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Embodied Knowing, Embodied Theology: What Happened to the Body?

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Abstract As part of larger project on human bodies and theological knowledge, this paper is a preliminary investigation into how biology and physicality shape human knowing. It asks whether, in the frequent use of the phrase *embodied knowing* or *embodied theology*, religion scholars have paid sufficient attention to actual bodies. It argues that there has been a lapse of attention to physical dimensions of bodies in the unreflective employment of such phrases, ironically among practical and pastoral theologians who have strong interest in understanding how theology operates on the ground. The paper traces evolving interest in embodiment across several disciplines, including theology, before exploring what might be learned from recent research on evolution, biology, and bodies in anthropology and the biological sciences.

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Today, scholars in religion and theology often use the term *embodied* interchangeably with *cultural embeddedness* or *cultural constructions* of the body. As a nice example, religion scholar Sam Gill (2002) contributes a noteworthy chapter entitled "Embodied Theology" to an edited book on the academic legitimacy of religious and theological studies, an issue that has troubled the modern university at least since nineteenth-century attempts to reconcile Christianity with the Enlightenment. He argues for a non-religious or non-confessional approach to religious study, in contrast to one biased by religious convictions, even though he admits that such a theologically-free stance is impossible because Christian theology is so embedded in Western society. Hence, his title. However, putting aside problems with his reductive view of *theology* as "belief that is outside our usual frame of propositionality" (p. 83), I am curious about his use of the term *embodied*. He talks about the body, but largely in terms of how it is formed by culture and history rather than how being in actual bodies forms culture or history.[2] Oddly the body itself, its literal physicality, almost drops out of the picture. In other words, culture has the highroad in a new kind of Platonism despite Gill's own intent otherwise.

This *cultural* reading of the term *body* and *embodied* is actually quite widespread. Today religion and theology scholars talk all the time about embodied knowing or

[2] For example, he says he wants to "trace specific body histories to show how bodies are variously and differently constructed and, in turn, how such body histories correspond with and even determine how the world is encountered and seen as meaningful" (p. 84).

embodied theology but with little thought or attention to what is being said about bodies themselves, especially with regard to what it means to inhabit a physical or biological body. That is, we talk a lot about em*bodied* theology or em*bodied* knowing but less so about the *body* itself or what it means to know in and through material bodies. Ironically, the term *embodied* seems impaled on the very dualism between flesh and spirit, body and soul, body and culture that many scholars hoped to disrupt in using the term.

This paper is a preliminary investigation into how biology and physicality shape human knowing. In one way, this is a new research interest. But in another way, I have been thinking about this question for a long time. My interest is also part of a larger effort to understand practical knowledge or how people know in and through practice more generally. So I want to trace briefly the progression of my thought to acknowledge disciplinary areas that have given attention to bodies and shaped my own reflection, noting a few conclusions I have reached and developed in greater depth elsewhere, before I turn to selected research on evolution, biology, and bodies in anthropology and the biological sciences.

I know that "looking to the biological sciences has been for a long time taboo among feminist thinkers," as Jewish studies scholar Mara Benjamin (2011, p. 17, citing Hrdy, 2000; see also Hrdy, 2011) observes. Indeed, feminist theorist Susan Bordo, well known for her study of the impact of cultural stereotypes on bodies, describes the feminist politics of the material body as an "extended argument against the notion that the body is a purely biological or natural form" (Bordo, 1993; 2003, p. 33). I proceed nonetheless. Please do not mistake my interest in the physical body as a desire to return to some kind of arrested determinism that ignores culture or presumes or implies that our

bodies are our destinies. I realize that defining the body in relationship to culture is a difficult, if not fruitless, enterprise, and that returning to biology for some kind of foundational explanation about human behavior is hazardous (from a feminist perspective) and epistemologically wrong-headed (from a hermeneutical and postmodern perspective). The body is not simply a physical entity; it is always already shaped by culture. I am not interested in adjudicating complicated philosophical questions about definitions of body or culture, their relationship, or the weight given biology/culture in human development. I also know that Westerners such as myself are shaped by a long history of dualism between body and mind, body and culture out of which none of us can easily step just by quoting an overused aphorism among theologians these days that "we not only have bodies, we are bodies" (e.g., May, 1995, p. 18; Morrill, 1999, p. 12; Paulsell, 2002, pp. 16, 18). Westerners lie in the bed our history has made.

Nonetheless, I am interested in gaining a greater understanding of how physical (sensual, somatic, visceral, material, carnal, mortal, fleshly, vulnerable—I search for appropriate adjectives here) dimensions of our bodies inform our thought and knowing. What is the relationship between this dimension of human bodies and human knowledge? And how do actual physical bodies shape religious and theological knowledge? If there is an argument behind this initial examination, it is that there has been lapse in attention to physical bodies in the unreflective employment of the phrase *embodied knowing/embodied theology*, especially among practical theologians who have particular interest in understanding how theology operates on the ground. Simply stated, I want to put the physical body back into embodied knowing and theology.

A dis-body-ed embodied theology

Religion and theology scholars might be surprised to know that for many scholars in the sciences the word *embodied* carries a close connection to human physiology, biology, and material goods. When a source like *Wikipedia* defines *embodiment*, it lists the uses of *embodied* in cognitive science, for example, as focused on how the body shapes the mind or on the interplay between brain, body, and world; in law, as directed toward putting conceptual ideas into actual bodily practice; in theatre training, as a reconnection of body and mind; and in economics, as related to a material good or product.[3] Whether law, cognitive science, theatre, or economics, physicality has a prominence when the term *embodied* is employed that it often lacks in the study of religion. Moreover, in recent years there has been renewed interest across disciplines in mind-body-brain connections, research that has only begun to find a comparable home among scholars in religion.

In one sense, it is odd that the body or at least its physiological dimensions have dropped out of sight in religious and theological study. At least one powerful origin of the term *embodied* in theological studies is theological ethicist James Nelson's (1978) challenge to Christian theological body/soul dualism, *Embodiment: An Approach to Sexuality and Christian Theology*. In his work, the term *embodied* refers almost entirely to human sexuality.[4] He was among the first to attack Christianity's devaluation of the

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[3] http://en.wikipedia.org/wiki/Embodiment, consulted September 10, 2012.

[4] He writes, "The question before us now is the positive significance of our physical bodies, and hence our sexual bodies, in Christian *theologizing*. The wording is significant. We are not simply asking what theology has to say *about* the body . . . from some superior vantage point by discarnate, disembodied spirits. We are asking what it

body, particularly its negative repressive approach over the course of Western history to sexual bodies—bodies that become aroused, bodies that engaged in sexual activities, bodies that birth children, and bodies that are attracted to bodies of the same sex. Interest in the body has mushroomed in decades since his book, influencing, if not directly spawning, the creation of the phrase *embodied knowing* or *embodied theology*.

In another sense, however, the collapse of the word *embodied* into its cultural connotations makes perfect sense. In the years since Nelson's groundbreaking effort to put sexuality back into the common Christian lexicon, attention has turned increasingly toward controversial politics surrounding the cultural construction of bodies, such as those of race, disability, orientation, gender, and body commodification and modification. Feminists and poststructuralists have shown how culture marks and manipulates bodies, foisting on particular populations restrictive expectations grounded in narrow perceptions of biological normativity and (so called) naturalness, whether ideals of female maternal instinct, heterosexual mating desire, masculine aggression, and so forth. Over two decades ago, British and Australian sociologist Bryan Turner (1991) said, "In recent developments of social theory, there has been an important reevaluation of the importance of the body, not simply in feminist social theory, but more generally in the analysis of class, culture and consumption" (p. 11). Sociologist Pierre Bourdieu and those shaped by his work, such as Michel de Certeau (1984), have had great appeal among religion scholars in particular because Bourdieu and others understand *habitus* as much more than the Aristotelian character formation assumed by a prior generation shaped by

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means that we as body-selves…reflect upon—theologize about—that reality [of God]" (1978, p. 20, his emphasis).

Alasdair MacIntyre's (1981) and Edward Farley's (1983) use of the term. *Habitus* for Bourdieu (1984) involves ways in which the "body ingests and digests and assimilates, physiologically and psychologically" cultural ideals at a pre-reflexive, pre-discursive level (p. 210).

Nonetheless, there are problems with limiting the meaning of the term *embodied* to the body's social habituation, even for those who agree, as I do, with the importance of analysis of political and cultural constructions of bodies. In a book on *Sensuous Scholarship*, anthropologist Paul Stoller (1997) identifies "two salient features of this new embodied discourse" that "weaken its overall scholarly impact." First, the body is transported to the literate, verbal world of Western academics where it becomes merely a text "that can be read and analyzed," stripped of "its smells, tastes, textures and pains—its sensuousness" (p. xiv). The ears of scholars shaped by pastoral theology's twentieth-century history should perk up here. Is there something potentially reductive or restrictive in Anton Boisen's characterization of human beings as textual *documents* in his pioneering work in clinical education? Can living subjects be adequately understood when turned into linear texts?

The second concern that Stoller names is equally suggestive. "Recent writing on the body," he observes, "tends to be articulated in a curiously disembodied language" (p. xiv). He names Judith Butler's (1990) classic work, *Gender Trouble*, as an example—not to diminish its immense significance in showing just how deeply cultural constructions of both sex and gender run—but to note the irony that such Foucault-like efforts to contest the tyranny of Cartesian rationalism actually reinforce in their "dense mosaic of abstract analysis" the "very principle they critique—the separation of mind and body, which . . .

regulates and subjugates the very bodies they would liberate" (Stoller, 1997, p. xv). So, ironically, the body disappears in abstraction in the very effort to release it from entrapping hegemonic mores that constrict its expression.

Tracing body interest across intersecting disciplines

A few years ago, I did a plenary address on method in theology and the social sciences for a Society of Pastoral Theology conference on cognitive neuroscience. Although my focus was more on method than neuroscience (Miller-McLemore, 2011), I began reading recent literature in this expanding field and ran across books that triggered thought, such as Shaun Gallager's (2005) *How the Body Shapes the Mind* and Raymond Gibbs's (2006) *Embodiment and Cognitive Science*. I was struck specifically by the complicated nature of the brain as *matter* (or deeply in-bodied) and of thinking as never solely a cognitive process but one deeply influenced by embodiment—"matter over mind" to reverse the modern cliché. I wondered what more could be learned from the burgeoning field of brain science about the role of the body in practical knowing and in how one learns to perform a practice (such as pastoral care or ministry or religious faith more generally).

My interests go further back, however, to early research on motherhood in which I attempt to articulate what difference it might make in knowing to inhabit a woman's body capable of carrying a fetus, birthing a child, and nursing an infant (Miller-McLemore, 1992a, b; 1994). At that time, I read books worth returning to once again by feminist scientists and philosophers like Evelyn Fox Keller (1985), Sandra Harding

(1986, 1991), Sara Ruddick (1989), and Susan Bordo (1993).[5] In different ways, they all tried to articulate alternative patterns of knowing that undermine conventional approaches to what philosopher Charles Taylor (1995) describes as the modern "thrall of intellectualism" (p. 180). They provided plenty of conceptual support for my own argument that I might know differently through experiences such as nursing a child. Certain tactile experiences of mothering vividly relocate thinking within the body.

My research on maternal knowing was sparked in particular by a request to speak at another Society for Pastoral Theology conference twenty years ago on the theme of epistemology. Since I had two young sons and a third on his way, colleague and friend Herbert Anderson encouraged me to address whether I knew anything distinct from maternal embodiment. His question and the Society's concern about epistemology in general were provoked by the impact of feminist scholarship on modern truth claims and ways of knowing. A wealth of work in the late twentieth century protests the exclusion of women's thought and experience—in essence, their bodies—from sacred spaces within academic and ecclesial institutions. Feminist scientists and philosophers as well as feminist theologians all worked to undermine dualisms of mind (man) over body (woman) and articulate other ways of knowing. Feminism is only one among many movements in the past century that have shifted our attention to the power and place of the body in knowing.[6] But, "open talk about one's body" and reclaiming control over it

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[5] Similar books, such as Prokhovnik (1999), have continued to appear since the early 1990s.

[6] Race, queer, and disability studies are among other prominent movements that have made significant contributions to this shift in attention to bodies. Much more could be

were key to the development of second wave feminism, according to Jean Baker Miller (1976), one of the first psychologists to address women's experience (p. 24). As Latina theologian Mayra Rivera Rivera (2010) says so well, "Feminists have argued for decades that the devaluation of flesh contributes to the subordination of women and thus we work to rescue the body and materiality from patriarchal deprecation" (p. 119).

As if feminist theory and cognitive science are not sign enough that modern conceptions of dis-embodied knowing are coming undone, one could point further back to a foundational influence on twentieth-century pastoral theology's emergence, Sigmund Freud himself. This is not the place to evaluate the contributions of either development in the detail it deserves. How Freud understood the relationship between body and knowledge is an interesting question in itself that others such as religion scholar Naomi Goldenberg (1993) have explored. However, it would be a grave oversight not to recognize Freud's efforts to understand how the body speaks, whether his early neurological interests and study of hysterics and paralysis or his later work on slips of the tongue and the very mechanics of psychological development around erogenous zones. As psychoanalysts Peter Fonagy and Mary Target (2007) point out, the "rootedness of symbolic thought in sensory, emotional, and enacted experience with objects" stands at the heart of much psychoanalytic thought (p. 411). Although later proponents and critics, such as Norman Brown, exaggerate the promise of a psychoanalytic resurrection of the body, they are correct to note Freud's powerful message that bodily desire drives human behavior more than people in Western civilization have admitted.

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said than space allows on the influence of such work on scholarship in religious and theological studies.

Nonetheless, although Freud, Brown, and later analysts sought to overcome the psyche-soma split in theory and clinical practice, it is less clear that the body gained validation even though it gained visibility. That is, the body remains the horse, the ego is the rider, and the hierarchy of "higher and lower" to use Brown's (1959) words goes fundamentally undisturbed (pp. 31-32).[7] In psychoanalytic perspective, people are pulled and pushed—even driven—by bodily desire but the body—the horse—has little valid knowledge of its own. It is still *just* an animal and Freud remains ambivalent about and cautious, even distrusting, of animals, children, women, the primitive, emotions, and the body, all of which need guidance, oversight, and control, if not by religion's oppressive forces, then at least by more mature scientific discovery. A disturbing paradigmatic instance of his valuation of mind over body appears in his revision of his early seduction theory; it is not, he comes to believe, actual bodily molestation that shapes later pathology, just fantasies *in the mind* of the child. In the years since, findings on actual physical and sexual abuse have shown the serious consequences of real experiences and early social environment. Nonetheless, at least the body is foregrounded in Freud, even if still devalued. In the post-Freudian shift away from Oedipal drives and psychosexual development to pre-oedipal relationships in object relations theory and self psychology, the body slowly disappears from analysis. "Psychoanalysis to some measure has been desexualized" say Fonagy and Target (2007, p. 419; see Green, 1995 and Stein 1998a, b).

There are, of course, many scholars in religion who do in fact write about the body in a literal sense and this work has also shaped my own thought. Influenced by

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[7] Naomi Goldenberg says the "body that Brown depicts is impossible to particularize, impossible to touch" (1993, p. 33).

Freud's psychoanalytical legacy and with a focus on care directed at bodies (e.g., ill, dying, traumatized, etc.), pastoral theologians have naturally included the body among their many research interests. The first edited book on pastoral care and women (Glaz and Moessner, 1991), for example, contains a chapter on women's bodies as well as chapters indirectly related to bodies, such as battering and sexual abuse. Also illustrative is research such as that of Ralph L. Underwood (2009) on chronic pain and mortality, which cannot help but locate reflection in acute relationship to the body. And of course, beyond pastoral theology, there are many religion scholars, particularly in race, sexuality, gender, and disability studies as suggested above, who have given serious attention to bodies, too many to name and cover here (e.g., Eisland, 1994; Moltmann-Wendal, 1995; Gilkes, 1993; Ward, 2004; Pinn, 2006; Mount Shoop, 2010). However, only a few scholars both within and beyond pastoral theology give explicit attention to questions about knowledge and bodies (e.g., May, 1995; LaMothe, 2008). As curious, many exemplify the pattern of collapsing embodied knowing into concern about how bodies are shaped by culture and show little interest in how physical bodies shape ideas. So there is not much research on literal bodies and the work on literal bodies does not go far enough in terms of exploring questions of epistemology.

Bodies and learning a practice

More recently, the prominence of the body in social theory emerges in theories of practice in sociology, such as the work of a Bourdieu-influenced French sociologist, Loïc Wacquant (2004), *Body and Soul: Notebooks of an Apprentice Boxer*. There is a lot going on in his book, such as his creative redefinition of the boundaries of ethnography and his

investigation into social dynamics of racism and classism. More relevant for this paper, however, is his demonstration of the body/mind dynamics in his own novice entry into learning boxing and his claims about body knowledge gleaned from this experience. In his account of personal "initiation into a bodily craft," he fashions a "carnal sociology" that captures the "taste and ache of action," a sociology "not only *of* the body . . . but also *from* the body" (p. viii). At some visceral, pre-rational level, the body learns and knows, and thought follows. His work is suggestive in my own search for a more "carnal theology."

Do ministers experience anything similar in learning ministry? This question is actually the most immediate instigator of this paper. The concern has arisen for me largely as a result of recent research in practical theology. The reinvigoration of practical theology as a discipline in the last three decades in the United States and internationally originated in a concern over an abstract disembodied conceptualization of theology removed from everyday practice. Practical theology distinguishes itself in its emphasis on lived religious practices from what has been variously called dogmatic, systematic, philosophical, or constructive theology, historically focused on the study of conceptual belief. Practical theologians explore the complicated elusive dissonance between stated belief (e.g., doctrine, creeds) and everyday practice (e.g., rituals, daily life) and sustain an abiding interest in the materiality of human religiosity (e.g., material culture, bodies, everyday practices, ethnographies of local communities, the dynamics of place and time, and so forth). Although some US pastoral theologians hold practical theology's scholarly development suspect as further abstracting theology from its context or pastoral theology from its roots in the study of the self and psychology, it has been practical theology's

investment in living theology that most attracts me. Research on bodies is therefore also partly an extension of my involvement in this discussion.

Since the publication of a collaborative book, *For Life Abundant* (Bass, 2008), I have worked with four colleagues, Dorothy Bass, Kathleen Cahalan, James Nieman, and Christian Scharen, on a second book on a subject we touched on in the earlier book but did not explore sufficiently—the kind of knowledge that both arises from practice and makes good practice possible or, to put it another way, the practical wisdom that is crucial to the life of Christian faith, ministry, and theological education. We have varied in how we describe our primary subject matter, using in turn words with diverse and complex histories, such as *phronesis* (hard to do better in parsing knowledge than Aristotle's threefold characterization of intellectual virtue as *phronesis*, *techne*, and *episteme*), wisdom (a loaded cultural and religious term if there ever was one), know-how (an aptitude sadly devalued in the 1980s "clerical paradigm" hype about merely teaching ministerial skills), and practical knowledge (as contrasted perhaps too simplistically and sharply with theoretical knowledge). When we deliberated about what each of us could contribute to a work-in-progress, I identified my interest in bodies and embodied knowing as one aspect of the kind of knowing distinct to faith, practical theology, and *phronesis*. I had begun to notice that when practical theologians use the term *embodied* to mean *theology in practice*, the actual body often drops out of sight.

As we considered the fullness of what we hoped to explore about alternative ways of knowing in theology, we thought a prototypically academic approach of "telling" or analyzing would not do justice to the subject. So we experimented with other writing styles, trying to "show" or display through narrative and image rather than "telling,"

thereby changing the usual disproportion in academic prose of the conceptual over the depictive, analysis over images. I ventured into the murky waters of narrative and attempted a "show" chapter on body knowing. To my surprise, composing that chapter turned into one of the more rewarding ventures of my writing life.

In a way, the "tell-oriented" paper you are reading is a companion to my "show" chapter on Christian *phronesis* and the body. In "showing," argument is indirect—between the storylines so to speak—although my proclivity for scholarly footnoting inevitably led me to document my portrait, even if only through research on other peoples' stories of embodiment and knowing. If one believes that a picture tells a thousand words, distilling key ideas from this "show" chapter is not really possible. Nonetheless, there are a few conclusions worth carrying forward here.

The chapter has three movements on bodily knowing in worship, intimate relationship, and the practice of care respectively, but at the moment I find myself most compelled by reflection on worshipping bodies and "knowing God." So I focus my remarks here. My own religious practice has been indelibly shaped by a free or low church tradition where liturgy remains informal and elaborate rituals around praying, reading scripture, partaking in communion, and so on are few. This is even truer in smaller congregations, which are in the majority. We are not exactly the Presbyterian "frozen chosen," whom some describe as actively repressing bodily expression like clapping or dancing (Shoop, 2010, p. 2), but we did not leave everything behind in breaking away from this strand of the Reformed tradition in the US Protestant revival movement of the 1800s. Members of the Christian Church (Disciples of Christ) sit, stand, sing, and close eyes and bow heads during prayer but do not cross ourselves, process with

a cross or Bible, utter set responses to scriptural reading or prayer, lift up the Bible, stand for the Gospel reading, kneel for prayer, raise arms in praise or prayer, and so forth, unless particular ministers and congregations decide to imitate other traditions, which Disciples are free to do. This is not to say we do not have body habits. Rather bodily gesture is purposively downplayed and almost completely ignored. People do not think it matters.

Hence, perhaps, my interest. What does it mean, for example, to bow to God and to each other as a repeated life-long body practice for Benedictine monks at St. John's Abbey in Minnesota near the research center where I spent sabbatical time? Or, in my wandering religious life, now adrift from the Disciples congregation where my membership resides, what does it mean to process forward and hold out your hands to receive the Eucharist from a priest in a university Episcopalian congregation versus sitting and passing a communion plate, taking bread, and then serving your neighbor in my own tradition? Does it shape how and what one knows or even how one conceives of the divine, especially when one practices certain body motions over a lifetime?

One of the more striking findings when sociologist of religion Susan Ridgely Bales (2005) studied children's understanding of First Communion in three Roman Catholic congregations in North Carolina is the impact and centrality of sensory experience. To her surprise, her conversations with children in the weeks leading up to and following First Communion do not center on white dresses and parties, much less on the concepts adults thought they were teaching about transubstantiation or joining the Catholic Church universal, but on the "taste of Jesus' body" (Bales, 2005, p. 1). Taste preoccupies children in the days before First Communion and in the hours after it. One

child even explains her understanding of transubstantiation through taste, saying that the real bread tastes better than the practice bread (p. 101). Moreover, in their evolving theologies of taste and sensory movement, children experience their separation and membership not in terms of doctrinal belief but as centered on action. They are hyper-vigilant about movement; they want to teach "their bodies to move as the adults moved during the liturgy" (p. 103). Thus, "things which seemingly had so little to do with their initiation into the Body of Christ," at least for adults, "in many ways, defined it" via their bodies (p. 6).

Adults are not all that different from children, although we like to think we are. We do not leave sensate experience and knowing behind, even though Western doctrinal and intellectual history implies that such detachment is possible and even admirable. Our own religious convictions are more deeply buried in our bodies and bodily practices than we realize. In *Worship as Theology*, liturgical theologian Don Saliers (1994) observes that "bodily signs carry theological convictions at a deeper cultural level than do rationally expressed 'beliefs." In fact, "the more directly the body is involved, the more theological conflict there is likely to be between traditions." Protestants, for example, "may have more trouble with . . . genuflection than with more explicitly doctrinal differences with Roman Catholics" (p. 164, cited by Morrill, 1999, p. 8). In other words, Christian faith becomes deeply entangled right here, in the smallest of bodily movements with their multiple, highly elusive, seemingly negligible meanings as much as or more than in the big conceptual frameworks laboriously worked out over the centuries by church leaders, scholars, and denominations. This might surprise educators who put such stock in our words and ideas. This does not negate the value of systematic doctrinal

reflection or formal learning. But the devil, so to speak, or the divine, is in the corporeal details.

In Western society, detachment from bodies is often considered a sign of intellectual and spiritual maturity and a mark of true science and morality. So, late twentieth-century experts on moral and faith development who have had significant influence on pastoral theology, such as Lawrence Kohlberg (1981) and James Fowler (1981), agree with cognitive development theorists that concrete thinking denotes immaturity rather than, for example, an imaginative or philosophically astute way of seeing the world. Does this view, I wonder in my "show" chapter, "harbor unwarranted prejudice against material religion, bodies, children, laity, ritual, and the knowledge within physical acts of faith"?

A biological account of psychosocial development

Having situated my thinking in a rough overview of a variety of disciplinary developments that support reflection on bodies and knowing, I want to make what may seem like an abrupt change of course and turn to the biological sciences to see what might be learned from paying greater attention to research on bodies and human development. Recently, when asked by Princeton's Center of Theological Inquiry (CTI) to participate in a symposium on Melvin Konner's (2010) " book, *The Evolution of Childhood*, I agreed, knowing I would learn more about new research in biology but without realizing the magnitude of the task. Readers begin 530 million years ago (mya) with the "creature…close to the root of all vertebrates" (p. 78)—a "simple tubelike structure" in which the "genetics and chemistry governing major CNS [central nervous

system] domains was in place" (p. 83). By Chapter 5, we have progressed (only) to 18 mya when our most likely ancestor diverged from chimpanzees and bonobos, mammals with whom we share ninety-six percent of our DNA. There are still thirty chapters and several hundred pages to go (plus seven Interludes, three Transitions, a Reprise, and an Epilogue). In his four-part movement from phylogeny to ontogeny to social and cultural evolution, the Emory professor of anthropology and neurology nearly "explain[s] everything"—"Up to a point" as he says (p. 732).

My response to Konner centered on this phrase—*up to a point*—and invited consideration of tougher questions implicit in but not tackled by the book (and the book tackles big questions): How does one use this amassed knowledge and, more important, to what end? If "improving the human condition" is the "aim of scientific activity," as he himself indicates in his Prologue, then these are important questions that cannot be fully answered within the realm of science alone, although Konner seems to assume that cumulative empirical discoveries in and of themselves can have a salutary affect (the more we know, the better we will behave, and, if we keep going, we will know more and more). In other words, my questions were less about the book's argument and more about the relationship of the sciences and humanities and the nature of theological inquiry in CTI's new venture in interdisciplinary research in science and religion (a question that goes beyond his book).

I turn to Konner here, despite such moral and philosophical uncertainties, because he wants to make anthropologists, developmental psychologists, and perhaps even religion scholars more "cognizant of biology," to put it simply (p. 17). His book is partly a response to what he characterizes as the "anthropological veto" (p. 600) to cross-

cultural commonalities, something I encountered vividly at an interdisciplinary consultation on childhood studies several years ago when a prototypical anthropologist decried the essentialism of the psychologist across the table and insisted there are absolutely *no* universals. Konner insists, by contrast, that although understanding cultural variation remains central, anthropologists still need to elucidate the "enduring and biologically informative facts about our species" (p. 718). In his view, more anthropologists in recent years are coming to see the truth of this position. His desire as an anthropologist to understand the "behavioral biology of psychosocial development" (p. 5) is also relevant for scholars in religious and theological studies who have become so enamored with theories about the cultural construction (of selves, illness, sexuality, motherhood, and lots more) that biology is often ignored.

Although I see problems with the weight given evolutionary biology in what Konner calls his "deterministic interactionism" between biology and culture (p. 749), the book is not, as his phrase itself reflects, a flat assertion of the "laws and facts of biology" (p. 4). He strives for a nuanced reading of the interconnections. Although he sees biology as setting the parameters within which culture operates (e.g., the "mind is bathed in culture because biology makes it so, and biology does that with clear guidelines," p. 8), he also stresses, "nothing in biology is 100 percent." "If it's a biological law, it's fuzzy around the edges; all the rules are probabilities" (p. 77). This does not prevent him or others from drawing normative conclusions from the sweeping distillation of research in sociobiology, behavior genetics, brain studies, neural and neuroendocrine development, and the ethnology of primate and human societies. But it does allow him to compile data worth our consideration. I name here just a few illustrative findings that theologians

might consider as we strive to understand human behavior, childhood, and practical knowledge.

As is commonly known, infant dependency among humans, unlike other animals, requires extraordinary care on the part of adults for an extended period of time. Konner offers further elucidation. In the final chapter of Part I on the evolution of vertebrates and mammals, he traces increases in human brain size and cultural complexity over the last two million years. Compared to other primates and mammals, humans are distinctive in their prolonged rapid post-birth brain growth. Brain size more than doubles in volume during the first twelve postnatal months, and nearly doubles again in the next twelve months, suggesting that infant behavior in the first weeks after birth is "as much a kind of postnatal neuroembryology as a learning process" (p. 126) or what he later labels "postnatal gestation" (p. 129). In other words, "humans should be born about twelve months later than we are, in terms of brain growth rate" (p. 126).

Our nine-month rather than the twenty-one month gestation that would be optimal for the infant is a compromise made necessary by the disproportion between neonate head size and changes in female pelvic anatomy that accompanied upright posture. We see here an early instance of mother-offspring conflict that characterizes childrearing more broadly. That is, there is a weighing even at this point between maternal welfare and mortality and that of the infant so "expulsion occurs at a time that is not ideal for the neonate," at a lower than optimal birth weight, but at a time that provides an obvious advantage for the mother (pp. 129-130).

A similar tension arises around a development distinctive to mammals—infant crying. Crying is a "vital built-in survival mechanism," a "distress call" that was critical

to mammalian emergence (p. 214) and likely coevolved with lactation and maternal care as middle ear bones allowed mammals to hear sounds at a higher frequency than was audible by reptilian predators (p. 382). In human infants, the ability to emit a high pitched noise designed to provoke a reaction actually forms a "developmental bridge" between immaturity at birth and the aptitude for attachment that does not develop until five months. The caregiver's route to ending crying through holding, rocking, nursing, and so forth tests dramatically the "best interest," if not the patience, resilience, and resourcefulness, of the caregiver (p. 219). So, crying, which comes at some irritation and cost to the parent, elicits nutrition, warmth, and protection from predation during a time when adults often find themselves less attracted or attached to an expressively limited neonate. Its pattern follows a cross-culturally valid inverted U-shaped curve that peaks at two to three months (p. 217) and declines at about the same time that other distinctively human means for securing a response emerge, such as smiling and mutual gaze. Especially notable, in a study of 591 infants the pattern of shaken baby syndrome among adult caregivers followed the same inverted U-pattern of crying, peaking in the first few months and thus indicating a potential correlation between heightened crying and aggressive adult response (p. 218). Such knowledge, alongside findings that abuse is more likely to be perpetuated by non-genetically-related adult males than related kin, has obvious implications for prevention and care.

The bulk of Part II on maturation looks at just these kinds of "relatively fixed sequences of psychosocial development, drawing on cross-cultural and cross population studies" and relating this data to "neural and neuroendocrine development" (p. 207). Also of interest, Konner describes research on a notable "social bias" in infants that challenges

the view of the neonate's "relative lack of social responsiveness" and leads Konner and some pediatricians call the first weeks postpartum the "fourth trimester" (p. 208). Supported by fairly advanced visual capacities at birth, a neonate can actually "follow a sketch of a face" nine minutes after birth. They prefer the mother's voice at a few hours, "look longer and differently at their mother's face" at forty-five hours, and by two or three weeks can "mimic *two* facial gestures—tongue protrusion and mouth opening" (pp. 212-213). Particularly fascinating are studies of mirror neuron development that make imitation possible. A region in the lateral frontal cortex becomes active in monkeys and humans watching others perform actions. These neurons also fire when doing the action. In fact, it may be necessary to "mirror action (at the premotor level) to understand it" (pp. 151-152). As Konner concludes, "it is likely that both the phylogeny and ontogeny of intersubjectivity begin with the ability to interpret the actions of others through our own incipient action or preparedness for action, a less purely cognitive but more realistic view of intersubjectivity" (p. 152).

Such findings on the human ability to grasp the intentions and mind of the other person are relevant not only for those who want to understand human development but also for those interested in practical knowledge and embodied knowing. They correspond to more recent research that appeared after Konner's book confirming that the use of Botox to erase facial wrinkles not only impedes the expression of emotion but its comprehension. That is, "people comprehend emotional language in part by involuntarily simulating emotions with their facial nerves and muscles" (Havas et al., 2009). The inability to replicate the emotion physically impedes ability to understand it.

In Part III on socialization, Konner reviews research on the impact of early social experience, moving through studies of rodents, monkeys, and humans on the effects of early handling, stress, stimulation, social deprivation, isolation, and separation from mothers. With Harlow's monkeys, for example, "numerous efforts at rehabilitating the most deprived monkeys failed or fell short." At the same time, studies of deprived children reveal "resilience even in severe deprivation" (p. 376). The brain has the capacity to recover "significantly from either biological or psychosocial trauma" (p. 380). In studies of rat pups, some changes caused by disruption in care "persist into adulthood" and, particularly significant, may actually be "passed on to offspring genetically," indicating, "maternal care can reach into the genome of the young." This finding has "implications we have barely begun to understand" (p. 365). Intriguing research on such "epigenetics" has continued since Konner's book publication, suggesting that environmental effects can be passed on to progeny not just through the mother in utero but also through the male genome (Shulevitz, 2012). So biology and culture are in real interactional flux.

Equally informative and simultaneously inconclusive are the many studies of childrearing and new findings on the significant evolutionary role of *allocare* or caregivers related to the mother. Konner argues that "there is no human society in which males have primary or even equal responsibility for the care of offspring" (p. 470), even though some contemporary societies test the limits here. At the same time, research reveals the extent to which humans are "cooperative breeders." That is, mothers predominate in infant care but nonmaternal care by men, children, grandmothers, and extended family networks is substantial. Among hunter-gatherers, infants still spend the

majority of their time in closest proximity to their maternal caregiver, but mothers are rarely alone with a crying child (p. 436). A survey of extended family helping in vertebrates, mammals, hunter-gatherers, and humans confirms that cooperative breeding "has probably made a difference between us and our last common ancestor" in terms of evolutionary and reproductive success (p. 431).

So, in contrast to former anthropological and psychodynamic views, comparative studies with nonhuman species reveals that "we can no longer believe . . . there is one basic relationship—that with the mother—from which all others are derived" (p. 427). High levels of allocare also allow for patterns typical of hunter-gatherers and even intermediate-level societies but difficult in industrial societies of high indulgence, continuous physical contact, frequent nursing, close sleeping distance, late weaning, and regular nonphysical interactions (visual, vocal). Several other findings are of related interest: Only female humans "live for decades beyond their reproductive years" (p. 442), affording a unique place for grandmothers who often play a key role in fostering the welfare of offspring; among males in other species, such as Mongolian gerbils, lower testosterone levels are related to increased time spent delivering allocare (p. 447); humans are unique in having an extended period of slow growth between 5 to 7 years old and puberty, a period when massive enculturation occurs and children begin caring for younger children; and a study of children in Kenya where boys were assigned chores typically given to girls indicates changed behavior. In particular, "boys who did a lot of baby tending showed very little aggression" (p. 678).

This is just a small list, covering a fraction of the book's findings and obviously shaped by my own interests in understanding practical knowledge and promoting shared

responsibility and greater male involvement in childcare—all of which I am more than happy to see Konner affirm "scientifically" as a necessity of evolution! And here's the rub. Other readers likely have their own lists of favorites based on their interests. Indeed, one major concern I have is Konner's neglect of interests that drive research. He seldom situates the research he reports and the interests that drive it historically, contextually, or politically. This leaves the impression that research stands on its own, even though all research presumes money, power, constituencies, alliances, funders, personal histories, biases, values, goals, and hopes. Even Freud is presented in a way few scholars in the humanities read him any more, although Konner cannot help but acknowledge at least in passing the influence of Freud's Victorian context. Konner also overlooks the fine line between fact and value. "We cannot derive 'ought' from 'is,'" he says, "but we have to know what is" (p. 73). I agree. But in the centuries since David Hume, we have learned that there is no simple separation of fact from value, knowledge from knowledge use, results of empirical study from application.

As I read Konner's book, I could not help but wonder how biological "laws and facts" might be co-opted around controversial issues—maternal nurture and paternal neglect; male violence; gender orientation. One of his more speculative questions is especially illustrative in this regard: "Could our marked departure" from early patterns of child-rearing "be producing a discordance" comparable to our departure from the lifestyle but not the diet heavy in fat of our hunter-gatherer predecessors (p. 623)? This must be important to him because he repeats the suggestion in his Reprise (p. 748). However, are changes in parenting today as foreboding or comparable in their consequences as the hardening of the arteries that has become the leading cause of most deaths in Western

countries? To be fair, earlier he has noted that “different patterns of child care and attachment are not necessarily better or worse for infants; they are strategies for maximizing reproductive success in different environments” (p. 73). I am more receptive to facts and laws that broaden our empathy than those that heighten (punitive) judgment. At the same time, there are topics that Konner opens up where judgment seems warranted and is lacking, such as male violence and female genital cutting. Once again, this simply illustrates the complexity of trying to ferret out the facts and laws on which everything else rests. Even he has to admit that many human activities reveal the limits of such scientific reasoning, such as language development (p. 142), human adoption of other non-biological children (p. 447), play (p. 500), grief (p. 545), and social learning (p. 515), to name just a few. Nonetheless, with each such complex behavior, there are still benefits to knowing its biological and evolutionary dynamics.

Conversation with Konner made clear to me that quite different philosophies of mind shape science and the humanities. Scholars in the humanities are indelibly shaped by epistemologies that question the idea of pure or objective science—two centuries of German and French hermeneutics (e.g., Hegel, Heidegger, Merleau-Ponty, Wittgenstein, Gadamer, Habermas), twentieth-century Foucaultian poststructuralism, and feminist and other liberationist theories. For all three intellectual streams, there is no un-interpreted fact. As Charles Taylor (1995) remarks, “Even in our theoretical stance to the world, we are agents.” We cannot “form disinterested representations any other way” (p. 11). Nor can we find “basic empirical experiences on which we can ground everything else” (p. 167), an idea Konner assumes in the ordering of his book itself from biology at the

bottom to culture at the top. In some ways, scientists and humanities scholars live in rather different thought worlds.

A final note on theology and bodies

To his credit, Sam Gill—the religious studies scholar with whom I began who illustrated the cultural use of the term *embodied*—does give the body its due later in his historical analysis of the current state of theological studies. Using the "robed, heavily garbed body" of both professor and cleric as paradigmatic, his chapter offers a vivid, even if a bit oversimplified, portrait of the typical Western view of the body. Our academic and liturgical robes reflect and enact, he suggests, "our deepest cultural and religious beliefs" about the body. "Such garments transform the human body into a cloth-covered pedestal on which is prominently displayed the all-important head, the domain of mind and spirit" (Gill, 2002, p. 89). Everything else from the neck down is under suspicion and so "its articulation, its sexuality, its fleshiness, is to be covered, suppressed, denied" (p. 81). Similarly, academic institutions themselves discipline the body to "'sit still and pay attention'" (one hears Foucault here but he goes unmentioned). "Educational architecture and furniture are designed to disembody" and "limit body mobility" (p. 88) with desks lined up, bolted to the floor, and facing forward toward the teacher "thus establishing in the body a hierarchy of learning" and proclaiming the "utter uselessness of the body" (p. 89). "Academic bodies are not natural bodies; they are bodies disciplined from their earliest days of school to privilege the head part and to develop agnosia with respect to everything from the mouth down" (p. 89).

Indeed, we might speculate that part of the thrall of intellectualism is the relief from entanglement with bodies. The "monological subject" of the modern scientific mindset, to borrow Taylor's (1995) term (p. 169), still predominates. In this view, the "mind" operates independently of body and other people. The hubris of modern mind sustains a certain disdain for our mammalian bodies and the knowledge gained through them. So, centuries after Greek Platonic thought shaped early religious history, basic perceptions of bodies remain relatively unchanged. The physical world, like the body, is still "a place of transit, a temporary and dangerous place to be overcome and transcended" (Gill, 2002, pp. 85-86).

Gill's portrait is a little overdrawn and presents as monolithic realities that have more than one meaning. But he still captures a problem in religion with bodies. His critique of two renowned scholars in the 1960s and 1980s, Mircea Eliade and Jonathan Smith, is telling. Eliade grounds his highly influential theory of religion, which Smith later refutes, in aboriginal examples that neither one witnessed. That is, they never actually went to Central Australia to study aborigines. Instead, they reconstruct aboriginal life entirely from textual sources. "The physical bodied existence of aborigines is of no concern to either scholar. Aborigines exist as texts, writing, examples, not as bodied people" (Gill, 2002, p. 90). "Rather, both considered the texts, even in their opacity, even in their disembodying their subjects, completely sufficient" (p. 91).

Willie Jennings, theological scholar at Duke Divinity School, might consider this an inevitable consequence of a twentieth-century European-American Christianity shaped by a four-century history of conquest, enslavement, colonization, and displacement. His magnus powerful portrait of this history, *The Christian Imagination* (Jennings, 2010),

stands alongside the work of another Duke colleague, Mary McClintock Fulkerson's (2007) *Places of Redemption*, as unusual in their close attention to bodies and place. I note them briefly here only to raise them up as intriguing exceptions to the rule Gill outlines about body negation. Both are painstaking in the care with which they engage bodies and place, Jennings through a meticulous reading of historical documents, Fulkerson by immersion in a congregation attempting inclusivity of race and ability. It is hard to read either book and not see religious and ecclesial life through different eyes, eyes more attuned to the physicality and materiality of practical theological construction. Theologians have begun to see and analyze the raced body, the disabled body, bodies whose physical attributes matter, bodies whose place in time and space make a difference.

As theologians continue to reengage bodies, we would do well to keep the physical body in mind. One avenue to doing so is to attend to research in the sciences and their investigation of physical bodies, both as a source of insight and as dialogue partners. And the sciences continue to need the hermeneutical and normative resources of the humanities to guide appropriate use of their burgeoning discoveries about human brains, hormones, genetics, and evolution. This paper is a preliminary and suggestive effort in this direction, raising more leads than it can follow, hoping thereby to elicit interest and pave the way for further research. At the very least, we have witnessed the complexity and necessity of taking physicality, biology, evolution, and neurology more seriously.

References

Bales, S. R. (2005). *When I was a child: Children's interpretations of First Communion.* Chapel Hill: University of North Caroline Press.

Bass, D. (2008). *For life abundant: Practical theology, theological education, and Christian ministry*. Grand Rapids: Eerdmans.

Benjamin, M. (2011). Jewish thought, feminist ethics, and the obligated self. Paper presented at Stanford University, February 28, 2011.

Bordo, S. (1993, 2003). *Unbearable weight: Feminism, Western culture, and the body.* Berkeley: University of California Press.

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Cambridge, Mass.: Harvard University Press.

Brown, N. O. (1959). *Life against death: The psychoanalytical meaning of history*. New York: Vintage Books.

Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. New York: Routledge.

de Certeau, M. (1984). *The practice of everyday life*, trans. by Steven Rendall. Berkeley: University of California Press.

Eisland, N. (1994). *The disabled god: Toward a liberatory theology of disability*. Nashville: Abingdon.

Farley, E. (1983). *Theologia: The fragmentation and unity of theological education*. Philadelphia: Fortress.

Fonagy, P. and M. Target (2007). The rooting of the mind in the body: New links between attachment theory and psychoanalytic thought. *Journal of the American Psychoanalytic Association, 55,* 411-456.

Fowler, J. W. (1981). *Stages of faith: the psychology of human development and the quest for meaning*. San Francisco: Harper & Row.

Fulkerson, M. M. (2007). *Places of redemption: Theology for a worldly church*. New York: Oxford University Press.

Gallager, S. (2005). *How the body shapes the mind*. New York: Oxford University Press.

Gibbs, R. W. (2006). *Embodiment and cognitive science*. Cambridge, MA: Cambridge University Press.

Gilkes, C. T. (1993). The 'loves' and 'troubles' of African-American women's bodies. In E. Townes (Ed.), *A troubling in my soul: Womanist perspectives on evil and suffering*. Maryknoll, NY: Orbis.

Gill, S. (2002). Embodied theology. In L. E. Cady and D. Brown (Eds.), *Religious studies, theology, and the university: Conflicting maps, changing terrain* (pp. 81-92). New York: State University of New York Press.

Glaz, M. and J. S. Moessner, (Eds.). (1991). *Women in travail and transition: A new pastoral care*. Minneapolis: Fortress.

Goldenberg, N. (1993). *Resurrecting the body: Feminism, religion, and psychoanalysis.* New York: Crossroad.

Green, A. (1995). Has sexuality anything to do with psychoanalysis? *International Journal of Psychoanalysis, 76,* 871-883.

Harding, S. (1986). *The science question in feminism*. Ithaca: Cornell University Press.

Harding, S. (1991). *Whose science? Whose knowledge? Thinking about women's lives.* Ithaca: Cornell University Press.

Havas, D. A., A. M. Glenberg, K. A. Gutowski, M.J. Lucarelli, and R. J. Davidson (2009). Cosmetic use of Botulinum Toxin-A affects processing of emotional language. *Psychological Science* http://pss.sagepub.com/content/21/7/895; accessed September 18, 2012.

Hrdy, S. B. (2000). *Mother nature: A history of mothers, infants, and natural selection*. New York: Pantheon.

Hrdy, S. B. (2011). *Mothers and others: The evolutionary origins of mutual understanding*. Cambridge: Harvard University Press.

Jennings, W. J. (2010). *The Christian imagination: Theology and the origins of race*. New Haven: Yale University Press.

Keller, E. F. (1985). *Reflections on gender and science*. New Haven: Yale University Press.

Kohlberg, L. (1981). *The philosophy of moral development: Moral stages and the idea of justice*. San Francisco: Harper & Row.

Konner, M. (2010). *Evolution of childhood: Relationships, emotion, and mind*. Cambridge, Mass.: Harvard University Press.

LaMothe, K. L. (2008). What bodies know about religion and the study of it. *Journal of the American Academy of Religion, 76*(3), 573-601.

MacIntyre, A. (1981). *After virtue*. Notre Dame University of Notre Dame Press.

May, M. A. (1995). *A body knows: A theopoetics of death and resurrection*. New York: Continuum.

Miller, J. B. (1976). *Toward a new psychology of women*. Boston: Beacon.

Miller-McLemore, B. J. (1992a). Epistemology or bust: Where are we really headed?" *Journal of Pastoral Theology, 2* (Summer), 66-85.

Miller-McLemore, B. J. (1992b). Epistemology or bust: A maternal feminist knowledge of knowing. *Journal of Religion*, *72*(2) (April), 229-247.

Miller-McLemore, B. J. (1994). *Also a mother: Work and family as theological dilemma.* Nashville: Abingdon.

Miller-McLemore, B. J. (2011). Cognitive neuroscience and the question of theological method. *Journal of Pastoral Theology*, *20*(2), 64-92.

Moltmann-Wendal, E. (1995). *I am my body: A theology of embodiment*. New York: Continuum.

Morrill, B. ed. (1999). *Bodies of worship: Explorations in theory and practice.* Collegeville: Liturgical Press.

Nelson, J. B. (1978). *Embodiment: An approach to sexuality and Christian theology*. Minneapolis: Augsburg.

Paulsell, S. (2002). *Honoring the body: Meditations on a Christian practice*. Grand Rapids: Eerdmans.

Pinn, A. B. (2006). Sweaty bodies in a circle: Thoughts on the subtle dimensions of black religion as protest. *Black Theology: An International Journal*, 4(1), 11-26.

Prokhovnik, R. (1999). *Rational woman: A feminist critique of dichotomy*. London: Routledge.

Rivera, M. R. (2010). Unsettling bodies. *Journal of Feminist Studies in Religion*, *26*(2), (Fall), 119-123.

Ruddick, S. (1989). *Maternal thinking: Towards a politics of peace*. Boston: Beacon.

Saliers, D. E. (1994). *Worship as theology*: *Foretaste of glory divine*. Nashville: Abingdon.

Shoop, M. W. M. (2010). *Let the bones dance: Embodiment and the body of Christ*. Louisville: Westminster John Knox.

Shulevitz, J. (2012). Why fathers really matter. *The New York Times*, September 18, 2012: http://www.nytimes.com/2012/09/09/opinion/sunday/why-fathers-really-matter.html.

Stein, R. (1998a). The enigmatic dimensions of sexual experience: The "otherness" of sexuality and primal seduction. *Psychoanalytic Quarterly, 67*, 594-625.

Stein, R. (1998b). The poignant, the excessive, and the enigmatic in sexuality. *International Journal of Psychoanalysis, 79*, 253-268.

Stoller, P. (1997). *Sensuous scholarship*. Philadelphia: University of Pennsylvania Press.

Taylor, C. (1995). *Philosophical arguments*. Cambridge, MA: Harvard University Press.

Turner, B. S. (1991). Recent developments in the theory of the body. In M. Featherstone, M. Hepworth, and B. S. Turner (eds.), *The body: Social process and cultural theory* (pp. 1-36). San Francisco: Sage.

Underwood, R. L. (2009). Hope in the face of chronic pain and mortality. *Pastoral Psychology, 58*(5-6), 655-665.

Wacquant, L. (2004). *Body and soul: Notebooks of an apprentice boxer*. Oxford University Press.

Ward, G. (2004). On the politics of embodiment and the mystery of all flesh. In L. Isherwood and M. Althaus-Reid (Eds.) *The sexual theologian: Essays on sex, god, and politics*. New York: T & T Clark.