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Disgusting Bodies, Disgusting Religion: The Biology of Tantra

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ABSTRACT

Hard-core Tantric practice is disgusting, a point several scholars make. Scholarly interpretations of Tantric disgustingness, however, tend to follow the lead of Mary Douglas in suggesting that what disgusts is ultimately a reflection of social-historical concerns with borders and boundaries. Such interpretations fail to take seriously the Tantric consumption of feces, menstrual blood, urine, semen, and phlegm. Likewise, they fail to take seriously the particular sexual act involved, that is, intercourse with a menstruating, riding-astride, out-of-caste, mother-substitute. Consulting contemporary disgust research, I suggest that hard-core Tantra is literally disgusting because it is literally maladaptive. Disgust was naturally selected to deter the ingestion of bio-toxic pathogens as well as the practice of suboptimal sexual intercourse. Disgust maintains the species' viability. Tantra confounds disgust and thus disgusts. Tantra engages antibiological behaviors in its characteristically religious war against the body. As a disgusting religion, Tantra may be a perfected religion.

IT IS THE ELEPHANT in the room of Tantric studies (Wedemeyer 2007). Scandalously substituting tongues for hands, the proverbially blindfolded men in this particular room prefer to lick, eat, and occasionally fornicate their way to nondual gnosis. While their Advaita Vedāntin cousins manually grope a similarly proverbial elephant the

contours of which represent some version of South Asian idealism, these blindfolded men pursue "a materialized notion of nondualism" (Openshaw 2002: 249). Tantra is "practical Advaita Vedānta" (Kinsley 1997: 90).

It is, of course, Tantra's materiality, its practicality that most often fascinates (see also Heath et al. 2001; Urban 2003). Generally perceived, Tantra stands opposed to-or in high tension with-what most consider the norms and etiquettes of "mainline" religion not only on the South Asian subcontinent but around the world as well (Stark and Finke 2000; Curtis 2007). Perhaps there is something liberating about such social antimodels (Kinsley 1997: 251). Significantly, though, where the social-historical routinely locates opposition and thus subversive religio-politics, the biological locates continuity. "Hard core" Tantra (White 2003: 13) is and is not in opposition to "mainline" South Asian religions.¹ True, hard-core Tantra brazenly engages what South Asian culture generally proscribes. However, as the logical conclusion of a certain universal religious impulse, an impulse the explanation of which recommends biological considerations (Burkert 1996), hard-core Tantra completes heroically what mainline South Asian religions begin only timidly (Kakar 1989: 122). Proposing that the study of Tantra to date has been primarily descriptive and social-historical in nature, I believe we have yet to explain satisfactorily this heroic completion, that is, this "spiritually pragmatic" path (Kinsley 1997: 86). For this, I propose we turn to biology.

Risking the evocation of a certain "politically correct" ire, I claim that hard-core Tantra is disgusting, and this universally so. Universally disgusting substances and behaviors reflect a universally shared biology (Curtis and Biran 2001; Curtis 2007; Rozin et al. 2009). Fashionable—though hopefully waning—disdain for human universals notwithstanding, they exist (Brown 1991). What is more, these biological and ultimately ethological universals affect significantly the construction and execution of certain cultural practices, a phenomenon some refer to as "evoked culture" (see also Waller et al. 1990; Barkow et al. 1992; Buss 2001: 974; Fessler and Navarette 2003b). Many, of course, disagree. According to Tooby and Cosmides (1992), many in the human sciences generally adopt "the standard social science model" or SSSM, a model

¹It should be noted that the qualifying coefficient "hard core" has not been universally adopted by those working on Tantra. The phrase seems to have a certain pornographic ring in Western cultures. The extent to which D. G. White wishes to incorporate such allusions is both unclear and ultimately unimportant. For the present discussion, I will employ White's usage of "hard core Tantra" when designating the particular style of practice I wish to explain.

to which David Buss rightly attributes "the myth of culture as a causal explanation" (2001: 968). Including in its intellectual pedigree influential authors such as Emile Durkheim, Mary Douglas, and Clifford Geertz, the SSSM suggests that biology merely provides a "blank slate" upon which culture inscribes its biologically independent system of arbitrary symbols and meanings, apparently never pausing to consider what enables the acquisition of culture in the first place (Barkow et al. 1992; Pinker 2002). For the SSSM, cultural symbols and meanings are in effect irreducible or, and what amounts to the same, sui generis (Rue 2005: 5). Despite the rather widespread appeal of this approach, it is not mine. I am interested here in the significant though heretofore unrecognized role that biology plays in the construction and execution of hard-core Tantric sādhana, or practice. Tantra's counsel concerning the ingestion of pathogenic substances coupled with the practice of maximally suboptimal sexual intercourse with an out-of-caste partner is best explained, I argue, by considering the "evolutionary arms race" (Mayr 2001: 210) between humans and their parasites and pathogens (May and Anderson 1979; Hart 1990; Ridley 1993; van Blerkom 2003; Schaller 2006; Schaller and Duncan 2007; Schaller and Murray 2008).

My approach resonates with, while simultaneously departing from, the growing interest in biological studies of religion at large (Persinger 1987; Burkert 1996; Hinde 1999; Boyer 2001; Newberg et al. 2001; Atran 2002; Sweek 2002; Hamer 2004; Kirkpatrick 2005; Rue 2005; Dennett 2006; King 2007; Bulbulia et al. 2008; Ellis 2008a, 2009b; Slingerland 2008; Feierman 2009; Shermer 2011; Wilson 1998). Generally eschewing the empirically unfounded, a priori commitments of the SSSM, biology of religion often explains contemporary religious behaviors and beliefs by appealing to behaviors and beliefs originally selected for alternative ends. Few in the biology of religion view religious phenomena as sui generis (Taves 2008, 2009; Ellis 2008b). Accordingly, religious behaviors are often thought to be by-products of naturally selected behaviors, that is, behaviors originally selected for their reproductive advantages in the "pre-religious" Pleistocene (c. 2.5 million years ago to twelve thousand years ago). For instance, an attach- ment system naturally selected for the survival of vulnerable progeny eventually gives rise to religious beliefs and behaviors regarding divine attachment figures (Kirkpatrick 2005; Ellis 2009a). Similarly, the desire to group and by extension identify members of the out-group-a coali- tional psychological adaptation ostensibly in the service of intergroup warfare and pillaging—clearly influences a certain religious impulse (Irons 2008). Routinely, such attachment and grouping behaviors not only find support in but are positively sanctioned by religious

injunctions and codes, potentially facilitating thereby a multilevel selection phenomenon (Wilson 2002). Regardless of the details specific to any one study, most working in the biology of religion generally understand religion to be an evolutionary by-product that occasionally accomplishes either or both of the following: (i) mitigation of existential anxieties through socioeconomic exchange with and occasional manipulation of nonnatural agents and (ii) a prosocial code enhancing the survival and reproductive success of the group's members by controlling antisocial tendencies within—for example, deception—while simultaneously lending competitive edge in a resource struggle against those without (Stark and Finke 2000; Atran 2002).

It is not my concern here to assess the validity of such studies. I admit that I find them intriguing and often compelling, all the while realizing that for some authors of these studies amount to nothing more than "idle Darwinizing" (Richardson 2007: 183; see also Stark 2007: 43). The debates and controversies concerning the role that biological methods and theories play in the study of human behavior and culture will, undoubtedly, continue for quite some time. In the meantime, these philosophical concerns ought not to forestall further inquiry. They certainly do not forestall the present inquiry.

Though sharing an interest in the biology of religion, I depart—for this particular project—from the perspectives just considered. Where many see if not an amicable relationship then at least a continuous one between a biological past and a religious present, so to speak, I am interested in identifying and then explaining those moments when religions become positively maladaptive: that is, when religions promote beliefs and behaviors biologically offensive to the naturally selected human body. To offend the naturally selected human body is to depress its chances of (i) survival to reproductive maturity and then (ii) successful reproduction (the basic goals of any sexually reproducing species). Maladaptive religions threaten these goals. Tantra threatens these goals.

Recognizing the incendiary potential of the argument that follows, I want to be absolutely clear on one most important point. Characterizing a religious tradition as biologically maladaptive does not entail uncritical condemnation. The naturalistic fallacy cuts both ways. Inasmuch as a natural origin of a behavior or belief need not compel continued endorsement, so too an "unnatural" origin need not compel dismissal. Avoiding for the present normative evaluations of any stripe, I am simply interested in identifying and then explaining those moments when Tantric practice offends the biologically normative interests of the human body. If such practice does indeed offend the body—and this is precisely what I claim—then Tantra is truly disgusting.

The present discussion unfolds over three sections. I first describe what I take to be the two constitutive practices of hard-core Tantra. Because there are many excellent historical, descriptive studies of such practices already in print, I will be brief in my own description.² What is more, my description will keep to the actual substances consumed and sexual activities engaged. I do not intend to examine the rather baroque theologies often attending Tantric practices. Like the historical, descriptive literature, these theologies have been the focus of sustained scholarly attention for quite some time. As such, I will reference Tantric theologies only to indicate how the actual practices may seemingly accomplish the theological intentions. Although uninterested in the minutiae of Tantric theologies, I am, to be sure, interested in not only the historical descriptions of the practices but also the rather typical scholarly interpretation, a few illustrative cases of which I also briefly examine. I do this not simply for the sake of a literature review, but rather to identify what I believe to be a discrepancy between the actual Tantric practices and these scholarly interpretations, an identification that sets the context for the present discussion's contribution. The critical study of Tantra suffers a rather significant explanatory lacuna.

The second section of the article examines contemporary biological and social-psychological research on disgust. To date, no studies of Tantra have consulted this research. This is truly curious once we realize that claiming that Tantra is disgusting is not so terribly controversial after all. Indeed, several authors clearly recognize "typical Tantric disgustingness" (Wedemeyer 2007: 391). The issue I wish to raise here concerns the very meaning of disgust and the disgusting. In the absence of any explicit consideration of this issue, the descriptive and social-historical approaches to Tantric disgustingness fail to explain the practice. This is the case because the descriptivists and

²I recognize that Nemec (2009) has recently appealed to scholars of South Asian religions to engage in more translation projects, believing that more translations will lead to greater nuance in our understanding of said traditions. Clearly, this is the case. As Proudfoot (1985) noted, we cannot engage in descriptive reductions. However, I believe Nemec's position runs the risk of yet again substituting language studies and translations for the larger work of the field, which is clearly redescriptive in orientation (Smith 2004: 368). I thus agree with Wilson: "Certainly we do not lack facts... In addition to a sizeable social scientific literature on religion, there is a much larger body of traditional scholarship on religions around the world and throughout history. This information is descriptive... What we lack is a comprehensive framework for organizing the facts about Tahtra.

social historians generally remain content in following Douglas' (1966) abstraction of dirt and disgust from considerations of hygiene and pathogenicity. This is a mistake. Douglas' position is not borne out by contemporary disgust research. Accordingly, we must extend our "exegetical fussiness" (Tweed 2006: 30) with the category of "religion" to those descriptive terms that hold greater promise for explanatory contribution. When it comes to the critical study of Tantra, exegetical fussiness with respect to "disgust" is most warranted.

The third and final section of the article applies the biological and social-psychological research on disgust, reviewed in the second section, to the Tantric practices and claims reviewed in the first. My argument is that the central practices of hard-core Tantric sādhana, that is, the consumption of pathogenic substances and the practice of maximally suboptimal sexual intercourse with an out-of-caste partner, are precisely the two behaviors most offensive to the naturally selected human body. Hard-core Tantra's material nondualism is literally disgusting because it is positively maladaptive.

TANTRIC SUBSTANCES AND SEXUALITY

As it is with any religious tradition, "Tantra" is clearly overdetermined. There is no one Tantra. As such, I will not attempt to encompass in one general theory all Tantric practices. That would amount to hermeneutical naiveté, if not hubris; therefore, I delimit here the focus of my attention. The most important delimitation concerns what many recognize as the two Tantric paths, that is, the right- and the lefthanded paths (Kinsley 1997: 46). While the right-handed paths often engage in visualizations and meditations aimed at realizing some form of monistic idealism, the left notoriously utilize what have traditionally been called the *pañcatattva*, that is, meat, fish, wine, parched grain, and illicit sexual intercourse. The purposes for which these and other substances and behaviors are employed will occupy our attention shortly. For now, I admit that my concerns are not with the right-handed path and all of its variants. The elephant in the room of Tantric studies clearly has nothing to do with South Asian idealisms; such idealisms abound in mainline South Asian history and scholarship. Rather, the focus here is on the material dimensions of the so-called left-handed path, especially those forms of left-handed practice D. G. White gener- ally categorizes as "hard core."

At the heart, or better yet "gut," of hard-core Tantric practice is the generation and consumption of "clan nectar" or *kulāmrta* (White 2003: 76). The Tantric practitioner consumes, or occasionally dons, a concoction of "jewels" (*ratna*) or "moons" (*candra*) more often than not identified as menstrual blood, semen, urine, feces, and phlegm (McDaniel 1989; Jha 1995; White 1996, 2003; Kinsley 1997; Openshaw 2002).³ According to the ninth- to tenth-century Kaulajñananirnaya, the practitioner is enjoined to consume "poison, menstrual blood (*dharamrtam*), semen, blood, and marrow. . . . One should practice the drinking of [their] menstrual blood (*dharapana*). . . . One should constantly drink blood and semen" (quoted in White 2003: 76). Likewise, the Kaulavalinirnaya, dating approximately to the sixteenth century, instructs the practitioner to "worship the Goddess with the nectar of vulva and penis . . . by drinking of the virile fluid" (quoted in White 2003: 74). The source of these moons or jewels varies. Some practitioners employ the categories of ekak or yugal (Jha 1995: 69). Ekak (oneself/alone) moons are either one's own or those of the guru and/or the guru's wife. Yugal (other/with partner) moons are either svakīyā. that is, one's spouse's, or *parakīyā*, that is, moons of any indiscriminatemember-of-the-opposite-sex. Further qualifying these moons is the timing of consumption, that is, whether the moons should be consumed immediately upon issuance from the body or whether they should be exposed to heat. Finally, and quite possibly for the "faint-of-will," the moons apparently may be consumed on their own or diluted with other substances so as to make them, tellingly I might add, "more palatable" (Openshaw 2002: 227).

Though choosing the source of the moons appears to be an open issue, some of the more striking examples of Tantric practice clearly fall into the "*yugal-parakīyā*" class. For instance, the "hagiography" of the Tantric saint Ramakrishna relates how he went to the riverbank and found a pile of human feces, to which he applied his tongue. The hagiographer Swami Nikhilananda notes, once again rather tellingly, that Ramakrishna "felt no disgust" (quoted in Kripal 1995: 270). In another rather striking example, Jha relates an instance when the Tantric practitioners not only sought out and consumed "random moons," but actually bloody feces, that is, feces indicative of dysentery (1995: 91). Both instances clearly exemplify *yugal-parakīyā* sā dhana with the added element of "exposed to heat." The consumption of such clearly

³For the sake of economy, I will from this point forward simply reference the "Tantric practitioner" or "Tantric practice," understanding that the qualification between right-handed practitioners/practice and left-handed practitioners/practice has already been established and still applies. Also, while there may be different theological traditions associated with the left-handed practice, I am once again most interested in a biological explanation of the "hard core" practice itself, irrespective of the particular theological tradition.

pathogen-rich excreta constitutes the first of the two limbs of hard-core Tantric sādhana.

As with the generation and oral consumption of the moons, typical Tantric disgustingness equally applies to *maithuna*, or sexual intercourse, the second limb. Tantric sex typically involves a Tantric hero (*vira*) and his mystical lover (*yogini*), a lover often understood to be not only a goddess but, and more importantly for us, a mother-substitute. Jeffrey J. Kripal suggests in this regard that Tantric sex is "a form of mystical incest" (1995: 90). Jeanne Openshaw similarly notes that *bartaman panthis*—for all intents and purposes here a type of hard-core Tantric practitioner—conflate the two roles, that is, the lover and the mother (2002: 178). What is more, the mother-substitute ought to be menstruating, and as clearly depicted in Tantric icons, this menstruating mother-substitute ought to ride astride the male partner, assuming thereby the dominant position (Kinsley 1997: 7; Openshaw 2002: 199). Finally, the hero's yogin^T often issues from a lower caste, a qualification clearly confounding the incestuous intention. It is this admittedly overdetermined combination of mystically incestuous intercourse with a menstruating, riding-astride, out-of-caste woman and the consumption of the attendant bodily fluids and other excreta that is the elephant in the room of Tantric studies. How indeed are we to explain such seemingly scandalous behaviors?

Generally speaking, Tantric practitioners *consciously* engage these behaviors for one of two reasons. The first reason concerns power (Sanderson 1985). The practice was-and perhaps for some still is-an attempt at gaining what are in effect occult forms of power or siddhis (White 2009). These powers are either "magical" or "abstract" (White 2003: 199). Among the abstract powers, we find capabilities such as "irresistible will," "atomicity," and "levity." White significantly notes, however, that these abstract powers are later emendations to the historical tradition. He proposes that the "magical" powers were the ones originally sought out by, among others to be sure, the Hindu kings of medieval India. Some of the magical powers include "invisibility ointment," "disappearance," "elixir of immortality," and "telekinesis" (White 2003: 199). In a passage of particular significance for our discussion, White claims that there was one power that seemed to be most sought after: that of *khecara*, or flight (2003: 199-200). Admitting that my biological interests address more pointedly the practitioners' second reason for undertaking Tantric sādhana, that is, liberation, I will offer here only a tentative explanation of the "power-bestowing" elements associated with the "first."

The first thing to note is that by consuming fecal matter, menstrual blood, and/or semen, one does not literally gain the power to become invisible or engage in telekinesis. These claims are fantastic and best left alone for the present discussion. That being said, we can nevertheless recognize that a different type of power may accrue to the person engaging these practices. Power attends status (Milner, Jr. 1994). Religious status is often purchased by means of charismatic or virtuosic displays. I suggest that one form of power resulting from Tantric practice is charismatic in essence, and thus of a wholly psychological nature. To be sure, "religious elites"-including Tantric kings-often command the respect of others precisely through their explicit performance of what most people would only reluctantly do. That which most informs such reluctance may ultimately be biological in nature. In other words, those activities or behaviors conferring the most charisma and thus status may just be those activities least "pro-biological" in intention. For instance, many religious elites seem to enjoy their high status precisely to the extent that they are accomplished in the antibiological feat of celibacy, a topic to which we return toward the end of our discussion. For now, I will rest content with the hypothesis that the "power" gained through Tantric practice is charismatic in nature and thus is actually psychological before it is truly biological and/or physical.⁴

The second reason for engaging hard-core Tantra, and the one for which I offer an explanation here, is the desire for liberation. According to Tantric literature and practitioners, liberation often involves achieving a nondual awareness or existence, qualities often identified with the divine feminine and immortality (McDaniel 1989; Kinsley 1997; Openshaw 2002; White 2003). By becoming—sexually and gustatorily one with the goddess, the practitioner is liberated from dualities and death. Although some authors wish to make a categorical distinction between these two emic reasons or goals, that is, between the search for power and the pursuit of liberation (Sanderson 1985; White 2009), there is actually a subtle equivalence. Clearly, the desire for liberation is grounded in existential concerns with the body and its impending demise (topics to which we return shortly). I believe a similar existential concern informs the Tantric interest in the predominant power of flight. Indeed, recent research has shown that flight fantasies, including

⁴Anticipating the discussion that follows, I will admit that there is one possible explanation of Tantra's power-bestowing capacity on a biological register. Though I do not believe this was the case, the argument may be made that by ingesting pathogen-rich substances, such as fecal matter, the consumer is in effect inoculating him/herself from further infection through exposure to low levels of pathogens. This position perhaps deserves further consideration.

levitation fantasies, serve to mitigate death anxieties. The terror management theorist Sheldon Solomon and his colleagues note, "flight fantasies are an archetypal example of humankind's imaginative construction of supernatural conceptions of reality in response to the awareness of, and unwillingness to accept, death" (2010: 99; see also Cohen et al. 2011). That flight was the principle power sought—and this potentially as early as the Rg Veda (White 2003: 198)—sets the socalled psycho-historical stage for the more explicit emphasis on liberation by means of nondual gnosis that we eventually find amid certain Tantric communities.

Whether or not one actually transcends death by means of such practices, Openshaw is right to observe, "the four moons practices, whether performed alone or with a partner, involve a shift or erasure of boundaries between self and not-self" (2002: 247). What has yet to be explained, however, is the significance of *these* practices, disgusting as they may be, for the achievement of *that* end. The correlation is no accident. I suggest that it is *only* by engaging the disgusting that one *truly* realizes nonduality. Here Tantric practice and Tantric theology coalesce. What is more, I argue that engaging the disgusting is the unrecognized-yet-logical conclusion of not only a general South Asian religious impulse, but a universal religious impulse as well. If this is in fact the case, then all religious paths quite possibly lead to Tantra.

The anthropologist Jonathan Parry was not exaggerating when he suggested that "Hindu society is organized on a war footing *against* the body and its natural processes" (Parry 1989: 493). It is this war that potentially constitutes the religious impulse as such (Bloch 1992). Clearly, socio-religious status in South Asia is "constantly threatened by involvement with biological processes" (Parry 1989: 492; see also Milner, Jr. 1994; Fuller 2004). This threat is amply reflected in the widespread Hindu concerns with purity and impurity, concerns so significant that they, according to Patrick Olivelle, border "on scrupulosity and anxiety—śankā" (1998: 212).⁵ White similarly notes that Jayaratha—a commentator on the Kashmiri Tantric Abhinavagupta's work—counts śanraśankā, or dread of the human body, as one concern that particularly exercises the attention of the orthodox Brahmin (2003: 255). Jha adds, "The idealists and members of the upper classes despise the body and its products as gross, dirty and

⁵Though it exceeds the scope of the present discussion, we may note here that religious preoccupations with the body surely influence many of the religious traditions throughout the world. From St. Paul and St. Augustine to the Buddha and Ge Hong, the body is often a focus of (negative) religious attention.

despicable" (1995: 101, emphasis added). This generally perceived offense of the body is thoroughly borne out by the high Sanskritic literary traditions, including the *dharmasūtras* and *dharmaśāstras* (Doniger and Smith 1991; Olivelle 1999), by historical and ethnographic studies (Mandelbaum 1970; Srinivas 1976; Bennett 1983; Fuller 2004; Seymour 1999), and—perhaps most importantly—by empirical, social-psychological research (Rozin et al. 1997; Haidt et al. 1997; Haidt and Keltner 1999; Hejmadi et al. 2000; Curtis and Biran 2001; Haidt and Algoe 2004; Hejmadi et al. 2004; Elwood and Olatunji 2009). Truly, South Asians "then" and "now" find the substances and behaviors of hard-core Tantra disgusting (Wedemeyer 2007).⁶

Significantly for some, if not in fact many, bodily anxieties counsel the uptake of the religious life (Bloom 2004: 178). The psychoanalytic Indologist J. Moussaieff Masson in particular suggests that one of the resounding themes found in Indian philosophical and religious literature concerns the disquietude of the embodied life: "Basic to all such Indian mystical texts, one can discern certain invariable themes . . . an awareness of transience; feelings of disgust with the world" (Masson 1980: 51; see also White 2009: 22). Elsewhere he quotes a Hindu text on renouncing: "feeling that the body is not eternal, [he] felt disgust and left for the forest" (1976: 618; Finlay-Jones 1983; see also Power and Tarsia 2007). The first century Buddhist convert, Aśvaghosa, likewise writes in his Buddhacarita: "I am a śramana, who in fear of birth and death have left the home life for the sake of salvation" (quoted in White 2003: 198). Such world-weariness and disgust apparently motivated even suicidal behavior. The *Malinivijayottara Tantra* states "when [the yogi] considers all . . . experience to be repulsive, he relinquishes his own body and proceeds to the state of no return" (quoted in White 2009: 116). If it is indeed the troubles with the material body that motivate the religious quest, then in much the same way as it is for psychiatry (Phillips et al. 1998), so too for religion, disgust is the forgotten emotion. It is the "forgotten" emotion to the extent that most religions explicitly celebrate qualities such as "quietness, devotion, beauty, purity, unity, atemporality, infinity, [and] noncorporeality" (Anttonen 1996: 37). Such celebrations are in fact reactions to the disgusting realities of temporal, corporeal, and ultimately biological life. Cohen et al. note precisely in this regard, "Over the years, humans have established

⁶It should be noted that the aesthetic traditions in South Asia incorporated the category of disgust ($b\bar{b}bhatsa$) as a primary rasa or emotion in the dramatic arts. Indeed, $b\bar{b}bhatsa$ is listed in the famous $N\bar{a}tyas\bar{a}stra$. While certainly interesting and worthy of attention, an examination of the aesthetic deployment of disgust is beyond the scope of the present discussion.

countless means, real and imagined, of reactively reasserting their sense of freedom from the body in the face of death's ultimate limitation. Such strategies for escaping a sense of creatureliness range from extreme asceticism to fantasies of eternal youth" (2011: 101). Certainly this is the impression we get from mainline South Asian culture. Curiously, while the scholarly community rightly recognizes in its *descriptions* Tantra's disgustingness, scholarly *interpretation* seemingly fails to take this seriously. This is the case because many working in Tantric studies—not to mention the larger anthropology of purity and impurity in South Asia and beyond—continue to linger in Mary Douglas' shadow. Douglas' work is as influential as it is potentially misleading.

Douglas (1966) (in)famously argued that what cultures find disgusting and dirty are simply tokens of a much deeper social concern. Dirt and disgust betray concerns with social borders and boundaries, categories and classifications. Dirt is matter out of place. Similarly, substances—and I would add behaviors—which appear incapable of strict classification, for instance viscous substances that are neither totally solid nor totally liquid, are generally found to be disgusting. For many social historians and cultural anthropologists, what disgusts is ultimately only what confounds a social system of order based on injudicious distributions of power and privilege (Milner, Jr. 1994). In this respect, social history routinely puts the social cart before the biological elephant: "Douglas has the local cosmology, or world order, coming first, with dirt as its product" (Curtis 2007: 663). Those who follow Douglas similarly, though equally mistakenly, put social realities ahead of biological ones.

The late leading scholar of South Asian goddess traditions David Kinsley clearly follows Douglas. Describing Tantric sādhana, he writes, "In this way one overcomes the distinction (or duality) of clean and unclean, sacred and profane, and breaks one's bondage to a world that is *artificially fragmented*" (1997: 78, emphasis added), continuing elsewhere, "What we experience as disgusting, polluted, forbidden, and gruesome is grounded in limited human (or cultural) consciousness, which has ordered, regimented, and divided reality into categories that serve limited, ego-centered, selfish conceptions of how the world should be" (ibid.: 83). I agree and disagree with Kinsley. While I believe that we do order the world according to selfish conceptions, Kinsley is mistaken in his subtle equation of the human with the cultural and the hygienic with the artificially fragmented. Kinsley apparently sees the self as a purely cultural construction. It is not. Divisions between the clean and the unclean, the pure and the impure, and the disgusting and the

nondisgusting may indeed be "selfish" but, and as I will show below, they are anything but cultural, if by that we imply arbitrary.⁷

Much like Kinsley, Olivelle adopts Douglasian lines of reasoning. Explicitly agreeing with Douglas' dismissal of attempts to connect impurity with hygiene, Olivelle affirms the rather arbitrary nature of the pure and the impure: "Concern for impurity translates into concern for maintaining the integrity of boundaries, both physical and classificatory, which in turn relates to the concern for maintaining social boundaries" (Olivelle 1998: 211). Once again, I agree and disagree. For Olivelle, impurity is merely a by-product of social-historical concerns and structures. I disagree. I do agree, however, that the concern with impurity relates to a concern with the integrity of boundaries. Our disagreement rests on disparate understandings of the social. If the social generally addresses issues of self and other, or self and nonself, then we must countenance the possibility that there is a general division in the social. There are macro- and micro-social others (McNeill 1976). It is my contention that studies of Tantra to date have kept to the macro-social. The macro-social concerns self-other relations at the macroscopic level, that is, the level of human-human interaction. Such concerns rightly concern the social historian. I believe, however, that it is the microsocial concern that ultimately illuminates Tantra. Though we will engage in an extended discussion of the micro-social below, we may for the sake of clarity here characterize the micro-social other as the microscopic and ultimately parasitological other. Concerns regarding impurity may indeed translate into concerns for maintaining social boundaries, but not the arbitrary, macro-social boundaries to which Olivelle and others often allude. To be sure, Olivelle argues that the body is simply an accidental, after-the-fact medium for the inscription of biologically independent, macro-social concerns and regulations: "The human body becomes the locus for expressing all these concerns, especially the concern for maintaining purity" (1998: 21). Regardless of whether this is in fact the implication Olivelle wishes to impart, it is clearly the message Wedemever (2007) sends.

⁷I believe Kinsley similarly misinterprets a Tantric tale he recounts (1997: 28). Where Kinsley believes **S**iva wishes to escape Pārvatī's house, an allegorical reference to the body, in order "to indulge the senses willfully, to act without yogic discipline and control," I believe we must see the exact opposite. As a mythological elaboration of the Sānhkyan *purusa* and *prakrti* metaphysic, the allegory alludes to **S**iva's desire to escape material embodiment in a moment of Himalayan meditation and idealism. The *Tantric* allegory suggests that consciousness is indeed trapped within the material body such that all attempts at transcendence must be attempted by way of and not in spite of the body.

Although explicitly addressing Buddhist Tantra, many of Wedemeyer's comments indirectly apply to Tantra as a whole; after all, he seems to implicate a history of Tantric studies in his discussion concerning the denotative and connotative semiotics of Tantric instruction and practice. In a most telling passage, Wedemeyer writes,

the question of whether these words—cow meat, dog meat, elephant meat, horse meat, human flesh and faeces, urine, blood, semen, marrow—signify real beef, urine, and so on, I would suggest, is *close to irrelevant* . . . what is important is their signifying function, their ability to instantiate ritual pollution as a lived fact. What is essential to the signification of the rite are the five meats and five ambrosias as signs.... The *actual signifier is*, as de Saussure insists, *arbitrary*. (2007: 407, emphases added)

Saussurian semiology renders Tantric moons, like every other sign, arbitrary. Apparently, had the high Brahmanical tradition randomly chosen other objects as worthy of proscription, it would have been these and not feces and blood that would instantiate ritual impurity. Perhaps for this reason. Wedemever proposes that only a "naïve hermeneutic" insists on the literal, denotative meaning of the Tantric texts. While this may be the case, connotative semiotics all the same risks complicity with a Tantric ruse. Openshaw notes, "The allusive and complex rhetoric of a guru conversing with a group of initiates and non-initiates is in total contrast to the unambiguous and purely denotative language used in the private instruction of a disciple in esoteric practice" (2002: 116, emphasis added). Surely instructions are never as effective as they could be if they intentionally employ duplicitous language. Charges of hermeneutic naiveté notwithstanding, perhaps Tantric instructions are to be taken literally and ought to lead to the actual consumption of the moons. Wedemeyer eventually admits as much: "Though I suspect that actual consumption was rare in practice by any but virtuosi—the *possibility* of such consumption must be avail- able . . . for the system of semiosis to work . . . that one could (and might) actually do it is important for the full impact of the semiosis of revulsion to occur" (2007: 408). The semiosis of revulsion only works because someone may have actually consumed human feces and blood, at which point I daresay that these substances are anything but arbitrary or irrelevant and are thus no longer amenable to high Saussurian analysis. It is precisely because these substances—not others—elicit "revulsion" upon actual consumption that they can even begin to be employed in semiotic play. I charge that social history in its many

guises is simply incapable of explaining this revolting practice. For this, we must forego Mary Douglas' counsel. We must reconnect dirt and disgust with hygiene and pathogenicity. Once we do this, we come to realize that everything about hard-core Tantric sādhana, down to the last fecal morsel, is both irrevocably relevant as well as irrevocably disgusting.

DISGUST: ANIMAL NATURE AND CORE

What is clear from the many descriptions of hard-core Tantra is that both insiders and outsiders find the practice disgusting. Some authors even recognize that it is precisely the evocation of the audience's disgust that constitutes one of the motivations behind the practice (Kinsley 1997: 83; Wedemeyer 2007: 401). Despite such concessions, most scholars *explain* Tantric practice as an attempt to subvert artificial divisions in reality in order to achieve some sort of power or nondual awareness, the latter ostensibly in the service of criticizing cultural distinctions and their attendant injudicious distributions of power and privilege. I find such generally social-historical explanations unsatisfactory, for two reasons. First, I am altogether unconvinced that anyone would actually consume feces, menstrual blood, and urine for purely socioeconomic reasons. There simply must be something else going on. Personal incredulity, however, does not establish a scholarly position-thus, my second reason: social-historical explanations linger in Mary Douglas' shadow. Douglas' hypothesis that dirt is a cultural construction is at best incomplete and at worst outright mistaken.

What is dirty and disgusting is not of exhaustively cultural origins. Granted, culture may manipulate disgust and dirt for social purposes, but biology plays a significant role in what we do and do not find disgusting. Leading researcher on disgust and hygiene Valerie A. Curtis notes,

There is a link between dirt, disgust, hygiene and disease, but it is a link that predates history, that predates science and culture, that even predates *Homo sapiens*. Disgust has a long evolutionary history; the reason it is part of our psyche is neither primarily cultural nor historical, but biological. (2007: 660)

There is indeed a good biological reason why feces are so easily found disgusting but ice cream is not. Precisely in this regard, and despite the impression we may get from Douglas and those who adopt her approach, "Cultures don't quite have free rein as to what to exclude from the polluting. . . . Menstrual blood, human sperm and excrement, and other excreta of the human body seem to resist being innocuous substances" (Miller 1997: 44). Recognizing that the two general approaches in the recent study of disgust have been the phenomenological and evolutionary (Fessler and Haley 2006)—the former more often than not being privileged among social historians and cultural anthropologists—it is my position here that the evolutionary selection pressure for disgust—that is, the ever-present threat of parasitic infection—renders transparent for the first time the deep, religious logic of hard-core Tantric sādhana.

Disgust is an emotion. Emotion research generally recognizes primary and secondary emotions. Secondary emotions build off the primary ones. Combining primary emotions, much like combining primary colors, renders a more robust spectrum of emotional life. While secondary emotions, for example, nostalgia, are amenable to analysis—nostalgia is a combination of sadness and happiness (Power and Tarsia 2007: 20)—the primary emotions appear irreducible. What is more, unlike the secondary emotions, primary emotions are universal, that is, found cross-culturally.

Many have attempted to delimit the range of primary emotions. Despite the occasional variance, all such lists include disgust, an inclusion cross-cultural research clearly supports. Elwood and Olatunii note that similarities do in fact exist between cultures with regard to the "signal, physiological response, antecedents, and function of disgust" (2009: 101). They also note, significantly for us, that on the top of the list of universal disgust antecedents or elicitors are feces and menstrual blood (ibid.: 111; Kristeva 1982: 71). Other universal elicitors include decay and spoiled food, particular living creatures such as worms and helminthes, certain categories of "other people," and violations of morality and social norms (Curtis and Biran 2001: 21). We will return to these disgust elicitors below. For now, we are right to assume that disgust is indeed a primary and thus universal emotion (see also Angyal 1941; Ekman and Friesen 1971; Ekman et al. 1987; Rozin and Fallon 1987; Ekman 1992; Rozin et al. 2000; Elwood and Olatunji 2009: 117; Olatunji and McKay 2009; Kelly 2011).

Emotions often trump reason. A simple case of road rage tends to bear this out (Boyer 2001: 186). Expediting behaviors the more elaborate cognitive processes would possibly delay (Wilson 2002: 42), emotions contributed to the survival of the human animal's ancestors. Neuro-anatomy reflects this bio-historical importance. LeDoux (1996) points out that the emotional centers of the human brain are located in the older portions, particularly the amygdale complex, demonstrating that our evolutionary ancestors were far more prone to "analyzing" complex, environmental scenarios using their "gut reactions." He writes, "By way of the amygdale . . . the brain is programmed to detect dangers. . . . Prepackaged responses [i.e. emotions] have been shaped by evolution and occur . . . as Darwin points out, involuntarily" (1996: 174–175). Though LeDoux explicitly references dangers here, the adaptive behaviors emotions motivated and motivate generally fall into two classes, what I call the promotional and the prophylactic.

Promotional emotions encourage the organism to engage in various behaviors that are beneficial to the organism's biological wellbeing. Alternatively, prophylactic emotions discourage behaviors detrimental to the organism's biological wellbeing. By behaviors beneficial or detrimental to an organism's biological wellbeing, I specifically mean those behaviors that either promote or disrupt first the organism's maturation to reproductive capacity and then eventual reproductive success. Such maturation and reproductive success constitute the twin goals of the naturally selected human body (Bittles and Neel 1994). As a prophylactic emotion, disgust contributes to what has been called "the behavioral immune system" (Schaller and Duncan 2007: 296), that is, that suite of behaviors intended to protect the organism from environmental dangers.

Disgust research generally recognizes two types of disgust, animalnature disgust and core disgust. Animal-nature disgust is a cultural elaboration of core disgust (Haidt et al. 1994). The leading researcher on disgust, Paul Rozin, and his colleagues note:

Core disgust appears to have been elaborated into a more complex moral emotion that we call *animal nature disgust* in which actions and events that remind us that we are animals are repressed, hidden, or condemned. Such regulation of bodily functions, including sex, eating, defecating, and hygiene, are often incorporated into the moral codes of cultures and religions . . . where they appear to function as guardians of the soul against pollution and degradation. (1999: 575)

To be reminded that one is an animal is in effect to be reminded that one is a bleeding, defecating, and ultimately expiring organism (Goldenberg et al. 2000, 2001; Goldenberg 2005; Cox et al. 2007).⁸ It is

⁸The curious exception appears to be tears. Unlike their feeling for other bodily exuviae, humans do not seem to find tears disgusting. Rozin et al. propose that tears do not elicit disgust because they appear to be uniquely human and are thus incapable of signaling an irreducible tie to animal embodiment (Rozin et al. 2000). With the possible exception of tears, bodily excrete disgust us.

this reality that often disgusts us today (Rozin et al. 1997). To guard against such grave reminders, cultures articulate an "ethics of divinity," that is, an ethics constituting the third limb of what has been called the CAD triad hypothesis (Shweder et al. 1997; Rozin et al. 2000; Haidt and Algoe 2004).

The CAD triad hypothesis suggests that there is a triad of social emotions that aim to establish order and psychological equanimity within human society. Initially an acronym for community-autonomydivinity, CAD, similarly comes to stand for the emotions elicited when transgressions occur in any one of these domains. For instance, transgressions against the community elicit contempt. Transgressions against autonomy elicit anger. Significantly for us, transgressions against divinity elicit disgust. The "ethics of divinity" are in this regard socioreligious codes, ostensibly arising out of our animal-nature disgust, that distance our sense of self or, and better yet, soul from our sense of our animality, our embodiment. Curtis (2007) rightly points out that many religious texts, including the *dharmasūtras* and *dharmasāstras*, identify, vilify, and consequently proscribe contact with precisely those elements of human excreta that are universally found disgusting. Despite what appear to be rather recent, fashionable, and not to mention seemingly romantic studies concerning the sanguine relationship between religion and the body, the body and its products generally offend the religious sensibility (Becker 1973).⁹ For such reasons, Miller proposes, "ultimately the basis for all disgust is us-that we live and die and that the process is a messy one emitting substances and odors that make us doubt ourselves and fear our neighbors" (1997: xiv). Cox et al. similarly remark, "many biological entities and processes elicit feelings of disgust because they are associated with our animal nature, which in turn are associated with our ultimate mortality" (2007: 504).

Threats of impermanence and metaphysical insignificance disgust us (Rank 1945; Nilsson 1954; Brown 1959; Becker 1973; Yalom 1980; Dennett 1995; Pyszczynksi et al. 2003). Remedying such an unwelcomed reality, humans generally abide "the vital lie" (Becker 1973: 47; see also Pyszczynski et al. 2003). This lie routinely employs a dualism.

Antagonism between the mental (eternal, ethereal, sacred) and the corporeal (temporal, material, profane) is expressed in many intellectual traditions (e.g. dualism), religious convictions (e.g. the soul), and cultural practices (e.g. excessive grooming and adornment), all seeking to

⁹In a moment of hygienic irony, it may have been the Essenes' hypervigilance concerning bodily refuse as an offense against God that led to their comparatively early deaths (Zias et al. 2006).

instill humankind with an immortal essence independent of the body and thus view the self as free from accidental termination or eventual dissolution from the ravages of time. (Landau et al. 2006: 131)

While mind-body dualism is clearly existentially soothing, not to mention cognitively intuitive and thus satisfying (Bering 2002, 2006; Barrett 2004; Bloom 2004), it is by all classical and contemporary scientific and philosophical accounts illusory, if not in fact delusory (Freud 1927; Dennett 1991; Flanagan 2002; Searle 2004; Dawkins 2006; Slingerland 2008). Serving as an *existential* prophylaxis, animal-nature disgust discourages our recognition of and ultimately admission to this reality. Perhaps we do need the vital lie. The same prophylaxis, however, becomes rather troubling, from at least one biological perspective, when it applies to sexual intercourse.

Although it is of utmost importance to the survival of a sexually reproducing species, sexual intercourse can become a source of great disgust, anxiety, and occasionally psychopathology for the human animal (de Jong and Peters 2009). Terror management researchers persuasively argue that sex is problematic in that it too reminds us of our animality (Goodenough 1998; Goldenberg et al. 1999: 1175; see also Goldenberg et al. 2002). Accordingly, humans must, in the service of genetic propagation, mitigate their animal-nature disgust concerning sexuality. This they do with notions of romantic love. Love transmutes a bestial act into one between soul mates. "Romantic love, like religion, is a vitally important human motive because it elevates us beyond our animal nature to an abstract spiritual plane of existence; we become soul mates with our beloved" (Goldenberg et al. 2000: 206–207). I believe the South Asian categories of $k\bar{a}ma$ and prema (Marglin 1982) serve a similar function.¹⁰

While talk of love, soul mates, and methodical techniques may facilitate the sexual act for some, for others such facilitation is apparently inadequate. Some continue to struggle. This is potentially more true for the human male, significantly for us the gender most associated with Tantric practice (Openshaw 2002; White 2003).

¹⁰Of course, and though often set apart as if the former is animal sex and the latter spiritual bonding, these categories are a bit more nuanced. *Prema* does indeed transcend $k\bar{a}ma$, but $k\bar{a}ma$ transcends pure animal sexuality. Clearly insistent that the sexual act must be submitted to self-aware method, the $K\bar{a}mas\bar{u}tra$ distinguishes pure animal sexuality from human sexuality, indirectly indicating that to submit to the uncontrolled former is to forfeit the methodical latter (Doniger and Kakar 2002). The $K\bar{a}mas\bar{u}tra$ ministers to our animal nature disgust.

Because of men's ardent sexual desire and their relatively more bodycentered sexuality . . . they may be especially vulnerable to confrontations with their own corporeality via sexual attraction. This is consistent with the historical prevalence of men's association between women's sexual allure and death, hypervigilance over yielding to the pleasures of the flesh, and contempt and derision for women who provoke lustful thoughts. (see also Horney 1932; Kristeva 1982; Goldenberg and Roberts 2004; Landau et al. 2006: 132)

Here we broach the tragic and violent by-product of men's animalnature disgust regarding sexuality. Men can be existential misogynists. According to Martha Nussbaum, the constellation of male sexual desire and existential anxiety makes woman the locus of male disgust: "The woman becomes disgusting and slimy because she is the vehicle of the man's semen. She becomes, by projection, the bearer of all those animal characteristics from which the male would like to dissociate himself" (2001: 221). Elsewhere she adds, "Misogyny has typically seen the *female as the site of the disgusting*" (2004: 118). As many ethnographies attest, women and their menses are indeed often seen as polluting and dangerous (Bennett 1983; Meigs 1984; Buckley and Gottlieb 1988; Gilmore 2001; Fuller 2004). This imputation of (partially) fictitious pol- lution and danger to menstruating women and the accompanying sexist politics unfortunately put on display the human male's animal-nature disgust regarding sexual intercourse.¹¹

Animal-nature disgust attends reminders that we are bleeding, defecating, and sexually reproducing animals. In that we pretend to be disembodied and immortal, that which disgusts is antipathetic to the religious life. Rozin et al. rightly note, "Disgust can be understood as a defense against a universal fear of death . . . [it] guards the sanctity of the soul as well as the purity of the body" (2000: 642–643; see also

¹¹We should immediately note, however, that empirical research suggests that the menstruating woman can be disgusting to both men and women. Goldenberg and Roberts report that "when reminded of women's more creaturely nature by the tampon, both men and women endorsed a less 'physical,' more appearance-oriented standard for women's bodies" (2004: 78). Here the authors point out that objectifying women may be one of the misogynistic ways men—and quite possibly women as well—deal with sexual disgust. Goldenberg adds, "Women play a more obvious role in reproduction (i.e., women menstruate, lactate, and bear children) and, to the extent that reproductive processes are threatening reminders of creatureliness, objectification of women's bodies may provide a viable defense" (Goldenberg 2005: 226). Men and women indeed appear prone to downplaying the physicality of feminine sexuality and biology by objectifying elements of the body as well as emphasizing cultural "sanitations" such as perfumes, make-up, and clothing. "Sexual objectification of women as woman's body, body parts, or sexual functions are separated from her person, or regarded as if they are capable of representing her" (ibid.: 76).

Kakar 1989). Though generally agreeing with this position, I believe it ultimately lacks an important distinction. Animal-nature disgust indeed guards the sanctity of "the soul." Such disgust apparently motivates the pursuit of renunciation in South Asian traditions (Masson 1976, 1980; White 2009). It is, however, *core* disgust that guards the purity of the body. As the classical philosophical conundrum attests, these are separate considerations. I propose that animal-nature disgust ultimately reflects memetic concerns. Memetic concerns arise out of adherence to a set of ideas, or memes (Dawkins 1976: 192; see also Aunger 2010), for example, body and soul dualism. Core disgust, on the other hand, guards genetic interests.

Many suggest that core disgust evolved to protect the organism against the ingestion of lethal pathogens, remedying in this way the "omnivore's dilemma" (see also Rozin and Fallon 1987; Haidt et al. 1997: 109). To be sure, an extended history of gastronomic plasticity selected for some regulatory mechanisms and behaviors (Sherman and Billing 1999; Fessler and Navarette 2003b). Fessler and Navarette succinctly note, "Disease prophylaxis via regulation of ingestion is a principal ultimate function of disgust" (2003a: 408; see also Sawchuk 2009: 84). Surely the universal, visceral displays of disgust support such a position.

As early as Darwin (1965 [1872]), emotion researchers noted that the universally recognized disgust reaction entails—most significantly for us—a lolling tongue as well as downward turned corners of the mouth and a crinkled nose, behaviors in the service of expelling something from the opening to the alimentary canal as well as the forestalling of further incorporation of noxious odors. Animal-nature disgust may indeed find fecal matter disgusting because it reminds of the embodied condition and thus death; core disgust, however, finds such matter disgusting because it is the source of microbial contaminants and thus actually threatens death. Kālī's lolling tongue and its culinary preferences notwithstanding, human tongues were not selected for relishing excreta. Thus, "whilst the specifics of what we find disgusting are, of course, shaped by experience and culture, there is an overall biological pattern to our revulsions. Disgust of dirt is a part of human nature" (Curtis 2007: 660).

Historically speaking, disgust research emphasizes gustatory concerns. Such emphasis ought not to dissuade us from recognizing that the emotion goes beyond the gustatory. A careful review of recent research indicates that core disgust informs a broader spectrum of behaviors. Rozin and Fallon (1987) note the widespread disgust at animal products and suggest a universal human need to protect the soul from reminders of the mortal and animal nature of the human body. We believe that these aversions can be better explained from an evolutionary perspective as evolved aversions to potential sources of disease which pose the threat not just of mortality, but of genetic extinction. We suggest that the disgust emotion polices the vulnerable portals of the body, defending them from the ingress of pathogens and parasites. (Curtis and Biran 2001: 29; see also Rubio-Godoy et al. 2007: 61-62)¹²

Though rightly associated with the gustatory, disgust is ultimately in the service of forestalling contact with potential sources of disease as such. I propose that there are three such sources—the gustatory, the sexual, and the macro-social.

Core *sexual* disgust serves two similar though appreciably different functions. Fessler and Navarette (2003a) note, for instance, that sexual disgust fluctuates with the menstrual cycle. Male test subjects routinely find the notion of sex most disgusting when the female partner is menstruating. These authors go on to suggest that many so-called aberrant sexual behaviors evoke disgust. What apparently makes sexual acts "aberrant" and thus evocative of core disgust is their fitness reducing nature: "sexual disgust is an adaptation that functions to inhibit participation in biologically suboptimal sexual unions" (ibid.: 407); "natural selection . . . coopted a mechanism that originally guarded the body against pathogens and toxins, employing it to preclude fitness-reducing sexual behavior as well" (ibid.: 414).¹³ What is perhaps most interesting here is that while sex with a temporarily infertile partner is fitnessreducing and thus evocative of core disgust, the very selection of sexual reproduction itself betrays the parasitological pressures that truly inform the primary emotion of core (sexual) disgust (Tooby 1982; Ridlev 1993).

While menstrual sex may be found disgusting because it is not productive, widespread disgust felt for incestuous unions reflect concerns for the viability of the union's progeny. There are two primary threats.

¹²The disgust felt for microbial pathogens even serves today, some have argued, as a deterrent against biological and chemical warfare (Cole 1998).

¹³Here we can note that Martha Nussbaum's recent book, *From Disgust to Humanity: Sexual Orientation and Constitutional Law* (2010), argues that disgust with homosexuality is purely cultural and easily eradicable with the appropriate laws and education. Though I am in agreement that the disgust felt for homosexuality leads to untoward legal and cultural practices and behaviors deserving condemnation and correction, Nussbaum may be incorrect. Maybe the disgust felt for homosexuality by some reflects disgust felt for suboptimal sexual unions.

It is, of course, generally recognized that incestuous unions often produce compromised offspring. Physical and observed behavioral compromises most often reflect recessive allele homozygosity, a condition most probable with consanguine unions (Bittles and Neel 1994). Kumaramanickavel et al. (2002) document, for instance, ocular genetic diseases prominent amid the Dravidian community in Chennai, India, a community known for consanguine unions. Occasionally and tragically, a recessive trait codes for a lethal disease, for example, sickle cell anemia. When homozygosity is realized in such instances, the progeny dies. While lethal allele homozygosity is fitness-reducing and as such those unions likely leading to such a condition are often found disgusting, recent research has begun to narrow in on what may be most evocative of core disgust with regard to incest.

Consanguine sexual intercourse prevents the generation of a novel immune system in the offspring. This is a primary concern because immunological novelty ensures that parasites adapted to the host's immune system and thus thriving furtively will once again be detectable and thus eradicable in the progeny (Hart 1990). To be sure, due to their short-term generation rate, parasites can quickly evolve adaptations to the host's immune system, achieving thereby a certain immunological occlusion. Immunologically occluded parasites pass on to the progeny. If the progeny's immune system is too alike those of his parents, then the transferred parasite may enjoy continued occlusion and thus prove detrimental, if not fatal, to the young organism whose constitution is not robust enough to defend against the parasite or pathogen. Consanguine sexual partners simply do not provide enough genetic novelty for the offspring's major histocompatibility complex or MHC. The MHC enables the immune system's recognition of foreign bodies. Penn and Potts explain.

The MHC genes encode class I and II MHC molecules, cell-surface glycoproteins, that present peptide antigens to T-lymphocytes. Through antigen presentation, MHC genes play a central role in controlling the development and the activation of the immune system, including both cellular and anti-body mediated defenses. (1999: 150)

For progeny to enjoy a more robust defense against the immunologically occluded pathogens of its parents, and thus enjoy a reproductive advantage, that organism's MHC genes need to be heterozygous. The importance of MHC heterozygosity is reflected in the pronounced polymorphisms of the alleles. Indeed, the number of different alleles associated with the MHC in human populations "is more frequent than expected by chance" and as such most likely reflects the "selective advantage under pathogen stress" (see also Tooby 1982; Wedekind and Furi 1997: 1471; Penn and Potts 1999). The polymorphism of the MHC genes—actually known as HLA or human leukocyte antigens in human animals—ensures a greater diversity of heterozygous combinations which in turn prove more effective against host-adapting parasites.¹⁴ As it is with core gustatory disgust, so too with core sexual disgust: both serve the promotion of pathogen and parasite defense. Robert A. Hinde summarizes,

Sex probably arose because sexual reproduction enables an organism to detect parasites. Many infectious agents can mutate in a manner which enables them to remain undetected by the immune system of the host, but the immune system of genetically distinct offspring, produced by sexual reproduction involving individuals who are not too closely related, is able to spot them. Inbreeding between closely related individuals produces less genetic distinctiveness, and thus less immunological protection in the offspring. In addition . . . inbreeding can lead to recessive lethal alleles becoming homozygous. (1999: 179)¹⁵

Because pathogen undetectability and lethal allele homozygosity clearly threaten genetic extinction, incestuous sexual intercourse elicits core disgust (Lieberman et al. 2007).

While sexual relations with a close relative threatens genetic extinction due to compromising the progeny's ability to produce novel defenses against host-adapting pathogens as well as risking the presentation of lethal allele homozygosity, the exact opposite is the case when it comes to ingesting another human's "moons." Though disgust may eventually be co-opted into the service of excluding social others on a rather arbitrary basis—or so the Douglasian scholars reviewed above argue—there may actually be a more compelling parasitological reason for such macro-social exclusions (Kurzban and Leary 2001).

An aversion to contact with others, varying with the degree of familiarity, might also be advantageous. Although close family often share a common microbial flora, outsiders to the group carry pathogens to

¹⁴Several recent studies have in fact documented female sexual preference for men whose body odors may announce their MHC dissimilarity from the woman (Wedekind et al. 1995; Wedekind and Furi 1997; Wedekind and Penn 2000).

¹⁵Although incestuous relationships lead to "inbreeding depression," there are occasions when inbreeding may prove to be the optimal reproductive strategy (Kokko and Ots 2006).

which the insider is not yet immune. Disgust serves as an excellent trigger to their avoidance. (Curtis and Biran 2001: 25)

Immunologically speaking, the macro-social, *out-of-group* other is rightly seen as parasitologically strange and thus dangerous. It is this biological reality that informs xenophobia and ethnocentrism (Faulkner et al. 2004; Navarrete and Fessler 2006). Throughout history, the parasitologically strange, macro-social other has been the agent of destruction of whole civilizations (Diamond 1997; Mayr 2001). Thus, others, especially those who violate the morals and social norms of the group, that is, the ethics of divinity—behaviors associated with an out-of-group other—may elicit disgust for good biological reasons. Conversely, abiding by the larger group's ethics of divinity, one effectively communicates one's hygienic proximity; after all, "disgust is . . . the name we give to the motivation to behave hygienically" (Curtis 2007: 661). I believe we broach here a tentative, biological explanation for both the promotion of caste endogamy as well as the core *macro-social* disgust felt for Tantric transgressions thereof.

If one needs a sexual partner with a dissimilar genotype for the sake of producing progeny with novel immune systems, this dissimilarity often comes with the price of mating with an out-of-group other. If the out-of-group other is a potential carrier of a novel parasite, then the need for a dissimilar genotype is compromised by the possibility of parasitic infection. This is the sexually reproducing organism's reproductive dilemma. One could mitigate this parasitological concern if only one could rest assured that the out-of-group other abides by similar hygienic codes. Caste endogamy potentially mitigates the concern. The out- ofgroup sexual partner in South Asia need not be and often is clearly not out-of-caste. Castes constitute, on at least one register, "hygiene societies" that cross geographic boundaries (McNeill 1976). For instance, the Brahmin groom in village A can ostensibly rest assured that his Brahmin bride from village B is genetically dissimilar while also hygienically similar. In this regard, the prevalence of caste concerns in South Asia quite possibly reflects parasitologically driven collectivism (Fincher and Thornhill 2008; Fincher et al. 2008; see also Triandis 2001). If this is the case, then the Tantric hero's out-of-caste partner threatens unfamiliar hygienic practices and thus potential parasitic infection. That the lowest castes are often associated with bodily excreta and perceived bloody occupations may not be a biological accident; after all, caste impurities and purities often focus on food and sexual concerns and thus pathogen-evoked disgust (Rozin et al. 1997; Appadurai 1981). Despite any untoward, political ramifications, it is

reproductively advantageous for certain intimate groups to view suspiciously, and with disgust no less, the "parasitological stranger." As an out-of-caste partner, especially one hailing from a lower caste, the Tantric hero's yoginī is clearly parasitologically strange. Exoteric, parasitic threat accompanies mystical incest. In such attempts to transcend biologically informed dualities through engagement with the parasitic, hard-core Tantra puts on display the irrevocable reality of biological selfhood.

In addition to seeing disgust as a cultural construction, most social scientists see the self as a cultural construction. It is not. Self-other distinctions do not first arise with language and culture. Selfhood originates with the immune system. Accordingly, the first social other is not the macro- but rather micro-social other. The biologist Neil A. Campbell notes, "Implicit in the immune system's ability to recognize foreign molecules and cells . . . is its capacity to recognize the body's own molecules as native—that is, to distinguish self from nonself" (1987: 852). Rubio-Godoy et al. add, "All animals are able to differentiate self from non-self, a prerequisite for life. . . . An organism's ability to recognize its individuality enables it to preserve its integrity through immunity" (2007: 61). At a most basic, biological level, my identity begins with my immune system, that is, with my major histocompatability complex and this even prior to birth: "The vertebrate immune system develops the ability to discriminate self/non-self (before birth) by randomly generating a wide diversity of T-cells with highly specific antigenic receptors and then eliminating and suppressing those that recognize self-antigens presented by MHC molecules" (Penn and Potts 1999: 150). Duality attends immunity. While the macro-social other is a potential carrier of parasites and pathogens, the micro-social other is the parasite or pathogen itself. Certain macro-social concerns may await culture, language, and social history; micro-social concerns cannot.

The immune system and the emotion of disgust form a neurological continuum (Rubio-Godoy et al. 2007). When the disgust reaction fails in its prophylactic mission, the immune system kicks into gear. Both significantly mediated by serotonin, disgust and immunity are the primary players in the organism's viability. It is the maintenance of this viability and thus identity that establishes the not-so-blank slate on which culture eventually writes.

The parts of the body that interface with the environment are more perceived, and more intimately associated with the self, than are the inner parts of the body. Congruent with an evolutionary perspective, this pattern likely reflects an underlying neural architecture explicable in terms of the adaptive advantages of more extensive attention to and command over those parts of the body through which interaction with the environment occurs. (see also Rozin et al. 1995; Fessler and Haley 2006:15)

We apparently associate our macro-sense of self more intimately with such body parts as the mouth and genitals not because of arbitrary cultural divisions, but because our micro-sense of self demands it. Bodily orifices are the sites of commerce with the parasitological other. Our cognitive and emotional resources are in this way heavily invested in those parts of the body that engage in the most exchange with the outside world (Fessler and Haley 2006: 7). That the self so heavily polices the boundaries between inside and out—and this at both cellular and whole-organism levels—betrays the fact that disgust and immunity play significant roles in our "construction" of identity.¹⁶

Because core disgust was—and continues to be—in the service of excluding undesirable substances and activities due to the ever-present pressure of parasites and other pathogenic microorganisms, it easily became co-opted by systems in the service of excluding and rejecting untoward realities as such.¹⁷ Such cultural elaboration of core disgust into animal-nature disgust finds no better manifestation than in "mainline" religion. Religion is indeed at war with the body because the body is the vehicle of mortality (Parry 1989; Bloch 1992; Glucklich 2001; White 2003).¹⁸ The irony is that where religion's animal-nature disgust motivates a flight from the body, the zenith of this flight dialectically reverses course (Taylor 2007) and reengages the body. Religion's war against the body ends not with a fantastic denial of the body in a moment of monistic idealism, but rather with the body's practical subjugation. Winning the war against the body, that is, the source of animal-nature disgust, ultimately entails confounding that which intends to protect the very source of such disgust. This is Tantra's campaign. Tantra subverts the behavioral immune system on all three

¹⁶It is quite fashionable in South Asian studies to suggest that in South Asia "dividuals" are more common than individuals, that is, South Asian self-identity has fluid boundaries. Although such a position is indeed fashionable, it fails to persuade (Parry 1989; Openshaw 2002).

¹⁷This apparently even applies to propositional statements we find undesirable. Recent functional magnetic resonance imaging studies of the human brain note that when test subjects broach material with which they disagree, the same neural networks associated with monitoring oral disgust are activated (Harris et al. 2008). People and propositions that differ from us do in fact disgust us.

¹⁸I believe the argument could be made that what has now become a seemingly "pro-body" exercise regimen, *hatha yoga's* bodily contortions may equally have arisen through a desire to commandeer the body-as-enemy.

fronts: the gustatory, sexual, and macro-social. Tantra intentionally courts the parasitic.

CONCLUSION: THE BIOLOGY OF TANTRA

Self-aware embodiment is the dilemma (Miller 1997); religion is the solution (Bloch 1992). Despite the troubles with characterizing religion as such (Fitzgerald 2000; McCutcheon 2001; Smith 2004), I concur with White: "Transcending the human condition . . . seems to constitute the motor of every religious system" (2003: 99; Pyszczynski et al. 2003: 20). The human condition is first and foremost the embodied condition. Humans pursue bodily transcendence by one of the two paths. The first and by far most popular path downplays, if not openly denigrates, the importance of the body and bodily life. Most individuals on this path hold tightly to a nonnatural duality between soul and body (Flanagan 2002) and as such abide the "ethics of divinity" associated with the CAD triad hypothesis. At its best, this path openly endorses idealism, suggesting material realities do not exist at all. In the service of such idealisms, humans co-opt the naturally selected emotion of core disgust to color emotionally the distinction between body and soul. This is animal-nature disgust. Animal-nature disgust motivates the pursuit of "mainline" religion, including the Hindu path of renunciation (Masson 1976, 1980; White 2009). For mainline practitioners, Tantra is understandably animal-nature disgusting.

Tantra flagrantly violates the Hindu ethics of divinity, enjoining precisely those activities that most remind us of our animality.¹⁹ Tantric practitioners are in fact often exhorted to behave like animals (Haidt et al. 1994: 712; see also Jha 1995: 90; Openshaw 2002: 209). From the perspective of animal-nature disgust, being animal-like and being religious are understandably antithetical, and yet such a constellation constitutes hard-core Tantra. By celebrating, albeit alchemically (White 1996) and thus most fantastically, bodily excrete as well as sexual

¹⁹By "Hindu ethics of divinity," I mean primarily those purity and pollution codes most associated with the *dharmasūtra* and *dharmasūstra* literature. In this regard, the "ethics of divinity"—Hindu or otherwise—is simply meant to capture that rather widespread concern in most religious traditions with one's hygiene, especially when approaching objects or persons thought to be sacred or divine. I also want to acknowledge here that there are religions that seem to celebrate the body and nature generally. In such cases, I believe these traditions ultimately "supernaturalize" nature. The "nature" of these traditions to take on fantastic characteristics. Goldenberg et al. note, "Cultures that construe human life as closely connected to other animals and the natural environment tend to imbue all of nature with supernatural power and significance . . . the nature they are one with is supernatural rather than natural" (2000: 214; see also Goldenberg et al. 2001).

intercourse with menstruating, esoterically incestuous, out-of-caste women. Tantra confounds—whether genuinely or counterphobically (Fenichel 1945; Kakar 1981; Langer 2002)-the results of those socialpsychological studies that document a widespread, robust animal-nature disgust. Although it may be seen as evoking animal-nature disgust, I argue that Tantra more accurately evokes core disgust. It is not simply that Tantric practitioners are acting like animals, and thus remind us that we too are animals and thus doomed to death and decay, that disgusts us. Likewise, it is clearly not the case that we find Tantra disgusting because of some confusion of arbitrary, macro-social divisions and boundaries. On the contrary, "the process of evolution ensures that there is a tight fit between our values and desires and the structure of the world in which we have developed" (Slingerland 2008: 8). Explaining "typical Tantric disgustingness" (Wedemeyer 2007: 391) thus requires us to realize first that there are two types of disgust—a realization clearly absent in Tantric studies to date-and second that we rightly view Tantra as disgusting because it subverts "biological wisdom." The biological disgust we have for Tantra is the same core disgust we ultimately have for religion when it is pushed to its logical conclusion, a conclusion constituting the second religious path.

If the body is indeed a great source of anxiety—as it most certainly is for the majority of Hindus, not to mention most people around the world—then the most robust plan of action would be to defeat bodily realities, not to deny them fantastically as idealism is often wont to do. While its many variants appear committed to such an accomplishment, idealism and its symbolic systems never work: "Because culture is a symbolic solution to the very physical problem of death ... no culture (regardless of how powerful and convincing) can ever completely eradicate the terror engendered by the awareness of death" (Pyszczynski et al. 2003: 30). It is the routine failure of the idealistic and symbolic that ushers in the success of the materialistic and practical. The practical attack constitutes hard-core Tantra. To be sure, the two practices constitutive of hard-core Tantra-the consumption of pathogen-rich excreta and maximally suboptimal sexual intercourse with an out-ofcaste and thus parasitologically strange partner-are not accidental cultural constructions. Rather, it is precisely *these* two practices, *not* others, that most offend the biological realities of the human organism. To convince oneself of one's bodily transcendence may just require intentionally participating in activities most offensive to this body.

Biologically speaking, the human body is well adapted. Enjoying the immune system and the primary emotion of core disgust, the human body comes predisposed to *prosper* biologically. Biological prosperity

entails the accomplishment of two goals. First, the body must fight against the ingression of pathogens that could possibly lead to premature death, a prematurity characterized as death-before-reproductivesuccess. Once reproductive maturity is reached—the first goal—the human animal seeks an appropriate partner with whom to engage in sexual intercourse, an activity primarily in the service of producing viable progeny—the second goal (Bittles and Neel 1994). A lifelong avoidance of pathogen-rich materials en route to nonincestuous, heterosexual intercourse with a nonmenstruating, sexually mature female is the biological goal of the human male. The twin goals of admittedly normative biology constitute "the enemy" against which Tantric heroes—who are men (Openshaw 2002: 14; White 2003: 160)—fight. In this regard, transcending the embodied condition requires abiding by a repertoire of memes that encourage the confounding of the biological condition. Precisely in this regard, it is truly no accident that "the tongue is the Tantric organ" (Kripal 1995: 305). As a core disgusting religion, Tantra employs the very organ used to expel pathogens for the exact opposite end. Tantra's tongue relishes the pathogenic: "Kālī's tongue . . . is not about shame but about the destruction of disgust" (ibid.: 305). Significantly, in its attempt to destroy (core) disgust, Kālī's tongue approaches the destruction of the body itself. Offending the very reason for an immune system, Kālī's tongue consumes the other's moons. Likewise, sexual intercourse with an incestuous, menstruating, riding-astride, out-of-caste partner appears to be the most suboptimal intraspecific sexual union of which the human animal is capable.²⁰ Clearly, a menstruating woman is temporarily infertile. Likewise, though perhaps a fact often unnoticed, the woman-astride position is the least conducive for insemination.²¹ What is more, even if progeny were to issue from the union, the antibiological intention behind the admittedly fantasied incestuous act is one of producing a lethal allele homozygous child or a child with an MHC too similar to the parents'. both conditions contributing to the likelihood of premature death.

White suggests that Tantric sex was always primarily in the service of generating the moons. As we saw above, the source of these moons

²⁰It should be noted that the incestuous component of the paradigm seldom plays out in reality. Indeed, the hero's partner is generally from out-of-caste and thus cannot be his mother or sister. Accordingly, the evidence for Tantric disgust is not uniform. Whereas the incestuous intention remains merely an intention, the hero actually ingests orally pathogenic substances. I want to thank one of the anonymous reviewers for drawing to my attention the discrepancy between actual consumption of feces and the merely intended incestuous act.

²¹The woman-astride position either intentionally or unintentionally employs gravity to aid in forestalling successful fertilization.

varies. What we now realize is that the emic classification Jha presents occludes elements of biological significance. Recall, Curtis and Biran (2001) argue that the pathogenicity of others' moons varies. Indeed, reporting the results of empirical research on forty thousand participants, Curtis and her colleagues conclude, "sharing a person's bodily fluids becomes more disgusting as that person becomes less familiar because strangers are more likely to carry novel pathogens and hence present a greater disease threat to a naïve immune system" (2004: S132; see also Hart 1990). With respect to Jha's classification, we now note that the esoteric identification of one's moons with one's guru's and/or guru's wife's occludes the significance of the biological distinction. To be sure, the guru and the guru's wife are in effect "parasitological strangers," that is, potential carriers of novel and thus offensive pathogens. Likewise, placing one's spouse's moons in the yugal category obscures the fact that one's spouse's moons are more parasitologically familiar than is the guru's, guru's wife's, or any indiscriminate other's and are thus less biologically dangerous and less disgusting. These concerns ultimately inform the biologically transgressive nature of the yoginī's out-of-caste status. Like the guru and guru's wife, the yoginī is parasitologically strange. For this reason, it may not be an accident that the yogini was often associated with birds, that is, with animals associated with the transmission of disease and epidemic (White 2003: 58). After all, Tantric heroes actively sought out "cracks in the human immune system" (ibid.: 52).

Courting the biologically dangerous is precisely where we locate the practical and thus completed nondualism of Tantra. As Openshaw notes, Tantric practice is about the erasure of distinctions between self and nonself. Where Openshaw leaves this observation undeveloped is precisely with regard to the biology of identity. To erase truly the distinction between self and nonself requires not the overcoming of arbitrary, cultural divisions or the mental gymnastics of meditative regimens, but rather the ingestion of pathogenic substances.²² If self-other distinctions begin with the major histocompatability complex, as indeed they do, then to erase dualistic boundaries requires offending the immune system. Offending the immune system is the performative gustatory act of hard-core Tantra and it is only this act that truly realizes, dangerously of course, nonduality. Thus, while for some Tantra may amount to a social antimodel, I believe it is best viewed as a

²²Indeed, I find, for example, that the deafferentation of the parietal lobes amounts to a fancy (meditation) parlor trick (Newberg et al. 2001); duality is only seemingly transcended.

biological antimodel. In its attempt to be liberated from the only conclusion the body promises, that is, death, Tantra becomes maladaptive.

The purity and pollution codes of high South Asian culture that Tantra flouts are not arbitrary constructions of an accidental, social institution. Rather, the codes address what is universally found disgust- ing and are thus reflective of evoked culture. The universally disgusting serves a biological function no social-historical or cultural anthropolog- ical analysis can rightfully disregard. If not contest, then I at the very least complement the interpretations of Tantra we routinely receive from authors such as Kinsley, Olivelle, and Wedemeyer. It is irrevocably relevant that Tantric practitioners consume precisely these substances and not others. It is equally irrevocably relevant that Tantric practitioners engage precisely the sexual unions they do, pursuing, as one sādhaka most tellingly put it, "the [anti-biological] ideal of non- procreation" (Openshaw 2002: 243). Indeed, "from ancient times these sādhaks are against childbirth" (Jha 1995: 98). To the extent that this is in fact the case, these sādhaks pursue genetic extinction: the consumption of pathogen-rich bio-toxins and the performance of maximally suboptimal sexual intercourse strike at the very *raison d'être* of the naturally selected human body. What better way for the mind/soul and its memes to win the universally religious war against the body and its genes than by intentionally offending the body precisely in those arenas naturally selected for its success? Hard-core Tantra sanctions the con- founding of the core disgust mechanism on the gustatory, sexual, and macro-social fronts. Tantra is literally and universally disgusting because it is positively maladaptive. As a truly antibiological attempt to "reverse the flow of life" (Openshaw 2002: 199; see also Bloch 1992), Tantra is the denouement of the universal, religio-martial campaign against the biological body.²³ In this regard, and despite any initial revulsion, the core disgusting bodies and sexual activities constituting hard-core Tantric sādhana make of this particular tradition a truly disgusting, though quite possibly "perfected." religion.

²³The extent to which the foregoing comments on other religious traditions is, I believe, something deserving scholarly attention. Do other religious traditions equally engage in antibiological behaviors? I believe they do. For instance, the consumption of heavy metals in the Daoist tradition of *wai-tan* appears comparable. Likewise, some of the reports concerning St. Francis of Assisi kissing the open sores of a leper and eating from a bowl mixed with the blood from a leper's fingers clearly offends immunological wisdom (I'd like to thank Amir Hussain for drawing this latter example to my attention). Of course, only further, comparative research will decide this issue. For these reasons, I counsel other scholars in the study of religion to consider explicitly the extent to which their particular traditions of interest utilize either pro- or antibiological motivations.

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