I felt fear, too; not intending to do so, not planning to do so, certainly not wanting to do so, I would be holding the same facial expression, the same bodily tensions, which I would then reproduce when dogs were around. I later learned to inhibit those responses, but amygdalic learning is hard to counter-condition, so my immediate and instantaneous response to the sudden appearance of a barking dog is the same as was my mother's. Other offloadings of my culture made it possible to recognize what I was doing, and develop counter-strategies, but the feeling happens first, and never really goes away, even after I have learned to modify it pretty quickly. Like the effects of child abuse, or post-traumatic stress disorder, it is not that you do not remember, but that you do not forget, or rather, that you continue to *relive* experiences, rather than code them as things that happened in the past, so they are reexperienced as happening *now* again, and again, and again.

The second level of empathy is more active and cognitive and involves the imaginary transposition into another's place; clearly, this will also include all the cortical mappings and the neural activities necessary to instantiate them, as necessary parts of the process. Human levels are linked to the emergence of joint attention (including gaze-following, joint engagement, and imitative learning), and the attribution of mental states thought to require the emergence of a "theory of mind." Even a young infant will follow the direction of your gaze, look in the direction you are looking, mirroring your gaze, automatically (Meltzoff and Moore 1977). You have to learn to modify the tendency to attribute someone's intention to the direction of their gaze, just as you can learn to direct your attention to different areas of your sensorium (as when I ask you to direct your attention to the feeling of your buttocks on the chair, to which you were previously habituated). Similarly, we can learn to direct our attention to other things than where someone is looking. Barresi and Moore (1996) propose the mutual development of self and other understanding out of an experience of intentional relations in which first-person and third-person sources are not initially differentiated, but subsequently learned.

The third level is mutual self and other understanding, which involves a reiterated experience of seeing each other as experienced empathically by the other, and can include the vocal interaction by which each participates in an intersubjective viewpoint that transcends the first-person view. Since one's own lived body is always at the zero-point of intersubjective space, this is the only way one can come to experience one's own lived body as an object belonging to an intersubjective world. "In this way, my sense of self-identity in the world, even at the basic level of embodied agency, is inseparable from recognition by another and from the ability to grasp that recognition empathically" (Thompson 2005, 268).

The fourth level is the ethical and moral perception of each other as persons worthy of concern and respect, not from imposed rules, but by empathizing with the other as an agent whose point of view one can take. Thompson (2005) asserts that without empathy such concern and respect for others as persons would be impossible. Interpretation and understanding comes dialogically, not in additive combination of preexisting isolates, but emerging from, and reciprocally. Moreover, this does not just occur instant by instant, but in memory as well, as any relationship has a history in which my sense of my own individuality, of my story, depends on being someone with a story for the other and with that other's story to tell.

This powerful intersubjectively externalist view of mind, self, and relationship may have implications for a nondualist view of self and other, in which self and other have no independent existence, no intrinsic identity. This would open the way for a Buddhist view that it is the egocentric attachment to a mentally imputed self that is the source of all suffering, and suggest ethical practices of empathic imagination; of addressing pride, rivalry, and jealousy by looking at oneself through the eyes of an inferior, an equal, or a superior; and of a self-other equality wherein the pain of another is suffered as one's own, to decenter the ego, and open oneself to "an originary intersubjectivity prior to the reified imputation of 'self' and 'other'" (Thompson 2005, 271). I think that understanding another person's pain is central here, and why our own human incarnation, our embodiment is so important to this. As the Buddhists say, this requires "seeing one's heart beat in the throat of another" (cf. Rockwell 2009 and Krueger 2009 for other recent work on Buddhism and extended minds). A lot of our capacities for altruism are probably rooted in the empathic capacities that allow us to understand and experience someone else's pain, first by feeling it as our own, as shared, but then learning to inhibit the primary, immediate, and automatic response in order to separate ourselves out as an other that can act to ameliorate that pain.

THEOLOGY: OUR PREDICAMENT AND OUR HOPE

In what space I have remaining, I can only sketch what I have detailed elsewhere (Teske 2008). But I want to say a few things about theological hopes and the movement from *I* to *We* that is entailed by the relational externalism of mind outlined so far. Phillip Cary's paper here (Cary 2011) and his work elsewhere (2000) provides the necessary historical overview, but I want to say something about the directions in which our communality and relationality may give us hope for some kind of redemption. Externalism denies redemptive value to a private, interior, individual relationship to the sacred and, in effect, codes redemption as necessarily better understood as being bound to our relationships with

other people and with a larger communal world. While the history, from Augustine and Aquinas through Locke's *camera obscura*, which Phillip Cary addressed, provides the deeper background, there are also contemporary theological resources for an externalist view, or for using this view theologically. These would include Barth's (1958) idea that the *imago dei* exists in relationship itself, and cannot be isolated from our embodiment, of Karl Rahner's (1978) anti-Platonist view of persons as wedded to the world, and of Stanley Grenz's *Social God and the Relational Self* (2001).

Our Predicament.   Much of our social fragmentation and isolation are traceable to our history of self, of individuality, and of social relationships (cf. Teske 2002). This erosion of embodied social connectedness is made worse by the particularly liquid and fleeting nature of our technologically and electronically externalized social involvement, which attenuates the empathic connections detailed by Amy Banks in these pages (Banks 2011). Our empathic connections depend on mirror neurons, on mimesis, on face-to-face engagement, and on the dance of embodied interaction, of eating together, of touching each other. Absent from electronic communication are all the things that have historically bound us to each other and to our communities, and given us a felt sense of belonging, of place, of involvement, and even of love. In most text-based communication, that is all abstracted out, when you communicate by e-mail, by instant messaging, or by cell-phone texting. Auditory contacts can help, but one still misses the facial interactions that are such a big part of the empathic response. Fluid and shifting relationships provide neither the duration nor solidity against that our self-definition and self-assertion can gain purchase (Bauman 2003). The construction of personal identity under such conditions, grounded in subdoxastic emotional integrations (Teske 2007), and even the experience of one's own body, which is part of those empathic reciprocal relationships, is much more difficult, and much more fragile.

Stanley Grenz's encyclopedic work, *The Social God and the Relational Self* extends contemporary Trinitarian thought, and develops a communal understanding of the *imago dei* in the face of the postmodern fragmentation of the self and the quest for relationality in community. His intent is to "foster a renewal of the Christian communally constituted soul out of the ashes of the demise of the centered self" (2001, 3). He draws heavily on a patristic social analogy, traceable to Gregory of Nyssa's *parechoresis*, of a Trinitarian God as three subjective centers of action, the revival of which has produced a rethinking of *person* as relational rather than substantial, embedded in community rather than in isolation or abstracted from it. It appears that the unease toward the substantial and the ascendancy of relational ontologies is widespread, including Roman Catholic and

Orthodox as well as Protestant theologians, and has brought together feminist, liberation, evangelical, philosophical, and process theologians.

Grenz sees a self in motion, where relations with others are not seen to be external as in "possessive individualism," but internal to our very identity. As the philosopher John MacMurray stated: "[I]t is only in relation to others that we exist as persons . . . . We live and move and have our being not in ourselves but in one another" (1991, 211). This is also consistent with contemporary psychological theories of ego development, like those of Jane Loevinger (1987) and Robert Kegan (1982), in which development moves from the institutional self of authorship and identity, to interpersonal mutuality, and the interindividuality of interpenetrable self-systems. From developing ideas of relationality, Grenz builds a theological anthropology that sees God as "inherently relational and dynamic" (2001, 16), God's being consisting in personal communion. "At the heart of recent attempts to devise a new ontology of communion has been a retrieval of the Greek tradition, especially as embodied in the Cappadocian fathers," (51). A person is seen not as a static entity, a self-existent substance determined by its boundaries, but as a drive toward both integration and self-transcendence (also the essence of *faith* for Paul Tillich 1957), implying an *ecstatic* drive toward communion, its *freedom* in transcending the boundaries of self. We are ourselves only in communion, constituted by our relational existence.

Grenz's (2001) first step is to trace the rise of modern "centered" self, rooted in Augustine's "turn inward." Charles Taylor (1989) also views "inwardness" as constitutive of the contemporary self. Such a self results from a centuries long attempt to see the self as the stable reality underlying individuality, a coherent inner being, with a continuous history, attempting to establish a unique identity (cf. Harre 1984), giving prominence to an inevitable existential aloneness. For Grenz, there is but a small step from a Kantian *transcendental ego* to the self-mastering religious self of the Puritan and Pietist movements, and their evangelical spawn. Self-mastery makes disengagement from nature and community the foundation for the ideal of personal autonomy. Enter the Jamesian science of consciousness, and the elevation of the self to the center of psychology by Allport, Freud, and Erikson, its apex in the self-sufficient, self-constructing, "therapeutic" modern self (Rieff 1966). In what Christopher Lasch diagnosed as a "culture of narcissism" (1979), health is defined in terms of personal well-being, not as a means to some higher end or the result of commitment to some greater good, but as life's worthy goal. Reality is to be found in ourselves, the world but a transcendental illusion, a web of deception behind which, *nothing,* the ego itself a fiction.

With Freud, the epistemological crisis is in full swing: not only does he ask about the degree to which human motives are knowable, about the opacity of the human mind to know itself, but suggests that even

in ordinary life, people hide their wishes, intentions, and motives from themselves, and that, as Owen Flanagan put it "many perfectly mundane and pedestrian human actions are the result of motives of which we are unaware and which we would, in fact, deny having were they attributed to us" (1992, 66). Introspection appears to be not only underprivileged, but decidedly corrigible, and the idea of an unconscious self no longer oxymoronic. Moreover, if our very ego develops via the incorporation of our relations with other objects, there clearly is no fixed identity, but a "free-floating" self, in endless interplay between what is conscious and what is not, and between reality and fantasy. As the modernist novelist Robert Musil suggests in *The Man without Qualities* ([1952] 1995), we are incomplete, unfinished, and we live in a world of possibility. We only exist as persons in Charles Taylor's (1989) "webs of interlocution" (36), in a socially constructed narrative, a story that is initially told about us, but that we learn to tell for ourselves (cf. Katherine Nelson 2003). As Grenz (2001) indicates, this leaves a self that is not only decentered but fluid, fluctuating with our relationships, a highly unstable and impermanent self in a rapidly changing world. A fluid, decentered, fleeting self, constructed moment by moment, translates too easily into fragmentation, and splintering into multiplicities, and we could only expect symptoms of identity dissociation to increase, the 1970s punk rock vocalist Johnny Rotten as the Swiss Marianist Fr. Johann G. Roten's "chaotic self." "You'll find that empty vessels make the most sound" (Johnny Rotten).

The chaotic self is not only empty, but alone. The modern erosion of community in the increasingly isolated, internally fragmented self has been accelerating at a rate that can only be described as frighteningly precipitous. Recent U.S. census data (see *Newsweek,* 28 May 2001) shows married households with children dropping from 40 to 24 percent and single-person households doubling from 13 to 26 percent in little more than thirty years. That is a huge change in social relatedness in the space of an historical moment. Jean Twenge's (2000) meta-analytic study of anxiety, showing that contemporary secondary school students show the same levels of trait anxiety as did psychiatric inpatient adolescents of a generation ago, suggest that the individual may not be a source of any solace at all.

Our Hope.   We are contingent, chaotic selves, incomplete, unfinished, and living alone in a world of possibility. In the midst of the terrifying emptiness of our postmodern whirlwind, too often but a defense against meaninglessness, why could it not induce us to imagine something more meaningful? Grenz (2001) talks about the theological importance of sexuality, as a counter to these patterns of fragile individual isolation. In an exegesis of the biblical creation narratives, he suggests a link between the *imago dei* and human relationality in the form of sexuality: "Sexuality as the sense of incompleteness together with the quest for wholeness"

(19). If personal identity arises *extra se*, if the self arises in relationships, then its development is a communal task. The biblical narrative of the *imago dei* begins with a creative act that represents humanity as the earthly representation of divinity, but its end is in the divine intention for humanity to be realized in community. The separate creation of woman, emphasizing the sexual and social dimension of our existence, is what distinguishes biblical narrative from its historical context. What is the last act of creation in Genesis? It is the creation of male and female, the creation of sexuality. Why? It is not just Adam needing a helpmate, or a subordinate. Even the Hebrew terms are more about an equal, a sharing partner. "This at last is bone of my bones and flesh of my flesh" (Gen. 2:23), is Adam's ecstatic reply, a covenantal formula expressing a common reciprocal loyalty. The *imago dei* does not find its full meaning in the solitude of man, but in the relationship of a man and a woman, the origin of human relationship. "It is not good that man should be alone" (Gen 2:18). What Grenz suggests is that this mutual intimacy is not the climax of the story. Instead, it indicates that our embodied existence entails incompleteness, a yearning for completeness, for a wholeness and connection reaching beyond our differences and divisions. This begins with the bonding of man and woman, of mutual help and understanding, but does not end with an isolated couple. Sexuality is something that takes us out of ourselves, makes us vulnerable, gets us to take risks, and ultimately is a source of broader communities.

The theological significance of human sexuality may be precisely in interpreting the *imago dei* in relational terms. Deitrich Bonhoeffer does so (1959), insisting that God recognizes himself in human freedom, which he sees in a relationship between two people in which each is free for the other, that we are only free in relationship, sexuality representing the great depth and seriousness with which we belong to each other. Grenz argues that without sexuality, the significance of the resurrection is undercut, in which humans participate in its transforming event as embodied persons, sexuality providing the basis for community eternally as well as temporally. Grenz points out that, by not incorporating the "sexual character of the self-constructing dynamic" (2001, 312), we are not in a position to "draw from the idea of love that lies at the heart of Christian theological anthropology" (*Ibid.*). We cannot be human "by ourselves" but only in community, as love only operates in community. The essential nature of personhood consists of mutuality and interdependence, in which *communion* does not threaten but constitutes our personal particularity. But it is in *agape*, which the need-based, natural loves of *storge, philias,* and *eros* are elevated beyond their self-centered limitations, reconciling us to each other, and into communion, opening the way for an *ecclesial self* that enables participation in *theosis*, something wider even than redemption, involving a new community in the *logos* by which all things find their interconnectedness. If the self is

communal, not produced by an inward turn (though this is important to the social construction of self), the corporate community constitutes those particular individualities, not as fictions or illusions, but as socially instituted, and socially interdependent entities. Its *perichoresis,* "in-one-another," is also consistent with a more Buddhist perspective, in which we take empathic, biologically based traces of each other, and find ourselves in each other. It requires a *desacralization* of the boundaries of self, not as introducing impurity or pollution, but seeing sexuality as the prototypical form of embodied, relational communion, in each other becoming more than each alone.

FROM I TO WE

I am always amazed at the sad sacralization of our ideas of individuality, which we believe even to be present in our ideas of an afterlife and its meaning. There is an example I love to use. In making a *gazpacho,* a kind of cold vegetable soup, one of the ingredients I always add is a few carrots, always chopped very fine, or even pureed as part of the very special, very cooling taste of this soup on your tongue. Imagine that you are a carrot, and you love being a carrot, and it is a wonderful, good thing. But you contribute your carrotness to a fine, delicious gazpacho that is, in some sense, the meaning of your existence as a carrot. Yet, somehow, in many forms of contemporary religious ideation, which is really not good enough, and it really does not mean anything, unless you somehow get to be a carrot again. I think I'd rather be part of the gazpacho.

The present essay has been an attempt to map out how the toxicity of contemporary individuality, rooted in the Augustine's inward turn, bounded in its dark interior room, and corrosive to communal life, can be recoupled to the external world, understood as relational, and meaningful only by virtue of our communal life. It helps if one can understand the mind as relational, rather than just the proper parts of the brain and what is inside the head, meaningful only in virtue of the things it is a part *of.* It is my view, and it is a *déjà vu,* that our redemption comes, and perhaps can only come, in particular, one-to-one, close, intimate, and loving relationships, even and perhaps inevitably, as mortal, embodied beings, unto suffering and death, as we are also redeemed. We do save each other, we can and must save each other, *in imago dei,* as the only path we have to any kind of escatological communion.

The present argument from externalism presses us to take the idea of being wedded to the world, literally of one flesh with it, ever more seriously. We are not only *cyborg* selves, incorporating our technologies, particularly extensive informational technologies, into our empirical self-experience, but, in the extensive exteriorization of higher cognitive abilities, and even memory, we are truly *symbionts* with a symbolic material culture. Moreover,

in the ways in which our memories, and the externalizations of them, can be involved in the highest levels, not only of cognition but of empathy, inclusive of our histories and our stories, our marriage with the world is also a marriage to time, it is *diachronic*. Preeminent amongst the externalities from which our selves are composed are our relationships with other human beings, particularly those with whom we have deep and lengthy, even life-long, intimacies. This is the way that one person comes to "know" another, no longer strangers, though there is always more to learn. As with Gabriel Marcel (1951), what is more important is not "I think," but "we are," as knowledge is intersubjective; we know by knowing each other.

What externalism entails is that we are, even physically and materially, not limited to the boundaries of our skin. What we are *about* is outside ourselves, is *other*. What we *are* even as individual selves, is not an internal space, connected to other such spaces, but that we are quite literally, and externally, composed of each other. We are one flesh, immersed in the world and married to the world, we are of one flesh with it as we are one flesh with each other; not in ourselves but in each other do we live and move and have our being. As minds and selves, we are embodied, enacted, encultured, and embedded within each other, our bodies, in living community. Given a primary intersubjectivity, a relational ontology of self, our selves are developed and enacted only in empathic, and hence bodily, coupling. Our contemporary culture of indirect, distant, electronic communication, however available, can too easily attenuate our mimetic, face-to-face, and embodied empathies, which need the regular renewal that can only come via these engagements (cf. Teske 2002).

Our bodily attachment, the bonding with each other that can produce communal life, is a product of our commonality of affective experience, rooted in our biology, as well as in the developmental shaping that makes cultural differences so difficult to overcome, and historical changes in it possible. Love is the positive form, shame an affect that produces the boundaries of individual isolation. Donald Nathanson (1992, 243 ff.) suggests that our expectations of love are built around the reduction of negative affect and the relief of needs in childhood. Love is built out of a cumulative memory of scenes that combine urgent need and the solace of relief, the scripts that we call love in adult life. Loneliness and redemption are paired experiences, the magnification of which can be seen in the relief of lovers' "at last I have found you." Pride expands the boundaries of self, but shame guards them. As we see ourselves, or parts of ourselves, as defective, so we can cast another who sees us that way, and we develop a catalog of such experiences over a lifetime. Shame always haunts love, as the more we long for communion the more we are vulnerable to the shaming augmentation of its attenuators. Love always involves the risk of pain, intimacy validating, but its impediments injuring, our experience of self. Shame is what modulates those affects that lead us to be social,

communal, as we develop strategies to protect ourselves by withholding interest or remaining isolated. Vulnerability to pain and shame is the cost of being unarmored, the cost of being open to loving. Such emotional dynamics are central to our relationality; our religious yearnings are deeply driven by them. We have each felt the difference between communities in which one feels the power of the communion of positive emotions and ones in which shame and judgment predominate. The abject isolation of social shame is mitigated only by loving communion, and its redemption of disgrace, of exile, of feeling forsaken (Teske 2007).

In our hopes for loving, communal ends we defeat the barriers of shame, not by ignoring them or pretending they are not there, but by looking them square in the face, and seeing the differences between the limitations of our mortal, embodied state, and the limitations incurred by the isolating boundaries of shame. An intersubjectively externalist view of mind, self, and relationship is one of the ways to help understand and undercut historical views that have contributed to constructing and reinforcing these isolating boundaries. But it is in religious imagination that we can project new futures for ourselves, of what it might mean to think about ourselves, our relationships, and our communities differently, and why it might matter deeply to do so (cf. Laurenson 2007, 815). We still face injustice; we still feel the alienation of one tribe from another, of hatred and warfare, of the isolation and separation of our loneliness, and of the ecological degradation of our planet. What an intersubjective externalism can help us see, is how we are parts of each other, members of a communal body, and coupled with, wed to the world, of one flesh with it (Rahner 1978). What it may take a religious imagination to see is how, in redeeming each other, and our broken world, we redeem ourselves.

NOTE

A version of this article was presented at the annual conference of The Institute on Religion in an Age of Science (IRAS), on *The Mythic Reality of the Autonomous Individual*, held at the Chautauqua Institution, Chautauqua, NY, USA, June 20–27, 2009.

An extended version of this article was presented at "Subject, Self, and Soul: Transdisciplinary Approaches to Personhood," 13–17 July 2008, in Madrid, Spain, and was an invited publication in: *Transdisciplinarity in Science and Theology,* Vol. 4, ed. Eric Weislogel. Bucharest, Romania: Curtea Veche, 2008, pp. 311–338.

REFERENCES

Banks, Amy. 2011. "Developing the Capacity to Connect." *Zygon: Journal of Religion and Science* 46:166–180.
Barresi, J., and C. Moore. 1996. "Intentional Relations and Social Understanding." *Behavioral and Brain Sciences* 19:107–54.
Barth, Karl. 1958. *Church Dogmatics*. Edinburgh: T&T Clark.
Bauman, Zygmunt. 2003. *Liquid Love*. Malden, Mass.: Polity Press.

Berman, Morris. 1989. *Coming to Our Senses: Body and Spirit in the Hidden History of the West*. New York: Simon and Schuster.

Bonhoeffer, Dietrich. 1959. *Creation and Fall: Two Biblical Studies*. Trans. J. C. Fletcher and Eberhard Bethge. New York: Macmillan.

Burge, Tyler. 1986. "Individualism and Psychology." *Philosophical Review* 95:3–45.

Cary, Phillip. 2000. *Augustine's Invention of the Inner Self*. New York: Oxford Univ. Press.

———. 2011. "Philosophical and Religious Origins of the Private Inner Self." *Zygon: Journal of Religion and Science* 46:119–132.

Clark, Andy. 2003. *Natural-Born Cyborgs*. New York: Oxford Univ. Press.

Clark, Andy, and David Chalmers. 1998. "The Extended Mind." *Analysis* 58:7–19.

Collingwood, Robin. G. 1993. *The Idea of History*. Revised, ed. Jan van der Dussen. Oxford: Clarendon.

Cushman, Philip. 1990. "Why the Self is Empty: Toward a Historically Situated Psychology." *American Psychologist* 45:599–611.

Damasio, Antonio. 1994. *Descartes' Error*: *Emotion, Reason, and the Human Brain*. New York: Putnam.

———. 1999. *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*. New York: Harcourt Brace.

Deacon, Terrence. 1998. *The Symbolic Species*. New York: Norton.

Dennett, Daniel C. 1987. *The Intentional Stance*. Cambridge, Mass.: MIT Press.

Donald, Merlin. 2001. *A Mind So Rare: The Evolution of Human Consciousness*. New York: Norton.

Edwards, D., Carolyn Baum, and N. Morrow-Howell 1994. "Home Environments of Inner-City Elderly with Dementia: Do They Facilitate or Inhibit Function?" *Gerontologist* 34:64.

Flanagan, Owen. 1992. *The Science of Mind*. 2d ed. Cambridge, Mass.: MIT Press.

Gibson, James J. 1979. *The Ecological Approach to Visual Perception*. Boston, Mass.: Houghton-Mifflin.

Goleman, Daniel. 2006. *Social Intelligence: The New Science of Human Relationships*. New York: Bantam Books.

Grenz, Stanley J. 2001. *The Social God and the Relational Self: A Trinitarian Theology of the Imago Dei*. Louisville, K.Y.: Westminster John Knox Press.

Harre, Rom. 1984. *Personal Being: A Theory for Individual Psychology*. Cambridge, Mass.: Harvard Univ. Press.

Hurley, Susan. 1998. *Consciousness in Action*. Cambridge, Mass.: Harvard Univ. Press.

Juarrero, Alicia. 1999. *Dynamics in Action*. Cambridge, Mass.: MIT Press.

Kegan, Robert. 1982 *The Evolving Self: Problem and Process in Human Development*. Cambridge, Mass.: Harvard Univ. Press.

Krueger, Joel W. 2009. "Empathy and the Extended Mind." *Zygon: Journal of Religion and Science* 44:675–98.

Lasch, Christopher. 1979. *Culture of Narcissism: American Life in an Age of Diminishing Expectations*. New York: Norton.

Laurenson, Edwin C. 2007. "Persons and Dreams of Possibility in Religion and Science." *Zygon: Journal of Religion and Science* 42:813–15.

Loevinger, Jane. 1987. *Paradigms of Personality*. New York: W. H. Freeman.

Luria, Alexander R. 1976. *Cognitive Development: Its Cultural and Social Foundations*. Cambridge, Mass.: Harvard Univ. Press.

MacMurray, John. 1991. *Persons in Relation*. Atlantic Highlands, N.J.: Humanities Press.

Marcel, Gabriel. 1951. "The Mystery of Being." In *Reflection and Mystery*, *Vol.1*, ed. G. S. Fraser. London: The Harvill Press.

Martin, Michael. 2000. *Verstehen: The Uses of Understanding in the Social Sciences*. Piscataway, N.J.: Transaction Publishers.

McCulloch, Gregory. 2003. *The Life of the Mind: Essay on Phenomenological Externalism*. New York: Routledge.

Meltzoff, A. N., and M. K. Moore 1977. "Imitation of Facial and Hand Gestures by Human Neonates." *Science* 198:75–87.

Metzinger, Thomas. 2009. *The Ego Tunnel*: *The Science of the Mind and the Myth of the Self*. New York: Basic Books.

Musil, Robert [1952]. 1995. *The Man without Qualities*. Trans. S. Wilkins. New York: Knopf.

Nagel, Thomas. 1974. "What Is it Like to Be a Bat?" *Philosophical Review* 83:435–56.

Nathanson, Donald. L. 1992. *Shame and Pride: Affect, Sex, and the Birth of the Self* . New York: Norton.

Nelson, Katherine. 2003. "Narrative and Self, Myth and Memory: Emergence of the Cultural Self." In *Autobiographical Memory and the Construction of a Narrative Self,* ed. Robyn Fivush and Catherin A. Haden, 3–28. Mahwah, N.J.: Lawrence Erlbaum.

Ohman, Arne, and S. Mineka. 2001. "Fears, Phobias, and Preparedness: Toward an Evolved Module of Fear and Fear Learning." *Psychological Review* 108:483–522.

Putnam, Hilary. 1975. "The Meaning of 'Meaning'." In *Language, Mind, and Knowledge: Minnesota Studies in the Philosophy of Science*, *Vol. 7*, ed. K. Gunderson. Minneapolis, Minn.: Univ. of Minnesota Press.

Rahner, Karl. 1978. *Foundations of Christian Faith*. New York: Seabury.

Ramachandran, V. S., and Sandra Blakeslee. 1998. *Phantoms on the Brain*. New York: William Morrow and Company.

Rieff, Philip. 1966. *The Triumph of the Therapeutic: Uses of Faith after Freud*. New York: Harper and Row.

Rockwell, Teed. 2009. "Minds, Intrinsic Properties, and Madhyamaka Buddhism." *Zygon: Journal of Religion and Science* 44:659–74.

Rorty, Richard. 1979. *Philosophy and the Mirror of Nature*. Princeton, N.J.: Princeton.

Rowlands, Mark. 2003. *Externalism: Putting Mind and World Back Together Again*. Montreal: McGill-Queen's Univ. Press.

———. 2009 "The Extended Mind." *Zygon: Journal of Religion and Science* 44:628–41.

Sartre, Jean-Paul. 1958. *Being and Nothingness*. Trans. H. Barnes. London: Methuen.

Smuts, Barbara B. 1985. *Sex and Friendship in Baboons*. Cambridge, Mass.: Harvard U. P.

Taylor, Charles. 1989. *Sources of the Self: The Making of the Modern Identity*. Cambridge, Mass.: Harvard Univ. Press.

Teske, John A. 2000. "The Social Construction of the Human Spirit." In *The Human Person in Science and Theology*, ed. Neils Henrik Gregersen, Willem B. Drees, and Ulf Gorman, 189–211. Edinburgh: T&T Clark.

———. 2002. "Cyberpsychology, Human Relationships, and Our Virtual Interiors." *Zygon: Journal of Religion and Science* 37:677–700.

———. 2007. "Bindings of the Will: The Neuropsychology of Subdoxastic Faith." *Studies in Science and Theology* 11:27–43.

———. 2008. "Recoupling Individuality: Relational Selves and Redemptive Relationships." In *Transdisciplinarity in Science and Theology, Vol. 4*, ed. Eric Weislogel, 311–38. Bucharest, Romania: Curtea Veche.

Tillich, Paul. 1957. *Dynamics of Faith*. New York: Harper and Row.

Thompson, Evan. 2005. "Empathy and Human Experience." In *Science, Religion, and the Human Experience*, ed. James D. Proctor, 261–85. New York: Oxford Univ. Press.

———. 2007. *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*. Cambridge, Mass.: Harvard Univ. Press.

Twenge, Jean M. 2000. "The Age of Anxiety? Birth Cohort Change in Anxiety and Neuroticism, 1952–1993." *Journal of Personality and Social Psychology* 79:1007–21.

Vygotsky, Lev. S. 1978. *Mind in Society*. Cambridge, Mass.: Harvard Univ. Press.

Wilson, Robert A. 2004. *Boundaries of the Mind: The Individual in the Fragile Sciences.* New York: Cambridge Univ. Press.