**Rethinking Incest Avoidance**

**Beyond the Disciplinary Groove of Culture-First Views**

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In Wilson (2019), I articulated and defended a version of the Westermarck Effect by developing a phylogenetic argument that has purchase within primatology but that has had more limited appeal for cultural anthropologists due to their commitment to conventionalist or culture-first accounts of incest avoidance. Here I look to advance the discussion of incest and incest avoidance beyond culture-first accounts in two ways. First, I shall dig deeper into the disciplinary grooves within cultural anthropology that make attractive the view that incest has a naturalness to it that is countered only or primarily by explicit social rules, such as taboos. Second I further explore the emerging, post-conventionalist view of incest avoidance in a more positive vein by elaborating on the nature of the Westermarckian mechanism and how it relates to such explicit social rules and our innate biological endowments. One general aim here is to overcome the bifurcation between perspectives that are seen as biological and those seen as cultural, pre-empting or countering the claim that rejecting culture-first accounts entails a form of biological reductionism, a general aim I have pursued in related publications on bioessentialism about kinship (Wilson 2016a, 2016b).

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**1. Introduction**

In Wilson (2019), I articulated and defended a version of the Westermarck Effect by developing a phylogenetic argument that has ongoing purchase within primatology but has had more limited appeal for cultural anthropologists. That phylogenetic argument draws on fairly decisive evidence concerning apparent constraints on sexual relations within nonhuman primate groups to argue that there are mechanisms for avoiding incest in our closest living ancestors that are also likely present in *Homo sapiens*. For the most part, cultural anthropologists have either ignored, dismissed, or downplayed the significance of this evidence from primatology in their continuing debates over the Westermarck Effect.

I view the cross-disciplinary dissonance here as due to two disciplinary grooves within cultural anthropology: first, a widespread (but mistaken) commitment to conventionalist or *culture-first* accounts of incest avoidance, according to which distinctively human culture plays a critical originating role in human incest avoidance; and second, a general wariness there of reductive appeals to the biological sciences in explaining social or cultural phenomena. (I take the commitment to culture-first accounts to activate the general wariness about biological reductionism.) In previous work, I have argued that the primate evidence that feeds the phylogenetic argument for the Westermarck Effect shows that culture-first accounts of incest avoidance are mistaken (Wilson 2019) and have defended what I have called a *bioessentialist* account of kinship (Wilson 2016a, 2016b) that confronts that more general wariness. In this paper I look to advance the discussion of incest and incest avoidance beyond culture-first accounts in two ways.

First, I shall dig deeper into the disciplinary grooves within cultural anthropology that make attractive the view that incest has a naturalness to it that is countered only or primarily by explicit social rules, such as taboos. Here I will start with the original groove carved by the early commitment to evolutionary primitivism in the second half of the 19th-century and the role that appeals to the distinction between descriptive and classificatory kinship systems played in structuring default views of incest in the discipline (section 3). The groove carved here was deepened by the disciplinary reception within cultural anthropology of Sigmund Freud’s views of the naturalness of incest in the first half of the 20th-century (section 4). These two grooves have primed cultural anthropologists to accept views that propose a firm division between human and animal incest and its inhibition (section 5). Although each of these currents of thinking have been discussed separately in accounts of the history of anthropology (e.g., Kuper 2005, Wolf 1993), drawing them together here usefully frames our understanding of the persistence of culture-first views of incest avoidance and the continuing resistance to their rejection, despite the advances in the relevant empirical sciences, particularly in primatology.

 Second I more positively explore what I hope is an emerging, post-conventionalist view of incest avoidance. I do so by elaborating on the nature of the socio-cognitive mechanism that underpins the Westermarck Effect and how it relates to explicit social rules and our innate biological endowments. My chief aim here is to create some distance between my defence of the Westermarck Effect and the putatively reductive views of sociobiologists and evolutionary psychologists. I shall start by briefly distinguishing this mechanism from the innate rules and modules invoked by recent discussions of the Westermarck Effect. These recent discussions echo Westermarck’s own talk of there being an “innate aversion to sexual intercourse between persons living very closely together from early youth” (Westermarck 1891, 3rd ed, p.420) and so my explorations here also flag some distance between my views and those of Westermarck (section 6). I will then consolidate and extend this discussion by locating my views here within the kind of externalist or anti-individualistic framework for thinking about cognition and cognitive mechanisms that has come to prominence in the philosophy of mind and cognitive science (Clark 2008, Menary 2010) that I have defended elsewhere (Wilson 1994, 2004, 2010a, 2010b; section 7). Finally, I shall draw a contrast between *compatibilist*  and *incompatibilist* views of the relationship between the Westermarck Effect and incest taboos. After indicating what is unsatisfactory about compatibilist views, I make a tentative case for endorsing a form of incompatibilism that includes an eliminativist view of incest taboos (section 8). I conclude with some general reflections on how the argument of the paper offers a strategy for responding to disciplinary resistance within cultural anthropology to viewing *precursor accounts* of human social and cultural phenomena as informative about those phenomena themselves (section 9).

I begin by providing a summary of the phylogenetic argument supporting the Westermarck Effect, the role of the primatological evidence in that argument, and why this is (relatively) decisive evidence against culture-first accounts of incest avoidance (section 2). In keeping with my earlier advocacy of a bioessentialist account of kinship, my general aim is to overcome the bifurcation between perspectives that are seen as biological and those that are cultural. In the case of incest and incest avoidance that is the focus here, this amounts to pre-empting or countering the claim—perhaps a sort of default for many cultural anthropologists (as a result of their groovy past?)—that rejecting culture-first accounts entails an unacceptable commitment to biological reductionism.

**2. Arguing for the Attachment-Sexual Inhibition Rule**

Empirical work in primatology developed over the past fifty years (Pusey 1987, 2004; Paul and Kuester 2004; Chapais 2008) strongly supports the view that nonhuman primates systematically avoid sexual relationships with close relatives. As one might expect, that work has also provided support for hypotheses about the specific mechanisms for incest avoidance within the primate lineage and has implications for the “naturalness” of human incest. The most prominently discussed of these mechanisms achieve incest avoidance in two different ways: through the sexual dispersion of members of either or both sexes from the natal group prior to or early during the onset of puberty (Pusey 1987, Pusey and Packer 1987, Pusey and Wolf 1996, Nater et al. 2011), and by reducing or removing the felt sexual attraction of members of natal groups for one another (Paul and Kuester 2004, Pusey 2004; see also Chapais 2008). The Westermarck Effect specifies a mechanism of this second kind.

I have argued (Wilson 2019: 396) that the Effect can be best expressed as a primate-wide rule connecting care-based attachment to sexual aversion or inhibition as follows:

***The Attachment-Sexual Inhibition Rule:*** Humans share with other primates a disposition linking care-based attachment to behavioural sexual aversion that can be expressed as the following rule: *if you have developed care-based attachment with individuals during your or their childhood, you feel sexual inhibition or indifference toward those individuals.*

Although primatologists view the Westermarck Effect as structuring primate sexual relationships, they typically stop short of specifying such mechanisms in cognitively- and emotionally-rich terms, such as *care-based attachment*. I have suggested that this reflects a kind of disciplinary groove regarding psychological commitment in the general study of animal behaviour. Yet the countervailing ontological commitment to care-based attachment provides an expression of the Effect suitable for advancing its discussion in two ways.

First, since such emotionally-rich and cognitively demanding states will be clearly shared by *Homo sapiens* and at most only its genealogically-closest relatives (roughly, the other members of the Linnaean order *Primates*), that commitment is apt for articulating a cladistically-restricted phylogenetic argument for the Westermarck Effect. Such an argument contrasts with a more common kind of general argument that draws on global adaptationist considerations, the most widely discussed of which appeals to the idea that incest avoidance evolved to avoid or minimize inbreeding depression (Leavitt 1990, Lieberman and Symons 1998, E.O. Wilson 1978; see also Paul and Kuester 2004: 284).

Second, care-based attachment in our species results from specific forms of cultural immersion, themselves resting on particular practices, norms, and institutions. Thus, the appeal to care-based attachment introduces a life-history dimension to the mechanism governing the Westermarck Effect that adds to its complexity that sophisticate the resulting view of incest avoidance in two ways.

The first sophistication is that both individual development and cultural variation become intrinsic to the nature of the mechanism itself. This distinguishes the account from existing (strongly) nativist views that conceptualize the Effect as a result of the triggering of either innate rules or evolved psychological modules. Since such views have served to reinforce the division between biological and cultural accounts of incest and incest avoidance, highlighting this dimension to the mechanism’s nature contributes to the middle ground necessary to advance discussion of incest avoidance beyond that bifurcation.

The second sophistication that the appeal to care-based attachment introduces is a missing *meliorative* dimension to anthropological discussions of incest avoidance. This serves to bridge between the more abstract discussions of incest avoidance in anthropology and primatology and the clinical reality of incest. As the psychiatrist Mark Erickson (1989, 1991) has emphasized, if we can collectively act in ways to promote the life history conditions in which care-based attachment is formed, particularly in boys and men, then The Attachment-Sexual Inhibition Rule not only describes a feature of our sociocognitive nature but also provides the basis for interventions likely to reduce the clinical incidence of incest.

 The Attachment Sexual Inhibition Rule is a more precise and restrictive formulation of a version of the Westermarck Effect advanced originally by Erickson (1989, 1991, 1993, 2004, 2006) and the anthropologist Arthur Wolf (1993, 1995) that is at once biological, psychological, and social. It is *biological* because it is part of our phylogenetically-transmitted, primate heritage. It is *psychological* in specifying a disposition that links psychologically-mediated antecedents and consequents whose cognitive and emotional richness make them, and thus the rule whose content they provide, likely to be cladistically constrained. And the Rule is *social*—doubly so—because it governs behaviour that involves others that is important for larger-scale social structures of kinship. Its restrictiveness lies, first, in the cognitive and emotional richness to its content; second, in the joint or shared character of the process that generates that richness; and third, given the typical circumstances in which infants and children are raised, in applying not to relatives in general but only to those first-order or primary relatives who occupy a distinctive place in the concept of kinship. Shared, care-based attachment is one of the chief ways in which the feeling of “mutuality of being” central to kinship (Sahlins 2013) is generated.

The current dialectical milieu within anthropology concerning incest avoidance and kinship and sociality more generally has been shaped by the views of influential voices, such as those of Levi-Strauss (1949) and Freud (1905, 1913), that have taken incestuous desire to be some kind of antecedent, natural state in our species. That assumption of the naturalness of incest has promoted culture-first accounts of incest avoidance and is consonant with the views expressed by earlier anthropologists committed to evolutionary primitivism. To probe further into the disciplinary groove this assumption has found within cultural anthropology, I review how it arose within the framework of evolutionary primitivism.

**3. Evolutionary Primitivism and the Naturalness of Incest**

Incest taboos were ascribed a key role in human cultural development in foundational works in anthropology’s origins. Proto-anthropologists such as Henry Maine, (1861), John Ferguson McLennan (1865), and Lewis Henry Morgan (1871, 1877) were immersed in the project of exploring oddities they found in past and present cultures to construct a plausible narrative leading from “primitive societies” and earlier forms of Western societies to the kinship structures found in the contemporary “civilized West”. One such oddity of particular relevance in revisiting kinship and incest avoidance concerned a pervasive and puzzling use of kinships terms in a range of indigenous and aboriginal cultures, including those in Australia. Here I shall focus on Morgan’s representative discussion.

Morgan was familiar with and puzzled by kinship systems that used a term interpreted as “father”—because it referred to the person presumed to be the biological male parent of someone—to also refer to other males presumed to be relatives. This usage of *father* seemed to Morgan to reflect a broader pattern in these kinship systems, with terms corresponding to *brother, mother, sister, aunt*, *uncle* showing the same expanded range of reference. This pattern departed from that with which Morgan was familiar in his native tongue of late nineteenth-century English. Morgan made sense of this puzzlement by introducing a distinction between what he originally called *natural* and *artificial* kinship terminologies—before relabelling these *descriptive* and *classificatory* terminologies—and hence between two types of kinship system.

Within the framework of evolutionism, the distinction between descriptive (natural) and classificatory (artificial) kinship systems was understood as a difference between the putatively advanced conceptualization of kinship in the West and its putatively primitive precursors in the Rest. This terminology itself implied the same kind of asymmetry between the West and the Rest that drove evolutionist approaches more generally. For Morgan, the kinship systems expressed in English and closely related European languages simply described the biological facts (and so were natural or descriptive), whereas a variety of other kinship systems chunked together what were in fact distinct types of biological or genealogical relationships. As such, these kinship systems were supposedly artificial or classificatory in a way the kinship systems familiar to Western kinship theorists from their own native experience were not.

But why did classificatory kinship exist at all, given how confusing it was from the “natural” point of view? Here Morgan made a different kind of evolutionary, functional appeal. Morgan postulated that, just as descriptive kinship systems reflected the social reality of a biologically-ground nuclear family in the West, classificatory kinship systems reflected primitive forms of sociality, ones that pre-dated the existence of such a family. As such, classificatory kinship was as true to the conditions in which it was developed as was descriptive kinship. More specifically, Morgan took the kin classification of biological fathers together with other males in the kin group, as well as that of mothers with other females, to represent stages of social evolution in which there was a kind of polygynous (and so relatively promiscuous) system of mating, and hence in which paternity was uncertain. This would make sense of why a term for “father” would apply (roughly) to any age-appropriate male in the kin group. But Morgan went further than this explanation of the difference between descriptive and classificatory systems, in two related ways.

First, since descriptive systems characterized “civilized” societies, and classificatory systems characterized “primitive” societies, one key task for an ethnographically-informed anthropology would be to explain the transition from such relatively promiscuous forms of marriage to the nuclear family as the basic unit of kinship. This was, in essence, the transition from social conditions that involved marriage between brothers and sisters in a larger communal setting (in the so-called “Hawaiian system”) through a series of intermediate stages to those that involved single-pair marriage (Morgan 1868, 1871). Extant classificatory kinship systems were taken as providing an archaeological record of human evolution, up from savagery through barbarism to the edge of civilization.

Second, Morgan postulated that the earliest of these systems was one of fully “promiscuous intercourse”. This hypothesis was chiefly an extrapolation from the evolutionary sequence that Morgan believed to be supported by the ethnolinguistic record etched in classificatory kinship systems, the presumedly earliest of which contained restricted forms of promiscuity in their marriage systems. Since the putative diachronic shifts in kinship systems involved cumulative modifications to marriage systems that start with relatively promiscuous mating and end with pair-bonding and the nuclear family, the original state from which all kinship systems must have begun had to be fully promiscuous and so incestuous. This fully promiscuous system, with no conventional constraints on incestuous sex, was the system that Claude Levi-Strauss claimed, eighty years later, to characterize even our closest biological relatives, the nonhuman primates: “[w]hatever the uncertainties regarding the sexual habits of the great apes, and the monogamous or polygamous character of the gorilla and chimpanzee family, it is certain that these great anthropoids practise no sexual discrimination whatever against their near relatives” (Levi-Strauss 1949: 31; see also section 5 below).

 As is well-known, the abandonment of the evolutionist paradigm for the study of kinship wrought by the rise of Boasian cultural relativism in the early twentieth-century brought with it a rejection of evolutionary primitivism and at least measured skepticism about the speculative claims made within that paradigm concerning early “marriage systems”. Yet apart from the survival of the division between descriptive and classificatory kinship systems (partly via Murdock’s (1949) six-part typology of kinship terminologies), a continuing legacy of that paradigm was the idea that restrictions on sexual activity between close relatives were *cultural innovations*: the natural inclinations passed on to us by our hominoid ancestors are incestuous.

This idea about our natural sexual inclinations being incestuous was famously developed in the early 20th-century by Sigmund Freud. Freud’s ideas here were both shaped by and deepened the disciplinary grooves within cultural anthropology that have made culture-first or conventionalist views of incest avoidance appear more compelling than present empirical evidence justifies.

**4. Three Strikes Against The Viennese Witchdoctor**

As others have noted (e.g., Wolf 1993), Freud’s *Totem and Taboo* has played a historically influential role in the anthropological story about incest and its avoidance, a role that accords a primary role to distinctively human social rules. To a disciplinary outsider, one of the more simultaneously entertaining, puzzling, and frustrating parts of the recent anthropological literature on incest and the Westermarck Effect is the back-and-forth between those defending and those attacking Freud’s views of incest and childhood sexuality, and the ongoing contention over their relationship to the Westermarck Effect (e.g., Spain 1987, Ingham and Spain 2005; Borneman 2012; Fraley and Marks 2011; Wolf 1993, 1995: ch.29; Gates 2004). My reactions here are, no doubt, shaped by my own disciplinary trajectory through the philosophy of science, the philosophy of mind, and the cognitive sciences, where Freud’s general standing is substantially lower than it is in much of the social sciences and humanities.

In *Freud’s Dream: A Complete Interdisciplinary Science of Mind*, the philosopher Patricia Kitcher wistfully captured the divide between the polarized reactions to Freud in the academic world:

If social conservatives bridle and high school students snicker at the sound of Freud’s name, the reaction of intellectuals is hardly more sophisticated.  They almost divide into two exclusive and exhaustive groups: those who read “Freud” as “fraud” and those who read it as ‘joy’ (its meaning in German) (Kitcher 1992: 4)

Although Freud is no fraud and his broader views of the mind are deservedly influential (Sulloway 1979), his views of human incest in particular are deeply misguided. Their historical and continuing influence in anthropological discussions of incest avoidance is one of the greater net losses for the field.

 The seriousness with which Freud’s views are taken on incest in the social sciences is puzzling, given the development of knowledge in the cognitive, biological, and social sciences more generally—the fragile sciences (Wilson 2004, 2005)—and that seriousness has itself deflected much constructive energy in work on incest in particular. The character of this deflection can be made vivid by two analogies in other areas of the fragile sciences. Consider what debates within the cognitive sciences over the nature of the computational processes governing cognition would be like, were paradigms structured around belief in an *immaterial soul* predominant, or how debates within the biological sciences over the workings of biological information would proceed, were *creationism* seen as presenting a genuine alternative perspective. In each case there would be much time and energy wasted that could have been dedicated to understanding how cognitive processing proceeded, or to how biological information was stored, transmitted, and deployed.

Attempts to reconcile Freudian and Westermarckian views of incest (e.g., Ingham and Spain 2005; Leavitt 2005, 2007) reach back to Robin Fox’s original paper that brought the Westermarck Effect out from the anthropological dark (Fox 1962). Despite this, there are deep and fundamental differences in these two views. For Freud, like Levi-Strauss, incest taboos mark a firm line between animal nature and human civilization: animals, and our own animal side—“the id”, amongst other things, in Freudian metapsychology—are incestuous, and the tensions for family life from our animal past gives rise to the need for incest taboos.  This is part of a broader view of the pervasiveness of sexuality in the human condition, one that is both *polymorphic*—and so can be found as childhood sexuality, or as the basis for the symbolism of dreams or everyday psychopathology—and *promiscuous*, a promiscuity subdued by the firm hand of control issued by societal rules, and absorbed by the ego and superego of the individual.  For Westermarck, incest taboos are an expression of a pre-existing mechanism for the avoidance of incest, one that is part of our animal heritage, rather than opposed to it.  Sexuality is a feature of creatures once they reach a certain stage of development, one typically associated with secondary sex characteristics in animals.

Thus, there is disagreement between the Freudian and Westermarckian accounts of incest and its avoidance on at least four fundamental questions:

* Are nonhuman animals incestuous by nature?
* Is sexual desire a key feature of infancy and childhood?
* Are incest taboos opposed to our most basic sexual desires?
* Do we require culturally-sanctioned rules to systematically counter incestuous desires, thoughts, and behaviours?

Given our focus on primary relatives, each of these questions is answered affirmatively by Freudian accounts and negatively by Westermarckian accounts, including the version expressed by The Rule.

Recent work in primatology shows decisively that Westermarck was right and Freud wrong about first and last of these questions, and this is Strike 1 against his views here. In *Totem and Taboo*, it is especially clear that the primary constraints on “the sex instinct” are derived from human social rules and inhibitions passed from adults to children, giving rise to the emotions of shame and guilt in matters sexual.  The consolidated primate data on this is simply incompatible with this perspective on the avoidance of incest, despite the efforts of those critical of the Westermarckian account to dismiss or counter that evidence.

One problem with these critiques is that they conceptualize the biosociality expressed in defenses of the Westermarck Effect as contributing to the putatively reductive projects of evolutionary psychology or human sociobiology. As such, their criticisms often focus on the across-the-board adaptationism that is part of those paradigms. For example, Leavitt attacks the assumption that inbreeding is harmful, a presupposition of global adaptationist arguments for incest avoidance, while Ingram and Spain critique what I have called the strong nativism of evolutionary psychology. Importantly, both of these critiques are irrelevant to the version of the Westermarckian view I have articulated and defended here. While Ingram and Spain also turn more explicitly to consider phylogeny, they either repeat the false claim that primates are naturally promiscuous or selectively misread or cherry-pick from the data on primates. In attempting their own reconciliation of Westermarck with Freud, they divide the spoils, ceding to Westermarck an olfactorily-mediated effect and to Freud the foundation that the Oedipal Complex provides for understanding father-daughter incest. This continues the bifurcated view of “the biological” and “the social” that, I have argued, biosocial views need to move beyond.

Although Freud commendably relies on the state of the art in related fields, such as evolutionary anthropology, sexology, zoology, as Patricia Kitcher has pointed out (Kitcher 1992), Freud’s interdisciplinarity here has proven to be a double-edged sword. For much of what was taken for granted in those then-nascent fragile sciences relevant to his views has turned out to be mistaken. In the fragile science of anthropology, this includes not only evolutionary primitivism in general but specific, speculative views of sexual promiscuity and communal marriage buried deep in the anthropological and primatological past. Those speculations include both mistaken racialist and racist dimensions, which also infest Freud’s recapitulationist views of the relationship between individual neuroses and the development of the species recounted in his 1915 manuscript *A Phylogenetic Fantasy* that expands on his theorizing in *Totem and Taboo*.

In that work, Freud identifies Australian aboriginals as a distinct race that is the most primitive amongst our species, based on the false assumptions (Pascoe 2018) that they “do not build houses or permanent shelters; they do not cultivate the soil; they keep no domesticated animals except the dog” (1913: 2). Freud then turns to their sexual lives:

We should certainly not expect that the sexual life of these poor, naked cannibals would be moral in our sense or that their sexual instincts would be subjected to any great degree of restriction. Yet we find that they set before themselves with the most scrupulous care and the most painful severity the aim of avoiding incestuous sexual relations. Indeed, their whole social organization seems to serve that purpose or to have been brought into relation with its attainment (Freud 1913: 2)

Freud then invokes “the system ‘totemism’” (Freud 1913: 3), whereby clans are named after animal, plant, or natural phenomena that identify the common ancestor of the clan, as a basic social structure to explain restrictions on incest. As Warren Shapiro (2015) has argued, not only are Freud’s appeals to totemism misplaced as part of an evolutionary primitivist account of Aboriginal cultures, but here Freud participates in the larger mistake that totemism names something at all.

Beyond this, there are at least two further and independent strikes against the Freudian account of incest as natural and incest avoidance as culturally imposed, a view that has pervaded anthropological thinking. Each signals deep problems with Freud’s broader conception of sexuality in the context of the clinical reality of incest: the first abandoned child victims of incest, while the second made them complicit in their own sexual molestation when it was acknowledged to have occurred.

From 1893 until early 1897, Freud held, notoriously and as a result of his clinical practice, what euphemistically became known as the “seduction theory” of neuroses.  On this view, neuroses, especially prevalent amongst his largely female patients, were caused by traumas induced by sexual assault and rape. These were often, even typically, reported by his patients as being perpetrated by adult male members of their own families.  That is, they involved father-daughter, grandfather-daughter, uncle-daughter, and brother-daughter incest, for example.  Starting in 1897, Freud abandoned this view, preferring instead the view that the reports of incest that he had, until that point, taken at face value, were instead imaginative projections by those reporting them.  These fantasies of incest became the key to many core Freudian concepts—repression, childhood sexuality, the unconscious, female neuroses, wish fulfillment, the Oedipal complex—that were articulated largely between 1900 and 1920, including, most relevant in this context, in his *Three Essays on the Theory of Sexuality*, and *Totem and Taboo*.  The views developed here were based crucially on the claim that these reported cases of incest did not really happen but instead revealed the core workings of the hyperactive imaginations of children and the wish fulfillment of daughters to have sex with their male relatives.  In short, the ascription of incestuous child-to-parent sexual desire rested on Freud’s not believing what women said, and so denying the prevalence of incestuous sexual assault (Masson 1984, 1996; see also Masson 1990).

This early dismissal of the clinical reality of nonconsensual, pedophilic, incestuous sex not only played a formative role in these key Freudian concepts, but has ramified in subsequent negligence of this reality in both psychoanalytic and anthropological work on incest. In psychoanalytic approaches, this has been expressed in a focus on the symbolic meaning of incestuous desire in individual thought and imagination. In cultural anthropology, this negligence manifests itself in the dominant (although not exclusive) focus on consensual, mutual, even playful sibling incest as a paradigm form of incest.

 While this second strike against Freudian views concerns a particular, central aspect of the clinical reality of incest, there is a deeper problem lurking in Freud’s metapsychology that plagues (or should plague) proponents of those views that counts as strike three. This is the general idea of infantile sexuality, and with it the broadening of the notion of sexuality. Attributing deep-running sexual desire and agency not only to pre-pubertal children but to infants from birth is one of the more spectacular and damaging theoretical blunders affecting clinical psychiatry in the twentieth-century. Broadening the concept of sexuality in this way makes those who are victims of sexual assault unconsciously complicit in the sex crimes they are subject to, projecting the fantasies of first Victorian and then Edwardian gentlemen onto infants and children.

**5. Incest and Incest Avoidance: Levi-Strauss on Nature and Culture**

As the discussion in sections 3 and 4 suggest, the view that the inhibition of sexual relations between close kin is a distinctively human cultural achievement has a long history in anthropology, one that has survived many of the substantial shifts in the discipline over the past 150 years. This achievement putatively distinguishes us from mere animals and even from earlier members of our species, an accomplishment brokered through the introduction of explicit rules concerning marriage. Although such rules have other positive goals, one function they are usually recognized as having is to prohibit sexual activity between close kin. Those rules, in turn, form part of the larger nest of rules that characterize and regulate kinship systems, which have played an important role in structuring and governing human social relationships in all cultures.

On this view, the nonhuman primates, like all animals, are naturally incestuous, with the inhibition on sex amongst close kin being achieved in our own species through the creation, adoption, and enforcement of social rules—taboos—that prohibit incestuous sexual relations. These social rules are fundamental human innovations, marking a clear distinction between human and animal nature. As Claude Levi-Strauss said, with particular dramatic force,

The incest prohibition … is, in fact, a kind of remodeling of the biological conditions of mating and procreation (which know no rule as can be seen from observing animal life) compelling them to become perpetuated only in an artificial framework of taboos and obligation. It is there, and only there, that we find a passage from nature to culture, from animal to human life, … (Levi-Strauss 1956: 278; see also Levi-Strauss 1949: 31).

This remodeling is a kind of remaking of biology through the “artificial framework” created by human conventions. On this view, the prohibition of incest in human society, requiring such rules and conventions, is one thing; inbreeding avoidance, governed by biological conditions in the nonhuman animal world, is another. Levi-Strauss continues by proffering an “ultimate explanation” of the origin of such incest taboos, harkening back to a line of thinking that originated with Edward B. Tylor some seventy years earlier:

Mankind has understood very early that, in order to free itself from a wild struggle for existence, it was confronted with the very simple choice of ‘either marrying-out or being killed out’. The alternative was between biological families living in juxtaposition and endeavoring to remain closed, self-perpetuating units, over-ridden by their fears, hatreds, and ignorances, and the systematic establishment, through the incest prohibition, of links of intermarriage between them, thus succeeding to build, out of the artificial bonds of affinity, a true human society, despite, and even in contradiction with, the isolating influence of consanguinity (Levi-Strauss 1956: 278).

One big idea for which Levi-Strauss is well-known in the study of kinship—that the various elaborations of kinship found across human societies are made possible by the cultural rules governing female exchange in exogamic marriage—rests on this picture of the transition from the world of “closed, self-perpetuating units” and these “artificial bonds of affinity”. This presupposes that the natural state in our pre-hominid past was incestuous, a state that our closest living primate relatives, the great apes—chimpanzees, bonobos, gorillas, and orangutans—lacking explicit cultural rules prohibiting incest, remain bound to. That presupposition is, however, demonstrably false.

**6. Innate Rules and Evolved Modules: What The Rule is No**t

The phylogenetic argument for a primate-specific rule for the avoidance of incest marks a departure from previous defences of the Westermarck Effect, including Westermarck’s own appeal to an “innate aversion to sexual intercourse between persons living very closely together from early youth” (Westermarck 1891, 3rd ed, p.420). Westermarck’s view was taken from the outset as signalling a reductionist account of incest avoidance, a view promoted more recently by Edward O. Wilson’s sociobiological discussion of brother-sister incest early in his *On Human Nature* (1978) Wilson characterized the mechanism underpinning the Westermarck Effect as a kind of innate rule, a view later sophisticated by evolutionary psychologists by an appeal to an evolved psychological module (e.g., Lieberman, Cosmides, and Tooby 2003). The entanglement of those discussions with reductionism—rightly or wrongly—have made the Westermarck Effect more controversial amongst cultural anthropologists than it need be. In this section I highlight ways in which the position I have defended is distinct from such views.

To clarify what I mean here, consider E.O. Wilson’s summary of his endorsement of a Westermarckian view of sibling incest. Invoking what he calls “bond exclusion” as a proximate cause and “inbreeding pathology” as an ultimate cause of the incest taboo, he says that Westermark’s hypothesis

states that individuals with a genetic predisposition for bond exclusion and incest avoidance contribute more genes to the next generation. Natural selection has probably ground away along these lines for thousands of generations, and for that reason human beings intuitively avoid incest through the simple, automatic rule of bond exclusion. To put the idea in its starkest form, one that acknowledges but temporarily bypasses the intervening developmental process, human beings are guided by an instinct based on genes (E.O. Wilson 1978: 38)

Here articulation and defence of a version of Westermarck’s hypothesis makes three controversial assumption. The first concerns the *explanandum*, what is being explained. For Wilson, it is not simply individual-level emotional states concerning sexual attraction and the behaviour they generate, but incest *taboos*, social-level rules. The second concerns the “ultimate cause” of the Effect, inbreeding pathology, which is assumed to be widespread amongst both human and nonhuman animals. The third concerns the “proximate cause” of the Effect, which is conceptualized in (strong) nativist terms and lacks a distinctly psychological, experientially-based component.

 A clade-specific, phylogenetic argument for the emotionally-enriched version of the Westermarck Effect expressed by The Rule need accept *none* of these assumptions. It can focus wholly on explaining individual states and behaviour, remain neutral about whether the ultimate cause of the primate-bound homology is countering inbreeding depression or something else (including a hodge-podge of adaptative and non-adaptive causes), and posit a proximate cause that departs from a strong nativist view of the corresponding mechanism (see section 7 below).

Avoiding the appeal to a global assumption of inbreeding pathology is strategically and epistemically prudential, since such an appeal automatically embroils one in a host of ancillary, general disputes—over biological reductionism, adaptationism as a research paradigm, and the genetic risks posed by human incest (see also Leavitt 2005, Bittles 2012). Given the long history of critical engagement within anthropology with such issues, resting a defence of the Westermarck Effect on particular stances on these broader issues functions primarily to deflect attention from the most powerful evolutionary argument for it. By viewing the Effect in terms of symmetrical attachment that is established through the prolonged, shared experiences generated by the provision of developmental care, The Rule avoids (or at least minimizes) one of the standard problems with theorizing in the traditions of both sociobiology and evolutionary psychology: cross-species explanations that group behaviours together that have disparate causes and functions.

**7. Resisting Reductionism about Incest Avoidance Beyond Conventionalism**

Although the mechanism underpinning the Westermarck Effect is appropriately conceptualized as a rule, I have said that it is neither an *innate* rule nor a mechanism properly thought of as an evolved psychological module (*sensu* Cosmides, Tooby, and Barkow, 1992). One way to explain this that should further fill out the non-reductive but biosocial conception of kinship and incest avoidance in play here is by positioning this view in the space of nativist views and contrasting it with the *strongly* nativist views of sociobiologists about culture and of evolutionary psychologists about psychology.

In *Boundaries of the Mind* (2004: ch.3), I introduced a two-dimensional account of nativism across the cognitive, biological, and social sciences. This account departs from standard single dimension accounts, such as those that identify universality or being guided by inherited information (Griffiths 2009) as criterial for innate traits. The basic idea of the two-dimensional account is that debates over nativism can be most informatively expressed in terms of the acceptance or rejection of specific forms of two general theses:

*The Internal Richness Thesis*: Structures and processes internal to the individual that are important to the acquisition and development of X are *rich*; and

*The External Minimalism Thesis*: Structures and processes external to an individual play at best a secondary causal role in the acquisition and development of X,

where X designates some particular ability or phenomenon, and a structure or process is rich just if it is specialized, localized, internally complex, and causally powerful. Paradigm examples of abilities or phenomena are linguistic abilities (in the cognitive sciences) and heritable traits (in the biological sciences); respective paradigmatic rich structures and processes are cognitive modules and genes.

 The most pronounced forms of nativism, what I called *strong nativism*, accept both theses, while the most pronounced forms of antinativism, *strong antinativism*, reject both. In the cognitive sciences, traditional modularity theory, as expressed in the work of Jerry Fodor and Noam Chomsky, represents a strong nativist view of cognition; both behaviourism and early forms of connectionist modeling represent strong antinativist views. In the biological sciences, the debate over nativism has been articulated with respect to genetics and development, with those working in classical and molecular genetics who emphasize the power of the agency of genes representing a strong nativist view, while those who are skeptical of genetic agency and hold a more pluralistic, interactionist view of genetic and non-genetic resources, such as Richard Lewontin and Richard Lewens, expressing a strong antinativism about inheritance and development. In the social sciences, strong antinativism—rejecting specifications of both of these theses about culture—has been dominant within cultural anthropology over the past 50 years through the influential work of Clifford Geertz and Marshall Sahlins.

 Although the Internal Richness and External Minimalism theses are often mutually reinforcing and so, in that sense, naturally go together to constitute such readily recognizable strong views in the debate over nativism, one virtue of the two-dimensional account of the nativism debate is that it readily allows one to represent positions that accept just one of the two theses. Such positions have been articulated and defended in the cases of both cognition and biology and also can be articulated for incest avoidance more specifically. While the Attachment-Sexual Inhibition Rule posits internally rich structures to explain incest avoidance, the mechanism these structures function in violates the External Minimalism Thesis because of the key role that individual life history plays in its specification. For this reason, the view I have defended is distinct in kind from the accounts of incest avoidance posited by sociobiologists and evolutionary psychologists. Figure 1 provides a visual summary of how extant views occupy this two-dimensional space:

 **External Minimalism Thesis**

 **Yes No**

|  |  |  |  |
| --- | --- | --- | --- |
| **Strong Nativism**Evolutionary psychology(evolved psychological modules) | The Attachment-Sexual Inhibition Rule (sociocognitive mechanism) | **Y****E** **S** | **Internal****Richness** **Thesis** |
| Sociobiological viewsWestermarck’s own view (innate rules) | **Strong Antinativism**Culture-first accountsFreudian views(incest is natural requiring taboos to counter it) | **N** **O** |  |

**Figure 1: Nativism and Incest Avoidance**

Previously (Wilson 2019) I have drawn attention to the temporally-extended, recurrent nature of the pairwise interactions between parent and child, or child and child, that create care-based attachment in both nonhuman and human primates, but there is another way to underscore why the introduction of individual life history into the specification of the sociocognitive mechanism posited by The Attachment-Sexual Inhibition Rule violates the External Minimalism Thesis. That is by identifying this mechanism as exemplifying an *extended cognitive system* (Wilson 1994, 2004, Clark and Chalmers 1998, Menary 2010), one that is physically constituted in part by cognitive resources beyond the boundary of the individual, and so external to it. If the Westermarck Effect is underpinned by an extended sociocognitive mechanism, as I am suggesting, then not only is the resulting view significantly less “biological” than the views of both evolutionary psychologists and sociobiologists, but that view is ill-suited for any project attempting to reduce social or cultural *explananda* to individual-level psychological *explanantia*.

**8. Incest Taboos and The Rule**

Given the disciplinary grooves carved by evolutionary primitivism (section 3) and an endorsement of Freud’s Oedipal fantasies as having some kind of primeval psychological reality (section 4) that make incest appear natural, it is understandable that early critics of Westermarck’s view found the following question pressing: if we did have an innate disposition that made incestuous sex unappealing to individuals, as Westermarck claimed, why would conventional incest taboos be needed at all? Despite the Attachment-Sexual Inhibition Rule not specifying such an innate rule (sections 6 and 7), its proponents still face a version of this question: if both that rule and societal incest taboos exist, how are the two related?

Westermarck himself hypothesized that felt contrasexual aversion and the incestuous sexual inhibitions it generates cause moral disapproval of incestuous feelings and behaviors more generally. Following his statement of the Effect—“there is a remarkable absence of erotic feelings between persons living very closely together form childhood”—Westermarck continues

Nay more, in this this, as in many other cases, sexual indifference is combined with the positive feeling of aversion when the act is thought of. This I take to be the fundamental cause of the exogamous prohibitions. Persons who have been living closely together from childhood are as a rule near relatives. Hence their aversion to sexual relations with one another displays itself in custom and law as a prohibition of intercourse between near kin (Westermarck 1922, vol.ii: 192-193).

Alluding to his general view that “society is the birthplace of the moral consciousness” (Westermarck 1922, vol.ii: 198; see also Westermarck 1906, vol.i: 117, and vol.ii: 740), a few pages later, Westermarck notes that “aversions, which are generally felt readily lead to moral disapproval and prohibitory customs or laws” (Westermarck 1922, vol.ii: 198), going on to illustrate some of these “other cases” with brief discussions of bestiality and parricide (Westermarck 1922, vol.ii: 203-204), both of which combine prohibitory societal rules about with natural aversions to the very same phenomena.

 William Durham (2004: 122) has called this view *the expression hypothesis*, the idea being that individuals who experience feelings of sexual inhibition and aversion with respect to incest express those feelings as the moral disapproval of incestuous attraction in others. Similar transferences from first-person emotion to third-person disapproval putatively occur in other sexualized cases, such as that of bestiality and parricide (as we have seen for Westermarck), or necrophilia (Shepher 1983: 35). On this view, the resultant moral disapproval becomes conventionalized through incest taboos, which in turn socially reinforce the disapproval and further regulate feelings of sexual inhibition.

Given the existence of the disposition specified by The Attachment-Sexual Inhibition Rule, the expression hypothesis posits one possible pathway from mere aversion or indifference—first-person, individual-level reactions—to social taboo—a third-person, group-level prohibition. This hypothesis is a species of *moral projectivism*, whereby moral sentiments are projected by individuals as parts of the fabric of the social or natural world.

Those who have rejected this projectivist view in the past have typically claimed instead that *incest taboos do not reflect but generate contrasexual aversions*, providing this as an alternative, culture-first account not only of the relationship between aversions and taboos, but of the origin of incest avoidance itself. But since at least some forms of psychologically-mediated incest avoidance are primate homologies—most clearly those between mothers and offspring and those between maternally-related siblings—as the phylogenetic argument makes clear, their origin cannot be explained by an appeal to unique features of human social life, such as incest taboos. Thus, although the phylogenetic argument for The Rule does not strictly imply anything about incest taboos—particularly if one holds (plausibly) that there is only felt aversion and behavioral inhibition, and not also moral disapproval in *nonhuman* primates—that argument increases the relative likelihood of the expression hypothesis over such culture-first accounts of both incest aversion and incest taboos. It does so, in effect, by reducing the likelihood of culture-first accounts of aversion to close to zero.

 The phylogenetic argument for The Rule also exacerbates, however, a classic problem for the expression hypothesis posed by its critics: the apparent mismatch between the content of the traditional Westermarck hypothesis, which concerns those raised together (who are often kin), and that of incest prohibitions, which concern a significantly larger and more diverse range of kin. Applying to a broader range of individuals—siblings, parents, children—than do sibling-focused forms of the Westermarck hypothesis, the Attachment-Sexual Inhibition Rule does provide a closer match with the content of incest taboos in this respect. Yet since it also refers more specifically to *those for whom one feels care-based attachment*, while incest taboos apply to individuals regardless of their relationship to one’s feelings, in this respect the mismatch problem is greater for the version of Westermarck’s hypothesis that I have defended.

 There may well be better explanations for the origin and character of incest taboos that are compatible with The Rule, as culture-first explanations are not. For example, there is the psychiatrist Roger Burton’s suggestion that human groups simply came to recognize the deleterious effects of inbreeding and formed incest taboos on that basis (Burton 1973). Thus, rather than express the indifference or aversion implied by The Rule, incest taboos more directly reflect and encode the social recognition of the negative health effects on offspring of reproduction between close kin.

My own view is that this particular suggestion is fraught with at least as much difficulty as is the expression hypothesis. I assign it as much plausibility as the view that taboos against gay sex or the classic sexualized philias derive from the recognition by human social groups of the non-reproductive optimality of the corresponding acts or practices. One objection to Burton’s view that I find compelling can be put as a dilemma. On the one hand, given the Attachment-Sexual Inhibition Rule, the putatively strongest deleterious effects of inbreeding in human populations are unlikely to be manifest sufficiently frequently amongst those who are most closely related to form a reliable observational basis for the social recognition that Burton proposed. On the other hand, in the more frequently produced offspring of dyads that cross beyond immediate relatives to cousins, uncles, and others, those deleterious effects are significantly lower, and so on that ground are unlikely to provide a suitable empirical basis for formulating an incest taboo. As even Durham notes in concluding his supportive discussion of Burton’s view, it has more empirical grounding as a view of how incest taboos are maintained than how they originated, the latter issue perhaps remaining speculatively beyond the reach of conclusive evidence (Durham 2004: 135-136). More importantly, however, is that both of these views—the expression hypothesis and Burton’s—grapple with what is distinctive about prohibitions on incest in human cultures against the background assumption that incest and incest avoidance are not themselves distinctively human, but part of our nature as members of the primate lineage.

 Both Westermarck’s expression hypothesis and Burton’s view are *compatibilist* responses to the supposed conflict or tension between the Westermarck Effect and the prevalence of incest taboos. They contrast, in this respect, with the original, critical response by Frazer, Freud, and those cultural anthropologists they influenced, who maintained an *incompatibilist* view as part of their basis for rejecting Westermarck’s hypothesis. One radical response to the question of how to reconcile The Rule and the existence of incest taboos is to pursue the other kind of incompatibilist response, one that sides with The Rule to argue that *incest taboos do not, in fact, exist*.

As Wolf has in effect pointed out (Wolf 2005a: 12-13), this sort of view of incest has anthropological precedence in the cultural relativism and interpretationism of Rodney Needham and David Schneider. Although I think that the general grounds that Needham and Schneider give for this rejection are mistaken, their view of the incest taboo itself warrants consideration, not least of all because just this view of constructs such as totemism and primitive society is plausible. To be sure, there are symbols properly characterized as totems, and organizations of human lineages (into “clans”, perhaps) structured around their identity with a totem. But totemism is neither a religion nor a fundamental structuring principle of any culture, despite the popularity of contrary views in the history of anthropology (see Shapiro 2015). The same kind of view of the concept of primitive society is widely accepted (see Kuper 2005). Redirecting claims about the “ethnocentric projection” of bioessentialism about kinship so as to apply to totemism and primitive society would seem to me defensible. The same may well be true of “the incest taboo”.

We can get at this idea via an analogy. Is there a taboo specifically against eating your own children? Given that our natural inclinations are such that the action proscribed here rarely occurs, and the purpose of a taboo, a prohibitory moral rule, is to regulate social behaviour, we might reasonably think not. There are taboos about eating and about what you can do to your own children, but there need be no specific taboo about eating your own children. When it does occur, *autopedophagia*—if we can call it that, or perhaps better *propriopedophagia* if we can settle for the blending of Latin and Greek—is met with a host of negative reactions: disgust, horror, and moral condemnation. But these can all occur independently of whether there is an explicit moral rule against eating your own children.

 In the case of sex between primary relative dyads—mother-son, father-daughter, and brother-sister—given The Rule, the same may well be true of “the incest taboo”. Sex and marriage, like eating, are regulated by moral rules of various kinds, as is how one ought to treat one’s immediate family members. Perhaps the prohibitions here are byproducts of positive exogamous marriage rules—“marry out” rules—that direct eligible members of these dyads to seek partners from beyond some extra-familiar group. Perhaps they are best thought as examples of broader classes of prohibitions, whether these be sexual or fall under some other subcategorization. But the disgust, horror, and moral condemnation directed at incestuous behaviour between primary relative dyads does not itself require an explicit taboo about that form of incest. In short, there may well be thoughts and behaviors to which the label “taboo” apply, but these are not properly thought of as *incest* taboos. To adapt Schneider on kinship, incest taboos may “exist in the minds of anthropologists but not in the cultures they study” (Schneider 1972: 51).

**9. Chipping Away at Resistance to Precursor Accounts of Incest and Kinship**

I conclude by indicating how my argument complements ongoing empirical work on nonhuman primates. Both the view of incest avoidance defended here and the more general view of kinship into which it feeds appeal to what we might think of as *precursor* accounts, accounts that identify in nonhuman primates putative evolutionary homologues to human behavior and social regularities. One source of resistance to taking such precursor accounts as having significance for human forms of incest avoidance and kinship is the view that, despite whatever similarities are shared by precursor and human forms, there remains something crucial about the latter that are missing in the former. For many, this “something crucial” concerns language, culture, and social rules, features present uniquely in our own species that clearly do mediate views of and practices around kinship and incest avoidance. That resistance can be expressed as skepticism about whether the traits identified as cross-species homologues are in fact versions of the same trait at all.

Bernard Chapais’s *Primeval Kinship* (2008) and his subsequent work (Chapais 2010, 2013, 2014) provides one way to chip away at the disciplinary resistance here by developing and enriching the hypothesized details in precursor accounts and in how they bridge from “primeval kinship” in nonhuman primates to full-blown kinship in human societies. One concern is whether such details will ever suffice to remove such skepticism. Grant Chapais’s precursor account of kinship that posits female dispersal, matrilocal bonding, and pair bonding as shared within some hominin clade. Whether these traits are strict precursor traits to human reciprocal female exchange, matrilineal descent, or marriage, respectively, requires, one might argue, viewing the institutional, symbol-laden aspects to the latter as non-essential features. For those who reject this assumption, there is no strict homology between these trait pairs because the precursor traits are not the same trait as those to which they are a precursor.

This would make the study of primeval kinship in nonhuman animals akin to that of “primeval language” or “primeval bipedalism”, where language use and bipedalism are agreed to be uniquely human and the distance between nonhuman language and mode of motion and human modes is gaping. Historical linguists, Indo–Europeanists, and others dedicated to the project of meaningful language family reconstruction might be less than fully impressed by the former such study, insofar as they find that the gap between such precursors and distinctly human languages is so great as to render whatever interesting findings emerge about ‘‘proto-linguistic structure’’ non-revelatory about the phenomenon of language per se. Experts in human movement—biomechanists, sports physiologists, visuo-motor specialists—might adopt the same view of “primeval bipedalism”. Even if nonhuman primates provide the chief phylogenetic evidential base for inferences about such origins, as surely they do, one might hold that all of the most significant additions that make for distinctly human kinship, language, or movement are sufficiently distant in time from the last common Pan-Homo  ancestor 6–6.5 million years ago, and the explosion in the complexity of each of these phenotypes so massive since that time, that primeval forms are of limited significance for an understanding of contemporary human forms of each.

So perhaps brute empirical detail will not suffice to convince. Another, complementary way to address the skepticism and so confront resistance here—the way I have proceeded with respect just to what we might call *primeval incest avoidance*—is to focus instead on the broader theoretical location both of default culture-first views (sections 3-5) and on the homologous mechanism through which the Attachment-Sexual Inhibition Rule operates (sections 6-8).

There is a twofold hope here. First, by identifying some of the disciplinary grooves that have generated culture-first views of incest avoidance such views can be seen more readily as problematic yet optional, and so rejectable. Second, by offering a more nuanced version of the Westermarck Effect—one that is explicitly antithetical to the perceived reductive ambitions of sociobiology and evolutionary psychology, that eschews strong forms of nativism that cultural anthropologists (rightly) bridle at when it comes to incest avoidance, and that foregoes the temptation to offer an explanation for the existence of incest taboos—we might be better placed to counter extant skepticism about the relevance of so-called precursor accounts of incest avoidance.

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