



INCEST AVOIDANCE
AND THE
INCEST TABOOS

*Two Aspects
of Human Nature*

ARTHUR P. WOLF

Stanford
BRIEFS

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Thus the sceptic still continues to reason and believe, even tho' he asserts that he cannot defend his reason by reason; and by the same rule he must assent to the principle concerning the existence of body, tho' he cannot pretend by any argument of philosophy to maintain its veracity. Nature has not left this to his choice, and has doubtless esteem'd it an affair of too great importance to be trusted to our uncertain reasonings and speculations. We may well ask, *What causes induce us to believe in the existence of body?* but 'tis vain to ask, *Whether there be body or not?* That is a point, which we must take for granted in all our reasonings.

David Hume, *A Treatise of Human Nature*

There is no question of importance, whose decision is not compriz'd in the science of man; and there is none, which can be decided with any certainty, before we become acquainted with that science. In pretending therefore to explain the principles of human nature, we in effect propose a compleat system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security.

David Hume, *A Treatise of Human Nature*

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INCEST AVOIDANCE AND
THE INCEST TABOOS

1. Two questions

This book addresses two questions: Why is it that most people avoid sexual relations with their close kin? and, Why is it that they disapprove of other people's having sex with their close kin—why, in other words, is there an incest taboo? Unlike theft, rape, or physical assault, incest *per se* does not inflict visible harm on either individuals or communities.¹ It does not even threaten harm in any obvious way.

The great majority of authors who have addressed these questions belong to one of two mutually hostile camps I call the constitutionalist camp and the conventionalist camp.² Constitutionalists always begin with the first question and commonly ignore the second—they assume that people disapprove of anyone doing something they would dislike doing. Conventionalists, in contrast, always begin with the second question and usually ignore the first—they assume that people avoid doing what custom disapproves of their doing.

Constitutionalists and conventionalists rally their arguments around mutually exclusive assumptions. Constitutionalists assume that for some reason human beings are naturally motivated to avoid sex with close relatives. Their goal is to discover what this reason is and how it achieves its effect. Conventionalists follow Freud in assuming that “an incestuous love choice is in fact the first and regular one.”³ Their goal is to discover how and why society overrules this natural inclination. Thus, where conventionalists argue that if it were allowed, many people would marry their kin, constitutionalists argue that even if it were allowed, very few people would be interested in marrying their kin.

The constitutionalist and conventionalist stands on incest were clearly defined as early as 1725. In that year the Scottish philosopher

Francis Hutcheson used what he took to be a natural aversion to incest to support his view that we all possess an innate “sense of moral good.” “Had we had *no moral Sense natural* to us,” he argued, “we should only look upon *Incest* as harmful to ourselves, and shun it, and never hate other *incestuous Persons*, more than we do a *broken Merchant*; so that still this Abhorrence supposes a *Sense of moral good*.”⁴ A few years later the philosophical bad boy of the time, Bernard Mandeville, deployed the opposite view to argue that contrary to Hutcheson, there is no more certainty in morals than in fashion, both being determined by the “Precept and Example of our Betters.” After noting that “in the *East* formerly Sisters married Brothers, and it was meritorious for a Man to marry his Mother,” he wrote: “Such Alliances are abominable; but it is certain that, whatever Horror we conceive at the Thought of them, there is nothing in Nature repugnant against them, but what is built upon Mode and Custom.”⁵

The contemporary constitutionalist view of incest avoidance was formulated by the late-nineteenth-century Finnish philosopher Edward Westermarck. Its most eminent twentieth-century champions are the anthropologist Robin Fox, and the biologist E. O. Wilson. Their conventionalist opponents take the British anthropologist Edward B. Tylor as their focal ancestor and hail Claude Lévi-Strauss and Leslie White as their most successful captains. Their recruits include a motley mixture of philosophers, cultural anthropologists, and what I call bloodless Marxists because they deny biology a role in human behavior.

As in my previous publications, I take the constitutionalist’s side in discussing why human beings avoid sex with their close relatives,⁶ but unlike most constitutionalist partisans, I do not dismiss incest taboos as simply translations or representations of incest avoidance. Avoiding sex with one’s close relatives is not the same as disapproving of other people’s having sex with their close relatives. The first is found among most mammals and all primates.⁷ The second is uniquely human.

Given that if there is anything more interesting than sex, it is tabooed sex, there is probably no need to justify my topic. I will only note that prurient interests aside, there are three reasons for another book about incest. The first is that the incest prohibition is the camshaft of human kinship systems. We need only try to imagine a system in which men married their sisters and/or their daughters to see that it would be something entirely different than the systems we know. Human kinship systems vary enormously but not limitlessly. There are always rules prohibiting sex (and hence marriage) with certain kinds of kin.

A second reason for taking an interest in incest is that so many others have already done so. They include thinkers as diverse in their views of our species as Thomas Aquinas, Francis Hutcheson, Bernard Mandeville, Charles Darwin, Edward Burnett Tylor, Edward Westermarck, Sir James Frazer, Sigmund Freud, Emile Durkheim, Havelock Ellis, Bronislaw Malinowski, Talcott Parsons, Claude Meillassoux, Claude Lévi-Strauss, Rodney Needham, and David Schneider.⁸ What some call “the incest problem” has been addressed from every possible perspective in every major discipline. The result is a unique opportunity to advance our understanding of human behavior. When theorists bet their assumptions on different answers to the same question, they put those assumptions at risk. Some of them are wrong and can be shown to be wrong.

A third reason for attending to the incest question is that it offers a venue for adjudicating arguments about the relationship between human nature and society. The constitutionalist view of incest avoidance—that it is a natural mammalian instinct—suggests a harmonious relationship. The incest prohibition simply reinforces a natural inclination. But this is anathema for conventionalists. Following Freud, they assume that if incest is to be avoided, the incest prohibition is absolutely necessary. Far from reinforcing a natural inclination, it represses a natural inclination. In the conventionalist view the relationship between human nature and society is antagonistic. Most conventionalists accept

Claude Meillassoux's claim that far from arousing "'natural' feelings of revulsion among the majority of people," incest "seems to have exercised such a powerful attraction that whenever social conditions facilitated its practice the resources of religious terrorism had to be enlisted to control it."⁹

The source of much of the heat in the incest debate is the friction incident on rubbing two very different views of human nature against the same problem. The conventionalist view is that human beings are born with a few "basic drives," all of which are asocial if not antisocial and some of which are so dangerous they must be constrained. The rest of what humans are, and the larger part by far, is learned and thus varies from society to society—a view that is commonly taken to mean that utopia or something like it is possible. Constitutionalists, in contrast, are committed to the view that while human beings are far from complete at birth, they typically develop along lines laid out by an innate plan. The variation touted by conventionalists is largely ephemeral if not the result of distortion occasioned by abnormal circumstances. Most constitutionalists argue that if we were really as pliable as conventionalists claim, we would all be slaves molded to serve one master or another. Where conventionalists, optimistic on principle, pit their hope for the future on a pliable human nature, constitutionalists, typically pessimistic, allay their fears for the future by holding fast to the view that human nature is stubborn.

There are now more than a few anthropologists who will insist on a third position with regard to incest that is neither constitutionalist nor conventionalist. This is the position taken by such authors as Rodney Needham, David Schneider, and Roy Wagner. They hold that there can be no general theory of incest prohibitions because they "do not in fact form a definite class,"¹⁰ because the problem they pose is "a pseudo-problem,"¹¹ or because they cannot be understood "outside the context of the particular culture in which they occur."¹² The authors I classify as constitutionalist or conventionalist are criticized for thinking that "incest is a real 'thing' rather than a kind of meaning or a way of speaking

about things.” They are judged “guilty of reifying what is merely an artifact of our own didactic concerns.”¹³

I call these authors latter-day conventionalists because they share with other conventionalists a profound dislike of biological explanations. Like what we might call classical conventionalists, they insist that all human institutions are virginal creations. The difference is that being determinedly antisocial, they deny the possibility of sociological as well as biological explanations. I will address later the one argument they offer in justification of their denial that incest prohibitions are real things.¹⁴ Suffice it for the moment to say that I regard their view as sour-tempered solipsism.

2. The Trobriand Islands

In the eyes of his students and successors Bronislaw Malinowski's 1912–14 studies of the Trobriand Islands set the standard for anthropological field research.¹⁵ As even his harshest critic had to admit, as an ethnographer Malinowski was “a stimulating genius.”¹⁶ His published works cover almost every aspect of Trobriand life but none as thoroughly or as originally as his account of sexual life, including most conspicuously the Trobriand incest taboo. In order then to give my argument a firm ethnographic basis, I will begin with a brief introduction to Trobriand society, and wherever possible use Malinowski's evidence to illustrate my points.

The Trobriand Islands had been subject to European rule for thirty years when Malinowski began his research, and the people were already familiar with the exhortations of missionaries and the exploitations of traders. Thus the society Malinowski knew was not one of the fabled fossils anthropologists were still hoping to find, but neither was it a colony of fully clothed but impoverished natives working on plantations. The Europeans had suppressed warfare, but otherwise life continued along the lines set by native institutions. People still depended on yams from their gardens and fish from the lagoon; they still deployed magic to manage the vicissitudes of life; they still enjoyed unrestricted sexual lives before

marriage; and they still accepted as natural a kinship system that most Europeans would regard as improbable if not impossible.

In the Trobriands the elementary units of society we call “families” all belonged to one or another of the more inclusive groups Malinowski calls “clans” and “sub-clans.” Understanding these is critical for our topic because the Trobriand concept of incest, *suvaso*, prohibited sexual relations within the clan as well as within the family. In theory a man could not marry and/or enjoy sexual relations with any female member of his clan, no matter how distantly related. When Malinowski asked his informants what would happen to people who violated this rule, the answer was that if they were caught, “they would commit suicide by jumping from a coco-nut palm,” and if they were not caught, their crime would spontaneously generate a disease “heralded by a swelling of the belly.”

Soon the skin becomes white, and then breaks out in small sores which grow gradually bigger, while the man fades away in a wasting sickness. A little insect, somewhat like a small spider or a fly, is to be found in such a diseased organism. This insect is spontaneously generated by the actual breach of exogamy.¹⁷

Malinowski was a great ethnographer because when he was told what people ought to do, he always made an effort to discover what they actually do. In the case of the Trobriand incest taboo he found that while sex with a close cousin was regarded as “a real crime” and could lead to “consequences as serious as suicide,” sex with a distant cousin—though “officially forbidden, ruled to be improper, and surrounded by supernatural sanctions”—was “everywhere committed.” There was “no indignation or horror about it.” “It figures in the tribal life of the Trobrianders much in the same way as that in which adultery figures in the French novel.”¹⁸

Corporate kinship groups like the Trobriand clans were found in many societies, and in the great majority children were assigned to their father’s group. There were, however, a few societies in which they were assigned to their mother’s group, and Trobriand

society was one of these, the result being that the Trobriand incest taboo had a sharp matrilineal bias. Where sex with a mother's sister's daughter was regarded as "a real crime" and could "lead to consequences as serious as suicide," sex with a father's sister's daughter was approved to the extent of being recommended for inexperienced boys. In the Trobriand view she was "the prototype of the lawful, sexually recommended woman."¹⁹

Malinowski devotes most of a chapter to what he calls "The Supreme Taboo"—the strict Trobriand rule separating brothers and sisters from an early age. In the Trobriand view, "the sister [is] for her brother the very centre of all that is sexually forbidden—its very symbol; the prototype of all unlawful sexual tendencies within the same generation and the foundation of prohibited degrees of kinship." When brother and sister had to appear in the same company—when they traveled in the same canoe, for example—a rigidity of behavior and a sobriety in conversation were required of all those present. "No cheerful company, no festive entertainment, therefore, is allowed to include brother and sister, since their simultaneous presence would throw a blight on pleasure and would chill gaiety."²⁰

The bias set by matrilineal descent is nowhere more evident than in the difference between this and the rules governing relations between father and daughter. Where brother and sister were subject to the Supreme Taboo, father and daughter were free to interact frequently and casually. "Although father-to-daughter incest is regarded as bad, it is not described by the word *suvasova*, nor does any disease follow upon it."²¹ The reason, for Trobrianders, is that while a woman's brother belongs to her clan, her father does not. He is only her mother's husband.

3. Matters of meaning

"Incest" is a troublesome word because it is commonly used with two quite different meanings. For most biologists, it is sex with close kin and can be used in speaking of any species, while for

most social scientists, it is sex with proscribed kin and can only be applied to *Homo sapiens*. The first meaning allows one to talk of incest among cats or dogs but only if they are genetically related; the second allows one to speak of incest among individuals who are considered kin even if they are not related but only if they are *Homo sapiens*. By the first usage, incest is just a kind of behavior; by the second, it is always a crime.

Their interests lead many authors to insist on one or the other of these meanings. I cannot because as I interpret it the incest problem involves both a biological and a social dimension. I will therefore leave it to context to determine which meaning is intended. This will almost always be the meaning preferred by biologists when the context is incest avoidance and that preferred by social scientists when the context is the incest taboos.

A further problem with “incest” is that as it is used by social scientists it lumps together a variety of usages with varying meanings. The particularity thus lost is one of the reasons latter-day conventionalists insist that there can be no general explanation of the incest taboos. As their most eminent spokesman, Rodney Needham, argued, this is because the usages referred to “do not compose a class of homogeneous phenomena.” The prohibitions in question are “moral injunctions” that “express indigenuous ethical doctrines,” evident in the fact that the words ethnographers translate as “incest” range from *Blutschane* and *blodskande*, which suggest an offense against kinship considered as a community of blood, through words like *luan lun* that imply an offense against a jural or moral order, to words like *sumdang* that refer to acts that are offensive because they are out of place or unseemly.²²

Arguments of this kind lead many conventionalists to return to their eighteenth-century roots in the Counter-Enlightenment and argue, as J. G. Hamann and J. G. Herder argued, that there can only be “local reasons” for institutions like incest taboos.²³ Introducing a collection entitled *Incest Taboos in Micronesia and Polynesia*, David

Schneider argued that because incest taboos are “embedded not only in the kinship system” but also “in areas far beyond the boundaries of the kinship system,” we cannot ask why they exist or what purposes they serve. Because incest taboos are cultural things, we have to ask: “What is the meaning of incest in any particular culture? What does incest symbolize, what do these symbols mean? What place has it, that is to say, in the total symbolic and meaningful system which constitutes a culture?”²⁴

Conventionalists like Needham are right in arguing that incest taboos vary to the extent that they “do not compose a class of homogeneous phenomena.” The question is whether or not this is sufficient reason to conclude that there can be no general explanation. It could be that while the behaviors “incest” lumps together are not homogeneous, there is a common pattern of relations underlying the manifest differences that can be comprehended in terms of a single theory. Arguing that this is a possibility that must always be considered, no matter the phenomenon, Ernst Nagel asks us to consider “a lightning storm, the motions of a mariner’s compass, the appearance of a rainbow, and the formation of an optical image in the range finder of a camera.”

These are undeniably quite dissimilar occurrences, incomparable on the basis of their manifest qualities; and it may not seem antecedently likely that they could be illustrations of a single set of integrally related principles. Nevertheless, as is well known, these phenomena can all be understood in terms of modern electromagnetic theory. There are of course different special laws for each of these phenomena; but the theory can explain all the laws, since different laws are obtained from the theory when different initial conditions, corresponding to the evident dissimilarities of the various systems, are supplied.²⁵

Most constitutionalists accept this or a similar view of how best to approach phenomena that appear dissimilar and thus incomparable, arguing that there is no reason to assume that what underlies variable behavior is itself variable. Observed differences in behavior

may be only the manifest products of a universal human nature responding to variable conditions. They therefore proceed as physicists proceed, by formulating and testing hypotheses that reflect what is currently known of human biology and psychology.

4. Universality affirmed

In the late 1940s George Peter Murdock surveyed what was then known of the kinship systems of 250 societies. His conclusions included eight “empirical generalizations” concerning incest taboos. The first was that “with the exception of married parents, incest taboos apply universally to all persons of the opposite sex within the nuclear family.” As he summarized it, the evidence revealed “not a single instance in which sexual intercourse is generally permissible between mother and son, father and daughter, or brother and sister. Aside from a few rare cases and highly restricted exceptions, there is complete universality in this regard.”²⁶

Murdock does not give any examples of what he calls “rare and highly restricted exceptions,” but it is likely that he had in mind what is generally called “royal incest” or “dynastic incest.” A number of societies, all of which are now defunct, allowed sibling and/or half-sibling marriage among a privileged elite, typically the heirs and would-be heirs to some kind of paramountcy. A thorough study by John Goglin and William Sturtevant turned up evidence of such marriages in the history of thirty-four societies. They include fifth-century Iran, the Inca and Mixtec empires, Korea during the Koryo period, preconquest Hawai‘i, the Calusa chiefdom in South Florida, Ponape in the South Pacific, Lele and Bushanga in equatorial Africa, and most famously, Ptolemaic Egypt.²⁷

Although societies allowing sibling marriage were not rare in the past, the unions allowed are appropriately characterized as rare and restricted. Not only was incest limited to what was typically a tiny elite; it was also limited to siblings and half siblings. No known society allowed father-daughter or mother-son unions.

Moreover, even where they were allowed, sibling and half-sibling marriages were rare, suggesting, contrary to conventionalist assumptions, that they were not particularly attractive. After tracing all the references to consanguineous marriages in the Hawaiian genealogies preserved in the Bishop Museum, William Davenport concluded that “it is realistic to assume that they actually were rare events and that the Hawai‘ians perceived them as such.”²⁸

Although it had long been alleged that Egyptians allowed sibling marriage among commoners as well as the ruling elite, it was not until 1952 (three years after Murdock wrote) that M. Hombert and C. Préaux published evidence proving that this was indeed the case.²⁹ This consisted of papyruses preserving household registers compiled in Asinoe in the Fayum Basin during the Roman occupation. Of the forty-six marriages recorded, eight involved half siblings and seventeen full siblings. Walter Scheidel argues that owing to the limited size of siblings sets and a preference for younger wives, this incidence approaches the feasible maximum.³⁰

Claude Meillassoux has argued that “for fear of vilifying peoples who have won their sympathy,” many anthropologists have censored their reports to conceal incest,³¹ but until now the Egyptian case is the only documented exception to Murdock’s generalization. This evidence says that one society allowed sibling marriage at one time, but it does not say that the incest taboo was not universal. There is no evidence suggesting that the Egyptians accepted father-daughter or mother-son matings. Thus we cannot conclude that there was no incest taboo in Roman Egypt. The most we can conclude is that at one point in history the Egyptian taboo was narrower than it was in other societies.

5. The dangers of inbreeding

In 1878, Mark Twain, traveling up the Rhine on a barge, came to a small town perched on “an instantaneous hill—a hill two hundred and fifty or three hundred feet high, and round as a bowl.” It

was Dilsberg, whose seven hundred inhabitants, Twain learned, were all “blood kin to each other” and “have been blood-kin to each other for fifteen hundred years.” The result, according to the captain of the barge, was that “for ages Dilsberg has been a thriving and diligent idiot factory.” When, after a visit to Dilsberg, Twain noted that he saw no idiots there, the captain explained that this was “Because of late the government has taken to lugging them off to asylums and elsewheres.” Twain comments, “The captain probably imagined all of this, as modern science denies that the intermarrying of relatives deteriorates the stock.”³²

Until the middle of the twentieth century most biologists and the great majority of social scientists argued that inbreeding was not necessarily dangerous. It all depended on the quality of the stock one started with. Dilsberg was only “a diligent idiot factory” because its founders had been inclined to idiocy. Had they been inclined in the opposite direction, their descendants might have been known for their exceptional ability. The classic version of the argument takes Cleopatra as its ornamental Marianne. She was “the offspring of brother-sister marriages continued through several generations and yet she was ‘not only handsome, vigorous, intellectual, but also prolific . . . as perfect a specimen of the human race as could be found in any age or class of society.’”³³

This view of inbreeding was vigorously defended as late as 1949 by Claude Lévi-Strauss and remained the dominant view among social scientists for another decade.³⁴ But by 1950 the tide was already turning and by the mid-1960s most geneticists would not have been surprised to find Dilsberg to be a “diligent idiot factory.” This history remains to be written, but when it is three studies will be featured: William J. Schull and James V. Neel’s studies of cousin marriages in Japan,³⁵ K. Fried and A. M. Davies’s study of uncle-niece marriages among Moroccan Jewish immigrants in Israel,³⁶ and Eva Seemanova’s study of parent-child and brother-sister unions in Czechoslovakia.³⁷ These three studies form a set representing the three closest degrees of what geneticists call “coefficients of relationship.”

The Japanese study was a direct if incidental result of World War II. Commissioned by the Atomic Energy Agency to assess the effects of the bombs dropped on Hiroshima and Nagasaki, Schull and Neel examined the outcome of thousands of pregnancies in the two cities. Their only substantial finding regarding radiation was that exposure altered the sex ratio in favor of females. What turned out to be important was the discovery that a large proportion of the pregnancies studied were the result of cousin marriages. When they examined these in detail Schull and Neel found that inbreeding was far more dangerous than radiation. The offspring of first-cousin marriages were more likely to die prematurely or suffer major birth defects than the offspring of unrelated parents. William Durham calculates the “death-plus-major-defect” rate in the two subpopulations as 13.5 percent compared to 6.6 percent.³⁸

Fried and Davies’s Israel study is minuscule compared to Schull and Neel’s massive effort. Its importance is that, with the rare exceptions noted above, uncle-niece marriages have the highest coefficient of relationship found among legal unions. Fried and Davies’s subjects were 153 children born in a West Jerusalem immigrant community where uncle-niece marriages were common. Their controls were children born in the same community to unrelated parents who were also immigrants. Probably because their parents were all poor immigrants, both groups’ death-plus-major-defect rates were higher than what Schull and Neel found in Japan. But as in Japan the rate was markedly higher among the inbred children than among the controls, 34.2 percent compared to 17.5 percent.³⁹

Eva Seemanova’s study is, without doubt, the most famous study of inbreeding ever published. From the records of district courts, maternity homes, children’s homes, and hospitals, she collected the information needed to assess the fates of 161 children of father-daughter, mother-son, and brother-sister unions. She then cleverly assembled a control group of 95 children born to her subjects’ mothers in unions with unrelated men. The results were astounding.

Thirteen of the inbred children died within one year but only five of the control children; thirty-one of the inbred children were born with one or more major malformations (cleft palate, dwarfism, malformed genitals, hydrocephaly, etc.) but only three of the control children; and forty of the inbred children suffered severe mental disabilities (imbecility, idiocy, deaf-mutism, etc.) but only two of the control children. The death-plus-major-defect rates among the two groups were 50.1 percent and 9.8 percent.⁴⁰

Despite the fact that her controls were half siblings of her subjects, Seemanova's results are frequently criticized. The most telling criticism is that a large proportion of her subjects' fathers were intellectually handicapped, chronic alcoholics, or suicidal and thus less fit than the fathers of her controls. Alan Bittles argues that it is best to ignore Seemanova's study and extrapolate the effects of close inbreeding from what is known of legal unions like cousin marriages. He suggests that given the evidence compiled by Schull and Neel we should expect brother-sister and parent-child unions to produce an excess death rate of 16 to 20 percent and an excess morbidity rate of 6 to 16 percent. This would put the excess death-plus-major-defect rate at somewhere between 22 and 36 percent.⁴¹

Whether the risk entailed by incest is an excess death-plus-major-defect rate of 20 percent or 40 percent, it is now clear that the "modern science" of Twain's time was mistaken. Their preference for marrying blood kin would have made the Dilsbergers' island "a diligent idiot factory."

6. A tempting solution

If one accepts that incestuous unions produce inferior offspring and thus reduce reproductive success, the solution to the problems posed here seems obvious. At some point in its history *Homo sapiens* or its immediate forebears recognized the danger and instituted an incest taboo. The taboo was a kind of public health measure

enacted for the sake of the minority of people who failed to recognize the danger or lacked the will to take precautionary measures. The great majority of the citizens of this enlightened community did not need to be told to avoid sexual relations with their parents and siblings. They did so willingly for the sake of their children.

The view that inbreeding is unhealthy was accepted as the obvious solution to the incest problem by the men who founded kinship studies, most notably Lewis Henry Morgan and Sir Henry Maine. The first of the “great reforms” Morgan hypothesized as driving sexual relations upward from promiscuity to monogamy was “the gradual exclusion of own brothers and sisters from the marriage relation.” This was a “difficult” step and “required long periods of time,” but it was inevitable because “the evils of [the practice] could not forever escape human observation.”⁴² Maine rejected Morgan’s history of marital relations as speculative but agreed that primitive men would have recognized the dangers of inbreeding. “I cannot see why the men who discovered the use of fire and selected the wild forms of certain animals for domestication and of vegetables for cultivation should not find out that children of unsound constitutions were born of nearly related parents.”⁴³

What I call the “hygiene hypothesis” achieved a large following among laymen, but a question raised by Darwin checked its career among scientists. Is it reasonable to suppose, he asked, that our primitive forebears were “likely to reflect on distant evils to their progeny?”⁴⁴ With this question asked but not answered, the hygiene hypothesis was denied serious consideration. Claude Lévi-Strauss dismissed it on the grounds that primitive peoples “give no indication of any such eugenic second-sight.” “This justification for the prohibition of incest is of recent origin, appearing nowhere in our society before the sixteenth century.”⁴⁵

The hypothesis did not regain scientific respectability until 1973 when a psychologist, Ralph V. Barton, reading anthropology for another purpose, decided that “the most common reason given in both primitive and modern societies for the incest taboo is that

[inbreeding] produces bad stock.”⁴⁶ Impressed by Burton’s claim that this accounts for the emotional response to incest, William Durham undertook the Herculean task of allaying the doubts raised by Darwin. Following a lead suggested by L. L. Stegner, who claimed to find the evidence needed in mythology, Durham began by studying incest myths—with disappointing results. Contrary to Stegner’s claim, he found that of thirty-three societies with such myths, only five claimed that the consequences of incest were deleterious. A far greater number—twenty-three of the thirty-three—“featured myths with neutral to beneficial consequences, such as the birth of culture heroes or giants of super strength.”⁴⁷

Durham then turned to ethnographers’ accounts of people’s reactions to violations of the incest taboo. Here he found what he took to be the evidence he wanted. Of the twenty societies whose ethnographers reported the native view of the consequences of incest, half of these views included unhealthy or deformed children. Durham admits that many of the reports he compiled are brief and not the result of focused inquiry. He nonetheless concludes that “a majority of the world’s populations do recognize the deleterious phenotypic effects of inbreeding.” He cites as examples of his evidence the Lapp view that incest “makes insanity and bad blood,” the Tlingit fear that “the children are likely to be deformed,” the Kapauku worry that people’s “vital substance will deteriorate,” and the Tucano belief that if we commit incest “we will not have children or . . . the children will die.”⁴⁸

Many peoples believed that incest makes for deformed or weak children, but it does not follow that they recognized the dangers of inbreeding per se. According to Grenville Goodwin, the Western Apache said that “any man or woman who had committed incest was likely to lose children by a later normal marriage. ‘The children will die easily because of what their parent has done.’”⁴⁹ There were also many peoples who believed that the parents themselves would suffer. We have already noted the Trobriand Islanders’ belief that the guilty couple would break out in sores caused by

spontaneously generated spider-like insects.⁵⁰ The Nuer believed that syphilis and certain forms of yaws were “especially a consequence of incest”⁵¹; the Solomon Island Siuai were convinced that “death follows automatically unless an antidotal ritual is quickly performed”⁵²; and the Navaho feared that incest would inflict an illness called “moth madness” because the guilty parties might “jump into the fire like a moth.”⁵³

The belief that the guilty couple’s relatives would suffer was also common to many peoples. According to E. E. Evans-Pritchard, the Nuer were convinced that the deleterious consequences of incest may fall “not only on the partners to the sin but also on their closest relatives, so that a man who commits incest may render himself responsible for homicide as well.”⁵⁴ Similarly, among the South African Tswana it was said “that a person committing [incest] would bring misfortune upon the people [*o tla fefa batho*], or, more specifically, would cause his relatives to die [*o tlholela ba lesika la gagwe go swa*].”⁵⁵ Additionally, in his account of the Admiralty Island Manus, Reo Fortune tells us that when a man who had just learned of a case of incest began beating a slit drum with the tattoo for sexual misconduct and war, the village “immediately seethed like a disturbed hornets’ nest.” The reason was brought out by a headman when the accused refused to confess. “All right,” he said, “if they are hiding it illness will come up from their concealing it; then, unless they wish their own kin to die, confession will be made.”⁵⁶

Many peoples believed that the evil set in motion by incest would effect cattle and crops as well as people. The Iban (or Sea Dyaks) of Sarawak were certain that “incest brings dire misfortune to the entire countryside, and all its inhabitants.” According to Derek Freedman, “Any Iban can catalogue the manifold disasters which follows upon incest if a community does not perform the proper rites of expiation.” They include: “(a) ‘Our *padi* will not live, and so with all planted things’; (b) ‘Swarms of animals and insects come to devour our *padi*’; (c) ‘All things fail, all things are

cursed” and “(d) ‘All the gods are enraged with us.’”⁵⁷ The Bakta-man of New Guinea say that “the soil gives growth to taro and must not be polluted with the semen from incest.” Semen from incestuous intercourse would retard the growth of taro and leave the soil infertile.⁵⁸

People who commit incest do not break out in small sores or fade away in a wasting sickness; they do not cause their kin to die; and they do not kill the *padi* or stay the growth of the taro. All that Durham’s evidence says is that the many afflictions blamed on incest include the health of the couple’s offspring. It does not say that people recognize this as the principal consequence of incest and therefore prohibit it. They only see deformed children as one of a host of misfortunes entailed by incest. We have to accept Lévi-Strauss’s caustic conclusion that our primitive forebears did not possess “eugenic second-sight.”

7. Group harmony theory

Conventionalists have offered two answers to the question of why human beings everywhere disapprove of people’s having sex with their close kin. I call these “group harmony theory” and “group alliance theory.” The former was first given explicit formulation by Sigmund Freud in the fourth of the lectures published as *Totem and Taboo*. What he called “Darwin’s primal horde” was a society in which “a violent and jealous father . . . keeps all the females to himself and drives away his sons as they grow up.” The incest taboo originated when the sons united and killed their father, and then, overcome by guilt, revoked their deed by resigning their claims to the women they had freed. What became group harmony theory was Freud’s claim that this had a practical as well as an emotional motive.

Though the brothers had banded together in order to overcome their father, they were one another’s rivals in regard to the women. Each of them would have wished, like his father, to have all the women to

himself. The new organization would have collapsed in a struggle of all against all, for none of them was of such overpowering strength as to be able to take his father's part with success. Thus the brothers had no alternative, if they were to live together, but . . . to institute the law against incest, by which they renounced the women whom they desired and who had been their chief motive for despatching their father. In this way they rescued the organization which had made them strong.⁵⁹

The core of Freud's argument—the idea that “sexual desires do not unite men but divide men”—appealed to many British social anthropologists, including Malinowski. Though he argued on the basis of his Trobriand evidence that the Oedipus complex is not universal,⁶⁰ Malinowski's explanation of the incest taboo followed Freud's lead. Beginning with the assumption that incest is a natural inclination, he argued that it must be prohibited. Without a taboo, society would be impossible.

The sexual impulse, which is in general a very upsetting and socially disruptive force, cannot enter into a previously existing sentiment without producing a revolutionary change in it. Sexual interest is therefore incompatible with any family relationship, whether parental or between brother and sister, for those relations are built up in the presexual period of human life and are founded on deep psychological needs of a non-sexual character. If erotic passion were allowed to invade the precincts of the home it would not merely establish jealousies and competitive elements and disorganize the family but it would also subvert the most fundamental bonds of kinship on which the further development of all social relations is based. Only one erotic relationship can be allowed within each family, and that is the relationship between husband and wife, which although it is built from the outset on erotic elements must be very finely adjusted to the other components of domestic cooperation. A society which allowed incest could not develop a stable family; it would therefore be deprived of the strongest foundations for kinship, and this in a primitive community would mean absence of social order.⁶¹

Group harmony theory is a prototypical functionalist argument. It identifies a problem that must be solved if society is to survive and then offers its *explicandum* as the solution. The problem is that arguments of this kind always rest on untested and often untestable assumptions. In the case of group harmony theory these are: the assumption that most people want sex with their close kin; the assumption that if it were not for the taboo they would have sex with their close kin; the assumption that the jealousies thus engendered would destroy the family; the assumption that without the family, social order would be impossible; and finally, most egregious of all, the assumption that if all of the above were true, our primitive ancestors would have seen the danger and then invented and imposed a prohibition as the solution. No wonder Ernest Nagel concludes that in the social sciences “the cognitive worth” of functionalist explanations is “in the main very dubious.”⁶²

8. Group alliance theory

The initial version of group alliance theory appeared in 1889 in a paper by Edward B. Tylor. Tylor argued the incest taboos were invented when tribes began to “press on one another and quarrel” and a fundamental “difference between marrying-in and marrying-out [became] patent.”

Endogamy [marrying in] is a policy of isolation, cutting off a horde or a village, even from the parent-stock whence it separated, if only a generation or two back. Among tribes of low culture there is but one means known of keeping up permanent alliance, and that means is intermarriage. Exogamy [marrying out], enabling a growing tribe to keep itself compact by constant unions between its spreading clans, enables it to overmatch any number of small intermarrying clans, isolated and helpless. Again and again in the world’s history, savage tribes must have had plainly before their minds the simple practical alternative between marrying-out and being killed out.⁶³

This hypothesis caught the attention of anthropologists on two continents. The American Leslie A. White chose it as the epigraph of an influential article entitled “The definition and prohibition of incest,” and the Frenchman Claude Lévi-Strauss introduced his account of exogamy with what he called the “brutal choice” so “powerfully expressed by Tylor.”⁶⁴ In both cases the arguments that followed are generalizations—one might say dramatizations—of Tylor’s hypothesis. What Tylor called a “discovery” becomes an epiphany that raises the species from an animal to a human state. White writes:

In the primate order . . . the social relationship between mates, parents and children, and among siblings antedates articulate speech and cooperation. They are strong as well as primary. And, just as the earliest cooperative group was built upon these ties, so would a subsequent extension of mutual aid have to reckon with them. At this point we run squarely against the tendency to mate with an intimate associate. Cooperation *between* families cannot be established if parent marries child; and brother, sister. A way must be found to overcome this centripetal tendency with a centrifugal force. This way was found in the definition and prohibition of incest. If persons were forbidden to marry their parents or siblings they could be compelled to marry into some other family group—or remain celibate, which is contrary to the nature of the primates. The leap was taken; a way was found to unite families with one another, and social evolution as *human* affair was launched upon its career. It would be difficult to exaggerate the significance of this step. Unless some way had been found to establish strong and enduring social ties between families, social evolution could have gone no further on the human level than among the anthropoids.⁶⁵

Asked to summarize his views for a lay audience, Lévi-Strauss turned in an account every bit as colorful as White’s. What began with Tylor as an explanation of a rule becomes a “passage between nature and culture.”

It will never be sufficiently emphasized that, if social organization had a beginning, this could only have consisted in the incest prohibition since . . . the 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 obligations. It is there, and only there, that we find a passage from nature to culture, from animal to human life, and that we are in a position to understand the very essence of their articulation.

As Tylor has shown almost a century ago, the ultimate explanation is probably that 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.⁶⁶

Group alliance theory takes the same form as group harmony theory and suffers from the same faults. The only difference is that where one emphasizes intergroup relations, the other emphasizes intragroup relations. Both assume that human beings are naturally inclined to mate and marry within the family, and both also assume that despite this they were capable of imposing rules that denied this possibility. It may be that marrying out has the advantages Tylor attributed to it, but it is unlikely that this is why the incest taboos were imposed. As Wilson Wallis noted when Tylor's hypothesis was resurrected, "seldom do a people deliberate in this manner and then proceed according to the dictates of reason. Much more frequently they act first and later justify the action." Consequently, it seems "more probable that marriage out led to perception of its advantages than that perception of its advantages led to this prevalent type of marriage."⁶⁷

9. The !Kung on cognition

The explanations of incest avoidance reviewed above all share with classical economics the assumption that human beings are all-knowing and rational. This is most obvious in the case of the public hygiene hypothesis but is also an essential assumption of both group harmony theory and group alliance theory. The epiphany that moved our species from an animal to a human state requires it.

Of all the evidence that can be marshaled to counter this assumption the best comes from the !Kung, one of the native peoples of the Kalahari Desert. It is special for two reasons. One is that at the time the evidence was recorded the !Kung still supported themselves as hunters and gatherers, living lives that must have represented in many respects those of our Paleolithic ancestors. The other is that the author who took the evidence, Lorna Marshall, did not hold any particular theory and was not beholden to any major theorist. She and her husband, Laurence Marshall, and her daughter, Elizabeth Marshall, were amateurs who spent much of their adult lives studying the !Kung because they were “a fascinating people.” Their only concern was to preserve !Kung culture by recording what they saw and heard.

Consider then what Marshall says about the reasons the !Kung give for avoiding incest.

The !Kung did not express the belief that inbreeding produces inferior offspring and must for that reason be avoided. Also, the thought that incest has been avoided by mankind because it would be exceedingly disruptive to the internal cohesion of the nuclear family comes to the mind of the analyst of social forms, but not the minds of the !Kung. The same might be said of the social advantages of marrying outside the nuclear family and thereby weaving a supporting web of kinship with many other families and bands. The !Kung apparently do not think of incest in these terms. They feel a deep, internalized, pervading horror of incest, which they do not try to explain. Incest with parent, offspring, or sibling is unthinkable. “Only dogs do that—not men.”

“It would be madness [*di*].” “It would be dangerous, like going up to a lion.” Many refused to speak to me about such “bad things.”⁶⁸

This testimony says that until they have specialists whose task it is to speculate, people do not even entertain the possibility that incest is avoided because it is biologically dangerous or socially disadvantageous. This is not because they lack the ability but because the question is never raised. They already have a convincing explanation, based as it is on their own, emotionally vivid, reactions. Incest is avoided because people “feel a deep, internalized, pervading horror of incest.” This book could be summarized as an attempt to prove that the !Kung are right.

10. Incest and intuition

Although my argument depends in large part on evidence of the kind provided by Lorna Marshall, I anticipate what follows with evidence of another kind. To expose the failings of rationalist models of moral judgments psychologists at the University of Virginia told students stories and asked them if the action depicted was moral or not.⁶⁹ Fortunately for my purposes, one of the stories involved sibling incest.

Julie and Mark are brother and sister. They are traveling in France on summer vacation from college. One night they are staying alone in a cabin near the beach. They decide that it would be interesting and fun if they tried making love. At the very least it would be a new experience for each of them. Julie was already taking birth control pills, but Mark uses a condom too, just to be safe. They both enjoy making love, but they decide not to do it again. They keep that night as a special secret, which makes them even closer to each other. What do you think about that? Was it OK for them to make love?

The immediate response of most of the students was that what Julie and Mark did was immoral. “It’s just wrong to do that!” or “That’s terrible!” Some offered the dangers of inbreeding to justify

their judgment but had to abandon the argument when they remembered that Julie and Mark had used two forms of birth control. Others suggested that Julie and Mark would suffer emotionally but had to admit this was unlikely when it was pointed out that the story makes clear no harm befell them. Eventually, most of the students said something like, "I don't know, I can't explain it, I just know it's wrong." They were morally dumbfounded in the sense that they could not find reasons to justify their judgment.

My thesis will be that though the subjects in this study were American students, the reactions recorded would be elicited by similar stories wherever they were told. Like the !Kung, people everywhere appear to have "a deep, internalized, pervading horror of incest." They often give as reasons for their reactions consequences of the kind noted, but these are post hoc rationalizations. The real source of their disapproval is an immediate feeling of the kind that David Hume saw as the source of all moral judgments. My argument will be that what explains the incest taboos are not the deleterious consequences attributed to incest. It is something in human nature that prompts spontaneous condemnation of behavior that is typically harmless.

11. From nature to culture

Bronislaw Malinowski, Leslie White, and Claude Lévi-Strauss were all fluent writers, but the language I quote should not be read as rhetoric. It is dramatic, because it expresses the authors' view of the importance of their topic, which is not simply the incest taboo but the relationship between nature and culture and, more particularly, the unlikely process by which, despite the resistance of our animal past, culture overcame nature and made us human.

Anthropologists are forever seeking the monuments that mark the boundary between human beings and all the other animals.

For many, it is language; for some, a complex tool kit, cave art, and respect for the dead; and for others, the ability to produce the means of subsistence collectively. For conventionalists, it is the incest taboo. It marks the point at which “an animal procreative group” became “a human cooperative one”; it is the point at which “social evolution as a *human* affair was launched upon its career”; “it is there, and only there, that we find a passage from nature to culture, from animal to human life.”

Of all the animals on the planet only human beings manufacture tools, decorate themselves and their houses, bury their dead, and communicate by way of articulate speech. Why then do conventionalists choose the incest taboo as the distinctive feature of our species? Compared with language, art, and tools, it is a simple institution requiring no special mental ability. The reason is that given their Freudian assumptions concerning incest, imposing a taboo required suppressing our natural, animal inclinations. It made us human because it required “a kind of remodeling of the biological conditions of mating and procreation . . . compelling them to become perpetuated only in an artificial framework of taboos and obligations.”

Language, art, and tools would not do as our defining characteristics, because they could be the work of what Clifford Geertz called “intrinsically talented apes.” We could not get to be human by just being cleverer than other animals. We had to transcend our animal nature and build anew. To be the achievement the conventionalists want it to be culture had to be artificial. It could not be the product of talents developed by the same processes that produced the traits that we share with other animals. It had to be a creation story, a genesis.

Thus the conventionalist account of the incest taboos is more than an explanation of a particular prohibition. It is a defense of a view of human nature in which our animal heritage is pitted against our cultural creations. The language is dramatic because for the authors the story told is a story in which something akin to a revelation changed the course of history. It is a story of leaps

taken, barriers surmounted, and ways forward found when they had to be found. The way the story is told suggests that it is prompted by religious and political commitments that are trained to refute all challenges.

12. Marx is missing

The only mention of incest in the Marxist canon occurs in Engel's *The Origin of the Family, Private Property, and the State* where, echoing Morgan, he suggests that the taboo was a valuable invention because it "tend[s] to create a more vigorous stock physically and mentally."⁷⁰ It is not surprising that Marx did not take up the incest problem himself given when he wrote. What is surprising is that twentieth-century Marxists rarely addressed the problem and when they did, always began with conventionalist assumptions. This is true of marquee Marxists like Claude Meillassoux and Maurice Godelier, quasi Marxists like Marshall Sahlins and Marvin Harris, and amateur Marxists like Richard Lewontin.

The explanation seems to be that for reasons that were not Marx's reasons, most Marxists developed a deep antipathy for biological explanations of human behavior. This is evident in the pains they took to deny the possibility that because of the dangers of inbreeding, human beings have developed a natural aversion to incest. When it came to a choice between Darwin and Freud, they chose Freud. Meillassoux insisted that "incest did not involve, any more than other sexual practices that are claimed to be 'abnormal' or deviant, 'natural' feelings of revulsion among the majority of people"⁷¹; Godelier argued that if there were no incestuous desires of the kind revealed by Freud there would be no need for incest taboos⁷²; Sahlins insisted that to secure its evolutionary role culture "was forced to oppose man's primate nature on many fronts and to subdue it"⁷³; and Harris argued again and again that my evidence suggesting that early association inhibits sexual attraction is better explained in one or another of various ways that do not involve biology.⁷⁴

The result is that there is nothing that could be called “a Marxist solution to the incest problem.” When Godelier took “incest” as his topic for a lecture honoring Herbert Spencer, he produced an argument that repeated all the faults of conventional group harmony theory.⁷⁵ The closest any Marxist comes to an explanation of the incest taboos is Claude Meillassoux’s suggestion that they were instituted “when control over marriages became one of the elements of political power.”

In other words incest is a moral notion produced by an ideology which is tied to the extension of power in domestic communities, as one of the means used to control the mechanisms of reproduction. It is not an innate proscription, (if it were it would in fact be the only one of its kind).⁷⁶

Meillassoux concludes by proclaiming that “what is presented as a sin against nature is in fact only a sin against authority.”⁷⁷

This will not suffice as an explanation of the incest taboos, assuming as it does that a natural desire for incest was not overruled until late in human history. Its value lies in suggesting that whatever may be the reason for their existence, the incest taboos may have been used to organize or control people. In other words, they may have been co-opted for purposes they were not created for and possibly extended or modified in ways that belie their origins. I will argue later that this helps explain why the incest taboos vary from society to society and why they are sometimes deliberately violated.

13. The Westermarck hypothesis

When Sir Thomas, the inept patriarch of Jane Austen’s *Mansfield Park*, hesitated to invite his young niece, Fanny Price, to live with his family, his sister-in-law, the meddling Mrs. Morris, guessed that he was “thinking of his sons” and, bent on persuading him to acquiesce, argued that given their growing up together there was no need to worry. “Do you not know that of all the things upon

earth *that* is the least likely to happen; brought up as they would be, always together like brothers and sisters? It is morally impossible. I never knew of an instance of it. It is, in fact, the only sure way of providing against the connection.”⁷⁸

This is the essence of what has come to be known in the scholarly world as “the Westermarck hypothesis.” It is attributed to the Finnish scholar, Edward Westermarck, because he made it the basis of an explanation of incest avoidance and defended it against a host of critics. Taking what I call the constitutionalist view, he argued that “our laws against incest are scarcely felt,” for the simple reason that “in normal cases there is no desire for the acts which they forbid.” This is because, “generally speaking, there is a remarkable absence of erotic feelings between persons living closely together from childhood.”⁷⁹

Unlike his predecessors in the constitutionalist tradition, Westermarck did not attribute incest avoidance to what Francis Hutcheson called an “innate moral sense.” His hypothesis makes avoidance dependent on an innate disposition, but this disposition does not specify kin as the objects to be avoided. It predicts this consequence whenever males and females are reared together from an early age regardless of how they are related. Kin reared apart are likely to interest one another if they meet as adults, and non-kin reared together will show no interest in one another despite being free to do so. Like Noam Chomsky’s account of language, Westermarck’s account of incest avoidance posits an indispensable innate disposition, but again like Chomsky’s account, it makes the behavior enabled by this disposition subject to experience. Just as the language a person speaks reflects where he was raised, so the relationships he avoids reflect whom he was raised with.

Making incest avoidance contingent on childhood experience was only one of the ways Westermarck reworked the constitutionalist tradition. Instead of looking to the deity as the source of the innate disposition proscribing incest, he looked to the dangers of

inbreeding, insisting that “inbreeding generally is, for some reason or other, more or less detrimental to the species.”

It seems to me that the sexual instinct is of such importance for the existence of the species that any satisfactory explanation of its normal characteristics must be sought for in their specific usefulness; and I have made the suggestion that the lack of inclination for sexual intercourse—leading, when the act is thought of, to a positive aversion—between household companions of childhood has a biological foundation in injurious consequences following unions of the nearest blood-relatives.⁸⁰

In recasting the constitutionalist view of incest in Darwinian terms Westermarck did more than modernize an old tradition. He reversed the constitutionalist and conventionalist positions in the eyes of people who cherish an elevated image of our species. In the eighteenth century constitutionalists like Francis Hutcheson were revered as champions of this view, upholding human dignity by making morality an innate human quality. The thinkers threatening an elevated view of the species were men like Bernard Mandeville who argued that morality was just a custom with no innate basis. Westermarck changed all this when he rewrote the constitutionalist position in evolutionary terms. What had stood as evidence of our special human qualities could now be seen as another manifestation of our animal nature. The response among people determined to preserve human dignity was to make custom a unique human creation that cannot be accounted for in Darwinian terms. The result is that a conventionalism that was once seen as threatening human dignity is now its bastion.

14. Frazer and Freud

When Westermarck’s account of incest avoidance made its public debut in 1891 as a chapter of *The History of Human Marriage* it was applauded as “the solution to the problem” by the leading authorities of the time. Alfred Russell Wallace wrote to the young author

saying, "I like your discussion of the origin of universal repugnance to incest very much, and I think you have solved the problem,"⁸¹ and, after praising Westermarck's hypothesis in a laudatory review, Edward Burnett Tylor wrote saying, "I should not be surprised to find it or something like it the real solution."⁸² Westermarck went on to become one of the best-known authors of his time, but praise for his incest hypothesis did not continue. In 1922, in a review of the fifth edition of *The History*, Malinowski praised his mentor's hypothesis as "a model of sociological construction" but had to admit that at present "it seems to find favour with no one,"⁸³ and by midcentury the hypothesis was only mentioned by authors clearing the ground for their own constructions. A 1963 paper summarizing the work of a seminar convened at the Center for Advanced Studies in the Behavioral Sciences dismissed the Westermarck hypothesis in two sentences, only mentioning it "for the sake of completeness."⁸⁴

What I will call the Advanced Studies Group gave two reasons for ignoring the hypothesis that had once been regarded as "the solution of the problem." The first was that "It is hard to see why what is naturally repugnant should be tabooed." This was one of many echoes of a point first made by Sir James Frazer in 1910 in *Totemism and Exogamy*. It was repeated by Sigmund Freud in 1911,⁸⁵ Bernard Williams in 1983,⁸⁶ Richard Lewontin, Steven Rose, and Leon J. Kamin in 1984,⁸⁷ Maurice Godelier in 1989, and Allen Johnson and Douglass Price-Williams in 1996.⁸⁸ "It is not easy to see," Frazer wrote, "why any deep human instinct should need to be reinforced by law."

There is no law commanding men to eat and drink or forbidding them to put their hands in the fire. Men eat and drink and keep their hands out of the fire instinctively for fear of natural not legal penalties. . . . The law only forbids men to do what their instincts incline them to do; what nature itself prohibits and punishes, it would be superfluous for the law to prohibit and punish. Accordingly we may always safely assume that crimes forbidden by law are crimes which

many men have a natural propensity to commit. If there was no such propensity there would be no such crimes, and if no such crimes were committed, what need to forbid them? Instead of assuming, therefore, from the legal prohibition of incest that there is a natural aversion to incest, we ought rather to assume that there is a natural instinct in favour of it, and if the law represses it, as it represses other natural instincts, it does so because civilized men have come to the conclusion that the satisfaction of these natural instincts is detrimental to the general interests of society.⁸⁹

The second reason the Advanced Studies Group gave for dismissing what they termed “the indifference hypothesis” was that “The evidence for sexual attraction among kinsmen is quite adequate for rejecting the theory.” The source of this point was of course Sigmund Freud, who insisted, again and again, that “the findings of psycho-analysis make the hypothesis of an innate aversion to incestuous intercourse totally untenable. They have shown, on the contrary, that the earliest sexual excitations of youthful human beings are invariably of an incestuous character.”⁹⁰

Westermarck responded to Frazer in 1917 and again in 1922, agreeing that “of course, where there is no transgression there is no law,” but suggesting that Sir James “cannot possibly be ignorant of the variability of instincts and of the great variability of the sexual instinct, nor of the fact that there are circumstances in which a natural sentiment may be blunted or overcome.”

Would he maintain that there can be no general aversion to bestiality because bestiality is forbidden by law, and that the exceptional severity with which parricide is treated by many law-books proves that a large number of men have a natural propensity to kill their parents? The law expresses the general feelings of the community and punishes acts that shock them, but it does not tell us whether an inclination to commit the forbidden act is felt by many or by few.⁹¹

Westermarck did not respond to Freud until the fifth edition of *The History* appeared in 1922 and then only in a footnote in which,

mischievously, he reminded Freud that his own “most distinguished disciple, Dr. Jung,” did not agree with him.

That the results of the so-called psycho-analysis are destructive to my theory is a supposition for which I must see some evidence before I can take it seriously. In Dr. Freud's terminology, “sexuelle Regungen” may imply mental states very different from the desire for sexual intercourse; and the study of neurotic persons can hardly be regarded as a safe guide to the proper understanding of the normal manifestations of the sexual instinct. Dr. Jung, Freud's most distinguished disciple, says, “I am able to attribute as little strength to incestuous desires in childhood as in primitive humanity.”⁹²

The Advanced Studies Group did not cite either Frazer or Freud because by 1963 their criticisms had been repeated so often that everyone knew the sources. They appear with mantra-like regularity in the works of authors as diverse in their views as Andrew Lang, A. L. Kroeber, Havelock Ellis, William McDougall, Émile Durkheim, Ernest Crawley, Brenda Seligman, Claude Lévi-Strauss, Alexander Goldenweiser, Leslie A. White, Marshall Sahlins, Claude Meillassoux, and Richard Lewontin. That these authors were more interested in putting Westermarck down than evaluating his argument is evident in the fact they never mention his responses to Frazer and Freud. I have not found a single exception.

My guess is that the spectacular rise and fall of the Westermarck hypothesis had less to do with the cogency of Frazer and Freud's criticisms than with a sea change in social views that ran strongly against Westermarck's conception of the relationship between man and society. Frazer and Freud thrived as his critics because they both espoused views that pit law and custom against human nature. What Westermarck offered was a view in which law and custom are the products of the same evolutionary processes that produced upright posture and binocular vision. What the twentieth century wanted was a view that elevated what human beings create over what they are. I suspect that this was a oblique reaction to what many people saw as Darwin's assault on human dignity.

15. Three natural experiments

The history of the Westermarck hypothesis seems to say that a hypothesis about an important aspect of human behavior rose and fell as divergent conceptions of the relationship between man and society waxed and waned. What saves us from this dispiriting conclusion is the fact that this happened in what amounted to an evidential vacuum. Freud's evidence was limited to suspect inferences about the behavior of a few neurotic patients, and Westermarck's was not much better. It consisted of little more than a few traveler's anecdotes and casual observations of farm animals and domestic pets.

The problem was not that no one appreciated the need for evidence. It was that so far as anyone knew, the conditions required for testing the hypothesis did not exist. Children reared together from an early age were almost always brothers and sisters, and because they were brother and sister, sexual relations between them were prohibited. It was obvious that they seldom took a sexual interest in one another and never married, but it was impossible to determine whether this was due to early association or to the penalties threatened by the incest taboos. The critical variables were hopelessly confounded.

What turned the tide that had run against Westermarck for sixty years was the discovery of three natural experiments. One could be used to ask what would happen if children reared together were allowed to marry, and the other two to ask what would happen if they were forced to marry. The first of the three is a form of marriage that was familiar to Westermarck as a result of years spent studying ritual and belief in Morocco.⁹³ It is generally known as *bint 'amm* marriage and until recently was the favored form of marriage in many Arab communities. According to Faud I. Khuri, *bint 'amm* is used "to refer to the daughter of the paternal uncle, to any woman who carries the name of the patrilineage, or to the wife regardless of whether she is a relative or not."⁹⁴ In Arab communities married brothers commonly lived

together with the result that in the first case a *bint 'amm* marriage united a boy and girl who had grown up in the same household. It is these marriages that constitute our first natural experiment.

Natural experiments are never perfect experiments, and *bint 'amm* marriage is not an exception. One problem is that often it is not clear how intimately the couple interacted as children and for how long, many authors failing to distinguish between marriages in which the couple grew up in the same household or just in the same neighborhood. Another problem is that none of the authors we depend on report the frequency with which couples who were reared together refused to marry. All they report is the reaction of couples who actually married, thus leaving open the possibility that the couples surveyed were largely those least affected by early association. We must include *bint 'amm* marriage as one of our three experiments because it has been cited both for and against the Westmarck hypothesis, but we must adopt a triage mentality lest we be misled by faulty evidence and unwarranted interpretations.

The second experiment was created by communal child-rearing in the collective settlements (*kibbutzim*) founded in Israel in the 1930s and 1940s. Motivated by a collectivist ideology that called for abolishing the family, the early settlers instituted a strict ban on activities that might foster such bonds. Husband and wife were not allowed to accumulate substantial private property; they were expected to take most of their meals in communal dining halls; and all their stores were supplied by communal institutions.

In most *kibbutzim* this attempt to reform the family included removing children from the home. Children were only cared for by their mother for a few weeks after birth. By six months of age at the latest they were removed to a communal nursery and assigned to the peer group (a *kevutza*) with whom they would live until they graduated from high school. The size of these groups varied from half a dozen to a dozen or more depending on the population of the community. They included all the children born in a three-to-four-year period and thus always had both boys and girls.

The children were allowed to visit their parents and occasionally took their evening meal with them, but they lived in special houses under the care of nurses and teachers. The Israeli sociologist Yonina Talmon found that boys and girls “sleep in the same room, shower together, play and run around in the nude” and that “there is a considerable amount of wrestling, tickling, exploring, soothing, and caressing among them.”⁹⁵ This continued until the second or third grade when what appears to be a universal tendency to sexual segregation forced a change.⁹⁶ After that boys and girls showered separately and slept in separate rooms, but the group remained living in the same house and all group activities remained bisexual.

Thus the ideology of the kibbutz movement’s founders created a community in which boys and girls of the same age lived together as intimately as brother and sister in the traditional family—perhaps even more intimately according to Talmon. She claims that the interaction among age mates was “much tighter and all-pervasive than the interaction between siblings.”

Siblings share activities and experiences only in the family, and their participation is age- and sex-differentiated, but members of the peer groups eat, study, work, and play together as a group most hours of the day and sleep together in the same room or adjoining rooms at night.⁹⁷

But while they were reared together like siblings, the members of these groups were not considered siblings. They were comrades, *sabra*, who might or might not marry as adults. Talmon found that the second-generation members of three long-established kibbutzim rarely married, but she concluded that “this is a behavioral trend and not an institutionalized normative pattern. This tendency differs radically from full-fledged incest taboos and exogamous injunctions, which regulate mate selection by means of explicit norms and negative sanctions.”

The third experiment is what is known in Chinese as *hsiao-hun* (little marriage) and in English as “minor marriage,” a form of marriage found in many communities in South China. One of the

first notices in English was by the Protestant missionary George Leslie MacKay, who having established a mission in northern Taiwan, discovered that one way people had of obtaining wives for their sons was to purchase little girls and raise them as daughters-in-law. In his experience, this was “the most common” way of obtaining daughters-in-law among the Min-nan-speaking Chinese who occupied most the Taipei Basin. MacKay tells us that “in such case the girl is called Sim-pua [little daughter-in-law], and is regarded as one of the family.”⁹⁸ Her future husband was called her *thau-tuia*, “the one facing her,” or simply “her match.”

Although minor marriages were rare in many Chinese communities, they probably were the most common form of marriage in the communities MacKay knew best. Studies using the household registers created by the Japanese colonial government indicate that minor marriages accounted for approximately 45 percent of all first marriages among women born in the Taipei Basin in the 1880s and 1890s.⁹⁹ The frequency declined to 20 percent in central Taiwan and less than 5 percent in southern Taiwan, but topped 50 percent in rural communities in the Pescadores Islands.

The problem with most natural experiments is that they seldom provide a control group, leaving one unable to determine whether the results were due to the variable of interest or some correlated condition. Fortunately for Westermarck, the Taiwan experiment is one of the exceptions. Where 40 or 50 percent of parents adopted infants or small children and raised them as their sons' wives, their neighbors waited until their sons were grown and then married them to girls raised elsewhere. What is known in Chinese as *ta-hun* (big marriage) and in English as “major marriages” is generally regarded as socially superior to minor marriages, but they did not allow the young couple any more opportunity to pursue personal preferences. All my elderly informants agreed that until the late 1920s couples married in the major fashion did not actually meet until the day of their wedding. As one old man put it, “You never knew until then if your wife was a lion or a tiger.”

Although the age at which little daughters-in-law were taken varied from a few days to ten or more years, the average was less than a year where minor marriages were popular. Many women gave away a daughter at a few months of age and then adopted and nursed a little daughter-in-law in her place. This I was told was the best way to arrange a minor marriage because “the girl you nurse yourself will grow up just like a daughter and won’t always be talking to your son behind your back.” In the typical case a woman who bore a boy and then a girl gave the girl away and replaced her with her son’s wife, the result being that couples matched for minor marriages were usually a girl taken as a nursing infant and a boy two or three years her senior. Most of the exceptions were the result of a widespread belief that a woman could enhance her chances of bearing a son by adopting a daughter, folk biology holding that the girl would “lead” a boy into the family. When this therapy succeeded, that boy and girl were often matched, the result being that the wife was the older partner in 10 percent of minor marriages in most communities.

It is fortunate for science that the many ways in which societies shape people’s lives include at least these three arrangements that allow us to separate the effects of early association and the incest taboo. What is even more fortunate is that in the Israeli and Chinese cases the consequences have been documented in detail. In the Israeli case we have Melford Spiro’s study of children in a kibbutz he calls Kiryat Yedidum,¹⁰⁰ Yonina Talmon’s study of mate selection in three long-established kibbutzim,¹⁰¹ and Joseph Shepher’s intensive study of the kibbutz where he taught and his survey of all the second-generation marriages in three kibbutz federations¹⁰²; in the Taiwanese case, we have the observations of Taiwanese and Japanese folklorists,¹⁰³ field studies by Taiwanese and American anthropologists,¹⁰⁴ and most importantly, the household registers created by the Japanese colonial government.¹⁰⁵ These make it possible to reconstruct the marital histories of thousands of couples who married in the minor fashion.

16. Darwin's method

The task that Darwin set for himself was larger than is generally appreciated. Not only did he have to account for the great diversity of living things and the way each is adapted to the world it lives in; he had also to find a way to test a hypothesis about small changes that took centuries to achieve observable results. His method was to list all the consequences he could think of and then see if the results converged. He was only convinced when he was able to show that the evidence from different sources—atomy, geographic dispersal, fossil remains, and the experience of animal breeders—all pointed in the same direction.

It will not tarnish the standing of so great a man as Darwin to suggest that he did not invent this method but was only implementing the strategy recommended by one of his teachers, William Whewell, a man whom Darwin described as being “next to Sir J. Mackintosh . . . the best converser on grave subjects to whom I have ever listened.”¹⁰⁶ Whewell argued that the surest path to truth was what he called “a consilience of inductions.” When inductions from classes of facts altogether different “leap to the same point,” we may take that as “the point where truth resides.”¹⁰⁷

The observable manifestations of a sexual inhibition, and thus the only ones likely to be recorded, are fertility, adultery, and divorce, all of which are subject to many kinds of influence. This and the fact that communal child-rearing and minor marriages no longer exist means that anyone hoping to use these experiments to test the Westermarck hypothesis is faced with a problem similar to the one Darwin faced. There is no possibility of making a decisive observation of the kind that made Einstein a legend. The best one can do is to follow Whewell and trust in the consilience of inductions. Were we to find that inductions from situations as different as *bint ‘amm* marriage, communal rearing in Israel, and minor marriage in Taiwan “leap to the same point,” this would go a long way towards proving that the point Westermarck indicated is “the point where truth lies.”

17. Seven predictions

The Westermarck hypothesis suggests seven predictions regarding the effects of early association in our three natural experiments. Confirmation would give us strong grounds for concluding in favor of the hypothesis because all seven are counterintuitive in that given local conditions and attitudes one would not expect the predicted results.

The first prediction is that when they are reared together candidates for a *bint 'amm* marriage will resist marrying and, if forced to marry, will evince signs of sexual dissatisfaction. The prediction is counterintuitive because *bint 'amm* marriage is a favored form of marriage throughout the Arab world and should produce harmonious rather than disharmonious unions.

The second prediction is that Israeli children reared as members of the same *kevutza* rarely if ever married as adults. This is not what is expected and for two reasons. One is that living together through high school gave these children ample opportunity to form romantic attachments as adolescents. The other is that far from opposing such endogamous unions, their parents encouraged them. They were afraid that the Spartan lifestyle enjoined by kibbutz ideology would lead their children to marry out of the community and thus deplete the generation groomed to perpetuate the movement.

The third prediction is an obvious corollary of the second. It says that kibbutz children reared together rarely if ever sought one another as premarital sexual partners, which if true is an even more unlikely outcome than their not marrying. Until they graduated from high school the members of a *kevutza* spent almost all their time with one another. Given then the permissive atmosphere of the kibbutzim and the interests prompted by puberty, there is reason to expect at least as many intragroup liaisons as one finds in American and European schools today.

A fourth prediction rests on the fact that in Taiwan, as in China generally, married men were allowed to take a second wife if they

could afford to do so. The prediction is that men in minor marriages were more likely to take advantage of this possibility than men in major marriages. This is not expected because while wealthy families sometimes chose to raise their sons' wives, men married in the minor fashion were generally poorer than those married in the major fashion. Thus they would have to stretch themselves further to take a second wife and would only do so if they were particularly dissatisfied with their first wife.

A fifth prediction stands on much the same ground as the fourth. It is that women in minor marriages were more likely to engage in extramarital sexual relations than women in major marriages. This is contrary to what anyone other than Westermarck would expect because women committing adultery risked expulsion from their husband's family and those raised as *sim-pua* had nowhere else to go. Many did not know who their parents were, and many of those who did hated them for giving their daughter away. One woman told me that when her parents came to visit her she locked herself in the toilet and refused to come out until she was sure they had gone. "Seeing them was like having a piece of flesh cut off my arm."

A sixth prediction resembles the fifth in assuming that people only risk contravening strong mores if they are desperate. It is that minor marriages were more likely to end in divorce than were major marriages. Again this is not what is expected, in the first place because women in minor marriages had no place to go if they divorced, and in the second because most *sim-pua* were desperately bonded to their mother-in-law as a result of having been abandoned by their mother.¹⁰⁸ One told me that if she had not seen her mother-in-law for a few minutes she would cry and go looking for her. "That's the way I was even though she treated me badly."

A seventh prediction—the most important of all—is that the fertility of minor marriages was substantially lower than that of major marriages. This is the most important prediction because

the predicted difference is the most unlikely. In China children were not only desired as a source of emotional satisfaction; they were people's best hope for security in this world and the next. A man with a number of sons could consider himself wealthy because of the labor he controlled and the force he could deploy. He was assured of support in his old age and descendants obliged to succor his soul in the next world. He could die confident that he would not become a hungry, homeless ghost. Thus to predict lower fertility among minor marriages is to predict that they were acutely distressed marriages.

Although Westermarck never specified the age at which association had to begin to produce an enduring inhibition, his language suggests that he meant the first three or four years of life. The implication is that while association beginning after three might have an effect, it is association before three that is critical. Thus all of the predictions listed above need to be qualified to take account of the children's ages. Evidence that a child who joined a *kevtza* at age six or seven later married within the group would not discomfit the Westermarck hypothesis. It could only be discomfited by marriages involving children who joined the group as infants.

18. The evidence from the Islamic World

Although Westermarck spent a large part of his adult life in Morocco, all he ever said about *bint 'amm* marriage is that "a Berber from the Great Atlas once said to me, 'How can a man love a woman with whom he has grown up from childhood.'"¹⁰⁹ Why the author of the Westermarck hypothesis did not attempt to collect the data needed to prove the hypothesis is a mystery. I have read a good deal of his correspondence and have found nothing to explain what now appears to be a surprising lapse.

Two authors, Faud I. Khuri and Carroll McC. Pastner, have used the evidence of *bint 'amm* marriage to question the Westermarck hypothesis, Khuri on the basis of a study of two Beirut

suburbs and Pastner with evidence collected in a Zikri Baluch fishing village in Pakistan.¹¹⁰ The fact is that while both studies report valuable data, neither is relevant to the Westermarck hypothesis. Khuri's subjects were urban couples few if any of whom were raised in joint families, and Pastner admits that there was no difference in the childhood experiences of the couples she compares. They were all cousins and all subject to conditions that facilitated interaction, but the conditions were too varied "to warrant any generalization about differentials in interaction . . . during childhood."¹¹¹

The three studies that provide evidence relevant to the Westermarck hypothesis come from different parts of the Arab world and employ very different methodologies. Taking his cue from Westermarck's Berber informant, Alex Walter hired university students in Morocco to interview young people about their marriage preferences. After eliciting the names of all their potential partners, the interviewers paired the people listed and then asked their informants which member of each pair they would prefer to marry. Analysis revealed that sleeping together in the same room as children made cousins undesirable mates. The odds ratio was .25 for male informants and .21 for female informants.¹¹² Walter concludes that "this result supports the evolutionary hypothesis that the psychological mechanism which evolved in connection with the threat of inbreeding depression was an aversive disposition to mate with those with whom they spend the most time in early childhood."¹¹³

A more important study, because the subjects include people who actually married a cousin, is reported by Justine McCabe on the basis of field research in southern Lebanon. Her characterization of the work as "quite preliminary" is appropriate because her sample of 115 marriages includes only 23 *bint 'amm* marriages. What makes the study noteworthy is that she compares the fertility of these marriages with that of marriages involving first cousins who were not childhood companions and marriages involving distant

relatives and strangers. The fertility rates for the three groups were 4.95 for *bint 'amm* marriages, 6.49 for other first-cousin marriages, and 6.46 for marriages with distant relatives and strangers.¹¹⁴ We will see later that these differences are much the same as the differences between minor and major marriages in Taiwan.

Our third source is Richard Tapper's study of the Shahsevan nomads in northwestern Iran. It is particularly convincing because while Tapper "often heard cousin marriages of all kinds praised . . . as keeping the family together," he also found that Shahsevan "regard with disapproval the marriage of those who have been brought up in the intimacy of a single room," the result being that "once a household contains young first cousins of the opposite sex it sooner or later splits to prevent them from growing up in enforced intimacy."¹¹⁵ What the Shahsevan wanted to avoid is evident in a wealthy chief's being allowed to marry his daughter to an orphaned nephew on the grounds that "the home had enough rooms (including both tents and a brick house) for the couple to practice an acceptable degree of avoidance."

What happened when the Shahsevan broke their rule is just what Westermarck would have predicted. The first of two examples recorded by Tapper concerns the family of a man who died leaving behind three younger brothers, his wife, and an infant daughter named Khanom Gul. "Largely through the influence of their mother," the brothers did not split up until six years later, the result being that Khanom Gul grew up with her eldest uncle's son, Salaman, to whom she was unofficially engaged. "However, after spending much of their childhood in the same house the young couple did not get along very well," with the result that when the time came for them to marry, "Salaman stated firmly that he had no intention of marrying Khanom Gul, and that he wanted to marry a distant agnate, Bala Begim, who lived in another camp." Far from being distressed by this declaration, Khanom Gul was pleased. "She had grown into an attractive girl of 15 and considered herself too good for Salaman."¹¹⁶

Tapper's second example is explicit about the aversion aroused by early association. The elder of a small tribe insisted, contrary to local custom, on marrying his daughter, Zeynab, to his brother's son with whom she had been raised. As both local custom and Westermarck would predict, "The couple . . . never got on. I was told that every time the groom tried to sleep with his bride she beat him off; at any rate, there were no children after seven years of marriage, and the girl was very unhappy." The affair ended when Zeynab eloped with a married visitor and thereby precipitated accusations of bigamy and abduction, a court case, and threats of assassination.¹¹⁷

What the evidence of *bint 'amm* marriage says is that when they are reared together cousins dislike marrying, bear few children if forced to marry, and, surprisingly, that the effect of early association was recognized and purposely avoided to make cousin marriages acceptable. Thus, though no single study cited provides conclusive evidence, the three together make a strong case for our first prediction, partly justifying the twelfth-century Sufi philosopher al-Ghazali's fear that cousin marriages produce weak progeny because they reduce sexual desire.¹¹⁸

19. The evidence from Israel

Writing with the authority of a man who had lived for two years as a member of one of the kibbutzim founded in the 1930s, Arthur Koestler observed that "the intimacy of life in the smaller Communes acts as a gradually materialising incest-barrier."¹¹⁹ I doubt if this was true of persons who joined a kibbutz as young adults, but it is definitely true of those who were born and raised in a kibbutz.

The first reliable evidence appeared in 1958 in Melford Spiro's *Children of the Kibbutz*. It is especially interesting with regard to the Westermarck hypothesis because Spiro was a by-the-book Freudian who later attacked on Freudian grounds my defense of the Westermarck hypothesis.¹²⁰ He was convinced that psychoanalysis had

demonstrated “beyond any reasonable doubt” that “siblings *do* have reciprocal sexual interests.”¹²¹

Though it must have cost him considerable dissonance to report his evidence, Spiro’s kibbutz research supports the Westermarck hypothesis. “In not one instance,” he writes, “has a sabra from Kiryat Yedidim married a fellow sabra nor, to the best of our knowledge, has a sabra had sexual intercourse with a fellow sabra.” Recognizing that it would be difficult to detect an illicit liaison if the persons involved belonged to different *kevutza*, Spiro adds: “If, in the light of additional data the latter part of this generalization be rendered false, I would be highly confident of its following reformulation: in no instance have sabras from the same *kevutza* had sexual intercourse with one another.”¹²²

The answers Spiro received when he asked young people why they did not marry their fellow *sabras* were very much the answers Westermarck would expect. They first said it was because “they view each other . . . as siblings,” but they then went on to explain that they did not mean that “they therefore view any sexual relationship between themselves as incestuous. They mean rather that they, like biological siblings, have no sexual interest in each other.”¹²³

Yonina Talmon’s evidence from the three kibbutzim she studied in the early 1960s makes an even stronger case for Westermarck. She begins her account by noting that among the 125 couples included in the study, “there was not one instance in which both mates were reared in the same peer group.”

In four cases husband and wife were born in the same kibbutz but reared in different peer groups. In addition we found eight couples in which one mate was born and raised in the kibbutz while the other entered the educational institutions of the kibbutz at diverse ages, ranging from three to fifteen. In six of these cases the “outsider” came to the kibbutz and was subjected to collective education just before or after puberty. . . . In seven of the eight couples the respective mates were reared in different peer groups. The single case of an intra peer group marriage occurred between a native and an outsider who was

sent to the kibbutz as an external student at the age of fifteen. The love affair between these two started after they left school and after an additional period of separation brought about by service in the army and study in town.¹²⁴

Talmon describes her data on sexual relations as “scantier and less reliable” than her data on marriage but believes they “parallel closely the pattern of distribution of marriages.”

We have not come across even one love affair or one instance of publicly known sexual relations between members of the same peer group who were co-socialized from birth or through most of their childhood. A small number of love affairs occurred between members of different peer groups; a somewhat larger number occurred between a native and an outsider who entered collective institutions at a later age, and between second generation members of different kibbutzim. The very rare cases of intragroup affairs involve an outsider who came to the kibbutz as an external pupil long after puberty.¹²⁵

Joseph Shepher’s two studies confirm Spiro’s and Talmon’s conclusions. He did not find “a single case of heterosexual activity between any two native adolescents of the same peer group.” The one apparent exception involved a boy who joined the group at age ten. “This avoidance,” Shepher insists, “is entirely voluntary. There is absolutely no sign of formal or informal pressure or sanction against heterosexual activity within the peer group, either from educators or parents or from members of the peer group itself.” The affair involving the boy who joined the group at ten was accepted by everyone and “when it was discontinued, everyone regretted it.”¹²⁶

Shepher’s marriage survey is also conclusive. An analysis of 2,769 second-generation marriages recorded by census takers turned up only thirteen cases in which the husband and wife had ever belonged to the same peer group. Shepher then contacted these couples and asked how old they were when they first met. He found only four couples that had met before age five and only

one that had met before age three, and in this case the couple were separated at age two and did not meet again until after age five.¹²⁷ Thus of the total of nearly three thousand marriages surveyed by Spiro, Talmon, and Shepher there is not even one instance of pre-marital relations or marriage involving a couple brought together before three and reared together as members of the same *kevutza*.

20. The evidence from Taiwan

The evidence for testing our predictions comparing major and minor marriages in Taiwan comes from three localities chosen because minor marriages were common. They are as follows: eleven villages and two towns in the southwestern corner of the Taipei Basin known in Ch'ing times as Hai-shan; seven villages across the river from Hsin-chu City and eleven in the hills overlooking the city; and three villages and Ma-kung City in the Pescadores Islands. The Hai-shan data include 2,762 major marriages and 1,482 minor marriages; the Hsin-chu data, 3,692 major marriages and 1,178 minor marriages; and the Pescadores data, 2,891 major marriages and 713 minor marriages. With a total sample of 9,345 major marriages and 3,373 minor marriages, we need have no fear that anything more than a small difference between the two is due to chance.

Our fourth prediction was that men in minor marriages were more likely to take a concubine as a second wife than men in major marriages, the reason being the inhibiting effects of early association. Because of high bride prices prompted by an unbalanced sex ratio, polygynous marriages were rare in our Hai-shan and Hsin-chu sites. Thus our test of the hypothesis is limited to the Pescadores site where male emigration created a sex ratio favorable to polygyny. The data from there say that while there was a substantial difference between Ma-kung City and our village sites, polygyny was far more common among minor marriages than among major marriages. While the percentage of men in major

marriages taking concubines was 1.9 in Ma-kung City and 2.0 in the villages, the percentage among men in minor marriages was 5.7 in the city and 7.8 in the villages. The overall percentage of concubines among men's wives was 7.0 among minor marriages as compared with only 2.0 among major marriages.¹²⁸ Thus our fourth prediction is confirmed by a ratio of more than three to one.

Our fifth prediction was that because of an aversion rooted in early association women in minor marriages were more likely to risk adultery than women in major marriages. To test this hypothesis I interviewed old men in five villages in Hai-shan about the reputations of their neighbors. What they reported is gossip but gossip evaluated and reevaluated by people whose neighborhood is their world. My sample included all the older women in the five villages, 315 in major marriages and 236 in minor marriages. According to neighbors who had known them since they married, 16.5 percent of the former had risked adultery as compared to 37.7 percent of the latter.¹²⁹ The details my informants offered argue that for the most part, they knew what they were talking about. When I expressed doubt about one man's testimony, he insisted that the woman in question had taken lovers. "I know, I know for sure. I have slept with her for years."¹³⁰

Our sixth prediction was that minor marriages were more likely to end in divorce than major marriages. Where the test of our fourth prediction was limited to the Pescadores and the test of the fifth to five villages in Hai-shan, this prediction can be subjected to the massive challenge posed by the evidence from all three of our sites. Although there are good reasons to expect it to fail, it succeeds by an overwhelming margin. In Hai-shan the probability of divorce by the end of twenty-five years of marriage was .086 among major marriages and .216 among minor marriages; in Hsin-chu it was .098 among major marriages and .248 among minor marriages; and in the Pescadores it was .094 among major marriages and .243 among minor marriages.¹³¹ The unweighted averages for the three sites are .093 for major marriages and .236 for minor marriages.

As striking as they are, these figures underestimate the impact of early association. When we limit minor marriages to cases in which the wife was adopted before age three, the divorce rates rise to .245 in Hai-shan, .300 in Hsin-chu, and .259 in the Pescadores. The average for the three sites is .267, nearly three times the average for major marriages.¹³² And it is all but certain that this difference still underestimates the impact of early association. We have to remember that women who married in the minor fashion were removed from their natal home as infants and bonded to their mothers-in-law as their primary caretakers. Had they disliked their mothers-in-law as much as women married in the major fashion did, and had they enjoyed the possibility of returning home, the divorce rate among minor marriages would have been much higher than our figures suggest.

Our seventh and final prediction is that the fertility of minor marriages was lower than that of major marriages. Given that we cannot compare the two forms of marriages in terms of the frequency of intercourse or sexual satisfaction, this is our most robust test of the Westermarck hypothesis. The demand for children was so strong in Chinese families that even a small difference would indicate an inhibition among minor marriages. And the difference we find is not small. In Hai-shan the total fertility rates of women in major and minor marriages were 7.61 and 6.02; in Hsin-chu, 7.83 and 6.26; and in the Pescadores, 8.17 and 5.92.¹³³ The averages for the three sites are 7.87 and 6.06, which says that the fertility of major marriages exceeded that of minor marriages by 29.9 percent. This is a substantial difference, but again underestimates the effect of early association. Simply setting aside the marriages of women who were adopted after age three reduces the fertility of minor marriages from 6.02 to 5.92 in Hai-shan, from 6.26 to 5.88 in Hsin-chu, and from 5.92 to 5.50 in the Pescadores.¹³⁴ The average for the three sites is now only 5.78, raising to 36.2 percent the margin by which major marriages exceed minor marriages.

This is a very large difference but still an underestimate. We have just seen that the couples most likely to divorce were those

brought together before age three. Since these couples drop out of our fertility comparison as soon as the divorce is registered, we are missing many of the marriages most affected by early association. Had we not lost these marriages, our prediction would fare even better than it does. To estimate how much better I assumed (conservatively, given that minor marriages are two and a half times as likely to end in divorce as major marriages) that half of all minor marriage divorces were motivated by an inhibition rooted in early association, and that if these couples had remained married they would not have produced any more children. Estimates based on these assumptions reduce the fertility of minor marriages in which the wife was adopted before age three to 5.48 in Hai-shan, 4.80 in Hsin-chu, and 4.87 in the Pescadores. The average for the three sites is now only 5.05 for minor marriages, raising to 55.8 percent the margin by which major marriages exceed minor marriages.

A second confounding bias is created by the fact that approximately 15 percent of the couples matched for minor marriages never married. Sometimes this was because for one reason or another the boy's parents decided against the marriage, but more often it was because the couple refused to consummate their parents' arrangement. Thus our comparison is missing a large proportion of the couples most distressed by early association. To estimate what the fertility of minor marriages would have been if these couples had been forced to marry I assume that half of the failed matches were the result of rebellion and that if they had married these couples would have borne only half as many children as those who did marry. This assumption pulls the total fertility of minor marriages down to 5.10 in Hai-shan, 4.59 in Hsin-chu, and 4.57 in the Pescadores. The aggregate effect raises the advantage of major marriages to 65.7 percent.

A third bias against our seventh prediction stems from the fact that women in minor marriages were more likely to risk adultery than women in major marriages. Since a married woman's children were almost always registered as her husband's children, a simple count of registered births underestimates the effect of early

association. To counter this bias I reexamined the marriages included in my test of our fifth prediction and set aside all the births my informants attributed to adulterous relationships. This gave me a total fertility of 7.48 for the 315 major marriages and 4.89 for the 236 minor marriages.¹³⁵ Using these figures to adjust the rates already adjusted to take account of divorce and unconsummated matches, I obtained total fertility rates of 4.07 for minor marriages and 7.25 for major marriages.¹³⁶ These figures say that major marriages produced 78.1 percent more children than minor marriages.

Although all three of these adjustments rest on questionable assumptions, the figures they produce are closer to the truth than our initial comparison. It is certain that couples who defied custom and divorced, who defied their parents and refused to marry, and who risked adultery were the couples most affected by early association. Thus, though we will never know the exact width of the margin, it is safe to conclude that our seventh prediction is confirmed by a wide margin. The fertility of major marriages was at least half again as high as that of minor marriages and may well have been twice as high.

What we see in this evidence is what happens when young people are caught in what J. S. Price aptly terms "the Westermarck trap."¹³⁷ It is, he suggests, the trap in which Mary Shelley's hero Victor Frankenstein was caught by his parents' expectation that he marry a cousin with whom he was reared. Unwilling to disappoint his parents, he married the girl but on their wedding night sent her up to bed but did not join her. Pacing up and down, he heard a shriek and found his bride lying dead, murdered by the monster he had created. Literary license has made the aversion Westermarck expected "when the fact is thought of" into a monster.

21. Six objections

Six objections to my interpretation of the Israeli and Taiwan experiments must be met. The first comes from an Israeli psychiatrist,

Mordecai Kaffman, director of the Kibbutz Child and Family Clinic in Tel Aviv. He contradicts the evidence reviewed above with the claim that his “experience and observations do not bear out the widely held assumption that growing up together in the kibbutz has led to the establishment of incest barriers.”

Mutual sexual attraction, even sexual relations, between boys and girls from the same group may not be typical, but it is hardly that rare either. There is hardly a kibbutz without its report of heterosexual relationships between adolescents brought up together from infancy. . . . One has to infer from the undisguised reports of the adolescents themselves that there is no sexual indifference, avoidance, or incest aversion between boys and girls in the same group.¹³⁸

These claims are frequently cited by conventionalists bent on refuting Westermarck but are not credible. “Hardly . . . rare” and “hardly a kibbutz” is as close as Kaffman comes to quantifying his evidence. He does not give examples of “heterosexual relationships between adolescents brought up together from infancy” or quote any of the “undisguised reports” indicating that there is “no sexual indifference, avoidance, or incest aversion between boys and girls in the same group.”

The second objection to be met is a conventionalist favorite. It was first voiced by Kaffman to account for what was, for him, the surprising “rarity of enduring romantic attachments and marriage within peer groups.”¹³⁹ The essence of the idea is that they are rare because the groups are so small, the result being, as Kaffman puts it, “that the variety of choice is limited in comparison with the possibility of finding a partner outside of the group.”¹⁴⁰ Frank B. Livingston, a physical anthropologist, offered this as “a major reason for the absence of [in-group] marriages,”¹⁴¹ and John Hartung, an anesthesiologist, used it to argue that Joseph Shepher’s data “says nothing about the veracity of the Westermarck hypothesis.”¹⁴² He claims that given that peer groups were small and Israeli women preferred older men, Shepher’s failure to find many in-group marriages is what was to be expected by chance alone.

The argument is specious for the simple reason that marriage is not a matter of chance. Unless there is some positive reason for not doing so, people marry someone they know or their kinsmen know. This human tendency is evident in the fact that while the peer groups they studied included only a few immigrants to the group, both Talmon and Shepher found several marriages matching a peer-group native and an immigrant.¹⁴³ That they found none matching two peer-group natives argues that natives had some positive reason for avoiding one another.

The third objection comes in the form of a recent study by Eran Shor and Dalit Simchai claiming that the Israeli case does not support Westermarck.¹⁴⁴ Interviewing thirty-two men and twenty-eight women who had grown up in a traditional kibbutz, they asked their informants whether or not, as adolescents, they were sexually attracted to their childhood companions. The responses were coded on a five-point scale with “strong aversion” and “strong attraction” as the poles and “indifference” as the midpoint. The percentages reporting attraction, indifference, and aversion were 75.0, 25.0, and 0.0 among the men and 28.6, 64.4, and 7.1 among the women. Given that what Westermarck expected as an effect of early association was not an active aversion (as Shor and Simchai mistakenly claim) but “a remarkable absence of erotic feelings,” this evidence, even if it is accepted as offered, does not refute his hypothesis. Twenty-five percent of the men and 71.5 percent of the women responded as he would have predicted. But this evidence cannot be accepted as offered. Shor and Simchai’s interviews were conducted in 2006 with informants whose mean age was forty-five,¹⁴⁵ which means that many of the memories recorded were twenty or thirty years old. Add to this the fact that sexual attraction is notoriously volatile and rarely if ever reliably recorded, and it is difficult to accept Shor and Simchai’s evidence when the conclusion claimed is the opposite of that supported by the in situ observations of Spiro, Talmon, and Shepher.

The remaining three objections all concern my interpretation of the Taiwan experiment, the fourth and fifth coming from Marvin

Harris who takes issue with my work in three of his popular textbooks as well as his *History of Anthropology*.¹⁴⁶ Although Harris was the self-anointed messiah of materialist explanations, he was a staunch conventionalist in his treatment of incest, always writing as though there is no such thing as human nature. For him nature is the ultimate determinant of human behavior, but it is outside, never inside, human beings.

Harris's original objection to my interpretation of minor marriages is that what I see as evidence of sexual aversion is "more readily intelligible" as "the frustration and discontent" experienced by the junior members of extended families.¹⁴⁷ What is missing in the argument is any reason for thinking that this was more so for couples in minor marriages than couples in major marriages. In traditional China, all marriages, whatever their form, were arranged by the couple's parents to serve the parents' interests. If having their parents decide how they were to marry and whom they were to marry aroused frustration and discontent among the young, this was everyone's lot, regardless of whether he was to marry a housemate or a person whom he saw for the first time on his wedding day.

Harris's second objection is that the data I offer cannot confirm Westermarck's hypothesis because the Taiwanese consider the minor form of marriage "an inferior, even humiliating form of marriage."

Normally to seal a marriage bond, the families of the bride and groom exchange considerable wealth as a sign of their support for the newlyweds. But these exchanges are smaller or absent altogether in [minor marriages]. This makes it impossible to prove that sexual disinterest rather than chagrin and disappointment over being treated like second-class citizens is the source of the couple's infertility.¹⁴⁸

This argument is frequently repeated by conventionalist authors, most recently by Paul Erlich, who also repeats Hartung's criticisms of Shepherd.¹⁴⁹ Like many biologists, Erlich wants to keep biology out of human affairs.

I find it difficult to believe that disappointment of the kind Harris evokes could interfere with sexual relations for thirty years, but there is an even better reason for rejecting his argument. The evidence summarized above argues that minor marriages only resulted in abnormally high divorce rates and abnormally low fertility when the wife joined her husband's family before age three. Thus "chagrin and disappointment" cannot be the source of the behavior I attribute to early association. Minor marriages were minor marriages—and thus inferior marriages in some people's eyes—regardless of the age of the wife's arrival. People did not "exchange considerable wealth" if the wife was taken at four or five but not if she was taken at one or two.

The last of the six objections to be addressed has been voiced by various authors in various forms.¹⁵⁰ The essence is that having been adopted at an early age and often maltreated by their adoptive parents, women in minor marriages may well have been maladjusted as adults. The possibility is an obvious extrapolation from John Bowlby's claim that "the prolonged deprivation of maternal care may have grave and far-reaching effects on [a child's] character and so on the whole of his future life," including heightened risk of suicide and depression and failure to achieve intimate conjugal relationships.¹⁵¹ Thus it could be that the source of the problems experienced by women in minor marriages is early removal from their mother rather than early association with their husband.

This is a serious but unsuccessful objection. It is overruled by the experience of women who were adopted at an early age, raised as *sim-pua* for a minor marriage, but because their intended husband died young or dared defy his parents, married a stranger in the major fashion. Our three sites include a total of 1,978 such women. Their total fertility is slightly lower than that of women in major marriages who were reared by their natural parents (7.61 compared to 7.91) and their divorce rate somewhat higher (.124 compared to .099).¹⁵² But their fertility is markedly higher than

that of girl who were adopted and then married their *thau-tuia* (7.61 compared to 6.02) and their divorce rate markedly lower (.124 compared to .216).¹⁵³ There is ample evidence that many *sim-pua* suffered deprivation and distress, but this does not explain the behavior I attribute to childhood association. Fertility and divorce were only affected when they were forced to marry their *thau-tuia*.

22. A seventh objection

In 1898, only two years after *The History of Human Marriage*, Geoffrey Mortimer (aka Walter Gallichan) suggested that “Westermarck somewhat over-estimates the force and extent of the repugnance to marriage of near kin.”

At the present among civilized people incest is not rare, especially among the lowest classes in large cities. . . . And in the higher classes of our community intercourse between boys and girls of the same family is not so infrequent as most parents and guardians suppose; indeed, I have heard of several cases amongst brothers and sisters of twelve and a few years older, though after puberty the instances become much rarer.¹⁵⁴

Many people writing today, particularly psychiatrists and social workers, agree with Mortimer, arguing that the frequency of incest is so high that if he is not wrong, Westermarck is at least guilty of overestimating the inhibiting effects of early association. Surveys of women in San Francisco, Los Angeles, Charleston, and London suggest that somewhere between 10 and 20 percent of all adult women have experienced some form of incest.¹⁵⁵ That incest is “not rare” is also evinced by the creation of centers to treat men convicted of incest and women suffering from incestuous encounters. When all of its patients gather for their weekly session the auditorium used by the San Jose, California, center is full. The patients include representatives of all races, classes, and occupations. There are at least as many Silicon Valley technicians as redneck truck drivers.

The reason this evidence does not refute Westermarck was anticipated by Mortimer when he wrote, “after puberty the instances [of incest] become much rarer.” In fact, we now know that in the Western world, if not generally, the female partner in incestuous relationship is rarely a sexually mature adult. In the great majority of all cases she is a child and more often than not a small child. It is entirely appropriate that most research on incest and its consequences appears in a journal entitled *Child Abuse and Neglect*. Most incest is child abuse. The 152 women identified as victims of incest in Diana Russell’s San Francisco study included 17 (11.2%) who were first abused before age five, 46 (30.3%) who were first abused before age ten, and 107 (70.4%) who were first abused before age thirteen. The two youngest victims were two years old.¹⁵⁶ And startling as this evidence is, it probably overestimates the mean age of incest victims. The 188 women included in Myfanwy Scott Brown’s study of the incest treatment program in San Jose included 47 (25.0%) who were first abused before age five, 114 (60.6%) who were first abused before age ten, and 159 (84.6%) who were first abused before age thirteen.¹⁵⁷ The two youngest victims in Brown’s study were only one year old. She writes, “It should be emphasized that most, if not all, therapists to whom I spoke were not at all surprised by this finding.”¹⁵⁸

Incest involving sexually mature women is not only rare but typically the result of drug abuse, extreme personality disorder, or social circumstances that result in siblings being reared separately. The classic example appears in S. Kirson Weinberg’s pioneering study of incest in Chicago. Surveying hundreds of marriages registered in the years 1910–20, he found six cases of siblings who became so attached to one another that they contemplated marriage. Three of the six lied about their relationship and actually married—one couple in a Catholic church and another in an Anglican. All six couples “were separated from early childhood.”¹⁵⁹

We have no reliable evidence of the frequency of incestuous child abuse in societies other than our own, but anthropologists

agree that incest involving sexually mature women is rare. Colin Turnbull found "it impossible to discover a single admitted instance of incest closer than first cousin" among Mbuti Pygmies¹⁶⁰; Ronald Cohen noted that "reports of incest are extremely rare" among Kanuri in Nigeria¹⁶¹; Paul Hockings claimed that "real intrafamilial incest is extremely rare" among the Badaga in southern India¹⁶²; Christoph von Furer-Haimendorf "failed to discover a single case of even a fleeting amorous attachment between members of the same clan" among the Sherpa in Nepal¹⁶³; Cora Du Bois reported that she could find no local cases of mother-son, father-daughter, or brother-sister incest among the Alor in the Lesser Sunda Islands¹⁶⁴; William Lessa found that "so strong is the sentiment against incest that violations of the taboo are virtually unknown" on Ulithi Atoll in Micronesia¹⁶⁵; Robert Suggs reported that "actual cases of incest within the nuclear family are few, but receive much publicity" among Marquesas Islanders in Polynesia¹⁶⁶; on Tikopia, also in Polynesia, Raymond Firth found that "Cases of mother-son incest are extremely rare, and I could obtain no hints of incest between father and daughter"¹⁶⁷; M. Inez Hilger reported that though several instances of father-daughter incest were known, no brother-sister or mother-son cases "had ever been heard of" among the Central Andean Araucanina¹⁶⁸; Allan R. Holmberg "never heard of a case of incest occurring among the Siriono" in the Bolivian Amazon¹⁶⁹; Robert Dunning assured us that "actual occurrences of incest are exceedingly rare" among the Northern Ojibwa¹⁷⁰; and summing up his evidence of incest among the Western Apache, Grenville Goodwin warned readers that his material on incest "represents the concentrated gleanings from a period of eighty years or more and should not be interpreted as meaning that incest was common. Actually it was rare."¹⁷¹

The few instances of incest anthropologists have noted rarely stand as evidence against Westermarck. Cora Du Bois did hear of a case of brother-sister incest in another community, but the circumstances were the same as those discovered by Weinberg. "The

brother had been away for many years and on his return slept with his younger sister, who had grown up during his absence.¹⁷² More commonly the incest noted by anthropologists turns out to be what might be called “virtual incest.” The couple are distant relatives who fall under the rule of the incest taboo because they belong to the same clan or lineage.

23. Monkeys and apes

Like Darwin and Huxley before him, Westermarck saw that an evolutionary explanation of a human behavior would be greatly strengthened by evidence of a homologous behavior among other primates, but very little was then known about any aspect of the behavior of any primate other than *Homo sapiens*. It was not until late in life that he was able to quote in support of his hypothesis the claim that “a marked diminution of sexual enthusiasm” among macaques and baboons was “immediately restored” when they were supplied with new mates.¹⁷³ Until then he had to rest his case on anecdotal observations like those of the Marquis de Brisay who claimed that doves from the same nest “behave as though they regarded coupling as prohibited, or, rather they know each other too well, and seem to be ignorant of their difference in sex.”¹⁷⁴

Thanks to the efforts of two generations of researchers we now know a good deal about incest avoidance among the other primates, so much that I need to confine my review of the evidence to Japanese macaques, baboons, and chimpanzees. Their behavior has been studied longer and more carefully than that of other species.¹⁷⁵

The first reliable evidence of incest avoidance among nonhuman primates was published in 1958 by Junichiro Itani and Kisaburo Tokuda. They reported that after four years not a single mother-son copulation had been noted among two hundred macaques confined in a compound near Kyoto.¹⁷⁶ Mother-son matings were reported later by other researchers but so infrequently that in 1978 Tomoo Enomoto, an acknowledged authority

on the sexual behavior of Japanese macaques, could conclude that "sexual interaction between mother and son seldom occurs in Japanese monkeys."¹⁷⁷ An elegant experiment organized by N. Itoigawa, K. Nogoyama, and K. Kondo demonstrated that the reason was, as Westermarck would have predicated, early and intimate association. The subjects of the experiment were an adult male, his mother, two unrelated females from his troop, and four females and three males from another troop. Captured three months before the experiment and housed separately, the subjects were tested in pairs, the procedure being to allow a male and female access to one another for thirty minutes. During twelve of fifteen trials pairing a male and female from different troops, the male mounted the female several times and ejaculated. This occurred only once during twenty-four trials matching a male with a female from his own group and never during twenty-two trials matching him with his own mother.¹⁷⁸

The evidence concerning baboons is of a different kind but equally convincing. Having discovered that males born into three troops in Gombe National Park dispersed to join other troops as adults, Craig Packer carefully observed their behavior to determine why they moved.¹⁷⁹ The possibility that they were attracted by a more favorable sex ratio was easily eliminated by comparing the composition of the groups involved. A more likely possibility was that they were driven out of their natal groups by older males, but Packer found that in fact young males ran a greater risk of violence by migrating than by not migrating. When a sexually mature male approached a strange troop, the immigrants who had already joined the troop always made a strenuous effort to drive him away. "These chases were always silent and sometimes resulted in the newcomer's being severely wounded."¹⁸⁰

Further observation revealed that young males migrated despite the risks entailed because females find immigrant males more attractive than native males. They are more likely to present to immigrants than to natives, more likely to consent to consorting

with immigrants than with natives, and when consorting with a native they are more likely to present to another male than when consorting with an immigrant. Packer found that inflating females are so drawn to strange males that they sometimes travel great distances to present to them and are sometimes so persistent that the object of their attention has to slap or charge the intruder to make her stop.

The evidence concerning chimpanzees is equally convincing. In 1968, five years after the Gombe Stream Centre was established, Jane Goodall reported that "so far no physically mature male has been observed copulating with his mother . . . when Flo was receptive . . . all the physically mature males who visited the observation area were seen to copulate with her except [her sons] Figan and Faben."¹⁸¹ Goodall also found that sexual relations between siblings were rare and actively resisted by females. She writes,

When Fifi, as an adolescent, showed small swellings of her skin (before becoming, for the first time, attractive to mature males) she frequently presented to her sibling Flint during play; he invariably mounted and thrust. However, when she developed her first true swelling she refused to allow the infant to mount her, either turning away from him or pushing him away. She continued to prevent Flint from mounting during subsequent swellings.

On the occasion of Fifi's first true swelling she was copulated with by nearly all the other adolescent and mature males except [her brothers] Figan and Faben. Figan, in fact, appeared to show no interest in his sister at this time but Faben twice approached her with hair and penis erect. Each time she hurried away although normally she crouched for copulation as soon as she saw a male approach. During her eighth swelling, however, both Faben and Figan were seen copulating with her. She did not, apparently, try to escape from Faben, but when Figan approached her to copulate she screamed and tried to jump from the tree. When her brother caught up with her she did not present for him, but merely hung from a branch screaming; after the act she ran away.¹⁸²

In 1978 Ann Pusey, one of the many researchers Goodall attracted to the Gombe Reserve, published a major paper focused on the relationship between sexual attraction and early association. Drawing on observations made between 1965 and 1975, during which time five females in the troop experienced estrus for the first time, Pusey examined the frequency of their interactions with adult males before and after their crossing this threshold. She found that while all five had a favorite male companion, their pre- and post-estrus favorites were not the same males. Before estrus all their favorites were brothers, but after estrus they were all unrelated males.¹⁸³

Pusey also found that while Gombe females mated with troop members as long as they did not belong to the same family, their preference was for males who belonged to other troops. Eight adolescent females joined the habituated troop between 1965 and 1975, and the nine young natives who achieved adolescence during these years all departed. "The immediate motivation for females to transfer" appeared to Pusey to be "greater sexual attraction to unfamiliar males."¹⁸⁴

In summing up twenty-eight years of research at the Gombe Reserve, Goodall offers two generalizations concerning incest avoidance.¹⁸⁵ One is that maternal incest is "extremely uncommon" and almost always resisted. She notes that although the Gombe researchers observed six mother-son pairs through twenty breeding seasons, they saw only three completed copulations, and in two of these three cases "the mother protested violently, screamed, [and] pulled away prior to ejaculation."¹⁸⁶

Figan and Faben, who were with their mother for at least some part of her five periods of estrus, were never observed even *trying* to mate her—during her 1963 and 1967 periods of estrus they were the only males of any age who did not do so. In fact, they never showed the slightest sign of sexual arousal in her presence. The same was true of Evered and his mother, Olly.

[Caroline] Tutin observed Satin copulating with his mother, Sprout. She tried to escape from him but he followed her to the top of a tall

tree. Although she submitted, she screamed loudly throughout and leaped away prior to ejaculation.¹⁸⁷

Goodall's second generalization is that while sibling incest is more common than maternal incest, it is far less common than one would expect given daily contact, and like maternal incest, is almost always resisted. Often the resistance is so determined that if the brother succeeds, he only does so by applying force. What amounted to rape was observed once in the case of Goblin and Gremlin and twice in the case of Fifi and Figan. Figan "was seen to copulate or try to copulate with [his sister] on seven different occasions."

Five times she resisted these courtships so persistently that he gave up. Twice, even though she refused to cooperate, he persisted until he achieved intromission. Once this was after courting her vigorously for over a minute, during which time he swayed the vegetation so wildly that at the end she was virtually imprisoned beneath a layer of branches; these he held down on her back during mating! Fifi was not observed to reject any other male in this way.¹⁸⁸

Goodall sums up with one particularly telling bit of evidence. Like macaques and baboons, chimpanzees engage in consortship, the practice by which a male leads a female away from the troop for a period of several days and they establish a temporarily exclusive sexual relationship. Since consortship cannot be achieved without the female's willing cooperation, relationships of this kind may be taken as evidence of strong mutual attraction. What more eloquent testimony for Westermarck can one then imagine than Goodall's report that in twenty-eight years of research at Gombe "no consortships, either observed or inferred, have involved mothers and their sons or maternal siblings." And more than that, "no male has ever been observed to *try* to take his mother or sister on a consortship."¹⁸⁹

24. Sexual indifference

My initial interest in the Westermarck hypothesis was prompted by a young man who had sullied his reputation as a filial son by refusing to marry the girl his mother had raised to be his wife. As she was an exceptionally attractive young woman, I pressed him to explain why: "Was it because you quarreled a lot as children and grew up disliking one another?" "No, no," he replied, "we always got along very well. It's just because marrying her would be like going to see the same movie over and over again." Asked why members of the same *kevtz* never married as adults, one of Yonina Talmon's informants replied with a similar metaphor. "We are," he explained, "like an open book to one another. We have read the story in the book over and over again and know all about it."¹⁹⁰

Classical ethnographers rarely asked their informants why they did not marry close kin, but when they did the answers were much the same as that given by my Taiwanese friend. Schapera's Tswana informants maintained that incest never occurred because people never imagined sex with a brother or sister. "A sister stinks in her brother's nostrils as far as sex is concerned," one remarked forcefully if crudely; and another added, "Even if she bends down and you see her naked thighs, they do not excite you."¹⁹¹ Similarly, Meyer Fortes found that "though incest taboos are never deliberately inculcated," the habits of Tallensi family life "create internal barriers against incest, in the normal person." "This applies particularly to incest with a sister or daughter, whether it is a single impulsive act or a more lasting liaison. Tallensi explain that a normal man does not even have sexual desire for a sister or a daughter."¹⁹²

We have already noted Jane Austen's claim that "growing up together" makes sexual attraction "morally impossible."¹⁹³ Other novelists saw that the reason is an indifference consequent on early association. The young man who figures as the central character of Eugene Fromentin's *Dominique* chooses a striking metaphor to explain why he cannot marry a pretty cousin with whom he has grown up. "To me," he insists, "the very idea of marrying

someone I knew as a baby is as absurd as that of coupling two dolls.”¹⁹⁴ Natsume Sōseki, the foremost novelist of Meiji Japan, is equally eloquent on the subject of the indifference attendant on early association. One of his characters admits that while he had various reasons for refusing to marry his cousin, “what primarily concerned me was that I felt quite indifferent to this younger daughter of my uncle.”

We’d been close ever since childhood, when I had been a constant visitor at the uncle’s house in town, not only on day visits but also as an overnight guest. As you will know, romantic love never develops between siblings. I may be stretching the interpretation of this well-known fact, but it seems to me that between any male and female who have been close and in continual contact, such great intimacy rules out the fresh response necessary to stimulate feelings of romantic love. Just as you can only really smell incense in the first moments after it is lit, or taste wine in that instant of the first sip, the impulse of love springs from a single, perilous moment in time, I feel. If this moment slips casually by unnoticed, intimacy may grow as the two become accustomed to each other, but the impulse to romantic love will be numbed.¹⁹⁵

Evidence discussed in the following pages says that people’s primary response to acts of incest is fear, but it was not fear that kept them from committing incest. It was indifference. Early association made sexual attraction “morally impossible”; it made marriage “as absurd as coupling two dolls”; it “numbed the impulse to romantic love”; in other words, it neutralized sexuality. “A positive feeling of aversion” could arise when “the act is thought of,” but this was rare because the act was rarely thought of. The one thing the Advanced Studies Group got right about Westermarck was to label his thesis “the indifference hypothesis.”

25. The second question

By the criteria advocated by Whewell and adopted by Darwin, the evidence assembled above proves Westermarck’s thesis. Inductions

from facts altogether different “leap to the same point.” In the Arab world it is a dislike of in-house cousin marriages; in Israel it is the absence of romantic attachments and marriage among children raised in the same *kevutza*; in Taiwan it is low fertility and high divorce and adultery rates among minor marriages; and among our fellow primates it is behaviors that preclude inbreeding among macaques, baboons, and chimpanzees. Such an unlikely consilience of inductions argues that the point Westermarck indicated *is* “the point where truth lies.”

With the Westermarck hypothesis established as the answer to our first question, we are ready to turn to the second: Why is our species not satisfied to simply avoid incest? Why do we condemn incest as unnatural and punish it as fiercely as murder? The evidence reviewed earlier in the book says that so long as close kin are reared together sanctions are not needed to forestall the dangers of inbreeding. Why then have we invented and imposed a rule that appears to have no biological *raison d'être*?

I have already discussed and rejected the answers proposed by conventionalists. They fail because it is unlikely that our ancestors would have noted the problems the incest taboos are said to solve and even less likely that they would have been capable of instituting effective solutions if they did. What then of the constitutionists? One reason for writing this book was the realization that they have no more to offer than the conventionalists. They frequently discuss incest under the heading “the incest taboo” but always confine their discussion to incest avoidance. So far as the taboos are even mentioned, they are treated as “translations” or “by-products” of incest avoidance. The taboos are not seen as presenting a distinguishable problem. They are simply an aspect of incest avoidance.

E. O. Wilson's treatment of incest taboos is illustrative of this failure. He discusses what he calls “incest taboos” in all three of the books written to promote human sociobiology but nowhere offers an explanation. In *On Human Nature* they are characterized as “by-products” of the “deeper, more urgent causes behind incest

avoidance,¹⁹⁶ and in *Consilience* it is suggested that the taboos “seem likely to have arisen from the Westermarck effect.”¹⁹⁷ Otherwise Wilson’s treatment of the incest problem is confined to incest avoidance. This is a noteworthy failure because the declared goal of sociobiology is to demonstrate that human behavior is rooted in innate tendencies shaped by natural selection. This requires explaining those aspects that, like the incest taboos, are uniquely human as well as those that, like incest avoidance, are common to all primates and most mammals.

This constitutionalist tendency to view the incest taboos simply as expressions of incest avoidance has not gone unnoticed. Philosophically minded conventionalists like Bernard Williams have seized on it to argue that there is a gulf between biological facts and human institutions that no explanation can bridge.¹⁹⁸ Admitting that biological constraints “can rule out, or make unrealistic, some practices and institutions,” Williams asks, “Might biological considerations then go further and explain the human adoption of other practices, which are conformable to biological constraints?” This, he argues, is impossible because of what he terms “the representation problem.”¹⁹⁹

It is the notion of a *norm* that perhaps gives rise to the central representation problem. The main point is condensed in a question about the relations between an inhibition and a prohibition. The most, it seems, that a genetically acquired character could yield would be an inhibition against behaviors of a certain kind: what relation could that have to a socially sanctioned prohibition? Indeed, if the inhibition exists, what *need* could there be for such a prohibition?²⁰⁰ If the prohibitory norm is to be part of the “extended phenotype” of the species, how could we conceive, starting from an inhibition, that this should come about?²⁰¹

Williams proceeds to argue that the incest taboos are “clear examples” of “a specially paradoxical version” of the relationship between inhibitions and prohibitions. I will ask the reader who is

interested in the argument to read Neven Sesardic's critique.²⁰² All I need note here is Williams's assumption that if the incest taboos could be accounted for in biological terms, they would be as representations of incest avoidance. This is an unwarranted assumption prompted by the constitutionalist failure to consider other possibilities.

26. Murdock's other conclusions

Murdock's eight conclusions summarize what is known about incest taboos and thus what an explanation of the taboos must explain. The first, already noted, is that "with the exception of married parents, incest taboos apply universally to all persons of the opposite sex within the nuclear family."²⁰³ The second is that "incest taboos do not apply universally to any relative of the opposite sex outside of the nuclear family,"²⁰⁴ and the third is that "incest taboos are never confined exclusively to the nuclear family."²⁰⁵ Taken together these three say that incest taboos have both constant and variable components. They apply universally to the nuclear family (a point emphasized by constitutionalists) but vary widely as applied to persons outside of the nuclear family (a point emphasized by conventionalists).

Murdock's fourth conclusion is that "incest taboos tend to apply with diminished intensity to kinsmen outside of the nuclear family, even though they are designated by the same kinship terms as primary relatives."²⁰⁶ This point is critical to my argument and will be documented below. Suffice it for the moment to remind the reader that by Malinowski's account, this was definitely the case in the Trobriand Islands.

A fifth conclusion is that "incest taboos, in their application to persons outside of the nuclear family, fail strikingly to coincide with nearness of actual biological relationships."²⁰⁷ This is an indisputable fact and is one of the reasons that the hygiene hypothesis cannot be stretched to account for the incest taboos. The assumption

that our ancestors recognized the dangers of inbreeding requires at least a rough correspondence between the taboos and nearness of biological relationship.

A sixth conclusion is that “incest taboos are highly correlated with purely conventional groupings of kinsmen.”²⁰⁸ This point is also important to my argument and will be discussed below. I take it to mean that more often than not the scope of the incest taboos coincides with the boundaries of corporate kinship groups like the Trobriand clans. This allows me to argue that they are extended to help organize relations within such groups.

A seventh conclusion is that “as compared with other sexual prohibitions, incest taboos are characterized by a peculiar intensity and emotional quality.” Murdock emphasizes the point by noting that “in none of the societies surveyed . . . do taboos against adultery or fornication exceed in strength the strictest incest taboos prevalent in the same society, and rarely if ever do they equal or even approach the latter in intensity.”²⁰⁹ I will call on this fact to support my argument that incest taboos are the emotional responses of an emotional species to unexpected and therefore disturbing events.

Murdock’s eighth and final conclusion is that “violations of incest taboos do occur.”²¹⁰ This, he argues, is supported by “abundant clinical and criminological evidence of the actual occurrence of incest in our own and related societies.” This is true but rarely if the persons were reared together.²¹¹ We will see below that most of the incest reported by ethnographers involves distantly related members of the same lineage or clan.

27. Starting over

The failure of both constitutionalists and conventionalists to provide a plausible explanation of the incest taboos gives us no choice but to start over again. The question is where. In the case of incest avoidance, we enjoyed the guidance of the Westermarck hypothesis, but there is nothing comparable to guide a search for an explana-

tion of the taboos. I have therefore chosen to begin at the very beginning with John R. Searle's account of what he calls "social ontology." I like his account because he insists that adequate explanations of human institutions must respect the basic facts given "by evolutionary biology and the other natural sciences" and must "avoid postulating different ontological realms, a mental and a physical, or worse yet, a mental, physical, and a social."²¹²

Searle recognizes that human institutions vary enormously but argues that the underlying logical structure is the same. As he puts it, "All . . . human institutions consist of the imposition by collective intentionality of status functions."²¹³ "Intentionality" is the word he uses "to describe that feature of minds by which mental states are *directed at* or *about* objects and states of affairs in the world."²¹⁴ This includes intentionality in the ordinary sense but also beliefs, desires, fears, hopes, emotions, and perceptions. Thus collective intentionality occurs when two or more persons hope for or fear the same thing or agree that a particular act is good or bad.

Collective intentionality is the basis of social reality in many species, but more is required to create human institutions. Searle argues that the critical step—the step that "separates humans from other species"—is taken when we assign functions to persons or objects where "the function is not performed in virtue of the physical features of the person or the object" but only "in virtue of the fact that the collective intentionality assigns a certain function to the person or object."²¹⁵ Searle's favorite illustration of this step is a parable about the transformation of a wall.

Suppose a community builds a wall around its dwellings. The wall now has a collectively assigned function, which function it can perform in virtue of its structure. But suppose the wall gradually decays until the only thing left is a line of stones. But suppose that the people continue to *recognize* the line of stones as a *boundary*, they continue to *accept* that they are *not supposed* to cross. The line now performs the function that the wall once performed, but it performs the function not in virtue of its physical structure but in virtue of the collective

acceptance that the line of stones now has a certain *status* and with that status a *function* which can only be performed in virtue of the collective acceptance of that status.²¹⁶

The boundary in Searle's parable has a physical presence, but this is not a necessary condition for an institution. With language human beings have the ability to represent things that do not exist and thus to create institutions that have little or no physical presence. Money, marriage, and markets are obvious examples. They only exist because human beings agree that they exist. It does not matter if some of these people disapprove of these institutions and even resist their demands. All that matters is collective acceptance or recognition.

Searle is at pains to emphasize that while many institutions have no physical presence, they nonetheless have what he calls "deontic powers." "We accept the status functions and in so accepting, we accept a series of rights, responsibilities, entitlements, authorizations, permissions, and so on." These become reasons for action that are absolutely essential to human society and uniquely human. They are, in Searle's language, "desire-independent reasons for action."²¹⁷

Thus, following Searle, what we need to explain the incest taboos is an account of why people come to agree that sexual relations between close kin should be avoided. It is this—and nothing more than this—that creates the incest taboos and endows them with deontic powers. This cannot be the biological or social consequences of incest because these are not obvious and would probably not prompt wide agreement if they were. We must look for something more fundamental.

28. The meaning of "taboo"

A clue in our search for the collective response that creates the incest taboos is provided by the word *taboo*. According to Franz Steiner, the word was first used in English by Captain Cook in his

description of his third voyage around the world.²¹⁸ "The *taboo*," he wrote, "also prevails in Atooi, in its full extent, and seemingly with much more rigour than even at Tongataboo. For the people have always asked, with great eagerness and signs of fear to offend, whether any particular thing, which they desired to see, or we were willing to show was *taboo*, or, as they pronounced the word, *tafoo*."²¹⁹

Cook also noted with regard to human sacrifice in Tahiti that "the solemnity itself is called *Poore Eree*, or Chief's Prayer; and the victim, who is offered up, *Tataa-taboo*, or consecrated man. This is the only instance where we have heard the word *taboo* used in this island, where it seems to have the same mysterious significance as at Tonga; though it is applied to all cases where things are not to be touched."²²⁰

After Cook's untimely death on a beach in Hawai'i, his successor, James King, continued his journal and attempted to explicate the meaning of *taboo* by listing "the particular instances that fell under our observation of its application and effects."

On our inquiring into the reasons for the interdiction of all intercourse between us and the natives, the day preceding the arrival of Tereboon [their paramount chief], we were told that the bay was *tabooed*. The same restriction took place, at our request, the day we interred the bones of Captain Cook. In these two instances the natives paid the most implicit and scrupulous obedience. . . . When the ground near our observatories, and the place where our masts lay, were *tabooed*, by sticking small wands around them, this operated in a manner not less efficacious.²²¹

King also noted that women were always tabooed "after they had assisted at any funeral, or touched a dead body, and also on other occasions." The word *taboo* was then applied "indifferently to both persons and things. Thus they say the natives were *tabooed*, or the bay was *tabooed*, and so of the rest." According to King, *taboo* was used to express "anything sacred, or eminent, or devoted. Thus

the king of Owhyhee was called *Eree-taboo*; a human victim *tangata taboo*; and in the same manner, among the Friendly Islands, Tonga, the island where the king resides, is named *Tonga-taboo*.”²²²

The evidence preserved by Cook and King suggests that despite a diversity of applications and variation from island to island, *taboo* and its cognates have a semantic core. Whether the tabooed object is a person, a thing, a place, or a behavior, it is something to be avoided because it is dangerous. A taboo inspires some combination of fear and awe, mostly awe in the case of a taboo imposed by a chief and mostly fear in the case of objects like corpses. The only examples mentioned by Cook and King concern death—assisting at a funeral, touching a dead body, and being a person about to be sacrificed—but their successors’ reports show that “the other occasions” mentioned by King included menstruation and childbirth.

As *taboo* passed into general usage in English, the word lost much of its emotional content, retaining only the idea of something to be avoided. Thus the *New English Dictionary* cites from 1791 “a plain declaration that the topick of France is tabooed or forbidden ground to Mr. Burke.” The exceptions to this trend were anthropologists and scholars interested in primitive religion. A few suggested the word should be stripped of its “Special Polynesian usages,”²²³ but even they retained the Polynesian idea of something to be avoided because it was dangerous. However much they disliked the general cast of his work, most scholars agreed with the emphasis Frazer put on danger when, under the title “The meaning of taboo,” he wrote:

Thus in primitive society the rule of ceremonial purity observed by divine kings, chiefs, and priests agree in many respects with the rules observed by homicides, mourners, women in childbed, girls at puberty, hunters and fishermen, and so on. To us these various classes of persons appear to differ totally in character and condition; some of them we should call holy, others we might pronounce unclean and polluted. But the savage makes no such moral distinction between them; the

conceptions of holiness and pollution are not yet differentiated to his mind. *To him the common feature of all these persons is that they are dangerous and in danger, and the danger in which they stand and to which they expose others is what we should call spiritual or ghostly, and therefore imaginary.*²²⁴

The fact that no matter where they went anthropologists applied the word *taboo* to restrictions on sexual relations between kin argues that they found incest to be generally regarded as dangerous behavior, and dangerous in a way that crimes like fornication and adultery are not. Thus the first question to be asked of incest taboos is, what in people's mind was the danger? What were anthropologists told that made the word *taboo* appropriate? In only a few societies were the law and its agents the danger. What we must look for is something about incest that makes it appear inherently dangerous in the way that death, menstruation, and childbirth are viewed as inherently dangerous in many societies.

29. Unnatural acts

The dangers the incest taboo guards against cannot be social or biological dangers consequent on marriage with close kin. Given the inhibiting effect of early association, these are not serious dangers, and even if they were would not have been noted and acted on by our Neolithic forebears. Whatever the danger was that prompted the creation of incest taboos it had to be something with the capacity to arouse an uneasiness of the kind that William James saw as an essential part of "a certain uniform deliverance in which all religions appear to meet."²²⁵ A suggestion of what this might be appears in a passage in which Lucien Levy-Bruhl mentions incest as an example of tabooed behavior. Having noted that "in a 'crime' like incest, we cannot help seeing, above all, the violation of an actual law," Levy-Bruhl continues:

The terms "crime" and "punishment," like the term "transgression," run the risk of misleading us. To us a transgression signifies the violation of

a rule, the infringement of a material or moral law. To primitives, it is an abnormality, something unusual and unheard of—a sinister omen, the manifestation of a malign and unseen power.²²⁶

The fear Levy-Bruhl refers to is what James Sully considered “fear proper, that is, apprehension of evil.”²²⁷ Among the children Sully studied it was prompted by anything unanticipated, particularly when these involved what he termed “a rupture of customary arrangements.” These included strangers, the ocean seen for the first time, “odd uncanny-looking dolls,” and even “familiar things seen after an interval.” Among adults fear proper is aroused by fatal accidents, gross abnormalities, and all departures from routine dramatic enough to suggest that the rules governing social intercourse have changed or are changing.

I am not suggesting, à la Mary Douglas, that incest is feared because it is anomalous, falling between two classes like “animal” and “human.”²²⁸ Incest is not simply something out of place; it is something that should never have happened. It is like the scene of a fatal accident or the aftermath of a beheading, frightening because it is unexpected, improbable, and by rights impossible. The shock is to the emotions, not the intellect. Our experience entitles us to believe that certain things will never happen, the result being that when they do we are shocked, partly by the fact of the event but more because it suggests that something is fundamentally wrong. We may not have suffered any ill consequences this time, but if this could happen, worse could happen and then we would suffer. We are like earthquake survivors who predict more of the same.²²⁹

As everyone in the advertising industry knows and takes full advantage of, sex attracts attention. An expensive car may be a thing of beauty, but to make sure it sells, a beautiful woman is included in the ad image. It is all but certain then that one reason incest commands our attention is because it is a form of sex, but this is not the only reason and certainly not the reason it is commonly interpreted as “a sinister omen, the manifestation of a malign and unseen power.”

Incest is not just a form of sex; it is abnormal, unnatural sex. It attracts our attention but also inspires fear and foreboding.

Eight independent lines of evidence support this inference: native statements to the effect that incest is abnormal and unnatural, a tendency in many societies to affiliate incest with witchcraft, a parallel tendency to associate incest with cannibalism, the common belief that incest is an offense against nature and will trigger automatic retribution, the related belief that the gods and ancestors regard incest as disorderly if not sinful, the fact that incest is punished and often severely in acephalous societies, the fact that it is commonly punished as severely if not more so in state societies, and most revealingly, the fact that in many societies incest was seen as likely to bring harm to the culprits' community as well as the culprits themselves. No one of these various forms of evidence is found universally. What makes my case is the fact that one or more of the eight can be found in almost all societies.

Some of the evidence called for by this thesis can be found in the work of historians, but most comes from the work of a small number of anthropologists. This is significant because while their goal was always a comprehensive study, most anthropologists worked alone with the result that many topics were neglected. The majority devoted some attention to the incest taboos and included a list of tabooed kin, but we cannot assume that they always noted and reported an association of incest with witchcraft or cannibalism. There is evidence that witchcraft often went unrecorded because the researcher was not fluent in the native language or did not stay long enough to discover sub-rosa activities.²³⁰ I will therefore treat reports by reliable authors as reflecting a natural tendency that is not always realized and not always noted when it is.

30. Native testimony

I have already cited Isaac Schapera's account of incest among the Tswana and will do so several times in the following pages. I rely on Schapera because he was one of the great ethnographers of the

golden age of ethnography and his account of incest among the Tswana is the most complete treatment of incest in a preliterate society. It says that the Tswana regarded incest as an abnormal act and greatly feared its consequences.

In all the Tswana tribes incest is termed *botlhodi* or *setlodhi*, a word denoting “something ominous; something very unusual, and regarding as predicting evil.” The Kgatla and Tlokwa, speaking about incest with a daughter, said that it would be as abnormal as if a person were to eat his own placenta (*go ija motlhana*), and could be accounted for only as a sickness.

Incest is not the only form of *botlhodi*. There are many others, most unnatural acts of animals, such as a hen crowing like a cock, or eating its own eggs, a mole appearing in the open at day-time, or a cow drinking its own urine. The term also applies to children cutting their upper teeth first, and, in some tribes, to the birth of twins. All such phenomena give rise to repulsion and dread.²³¹

In Madagascar the Merina word *mamonsavy* has much the same meaning as *botlhodi* among the Tswana. According to Maurice Bloch, *mamonsavy* means “unnatural” and covers a semantic field that encompasses both incest and witches, who “appear naked, wearing their clothes on their head” and are generally regarded as “inverted creatures.” Bloch notes that though accusations of incest are rare, the idea of incest is “continually bandied about.” He suggests that this talk is “a defining device for stressing the positive value of its psychological opposite—kinship.”²³² I think that it is fascination with unnatural behavior.

Elizabeth Colson found among the Plateau Tonga of East Africa a special ritual for dispersing “the mystical danger arising from incest, attempted incest, and other forms of what is known as *malweza*,” a word that “refers to unnatural events or actions and the evil which may follow from them.”²³³ “If a child was born abnormally, i.e., feet first, if it had been conceived incestuously, or before the mother’s puberty ceremony had been performed, if it

cut its upper teeth first, these were considered *malweza*. The child was therefore destroyed to save the matrilineal group from the disaster that threatened it. Twins were also considered *malweza* and destroyed.”²³⁴

Comparison of Asia and Africa reveals broadly similar reactions to incest in otherwise divergent cultures. Like the Tswana, the Merina, and the Plateau Tonga, the South Indian Garo refer to incest with an expression (*marang ongjok*) used to name “situations or happenings which are considered as ill omen, or indicator of some future evil,” and like the Africans they take as examples of such happenings all unnatural or abnormal events. “If a cock crows from the house top in the evening or if a hen crows like a cock it is considered as *marang*.”²³⁵ Likewise, the Malay-Indonesian concept *sumbang* covers much the same ground as *bothodi* and *malweza*. It “refers to improper or repugnant behavior or conditions and, more generally, to phenomena that are deformed, or discordant, for example, a tree that has been grafted and consequently bears blossoms of two different kinds.” In social conduct *sumbang* refers to what is offensive because “it is out of place or unseemly.”²³⁶

In the 1890s when the Russian law student Lev Shternberg collected the information that earned him a reputation in Russia that rivals that of Malinowski in the English-speaking world, he found that the Gilyak regarded incest as “thoroughly unnatural” and attributed it to evil spirits, “not only among men but among animals as well.” Humans who committed incest were urged to commit suicide and animals were strangled.

[Sex taboos among the Gilyak] are adhered to even in the most distant degrees of relationship, such as the so-called *tilgund tuwng*, “the traditional agnatic cousin.” The Gilyak, in fact, believe that these conditions are so completely in accord with nature that they extend to their one domestic animal, the dog. They believe that among dogs, brothers and sisters do not copulate. The rare exceptions are ascribed to the influence of *milk* (evil spirits).²³⁷

The Gilyak regarded incest as so unnatural that even among dogs “brothers and sisters do not copulate.” More commonly it is said that incestuous couples are acting like dogs. We have already seen that the !Kung regard incest with parents, offspring, or sibling as “unthinkable,” “only dogs do that—not men.”²³⁸ The New Guinea Highland Mae Enga, the Barama River Caribs, and the South American Mapuche all condemn incestuous couples as “copulating like dogs”²³⁹; the Maori compare a person who commits incest to “a dog that bites its own tail”²⁴⁰; and the Tukuna are reported as saying of one man accused of incest that “he had already acquired the nature of a dog” and had been seen “digging with his fingernails like a dog.”²⁴¹ Several peoples say that persons committing incest are behaving like goats. Among the Central African Rwanda the root of the word for incest, *ubuhene*, is *ihene* (goat) because “only he-goats pair with their mothers and sisters.”²⁴²

There is even evidence that incest was regarded as animal-like in Hittite Asia Minor. The Hittites lumped together as illegal couplings (*hurkel*) sexual relationships with such kin as “one’s mother, daughter or son” and “sexual relations with most animals.”²⁴³

It was not only in Africa that incest was characterized as an inversion of everything considered good and proper. This was also a European view. Heretics accused of believing that Lucifer was the true Creator unjustly disposed by God were also accused of condemning marriage as fornication but approving of incest. A heretic named Lepzet was supposed to have told a court that “if a man wishes to sleep with his mother, he must pay her 18d. according to the rule of the sect: 6d. for having conceived him, 6d. for bearing him, and 6d. for nursing him. A man might sleep with his daughter for 9d., but the best bargain was a sister, who cost only 6d.”²⁴⁴ According to J. K. Campbell, the transhumant Greek shepherds called the Sarakatsani could think of no way of explaining incest as other than the work of the evil spirit they called the Devil.²⁴⁵

That Europeans have long regarded incest as unnatural is evident in the fact that when Strabo wanted to damn the Irish as even “more savage than the Britons” he claimed that not only were

they man-eaters, but they failed to recognize the incest taboo²⁴⁶; and when Romans wanted to condemn the early Christians they did not rest satisfied to accuse them of lèse-majesté and refusing to adore the pagan gods. They also accused them of “ritual infanticide, incest, and a variety of cannibalism in which the host was dipped in children’s blood before being consumed.”²⁴⁷ Christian authors responded by arguing that other sects had brought down these slanders upon Christianity by actually practicing these perversions themselves. Clement of Alexandria claimed that the Montanists used the blood of children in their unholy sacrifices, and that when the Carposcratians met they overturned their lamps and engaged in incestuous orgies.²⁴⁸

31. Incest and witchcraft

We have already noted a close association between incest and witchcraft in Madagascar.²⁴⁹ Another vivid account of the association appears in Phyllis M. Kaberry’s study of the Nso Kingdom in West Africa. The Nso called incest *virim ve shuivi*, “witchcraft of the sun,” and feared both incest and witchcraft. Kaberry writes:

Virim ve shuivi is a term which is applied only to incestuous relationships; it means literally “witchcraft of the sun or day” in contradistinction to “witchcraft of the night” (*virim ve vitsee*). “Witches of the night” are evil persons who bring misfortune, sickness, and death, more especially to agnates of whom they are envious or to individuals whose office and power they covet. Witchcraft is said to reside in the belly and may come forth at night in the guise of a nightjar. Witches are said “to eat people” (*kfer wir*) so that the bodies of such people eventually weaken and they die. When informants were asked to explain why incest is called “witchcraft of the sun” they offered a number of reasons: unlike “witchcraft of the night,” witchcraft of the sun can be seen; if a brother and sister have intercourse they do wrong deliberately, knowing that it is a sin which not only brings trouble on themselves but imperils the safety of their kin. It is like “witchcraft of

the night” because it is as though the culprits were eating one another and they would, unless action were taken, not only die and go mad but in some cases bring death to their children and other members of the compound or compounds involved. It is described as not merely as bad (*bi*) or dreadful (*be’emi*), but as revolting or disgusting (*ko’oi*, a term also applied to a corpse found in a decayed state, to excrement, suicide, and leprosy).²⁵⁰

The association between incest and the malevolent arts was as close in East as in West Africa. Robert Gray found that among the Mbugwe “to make effective use of the knowledge he has learned, a witch must possess a special constitutional factor that can only be acquired through an incestuous act committed with a related witch of the opposite sex. A son is usually taught witchcraft first and then commits incest with his mother, while a daughter first submits to the father’s incestuous advances and is taught the craft afterwards.”²⁵¹ M. G. Marwick’s Cewa informants insisted that “a sorcerer does not achieve any power until he has sexual intercourse with his sister.”²⁵² Gustave Hulstaert and Monika Vizedome found similar ideas among the Gongo Basin Mongo who believed that incest with his mother or sister was necessary lest a man’s sorcery turn against its owner.²⁵³ Victor Turner found that an Ndembu man who wants “to obtain a particularly potent hunting medicine . . . must commit incest with his sister.”²⁵⁴ T. O. Beidelman discovered that the most common Kaguru term for incest “is *whai*, witchcraft, it often being said that such activity would be enjoyed only by witches, that is, by profoundly antisocial persons.”²⁵⁵ And Jean La Fontaine found that the Gisu regard witches as “unnatural human beings” who “do things which are more than merely ominous.”

They are polluted with sin; a witch commits incest. Indeed, most Gisu, when asked to define a witch will say that a witch is a man who sleeps with his daughter-in-law, which is the most heinous of all sexual transgressions. A breach of any of the rules forbidding sexual relations with close kin and affines, and particularly those with whom there is a

respect or avoidance relationship, is in itself an act of quasi-witchcraft, bringing disaster. For Gisu it is the epitome of evil and arouses feelings of horror and repugnance.²⁵⁶

The association between incest and witchcraft appears to have been at least as close in New Guinea as in Africa. Fredrik Barth took as the prototypical Baktaman sorcerer a man who committed incest with his sister and killed her when she later refused him,²⁵⁷ and Raymond C. Kelly found that the Etoro were convinced that incest breeds witchcraft. Kelly writes:

The Etoro attribute the origin of witchcraft to the mythological union of a true brother and sister. The two copulated secretly in the bush and the girl later gave birth to a son. By this act of incest, the brother and sister were themselves transformed into witches, and a witch-child was the fruit of the union. The illicit match was revealed by the discovery of the child; the siblings were killed but the witch-child escaped. Incest thus begat witchcraft and introduced sickness and death into the world.²⁵⁸

Lest his readers misunderstand the myth to be saying that the child was born a witch because his parents were witches, Kelly appends a footnote explaining that “the witch-child is a product of incest itself not of his parentage by witches.”²⁵⁹

Incest and witchcraft were also considered inseparable companions in many parts of North America, most notably among the Southern Athapaskans. Clyde Kluckhohn and Dorothea Leighton found that among the Navahos “Incestuous persons are inevitably suspected of witchcraft and are thought to be, or to be doomed to become, insane.” When they asked an informant how he knew the person who “did something to his sheep” was a young man called Tall Boy, he replied, “Well, we knew he did these things. He slept with his half-sister. All the time he was married he was sleeping with that sister.”²⁶⁰ According to David Aberle, the inference rests on the belief that witches gain their power through committing incest.²⁶¹

Grenville Goodwin tells us that the Western Apache almost always accused one of the parties to an incestuous relationship of witchcraft, and when incest resulted in a public trial the couple “were questioned searchingly as to why they had done such a terrible thing and whether or not witchcraft was involved.” Goodwin found that “because witchcraft and incest were considered almost one and the same thing, the procedure for trying witches was exactly the same which was observed in incest.” This was because “most witchcraft trials evolved from accusations of incest” and incest “afforded more tangible evidence of guilt than witchcraft.”²⁶²

Frederica De Laguna found that among the Yakutat Tlingit, as among the Western Apache, “actual incest would certainly be taken as proof of witchcraft.” Her evidence says that “the witch was feared and loathed because there was no antisocial, evil, or unnatural act of which he was not capable.” These included “mysterious powers of locomotion or of bodily transformation” as well as incest.²⁶³

Incest was also linked with witchcraft in South America. Among the Brazilian Tukuna the link was through a goddess who, though not credited with creating anything, was an important figure “because of her inseparable connection with the notion of sin and subsequent punishment.” According to Curt Nimuendajú, the first ethnographer to study the Tukuna in their native villages, the goddess “did not bother with such trifles as theft and hot-blooded killing,” confining herself to three crimes—“incest, infanticide, and murder through witchcraft.” Of the three, incest was the only one she was sure to punish while the offender was still alive, usually by inflicting madness.²⁶⁴

In Western Europe what were assumed to be the unnatural sexual motives of witches were usually represented by sexual relations with the Devil, but incest was also implicated. The German sexologist Leopold Lowenfeld argued that sexual aberrations, with special emphasis on incest, figured in the witches’ Sabbath; in support of his contention he quoted a sixteenth-century description of incest in southern Bavaria.

Their dances finished, the witches and warlocks proceeded to couple. The son does not spare the mother, nor the brother the sister, nor the father the daughter. Incest is common; even the Persians were of the opinion that to be a good sorcerer and magician one had to be born of a mother and son.²⁶⁵

32. Incest and cannibalism

People throughout the world seem to find, as Claude Lévi-Strauss suggested, “a profound analogy between copulation and eating,” an analogy so persuasive that it is often extended to incest and cannibalism, “the most exaggerated forms of sexual union and the consumption of food.”²⁶⁶ Many peoples use the same verb for the two acts. Lévi-Strauss offers as an example the word *kuta kuta* in the language of the Koko Yao on the Cape York Peninsula, and Robert L. Levy provides another example when he notes that in Tahiti “one of the phrases designating incest was, and still is, ‘*amu ta’ata* or ‘*ai ta’ata*, both meaning ‘to eat people,’ which was also the term for cannibalism”²⁶⁷; the Bare’e-speaking Toradja in the Central Celebes call incest *mantjisi tojoenja*, “‘to lap up (eat up) one’s own eggs,’ as chickens sometimes do.”²⁶⁸

The analogy Lévi-Strauss points to is evident in the mythology of many widely separated societies. In the case of the !Kung San a culture hero known as old /Gao!na ate his brother-in-law and raped his son’s wife and thus committed what the !Kung consider “the two worst sins, the unthinkable, unspeakable sins, cannibalism and incest.”²⁶⁹ On the opposite side of the globe, eating and incest were metaphorically linked in the mythology of most Amazonian societies. The Forest Ogres of the Shipibo were thought to be characterized by “extreme acultural ingestion—cannibalism” and “extreme asocial sex—incest.”²⁷⁰

Incest and cannibalism were also associated in the beliefs of several South Asian societies. Marine Carrin-Bouez recorded Santal myths in which brothers consume their sisters in “a phantasm of cannibalism.” In one such myth four brothers kill their sister and then eat her

as a substitute for incest.²⁷¹ Among the Malay Minangkabau, who liken incest to chickens who consume scraps that may include the remains of other chickens, Michael Peletz found that the origin of vampirish, grasshopper-like creatures called *pelisit* was traced to “a primordial act of incest cum cannibalism involving a brother and sister.” The brother’s behavior was regarded as particularly heinous because “he not only engaged in incest, which is metaphorically linked to cannibalism, but also engaged in a more literal form of cannibalism by lapping up his sister’s vaginal discharge.”²⁷²

The mutual affinity of incest and cannibalism was not confined to any cultural area. In Ponape persons accused of the most distasteful forms of incest were called “rotten corpse eaters” (*il-keng-eng-enih-mat*),²⁷³ and in Yap “incest was compared directly to cannibalism.” When David Labby asked what the worst offense was that a person could commit, he was told that “undoubtedly it was incest, particularly that between parent and child and that between siblings,” an offence so heinous that the person “might turn to cannibalism next.”

Incest was totally repugnant, a disgusting act. People who did such things, it was said, might do anything. Indeed, they could hardly be called human beings. They were like animals, having behaved in a way that was completely outside the realm of acceptable human conduct. They were like the *Moros*, the cannibals of New Guinea. Someone who went so far as to commit incest with his parent, child, or sibling, several suggested, might turn to cannibalism next. Incest itself was directly compared to cannibalism. It was explained that the Yapese word for incest, *ku’w*, also referred to a variety of large sea bass which was notorious for its voraciousness and huge mouth. It would engulf all fish, even its own offspring, perhaps even a man. People who committed incest, it was said, were similarly voracious, consuming their kin in a sort of sexual cannibalism.²⁷⁴

Just as cannibalism is linked to incest, so also it is linked in many peoples’ beliefs to witchcraft. For most people witches were can-

nibals who killed their victims by eating them or killed them in order to eat them. This was true in Africa, Asia, the Americas, and most notably in Europe. The Inquisition's massive handbook, the *Malleus Malificarum*, tells of a judge who, prompted by the belief that witches eat their victims, asked a convicted witch how she and her colleagues had managed to devour thirteen children. "The method," she replied, "is this":

We prey on babies, especially those not yet baptized, but also those baptized, particularly when they are not protected with the Sign of the Cross or prayers. With our ceremonies we kill them in their cribs or while they lie beside their parents, and while they are thought to have been squashed or to have died of something else, we steal them secretly from the tomb and boil them down in a cauldron until all the flesh is made almost drinkable, the bones having been pulled out.²⁷⁵

This response would have been perfectly intelligible to the elderly witch-finder who introduced Captain R. S. Rattray to Ashanti witch lore. "The great desire of a witch," he explained, "is to eat people, but she will not do this so that any one may see; they suck blood. Each witch has a part of the body of which she is particularly fond." By this informant's account, Ashanti witches, like European witches, "all know one another" and hold "regular courts." When they meet, the body parts of their victims are divided up with every witch knowing "exactly the portion to which she is entitled. When the witch whose share is the heart goes for it, then the person dies."²⁷⁶

What we find, then, in many parts of the world is what I call an unholy trinity composed of incest, witchcraft, and cannibalism. Like the three witches who forecast Macbeth's tragedy they are united as unnatural creatures whose appearance predicts evil. When Phyllis Kaberry asked her Nso informants why incest is called *virim ve shuivi*, "witchcraft of the sun or day," they told her that incest is also like witchcraft of the night "because it is as though the culprits were eating one another." Among the Ashanti,

who believed witches sucked their victims' blood and ate their body parts, "*mogya die*, 'eating the blood,' is an alternative term for incest."²⁷⁷

Similar thoughts underlie the beliefs of many other African people. Having noted that the most common Kaguru term for incest "is *whai*, witchcraft, it often being said that such activity would be enjoyed only by witches,"²⁷⁸ T. O. Beidelman explains that while "the simplest way to become a witch is to purchase *whai* from a reputed witch," this is not the best way. "Purchased witchcraft may harm others but unaccompanied by other practices it does not make a truly powerful witch. That is only achieved by committing incest and/or murdering and devouring a human, sometimes even a kinsman. Most Kaguru say that a witch's taste for human flesh, incest, and other bad things, is inborn and inherited matrilineally."²⁷⁹

Among the Cewa, as among the Kaguru, a man could not become a truly powerful witch without committing incest, preferably with his sister.²⁸⁰ And again as among the Kaguru, witches were believed to develop a taste for human flesh. According to Marwick, "Cewa maintain that when a sorcerer gets old he takes his favourite child or grandchild and initiates him into eating human flesh. He gives him 'medicines' to prevent him from being nauseated by its smell, and he inoculates him against the skin-rash that is believed to be the normal consequence of eating it."²⁸¹ So prepared the novice sorcerer joins a necrophagous guild. "They have a leader . . . who supervises the sharing of the flesh of the victim, who is cut up by one of his own matrilineal relatives, this person having been responsible earlier for reviving him so that the sorcerers may torment him before they slaughter and eat him."²⁸²

We have already noted that according to Jean La Fontaine, the Gisu define witches as people who commit incest and view all incestuous relations as quasi-witchcraft. Thus it is not surprising to find that Gisu witches, like Kaguru and Cewa witches, are believed to eat human flesh. According to La Fontaine, "they feast

on the corpses of their victims which they dig up and are also believed to eat any corpse they may find.”

Burial is not native to the Gisu; before the advent of Europeans they abandoned their dead in unfrequented bush. These areas were believed to be the haunt of witches and were, therefore, doubly avoided. Witches are said to use human arms to stir their beer, which gives it a particular strength. . . . Witches meet together for feasts of human flesh in the way that ordinary men and women offer one another hospitality in celebration of some notable event; in the case of witches the event is a successful killing.²⁸³

Clyde Kluckhohn found that among the Navaho “suspicion of incest means by the very fact suspicion of Witch activity and vice versa,” and also that Navaho witches meet at night “to have intercourse with dead women” and “to practice cannibalism.”²⁸⁴ One of his informants told him that “witches are just like crows, buzzards, and coyote. They eat people.”²⁸⁵ There is also evidence that the unholy trinity occupied a prominent place in the culture of the Western Apache. Keith Basso tells us that when Apache witches met they started a large bonfire, removed their clothes, and then danced naked around the fire “holding high over their heads the remains of corpses exhumed from graves.” When the dancing eventually subsided, “each witch, if he so desired, had sexual intercourse with a menstruating woman, usually a close maternal kinsman.”²⁸⁶

What Lévi-Strauss called an “alimentary form of incest” also found a place in California and Oregon. The heroine of myths known to many of the native people variously rapes and eats her brother. In the Wintu version, licking her own blood from an accidental cut makes her “so ravenous that she devours her whole body and becomes a rolling head, which goes all around the world devouring people.”

Her family are terrified and climb up to the sky. The head is informed of this by some ancient faeces, and she grabs hold of the escaping family and, full of sexual excitement, succeeds in removing her brother

from them by gripping him between her thighs. As he will have nothing to do with her, she devours him, sparing only the heart, which she hangs around her neck.²⁸⁷

Andrew Strathern reports finding what he terms “a classic complex of symbolic associations between witchcraft, incest and cannibalism” in the New Guinea Highlands.²⁸⁸ He does not say which peoples he has in mind, but the Etoro, who attributed witchcraft to a mythological union of a brother and sister,²⁸⁹ would have to be one of them. The unholy trinity found elsewhere in the world constituted in their view a self-sustaining economy of evil. Incest bred witchcraft, and cannibalism sustained witches.

A witch consumes portions of the *ausulbo* and *hame* of his victim and thus grows unusually large and vigorous while the victim is weakened and depleted by the resultant illness. The *hame* of the victim is depleted (as evidenced by respiratory distress), while that of the witch is augmented such that he or she begets children of exceptional size. After the victim's demise, the witch is thought to return to the burial platform by night to fatten himself or herself on the flesh of the corpse.²⁹⁰

In Europe the links that form the unholy trinity were not entirely dissolved when witchcraft was finally banished. The adventurers who colonized the New World often reported that the peoples encountered ate their neighbors and married their mothers. An engraving dated 1505 features a man gnawing on a human arm while other body parts are roasting on a fire in the background. An attached note explains that in this society “the men have as wives those who please them, be they mothers, sisters, or friends, therein they make no distinction.” The assumption that incest entails cannibalism turned up whenever Europeans tried to imagine how human beings lived in the distant past. Lewis Henry Morgan filled out his picture of what he called the Lower Status of Savagery with cannibalism and a form of the family “founded upon the intermarriage of brothers and sisters, own and collateral, in a group.” It was, in his reconstruction, only with the invention

of agriculture that our ancestors were delivered from “the scourge of cannibalism”; and “intermarriage between brothers and sisters had not entirely disappeared from the Sandwich Islands when the American missions were established among them.”²⁹¹ Even Sigmund Freud failed to dismantle as a psychopathic construct the link between incest and cannibalism. Not satisfied to have the young males of his primeval horde dispatch their father for the sake of coupling with their mothers, he insisted that “savage cannibals that they were, it goes without saying, that they devoured their victim as well as killing him.”²⁹²

33. Incest pollution

Malinowski tells us that from the moment of a Trobriander's death, “the distinction between his real, that is matrilineal, kinsmen on the one hand, and his children, relatives-in-law and friends on the other, takes on a sharp and even an outwardly visible form.”

The kinsmen of the deceased fall under a taboo; they must keep aloof from the corpse. They are not allowed either to wash or adorn or fondle or bury it; for if they were to touch or to come near it, pernicious influences from the body would attack them and cause their disease and death. These pernicious influences are conceived in the form of material exhalation, issuing from the corpse and polluting the air. It is called *bwaulo*, a word which also designates the cloud of smoke which surrounds a village especially on steamy, calm days. The necrogenic *bwaulo*, invisible to common eyes, appears to a witch or sorcerer as a black cloud shrouding the village. It is innocuous to strangers, but dangerous to kinsmen.²⁹³

The idea that pollution emanating from a corpse creates a black cloud big enough to shroud a village is a peculiarly Trobriand idea, but the idea that corpses, coffins, and graves are an abundant source of danger is a common idea, not surprisingly given that

fear of death is universal. What is surprising is that although it does not entail any of the consequence of death, incest is widely regarded as an equally potent source of pernicious influences. This is implied by its association with witchcraft and cannibalism in many societies and is evident in what Malinowski calls an “outwardly visible form” in several societies.

Geoffrey Gorer tell us that during his stay among the South Indian Lepcha he heard of only one case of “true brother-sister incest, “and that occurred in another village some generations ago.” There were, however, two contemporary unions considered incestuous because couples were classified as “brother” and “sister” though in both cases they were two generations removed from a common ancestor. “These couples,” Gorer found, “were shunned as irremediably unclean and contagious; they were exiled from their villages and neighborhood; neither neighbor nor relative could visit them or help them; when they die nobody would see to the disposal of their body, nor conduct their soul to paradise.” At the time of Gorer’s visit one couple was living in a village three days’ walk away. He was told that when traveling one or two local people had spoken to them “but so far no Lepcha has entered their house nor taken food from them.”²⁹⁴

In Bali fear of pollution also caused couples guilty of incest to be exiled from their native community. Jane Belo found that “according to the records of ancient adat,” the penalty for first-degree incest included “immediate banishment from the formal limits of the village, a great purification ceremony with animal offerings to the bad spirits, and sometimes a rite whereby the offending pair are dressed in the yokes worn by pigs and made to approach on all fours and drink out of a pig’s drinking trough.”

Subsequently the two are to be banished from the village for life and their lands confiscated. As such banishment in the old days left them no recourse but to wander off in the jungle, there to be hunted by wild beasts or to face death from starvation, the punishment amounted to a

death sentence. No other village would take in people banished from their own village, lest they bring ill luck and disaster.²⁹⁵

Incest was also considered polluting in Tibet, so much so that the abbot of one monastery made himself and his fellow mendicants rich by purifying polluted pilgrims. The means by which this was accomplished were recorded by Prince Peter of Greece who discovered that the monastery was a very special one because the waters of a nearby lake “had the property of being able to wash away the sin of incest.”

Anyone having had sexual relations with somebody within the prohibited degree of consanguinity could be purified of the pollution by making a pilgrimage to Choten Nyingama Tso where, after having plunged in its waters, he or she would make an offering to the monastery. The abbot whom I met would, in exchange, deliver a certificate that the person was now absolved of all sin, and the petitioner could go home satisfied and appeased. It appeared that the principal source of revenue of this particular monastery came from this trade in certificates and that this was the reason for the prosperous appearance of the Incarnation I just met.²⁹⁶

Fear of pollution by even approximate contact with a person guilty of incest appears to have been even greater in ancient Hatti than in India, Bali, or Tibet. In the view of the Hittite kings “the most alarming feature” of a person who committed incest “was that his defilement could spread to others. A whole community could be affected by it, and suffer the full force of divine wrath for harbouring such a creature.” The defilement must be eradicated and execution was “the simplest and most effective way of doing this.” As with all capital cases, the final judgment was made by the king’s court, “but the offender could not enter into the actual presence of the king, for that would put the king himself at risk of defilement, the consequences of which might be terrible indeed.”²⁹⁷

34. Automatic retribution

On the basis of many years as a missionary among the Bantu W. C. Willoughby argued that "taboos are grounded in the very nature of things," citing in support of his argument another Bantu missionary, E. Torday, who held that the breaking of a taboo "is not a sin against god, it is a foolhardy act against the laws of nature, like overeating, or taking poison. . . . Bad actions were not punished by God; their opposition to the laws of nature caused automatically, without divine intervention, some unpleasant reaction."²⁹⁸

This was true of the incest taboos in many societies. In acephalous societies in particular the danger of incest was commonly seen as so great that "the very act of participation will recoil upon the violator of the taboo."²⁹⁹ We have already noted the Trobriand belief that the couple's skin would turn white and break out in sores which gradually grew bigger; the Nuer belief that syphilis and certain forms of yaws are an especially likely consequence of incest; the Manu conviction that all the couple's kin would fall ill and die if they did not confess; the Tswana belief that "a person committing such an act would bring misfortune upon the people or cause his relatives to die"; the Iban belief that incest will bring insects to devour the paddy and cause all things to fail; and the Plateau Tonga fear that evil will follow from this and all other forms of *malweza*.³⁰⁰ According to Colson, these events give rise to a "mystical retribution" that "is usually represented as a more or less automatic response to the offence, and not as a punishment sent by the ancestors."³⁰¹

Belief in mystical retribution of this kind is not limited to any particular part of the world. The New Guinea Baktaman are convinced that the fertility of the earth would fail "if semen from the intercourse of relatives were to spill on the ground"³⁰²; the Solomon Island Siuai say that "death follows incest automatically unless an antidotal ritual is quickly performed"³⁰³; the West African Bangwa insist that "incest with the mother results in a kind of idiot

Parkinson's disease known as *leka* which also afflicts a man who touches the medicated ankle of a royal wife"³⁰⁴; and Ponapeans see incest as responsible for what they call "supernatural doom."

The parties to incest, especially the forms involving closer relatives, are thought to be subject to a "supernatural doom" (*riab-la*), which may lead to death, sterility, sickness, or other misfortunes. If the parties later encounter misfortune, Ponapeans discussing the case are practically certain to attribute it to "supernatural doom" stemming from the incestuous act.³⁰⁵

The visible agents and palpable consequences of what Colson calls "mystical retribution" varied from society to society. The Alaskan Aleut believed the sea would not receive the body of a person guilty of incest when he died. "Abhorring his iniquity, it would swallow him only to throw him back up on the shore."³⁰⁶ The Malay Minangabau were convinced that an automatic response triggered by incest would take the form of a skin disorder affecting not only guilty parties but their descendants up to seven generations.³⁰⁷ And the Navaho feared incest would initiate an illness called "moth madness" with symptoms resembling grand mal or epileptic seizures. The illness was called "moth madness" because it was believed that the victims "became rash and insane and may jump into the fire like a moth."³⁰⁸

In his account of the reaction to incest on Yap David Schneider worries whether consequences of the kind catalogued here "can properly be viewed as punishment or whether they are more accurately described in simple cause and effect terms." His distinction rests on the view that "punishment implies a moral transgression of some sort."³⁰⁹ The distinction is valid but not, I think, applicable to the response to incest. Whether or not taboos "are grounded in the very nature of things," as Willoughby put it, violations of the incest taboos are always seen as moral transgressions. The point was well made by P. H. Gulliver with regard to the East African Turkana. His informants were convinced that incest entails

“grave automatic consequences” but could not specify what they were. “One man said the transgressor would be dead before a full day had elapsed. Another said a witch would come and kill him.” “These are,” Gulliver suggests, “only attempted formulations of the general idea.” The idea is that “incest is very, very bad.”³¹⁰

35. Supernatural retribution

In his classic study *We, The Tikopia* Raymond Firth tells us that among the Tikopia “the idea is firmly held that unions of close kin bear with them their own doom, their *mara*,” which generally means barrenness. “This generalization is not,” however, “of the nature of a biological theory that inbreeding is injurious *per se*, but a belief in the operation of supernatural forces.”

These are an expression of the resentment of the parents of the guilty pair, who in life have suffered the union, but after death vent their accumulated spleen on their offspring. Thus sa Tonarei, cited above, were left without issue. “Their children died; died when big. They died because this was their barrenness, true brother and sister; their parents came hither and bewitched them, to hurt their children.”³¹¹

Like the Tikopia, many peoples were convinced that incest was certain to be punished by some supernatural, if not by gods then by ancestors, ghosts, or other spirits. We have already noted the Mae Enga belief that incest is “sure to be followed by attacks by enraged agnatic ghosts” and the Gisu belief that incest is itself a form of madness inflicted by neglected ancestors. Among the other societies already mentioned we can cite the Gilyak insistence that incest is due to the influence of evil spirits call *milk*³¹²; the Tucana belief that a goddess charged with punishing incest inflicted madness on anyone who dared violate her mandate³¹³; and the Yapese belief that incest was punished “with sickness, injury, or calamity” by ancestral ghosts.³¹⁴ Edward Hunt makes a point of noting that in Yap “incestuous relationships are punished

not by men, but by the offended spirits who will, sooner or later, kill the offending couple.”³¹⁵

Similar beliefs are found in societies representing widely divergent social forms and traditions. Among the Konkomba of Northern Ghana “it was said that persons who committed this offense would die because ‘God does not tolerate such behaviour’”³¹⁶; the Angami Nagas feared that intercourse involving clan mates “would be punished by a tiger eating the culprits”³¹⁷; the Netsilik Eskimo believed that incest was punished by a class of supernatural beings (*tunraqs*) who served as shamans’ special helpers³¹⁸; among the Dinka a union involving clan mates “would be considered incestuous and would anger the *jok* (ancestral spirits)”³¹⁹; the Aleut considered incest an “offense to the ancestors” whose displeasure might affect the whole community as well as the evil-doers³²⁰; and the aboriginal peoples of Peninsular Malaysia were convinced that the god Karei punishes incest with violent death inflicted by lightning or a tiger.³²¹ Verrier Elwin found that among the South Indian Gond “incest within the clan is regarded as especially insulting to the Anga and before the guilty can be forgiven offerings must be made to it.” “If they do not do this, the offenders bodies will swell and their eyes burst.”³²²

Beliefs about punishment of this kind do more than tell us that incest was regarded as a heinous crime. Often they also tell us that it was regarded as the most heinous crime. According to Victor Uchendu, the Igbo of southeast Nigeria believed that “Ala is a merciful mother” who “intercedes for her children with other spirits.” She “does not punish in haste” and not at all for minor crimes. But she does punish incest—“by bouncing the wicked on the ground until they are dead.”³²³ Paul Schebesta is explicit about the place of incest among the Southeast Asian Semang. It is “the greatest and most fearful of all lapses.” The punishment is *cemam*, an illness “caused by a bolt of lightning, that leads to death.” This is the penalty “not only for incest already committed,” “but all situations that might lead to incest.”³²⁴

Incest was also treated as “the greatest and most fearful of all lapses” among the Bush Negroes living in the interior of Dutch Guiana. They believed that human failings create something called *kunu* that hang about the sinner and his family threatening punishment. Melville and Frances Herskovits describe *kunu* as “the law of retribution, the tool of ancestors and gods,”³²⁵ but it could as well be characterized as supernaturally embodied guilt. All the greater *kunu* are dangerous, “slowly, inexorably bringing death to one member after another of the offender’s kin,” but the *kunu* of incest is “the deadliest of all *kunu*.”³²⁶

Supernatural retribution was also expected in many literate societies. In the King James version of the Bible God is made to declare, “None of you shall approach to any that is near kin to him, to uncover their nakedness: I am the Lord.”³²⁷ The text does not specify the punishment, but the imperious “I am the Lord” leaves no doubt that punishment is threatened. The culprits might be exiled or executed and their community laid waste by a natural disaster. According to David Sabean, “Lutheran pastoral rhetoric was built around a notion of collective retribution, with old Testament examples woven throughout the text.”

Certain kinds of sin made the “land and people” subject to the full force of God’s Wrath, and the motif of being driven from the land for the corruption of even one person was everyday stuff for the sermon material and frequently made its way into the imagery of the Kirchenordnungen. Indeed, the Merseburg Church Ordinance warned that God has “often allowed whole kingdoms and principedoms, land and people, to be horribly ravaged and laid to waste” for incest.³²⁸

An example is provided by the author of the *Annals* of Saint-Aubin who noted that when Geoffroi Martel took Agnes, his cousin, “in incestuous marriage . . . the town of Angers was burned down in a horrible conflagration.”³²⁹

36. Communal retribution

Malinowski tells us that one day he heard “an outbreak of wailing and a great commotion” suggesting that a death had occurred somewhere in the neighborhood. Investigating, he found that a boy he knew had committed suicide by jumping from a coconut palm when he was accused of having violated the incest taboo with a clan cousin.

This had been known and generally disapproved of, but nothing was done until the girl’s discarded lover, who had wanted to marry her and who felt personally injured, took the initiative. This rival threatened first to use black magic against the guilty youth, but this had not much effect. Then one evening he insulted the culprit in public—accusing him in the hearing of the whole community of incest and hurling at him certain expressions intolerable to a native.

For this there was only one remedy; only one means of escape remained to the unfortunate youth. Next morning he put on festive attire and ornamentation, climbed a coco-nut palm and addressed the community, speaking from among the palm leaves and bidding them farewell. He explained the reasons for his desperate deed and also launched forth a veiled accusation against the man who had driven him to his death, upon which it became the duty of his clansmen to avenge him. Then he wailed aloud, as is the custom, jumped from a palm some sixty feet high and was killed on the spot.³³⁰

This account suggests that the Trobrianders preferred to leave the task of punishing incest to other-worldly agents, only taking action when forced to do so by scandal and then only urging the culprits to commit suicide. According to Douglas Oliver and Lev Shternberg, this was also the response to incest among the Solomon Island Siuai and the Gilyak. Oliver notes that when a Siuai couple who “flaunted the convention against sib incest by openly living together” were censured by their relatives the girl committed suicide by hanging,³³¹ and Shternberg found that among the

Gilyak “it was not uncommon for lovers belonging to prohibited categories to kill themselves at the instigation of their relatives. In one of the songs of such an unfortunate pair the woman complains that her sister called her a bitch, and her beloved a devil because he was her uncle; and that all her loved ones—father, mother, and sister—kept telling her, ‘Kill yourself, Kill yourself.’”³³²

There were, however, many other societies that, though lacking a strong central authority, nonetheless punished incest, the culprits’ relatives and neighbors acting as enraged vigilante. Margaret Williamson was told by the Kwoma that “if a man saw his son and daughter having sex he must immediately kill his son and cast his body into the bush.”³³³ Similarly, Grenville Goodwin found that among the Western Apache “if a close blood relative and clan-mate of the offenders, such as a brother, should actually see the culprits cohabiting or making love, he might kill one or both immediately.” One of the two cases recorded by Goodwin involved a man with two brothers and one sister. “One day he went off hunting. On his way home he came on one of his brothers out in the brush cohabiting with his sister. He shot them both.”³³⁴

Execution by an incensed relative was an acceptable response to incest also among the Central African Ovimbundu. When Wilfrid Hambly asked “what would be the fate of a man who committed incest with his blood daughter or uterine sister,” he was told that “he would be killed by his brother or mother’s brother.”³³⁵ More commonly, punishment for incest in acephalous societies was authorized and administered by an ad hoc council of influential men. In the Apache case the chief of the culprits’ local group summoned a council and told them what had happened.

The culprits were then sent for or, if necessary, brought by force. They were flatly accused of their crime, and if they denied it, as they were likely to do, they were strung by the wrists from the limb of a tree, just high enough to permit their toes barely to touch the ground. Culprits who would not talk could be left hanging all day, and a fire might be built under the man. . . . Ordinarily the woman was not killed for the

offense, because she saved herself by confessing. The man might be put to death whether he confessed or not.³³⁶

Incest appears to have been handled in a similar way among the nineteenth-century Seminole. According to Alexander Spoehr, “in cases of known incest, the clan elders called a clan council, with all the clan supposed to be present.”

The guilty pair was usually flogged and scratched; originally scratching was done with garfish teeth but later a harness needle was substituted. Before being used on the unfortunate offenders, the needle was treated so that the scars of the scratches would never disappear, but remain as visible evidence of guilt.³³⁷

Incest was dealt with in much the same way among Australian aborigines as among North American aborigines. In their influential account of the Aranda Baldwin Spencer and Francis Gillen note that having local men killed by men belonging to other groups was a common practice. The reason was that when a case of incest arises, “the old men of the group to which the offender belongs hold a meeting to discuss the matter; and if all of them are in favour of the death of a man or woman, a neighboring group is asked to come and carry out the sentence.”³³⁸ According to A. P. Elkin, a later authority with the evidence needed to generalize, this was the method of dealing with incest in most of the Australian tribes.

A man must not cohabit with his sister, mother, or wife’s mother: the punishment is death, though if the actual relationship be not a close one, banishment from the corporate life of the tribe, or else some severe physical punishment may suffice. These matters are decided by elders . . . but a couple caught committing an act of serious incest would be speared on sight, because the person seeing it would be so ashamed.³³⁹

Although the evidence from acephalous societies is not always sufficient to see how incest was punished, it is sufficient to see that it was and that the agents were commonly elder-led vigilantes.

Ward Goodenough reports with regard to Truk that “in aboriginal times a person guilty of having sexual relations with a member of his own or his father’s lineage was killed by his relatives”³⁴⁰; Kalvero Oberg, that among the Tlingit “the penalty for incest was death, both persons being killed by their respective clansmen”³⁴¹; Marine Carrin-Bouez, that among the Santal punishment for incest was “the responsibility of the local kin group, which excommunicates and—at least traditionally—kills the offenders”³⁴²; and Rafael Karsten, that among the Jivaro “incest and any illicit sexual intercourse is regarded with the greatest horror and severely punished by cruel ill-treatment. One case of this kind came under my notices when a young Jivaro Indian eloped with his father’s sister. All the male relatives of the family were pursuing the couple, and they assured me that if they got hold of them they would kill them.”³⁴³

The Vedda and the Mohmand Pashtun were as assiduous in punishing incest as the Jivaro. During their time among the Vedda, C. G. Seligman and his wife, Brenda Seligman, heard of two cases of what were regarded as incestuous unions when they occurred fifty or sixty years earlier. They were told that “in both instances the guilty parties were promptly killed by the outraged group. The men were set upon in the jungle, their own fathers it was said taking a prominent part in the assault, while the girls were killed in the huts in which they were living.”³⁴⁴ Among the Pashtun, killings involving incest were special in being the only killings that did not invoke the laws of revenge. According to Akbar Ahmed, “Such couples, whether involving mother, father, daughter or son of ego, are immediately and by unanimous social agreement killed,” the onus of punishment falling “on the immediate agnatic kin of the guilty couple—fathers, uncles, and brothers.”³⁴⁵

Punishment for incest was as cruel in Ibo-speaking villages in Eastern Nigeria as among the Vedda and the Pashtun. M. M. Green found that “in the old days offenders would have been buried alive in the Agbaja market place, Ori Ekpa. This burying of them would purify and appease *Ala*.” Green’s informants “maintained

that even now if such an offence were known to have taken place people would go secretly at night and cut a hole through the mud wall into the man's house and kill him. He would then be placed at the foot of a palm tree, from which passers-by would imagine him to have fallen to his death."³⁴⁶

The evidence from the Americas is not as abundant as that from Asia and Africa, but what there is says that many societies punished incest more severely than any other crime. With regard to the Cayapa, one of the native peoples of southern Brazil, Milton Altschuler writes, "Incest is generally viewed by the Cayapa as being particularly heinous. In the older days, it is asserted, anyone guilty of such a crime would be placed over a table which was covered with lighted candles, and then, slowly roasted to death."³⁴⁷

This and the evidence cited above says that even if a society lacked institutions responsible for enforcing its mores, incest was punished, if not by gods or ancestors then by the guilty parties' relatives and neighbors reacting to what they regarded as abnormal behavior. They were like the Elizabeth Bowen character who has "a horror . . . of the abnormal and has to hit out at it before it hit her."³⁴⁸

37. State retribution

Incest is no longer a crime in many European countries, but this is a recent development peculiar to governments whose legitimacy rests on grounds other than moral superiority or supernatural status. Political history tells us that elites almost always criminalized incest as part of the process by which they institutionalized their power.

The twelfth-century Hittites provide a vivid example. Hittite law tolerated couplings between persons related by marriage (e.g. brother and sister-in-law, and stepmother and stepson), but prohibited on pain of death couplings between blood relatives. Persons who were not executed were banished from the kingdom.³⁴⁹ The

Hittite concern is preserved in a rebuke issued by Suppiluliuma I to a vassal who was rumored to tolerate sex between cousins and perhaps even siblings. It reads:

For Hatti it is an important custom that a brother does not have sex with his sister or female cousin. It is not permitted. Whoever commits such an act is put to death. But your land is barbaric, for there a man regularly has sex with his sister or cousin. And if on occasion a sister of your wife, or the wife of a brother, or a female cousin comes to you, give her something to eat or drink. Both of you eat, drink, and make merry! But you must not desire to have sex with her. It is not permitted, and people are put to death as a result of that act. You shall not initiate it of your own accord, and if someone else leads you astray to such an act, you shall not listen to him or her. You shall not do it. It shall be placed under oath for you.³⁵⁰

The Roman state was no more tolerant of incest than the Hittite. According to Percy Corbett, the punishment for incest during the Republic was to throw the offender from the Tarpeian Rock, it being “a familiar school controversy in the first century of the Empire whether a woman who survived the fall should be thrown again.”³⁵¹ Tacitus claims that this retribution was meted out by Tiberius to Sextus Marius, and Corbett notes that believing the frequency of incestuous marriages was on the rise in Osroene and Mesopotamia, “Justinian was driven to repressing them with the threat of death to both parties and their offspring.”³⁵²

In imperial China incest was the only one of the “ten unpardonable offences” that did not involve treason or what in the Confucian view amounted to the same thing, filial impiety.³⁵³ In Ming and Ch’ing times (1368–1912) the punishment was strangulation for persons related in the second and third degrees, and beheading for those related in the first degree.³⁵⁴ Derk Bodde and Clarence Morris note the case of a man who was “sentenced to 100 blows of the heavy bamboo and three years penal servitude” for sexual relations with the daughter of his fifth-degree younger

cousin. Severe as it was, this punishment was later felt to be inadequate and the law was supplemented to add “40 days of the cangue.”³⁵⁵

Japan provides a clear case of how the treatment of incest changes with the creation of a strong central authority. When in the seventh century, before the country was united, the Japanese adopted a version of the Chinese legal code, they did not follow the Chinese in making incest an “unpardonable offence,” instead leaving punishment of incest to supernatural agents. But when they revised their code in the seventeenth century, after hegemonic rule had been firmly established, they included the Chinese proscription, making beheading followed by public display the punishment for incest.

Although the Inca state came into being much later than most Eurasian states, it also assumed responsibility for punishing incest. According to the priest Bernabe Cobo who spent twenty years in Peru following the Spanish conquest, “in marriages and the use of mistresses, there were rules concerning the prohibited degrees of consanguinity, and various punishments were meted out for delinquents and transgressors, according to the type of crime that had been committed.”

Marriage between ascendants and descendants, such as with one’s granddaughter, mother, or grandmother were prohibited, to such an extent that not only were they never done but even that the death penalty was imposed upon those who would commit a similar crime; the same applied to those who had carnal access with any woman of this degree of kinship, and the death penalty applied to both accomplices, no matter what their rank or position might be.³⁵⁶

What amounts to a nearly universal tendency for states to take on the task of punishing incest is also evident in reports concerning the Yoruba and Igbo in Nigeria. In the first case, cases of incest came directly before the highest judicial body, the Council of State, and was typically punished by death.³⁵⁷ Among the Igbo “It

was forbidden, and in fact an 'abominable' thing, to have sexual relations with any close consanguine relative, and it is said that breaches of this law were almost unknown. If a case did occur both the culprits were killed or sold, after an investigation of the Oha of the whole village-group."³⁵⁸

Early state concern with incest cannot be attributed to its practical consequences. Incest is not subversive; it does not deprive the state of taxes, *corvée* labor, or soldiers. It is not, in any way, a threat to state authority. Max Weber would probably argue that the leaders of early states punished incest because it was regarded as dangerous and thus gave them an opportunity to demonstrate their extraordinary quality.³⁵⁹

38. A collective calamity

Incest was implicated in witchcraft; it was associated with cannibalism; it was believed to trigger automatic retribution; it was thought to offend if not outrage ancestors and gods; it was punished as severely as murder and more so than rape; and it was widely feared as a source of pernicious influences inimical to good health. As telling as this evidence is, there is even better evidence of the singular place of incest in human thought. Unlike other crimes, including even murder, the consequences of incest are rarely seen as limited to the culprits. Incest is typically conceived of as a collective calamity, the consequences radiating outward and, if not constrained by ritual action, likely to inflict harm on the culprits' relatives and neighbors and, many imagine, on their animals and crops as well. Klaus-Friedrich Koch suggests that this was the reason incest was punished so severely in some societies. When incest is viewed as a collective calamity, "the culprit's liability extends to everyone."³⁶⁰

This was clearly the case among Jalé in West New Guinea. According to Koch, the Jalé distinguish incest "from all other forms of injurious behavior" because, in their view, incest alone of

all the offenses people commit “endangers the very survival of the people.” The likely consequences are “catastrophic crop failure and the deterioration or death of humans and pigs.” This being the case, both culprits should be put to death by their own kinsmen, “because their lives constitute the only kind of retribution that can avert the disaster.” When this happened—and it did in two of the three cases recorded by Koch—the couples’ genitals were excised and wrapped in leaves. The following day, “after sticking the penis through the vaginal orifice, [the medicine men] tied the pieces together with ‘sacred’ vine,” and “wrapped layer after layer of bark around the construct until a huge ball had formed which was tied to the end of a pole.” This was then carried to the river where it was disposed of by men “uttering the special howl that belongs to any procession connected with the disposal of malefic matter.”³⁶¹

The same view of incest prevailed among many of the native peoples of Borneo. They, like the Jalé, feared that incest “endangers the very survival of the people.” The celebrated naturalist Charles Hose reports that while he was among the Murats, Klemantans, Kayans, and Ibans, “almost all offences were punished by fines only,” incest being the notable exception.

For this offense, which is held to bring grave peril to the whole house, especially the danger of starvation through failure of the rice-crop, two punishments were in former times customary. If the guilt of the culprits was flagrant, they were taken to some open spot on the river bank at some distance from the house. There they were thrown together on the ground and sharpened bamboo stakes were driven through their bodies, so that they remained pinned to the earth. The bamboo, taken root and growing luxuriantly on this spot, remained as a warning to all who passed by; and, needless to say, such a spot is even to-day looked on with horror by all men. The other method of punishment was to shut up the offenders in a strong wicker cage and to throw them in the river. This method was resorted to as a substitute for the former, owing to the

difficulty of getting anyone to play the part of executioner and to drive in the stake, for this involved shedding the blood of tribesmen.³⁶²

Fear of incest was equally acute among the Toraja in Sulawesi and the Miang Tuu in Sumatra as among Jalé and the Iban, and for the same reason. Before they were colonized by the Dutch, the Toraja drowned incestuous couples or burned them to death. According to Hetty Nooy-Palm, "The Toraja dreaded the consequences of incest: crops would bear no fruit, contagious diseases would run rampant among men and beasts alike."³⁶³ Our authority on the Miang Tuu, Harald Brach, tell us that "When incest occurred, the offenders were placed together in large bamboo *bubu* [a kind of fish weir] and sunk in the sea. If that was not done, some major disaster would occur, such as a heavy storm and thunder that could ruin the village, or rain would not fall during the wet season." As among the Jalé and the Iban, incest for the Miang Tuu was "not a matter between the two, but an act that could destroy the whole community."³⁶⁴

Although our most striking examples come from the Indonesian Archipelago, the peoples living there were not unique in regarding incest as a collective calamity. The Tswana believed that a person who committed incest would "bring misfortune upon the people" and "cause his relatives to die"; the Admiralty Island Manu, that if a person committed incest and did not confess, his kin would die; the Bush Negroes in Dutch Guiana, that the *kunu* for incest will strike down one after another of the miscreants' family; Rwandans, that incest was "the concern of everybody in the group as it was likely to bring about calamities affecting them all"; the Ainu, that the ancestors would punish "the whole community as well as the evil-doers"; the Nuer, that the various illnesses attributed to incest may fall "not only on the partners to the sin, but also on their closest relatives, so that a man who commits incest may render himself responsible for homicide as well"; the New Guinea Baktaman, that incest destroys the fertility of the soil and thus may inflict starvation on an entire community; the

Ponapeans, that a community in which incest occurs may suffer “supernatural doom”³⁶⁵; and medieval Christians, that God punishes incest by allowing “whole kingdoms and principedoms, land and people, to be horribly ravaged and laid to waste.” All of these peoples appear to have shared the ancient Hittites’ fear that a whole community could be affected by incest and suffer the full force of the wrath aroused.

Of the many peoples that could be added to this list the best known are the Ashanti, the Navaho, the Lepcha, and the Yapese. Meyer Fortes tells us that the Ashanti treated breaches of the incest taboo “as sacrilegious crime, dangerous to the whole community and therefore punishable by the chief and his council sitting as a court of law”³⁶⁶; David Schneider, that in the Yapese view “the group is responsible for the incestuous acts of any of its members, and that any member of the group is liable to die as a result of incest committed by some other member”³⁶⁷; Geoffrey Gorer, that the Lepcha believed that besides covering the guilty couple with sores, incest would cause “a year of disaster to the community”³⁶⁸; and Mark Bauer, that among the Navajo “it is believed that incest brings harm not only upon the offender, but upon the entire district.” The offense may seem “natural, even victimless,” but “the belief that the act will cause supernatural harm means that many people will feel victimized by it.”³⁶⁹

I interpret this evidence as saying that in the eyes of many peoples incest was less a crime than a natural disaster. Everyone suffered as they suffered during a drought, a flood, an earthquake, or an infestation of crop-destroying insects. The causes were different but the effects could be the same.

39. Incest impossible

According to the observers who knew them best, there are a few peoples who do not punish incest and do not believe their gods or ancestors do either. Although there are none among them who

approve of incest, there are some who say that it is neither a sin nor a crime. Thus E. Adamson Hoebel claims that among the Comanches “incest was not a sin against the gods any more than it was a crime. There was no need to punish an offender in order to protect the community from supernatural wrath.”³⁷⁰ The most reliable evidence for a society with this attitude is Meyer Fortes’s account of the Tallensi. “There are,” he writes, “no penal sanctions against any form of incest, nor are the culprits believed to be subject to automatic mystical retribution.” Sexual relations with a daughter or sister “is spoken of as tabooed (*kih*), but it is neither a crime nor a sin. It is simply despicable conduct that the culprits ought to be ashamed of as unworthy of grown persons.”³⁷¹

Fortes also notes that having no name for incest, the Tallensi “say, simply, ‘It is tabooed (*de kihme*)’; and they look on it with unanimous revulsion. Translating their ideas into our cultural idiom, we should say that they regard any form of incest as an unnatural act.”³⁷² The Tallensi conception of incest is not, then, exceptional—as in most other societies, incest is considered revolting and unnatural. But why don’t the Tallensi punish incest or believe in some form of mystical retribution? Why do they not fear the consequence of what they think of as an abnormal act? Fortes points the way to an answer when he observes that “though incest taboos are never deliberately inculcated,” the Tallensi insist that “a normal man does not have sexual desire for a sister or a daughter.” Incest with one’s own mother is regarded “as a thing of such monstrous iniquity that it is ridiculous to conceive of anyone who is not mentally deranged committing it.”³⁷³

The examples of other societies that resemble the Tallensi in not treating incest as a crime suggest that when, for whatever reason, people are convinced that normal people have no desire for incest, they do not think of punishing it. According to Koentjaraningrat, this was the case in South Central Java where cousin marriage was “negatively sanctioned by threat of supernatural punishment,” but not marriages “considered to be really incestuous,” including “unions

between siblings or other members of the nuclear family.” “There is,” he reports, “no conception of supernatural punishment for unions of this type; they are merely considered so absurd that no one even thinks of the possibility.”³⁷⁴

The !Kung also appear to have no thought of social or divine punishment for incest and probably for the same reason as Javanese villagers. Lorna Marshall found that “they feel a deep, internalized, pervading horror of incest, which they do not try to explain.” For the !Kung “incest with parent, offspring, or sibling is unthinkable.”³⁷⁵ Although the evidence is not as complete, the same attitude appears to have held among the South American Bororo. Like the Tallensi they have no special word for incest and no supernatural punishment is expected for sexual relations with a real or classificatory sister. When asked why, the Bororo “say only that it does not happen.”³⁷⁶

The evidence says that the great majority of human societies regard incest as unnatural, which is why they commonly associate it with witchcraft and cannibalism. Whether they punish incest or not is, I suggest, a matter of how they interpret what they all agree is an unnatural phenomenon. The majority see it as an ominous event, a collective calamity, and therefore believe someone or something will punish the culprits; the minority assume that the more heinous forms will never occur and therefore give little or no thought to how it would be punished. Incest, in their view, is so unnatural as to be impossible. This, I hypothesize, is most likely when the scope of the incest taboo is narrow and sexual attraction thoroughly inhibited by early association.

40. The power of awe

When Europeans imposed themselves on the Trobriand Islands incest was not an institutionalized privilege, but it was accepted when practiced by the leading clan. After describing the Malasi clan and Tablayu subclan as “the real chiefs, acknowledged to be

of supreme rank, not by the Trobrianders only, but by adjoining areas as well," Malinowski writes:

Of the four [clans], the Malasi have the reputation of being the most persistent exogamy-breakers and committers of incest. All the incestuous marriages on record have happened within this clan; and I was told that this was not an accident but that only the Malasi and no other clan will tolerate such marriages. The myth of incest . . . is associated with the Malasi, and so also is the magic of love and the magic to frustrate incest disease.³⁷⁷

One of the previous paramount chiefs, Purayasi, was known to have lived with his sister, and another one, Numakala, is also strongly suspected by history of this felony. They, of course, belonged to the Malasi clan; and there can be no doubt that with them, as with so many other dynasties and famous rulers, the feeling of power, of being above the law, served as a shield from the usual penalties.³⁷⁸

By the midsixteenth century when the Spanish arrived, the Calusa had achieved about the same level of political complexity as the Trobrianders. The people called "chiefs" by the Spanish wore special ornaments and sat on what the Spanish called "a bench or dais,"³⁷⁹ but otherwise enjoyed none of the power claimed by Old World monarchs. Like the Trobriand Malasi, however, they did claim the privilege of incest. According to the missionary Father Rogel, who lived among the Calusa, the man who became chief in 1568 "married his own sister according to what he said was regular custom—insisted on by his people, and allowed only to the chief."³⁸⁰

There is evidence that incest was regarded as a chiefly privilege in a number of societies with approximately the same level of political organization as the Trobrianders and the Calusa. Jan Czekanowski claims that "Azande harems always included daughters of the chiefs," as, he suggests, did the harems of other chiefs in the Nile-Congo region.³⁸¹ Likewise, Siosiane Bloomfield maintains that "incest was known in ancient Tonga, particularly among the

chiefly circle,”³⁸² and J. L. Fischer reports that the “many freedoms” allowed people of high rank in Ponape included “some freedom to violate incest taboos.”³⁸³ He suggests this was “partly because no one of lower rank dared to criticize them or make fun of them to their faces,” and also that “perhaps there is . . . involved here a notion of partial identity between high ranking nobles and their clan deities, many of which are mythically reported to have committed incest.”³⁸⁴

It has been argued that Egyptian royalty married incestuously to set themselves apart from their subjects, but this is not a likely explanation of privileged incest in the Trobriands and the other societies noted above. There, the people called “chiefs” had not yet achieved such a sharp separation from the rest of the population. Why then did they tolerate if not encourage incestuous unions? We have to assume that they did not dare do so until they achieved the ability to avoid the usual sanctions. But having moved this far toward the power they were seeking, why would they risk general disapproval by marrying against the norm? One political logic says they would try to set themselves up as moral paragons by scrupulously observing all taboos.

In an essay reinterpreting the Trobriand evidence Hill Gates offers an original answer to these questions. Her argument is that having not yet managed to monopolize violence, emerging elites used incest as a “theatre state tactic” to bolster their authority. It served, she suggests, the same purpose as “flashy monumentalism, spectacular public ritual (often with human sacrifice), and the lavishly detailed apotheoses of rulers.”

This repertory of cultural flamboyance accords well with the shock value of royal incest. Brother-kings married sister-queens, or brother-chiefs their sister-chiefs, flouting a prohibition commoners will have felt to be natural. Lords and ladies of the earth flaunted superhuman invulnerability, constructing auras of power by haughty taboo-breaking. They did so especially when they had not invented the administrative and communication systems to enforce their rule by less colorful means.³⁸⁵

Gates concludes with the provocative suggestion that “somewhere in the history of all early states we might expect to find royal brother-sister incest lurking.”³⁸⁶

Two of the many examples supporting Gates’s argument are the use of incest taboos by the Inca and the ancient Hawaiians. Living in a sharply stratified but by no means stable society, the Hawaiian elite made elaborate use of taboos to protect their status. The highest of three sacred ranks, what Davenport calls “the exalted aristocracy,” inherited taboos known as *kapu moe*, “prostrating taboos.” In public they were preceded by a page proclaiming their taboo, “*Kapu moe! kapu moe!*, Lie down! Lie down!” *Kapu moe* was frequently referred to as the fire taboo because the possessor had the right to punish a violator with death by burning.³⁸⁷ It is not surprising then that the Hawaiian elite took incest to be one of their privileges. It was an obvious move for people accustomed to imposing taboos in order to instill fear and awe, to employ violating taboos for the same purpose.

Politicization of the incest taboos is even more obvious in the case of the Inca. Garcilaso de la Vega informed the world that “it must be known that Kings Ynca, from the first, established it as a very stringent law and custom that the heir to the kingdom should marry his eldest sister.” “The first born of this brother and sister was the legitimate heir to the kingdom,” but if “the prince had no children by his eldest sister, he married the second and the third until he had children.”³⁸⁸ But while requiring that the royal line be perpetuated by way of incest, Inca custom commanded that among commoners “no one may marry his sister or his mother or his first cousin, nor aunt, nor niece or female relative or god-mother, under penalty of punishment: their two eyes will be gouged out and they will be cut into quarters and they will be placed on the hills as a reminder and punishment, for only the Inca is to marry his carnal sister, according to law.”³⁸⁹

Gates’s thesis anticipates and completes much of the argument of this book: anticipates with her assumption that incest inspires

fear and awe and is thus properly called a taboo; and completes with her use of this insight to explain why we find what I call privileged incest. The argument demonstrates how much understanding we lost when Marx went missing. A complete account of incest taboos is possible but only if we recognize their political uses. These explain not only why the taboos are extended beyond the nuclear family, but also why they are sometimes deliberately violated. The general point is that while the emotions that motivate the taboos originate in the family, they are like all other human emotions in that they can be co-opted to serve political purposes.

41. Incestuous origins

Many creation myths postulate a primeval family, a man, a woman, and their children, constructions that give rise to what Sally Falk Moore called “incestuous riddles.”³⁹⁰ “Who is to marry the children of the first couple?” One method is to simply find their mates when they are needed, like Cain’s wife who just turns up in the King James version of the Bible. Another is to have many people emerge from the ground at the same time, a mass creation of ancestors. But surprisingly, as Moore was the first to emphasize, “many people cheerfully and explicitly mate the first family to its own members.”³⁹¹ Using such sources as the Human Relations Area Files and the Stith Thompson Index, she easily located forty-two such societies, representing every ethnographic area. In three cases the primeval family perpetuated itself by mother-son incest, in seven cases by father-daughter incest, and in thirty-four cases by brother-sister incest.³⁹² The latter included the Trobriand Islands where, according to Malinowski, brother-sister incest was considered “the Supreme Taboo.”³⁹³

Why would people who abhor incest create incestuous ancestors? Why would they trace their descent to an abnormal event predicting evil? The conventionalist answer comes from Freudians like Otto Rank who argued that origin myths, like dreams and the

fantasies of neurotics, “all serve as proof of the universal presence and significance of incestuous impulses in the individual.” In a work that Freud praised as easily taking “the first place among strictly scientific applications of analysis to literature,” Rank argues that mythical and religious fantasies create “a major symptom for the absorption of repressed impulses. The gratification of drives, which the individual must renounce as culture dictates, he permits to the mythical gods created in his own image and ultimately, through identification with them, to himself—at least in fantasy.”³⁹⁴

Many conventionalists are so confident of this resolution of what appears to be a conflict of values that they cite Moore as evidence against Westermarck. In a study of what they take to be Oedipal impulses in folk tales, Allen Johnson and Douglass Price-Williams suggest that if Westermarck were right, “there should be no tales of brother-sister incest at all.”³⁹⁵ Their logic is the same as Frazer’s when he argues that if Westermarck were right there would be no incest taboo. It assumes that mythical incest is a projection of incestuous desire just as Frazer assumes that the incest taboos exist to repress expression of such desire. But, as Gates’s analysis of privileged incest suggests, it could be that myth-makers attribute incest to the ancestors they create to emphasize that they are not ordinary human beings, that they are a special kind of being, more like gods than men. The source of mythical incest would then be the awe inspired by incest rather than a desire to commit incest.

42. Taboos as consensus

In 1936 the social psychologist Muzaffer Sherif reported an experiment in which the subjects were asked to estimate the movement of a point of light in a dark room.³⁹⁶ The light did not actually move but appeared to move because there was nothing to serve as a reference point.³⁹⁷ The subjects were told: “When the room is

completely dark, I shall give you the signal *Ready* and then show you a point of light. After a short time the light will start to move. A few seconds later the light will disappear. Then tell me the distance it moved.”³⁹⁸ The subjects’ initial judgments ranged widely from trial to trial but settled down to a narrow range after a hundred trials. The settled ranges differed from subject to subject but were consistent for individuals tested on different days.

Sherif’s question was, What would happen when persons who had settled on a judgment in private sessions were brought together and asked to report their judgments aloud? The answer is that the subjects’ judgments converged. After several sessions individuals who started by guessing the light moved seven inches, two inches, and less than an inch were consistently guessing in the range of two to four inches. This was despite no request for unanimity, no effort to persuade, no sanctions for disagreement, and often no awareness of any social influence.

In Sherif’s experiments the subjects knew what one another’s judgments were, but a series of experiments by another social psychologist, F. H. Allport, argues that this is not necessary to promote convergence.³⁹⁹ Comparing judgments of odor and weight by subjects working alone but side by side, he found that knowing nothing about their fellow workers’ judgments, the subjects working side by side made fewer extreme judgments than the subjects working alone. “It is,” as Roger Brown puts it, “as if they were trying to avoid deviation from a *presumed* central tendency of the group.”⁴⁰⁰

In another famous series of experiments Solomon Asch demonstrated that when they are made a minority of one, people will even agree to judgments that violate their senses.⁴⁰¹ Such agreement is particularly likely when a group is cohesive and especially when people want to remain members of the group. It is, then, all but certain that incest would produce a convergence of attitudes in cohesive societies of the kind represented by Australian and African hunter-gatherers. A natural tendency to see rare events as

ominous would insure a basic similarity of response, and any disagreement would quickly be overcome by what Roger Brown calls “an almost ineradicable tendency for members of a group to move toward agreement.”⁴⁰²

There is, then, no need to burden the incest taboos with the Herculean task of holding up society. They can be fully accounted for as the creations of two aspects of human nature—a fear of events perceived as abnormal or unnatural, and what social psychologists take to be a universal human need to “belong with” those around us.⁴⁰³ These together are all that is needed to create the incest taboos. They constitute the collective intentionality to which we assign the function of preventing behavior that threatens the community.⁴⁰⁴

43. Taboos as norms

Even if they accept the social psychological argument of the previous section, most conventionalists will not accept it as an explanation of the incest taboos. They will argue that regardless of whether they constitute a consensus, individual responses do not and cannot add up to a taboo. They are different things, properly assigned to different ontological realms. One is simply a response to a stimulus, not unlike the kind animal psychologists observe in their laboratories. The other is a rule, a regulation, a moral injunction, a cultural thing, or as Durkheim would have it, a social fact. The problem then is how to get from what people do and say to rules regarding what they ought to do and say. This is, I believe, the problem Bernard Williams has in mind when he suggests that “it is perhaps the notion of a *norm* that gives rise to the central representation problem.”⁴⁰⁵

It is true that the incest taboos are not simply statements of fact about what incest is and what it portends. The tendencies to equate incest with witchcraft and cannibalism, to fear that it offends nature and the gods, and to punish it more severely than most

other crimes all argue that incest is considered immoral. The Tswana tribes leave no doubt that this is their view when they characterize incest as “something ominous; something very unusual, and regarded as predicting evil.”⁴⁰⁶

How then did the incest taboos acquire a moral or ethical dimension? John Searle’s answer would be that this is simply the result of declaring that incest is dangerous, a deontic force being an inherent aspect of such declarations.⁴⁰⁷ I prefer the answer suggested by Edward Westermarck in *The Origin and Development of Moral Ideas*. The basic premise of his argument is that there is no such thing as an inherently moral judgment. What is moral is simply what people consider moral or agree to call moral. The only question is why most people accept condemnation of incest as a moral judgment.

Westermarck’s answer is simple and, for a constitutionalist like myself, intuitively convincing. It is that what distinguishes moral judgments from judgments in general is “their generality, apparent disinterestedness, and a flavour of impartiality.”⁴⁰⁸ The judgments must be general, but they do not need to be disinterested or impartial; they only need to appear disinterested and impartial. When Westermarck concludes that “society is the birthplace of the moral consciousness,” he sounds like Durkheim,⁴⁰⁹ but the difference is profound. Whereas Durkheim answered the question “What kind of acts are moral?” by specifying certain sorts of goals as peculiarly moral,⁴¹⁰ Westermarck denied that any act or goal is intrinsically moral. What gives the incest taboos their moral quality is not the goals they serve. It is simply the fact that the disapproval they express is general and does not appear to serve any vested interest.

We have already seen that there are good reasons to assume that disapproval of incest is general. All we need then to justify applying Westermarck’s argument to the incest taboos is reason to assume that this disapproval appears disinterested and impartial. The obvious reason is that the response to incest is reflexive and

reflexive actions rarely if ever appear as self-serving. It is only when we see an action as premeditated that we suspect selfish motives. What appears to be spontaneous is usually accepted as sincere. An ironic implication is that responses guaranteed by human nature are more likely to be accepted as moral than purposeful actions prompted by rational considerations.

Thus the chasm that many conventionalists find separating individual disapproval of incest and the incest taboos turns out, on closer examination, to be an illusion, a visual cliff created by their failure to see that the natural processes that create the taboos guarantee their normative status.

44. An emotional animal

Conventionalists are heirs to the French Enlightenment's view of human beings as rational creatures whose seemingly irrational creations either serve concealed purposes or are mistakes that reason will find and correct if necessary. I argue, to the contrary, that if we are to make sense of behaviors like the incest taboos, we must begin with the Scottish, not the French, Enlightenment, and more particularly with David Hume who saw that reason is an inert ability, dependent on the emotions for achieving its goals and never free of the influences generated by its dependency. From this perspective, the fact that incest taboos are universal argues that whatever the reasons given for their existence, they are at bottom creations of what Hume called the passions.

A contemporary version of the Scottish view appears in an essay by Donald Hebb and W. R. Thompson entitled "The social significance of animal studies."⁴¹¹ Comparing the behavior of a number of species, Hebb and Thompson conclude that human beings are not only the most intelligent species on earth. We are also the most emotional species. "Man is," as they put it, "the most emotional as well as the most rational animal." "As one goes from rat to dog to chimpanzee one finds an increasing variety in the causes

of emotional disturbance, an increasing variety of manifestations, and an increasing duration following brief stimulation, all of which is consistent with the idea that susceptibility to emotional disturbance increases with intellectual development."⁴¹²

Hebb and Thompson suggest that this is not generally recognized because it is partly self-concealing. In an effort to avoid the consequences of our susceptibility, we create environments that limit our exposure to disturbing experiences. We carefully conceal corpses, hide mutilated bodies behind screens, confine mentally ill persons in special hospitals, avoid depicting the most intimate moments of sexual relations, and more generally, institute innumerable rules the primary purpose of which is to make life predictable. We are not satisfied to regulate the use of violence and legislate the expression of sexuality. We pay enormous attention to what we wear, how we arrange our hair, where and how we eat, and even when and where it is appropriate to greet one another and how exactly it should be done. And what is most revealing, we are disturbed when someone violates one of these rules, no matter how trivial. We are a species that cares how one says good morning and good night.

Human emotionality is clearly evident in the reaction to incest, but this is only an example of a universal tendency. Another is the reaction to twinning. It is far more common than incest but rare compared to singular births, the result being that it is commonly regarded as an abnormal event foretelling misfortune. Isaac Schapera concludes an influential survey of twinning in South Africa by noting that "almost everywhere the birth of twins is looked upon as something uncanny and out of the ordinary course of nature." The explanations people give "vary to some extent, but they all point to the fear of evil consequences."⁴¹³ Monica Wilson studied customs relating to twins among the East African Nyakyusa, and like Schapera concluded that "Twin birth is a fearful event to the Nyakyusa. The parents of twins, and the twins themselves, are *abipasya*, 'the fearful ones,' felt to be very dangerous to their relatives

and immediate neighbors, and to cattle, causing them to suffer from diarrhoea or purging, and swollen legs if any contact takes place.”⁴¹⁴ Similarly, the Italian pediatrician Alessandra Piontelli found that while that part of Southeast Asia known as the Golden Triangle was home to many peoples, “they all shared one thing in common, a loathing of twins.” They were regularly disposed of at birth by strangulation for fear the mother had been impregnated by an evil spirit.⁴¹⁵

The thought that incest and twinning elicit similar responses because they are both regarded as abnormal is supported by the fact that they are confounded in the beliefs of many peoples. In Indonesia the commoner castes, the Sudra and the Wesja, called opposite sex twins *kembar salah*, “sinful twins,” because they were thought to have been too intimate in the womb. According to Jane Belo, their birth “was considered a great evil and misfortune, an incestuous event, and so evil that the houses of the parents had to be burned down, their possessions destroyed or cast into the river, ‘which carries filth down to the sea,’ and the parents and the twins exiled from the village for a period of forty-two days.”⁴¹⁶ Incest and twinning were similarly confounded among the Khasis of Assam who interpreted twin births as punishment for some transgression (*sang*) by a member of the couple’s clan. P.R.T. Gurdon found that “When twins are of the opposite sex the *sang* is considered to be extremely serious, the Khasis idea being that defilement has taken place within the womb. The case is treated as one of *sheng ky*, or marriage within the clan, and the bones of the twins cannot be placed in the sepulchre of the clan.”⁴¹⁷

One does not have to search the beliefs of exotic peoples to find evidence of human emotionality. It is readily available in the work of all the great novelists. A contemporary example appears in Pat Barker’s novel *Union Street*. A woman she calls Muriel Scaife stops on her way home to watch a group of girls playing jump rope in the circle of light made by the one lamp post on her street. Their chanting arouses memories of her own childhood and she arrives home

tired but in a good mood. "The house was peaceful all around, full of firelight and sleeping children." The roar of the flames made her drowsy. "Yet, beneath the surface of her mind, something that could not be so easily lulled roused itself to keep watch."

She had never been able to take happiness for granted. . . . She must always be aware of time passing, of the worm that hides in darkness and feeds upon innocence, beauty and grace . . . the children asleep upstairs: nothing was to be taken for granted. Love, security, order: these were achievements painfully wrested from a chaos that was always threatening to take them back. She remembered the children playing in the lamp-light. Life was like that. *Her* life was like that. A moment in the light. Then the lamp goes out, the circle is broken, the chanting voices are silenced forever.⁴¹⁸

Hebb and Thompson's point is that we are all like Muriel Scaife. Because we are such an emotional species, there is always something just beneath the surface of the mind keeping watch. When someone or something surprises it, we startle, breaking the circle of light and silencing the chanting voices. The intellect protects only psychopaths, who lack the species' emotional capacity. The rest of us are forever at risk of having our peace destroyed by the unexpected that appears dangerous because it is unexpected.

Incest does not generate insects, blight crops, kill the neighbor's chickens, prolong droughts, cool a lover's ardor, or breed witches. The only danger is to the couple's offspring, and this was not known until recently. All that makes incest stand out is that thanks to the inhibiting effects of early association, it is rare. What turns this into an "abnormality, something unusual and unheard of" and thus "a sinister omen, the manifestation of a malign and unseen power" is human emotionality. Closely contested games, new hair styles, clothing fashions, and even books are praised as exciting, but only when the excitement is mild and the stimulus well controlled. Anyone who has experienced a riot or a violent protest will understand why a Chinese curse reads, "May you live in exciting

times." Human beings like excitement, but only well regulated excitement. They order their social environment obsessively because given their volatility, they cannot stand to live otherwise.

Though he failed to provide an answer, A. R. Radcliffe-Brown asked the right question. After arguing that "incest is properly speaking the sin or crime of sexual intimacy between immediate relatives within the family," he wrote: "In human societies generally such conduct is regarded as unthinkable, something that could not possibly occur, and the idea of it arouses a strong emotional reaction of repugnance, disgust, or horror. It is characteristically conceived of as an 'unnatural' action, contrary not so much to law and morals as to human nature itself. It is this emotional reaction that we have to explain if we are to have a theory of incest."⁴¹⁹

45. Degrees of incest

Taken together Murdock's second and third conclusions say that incest taboos always extend beyond the nuclear family but in different directions and to varying lengths.⁴²⁰ Why, we must ask, is this the case if the taboos are the products of forces rooted in a universal human nature? Until the question is answered, conventionalists like Rodney Needham will insist that "the wide and variable range of statuses to which the prohibitions apply" means that the taboo is "a mistaken sociological concept" and that consequently, "there can be no general theory of incest."⁴²¹

I have already challenged the logic of this argument, quoting Ernest Nagel to the effect that so long as one allows for variable initial conditions there is no reason to assume that manifest differences cannot be accounted for in terms of general principles.⁴²² What is needed now is to identify these principles and specify the relevant initial conditions. I will do so by resurrecting the long-discredited, much maligned idea that the variable reaches of the incest taboos are extensions of an invariant core centered on the nuclear family. My argument is constructed on the empirical foundations laid down in Murdock's fourth and sixth conclusions.⁴²³

The fourth conclusion is that “incest taboos tend to apply with diminished intensity to kinsmen outside of the nuclear family, even though they are designated by the same kinship terms as primary relatives.” What Murdock means is not that incest taboos are morally calibrated in a way that makes incest with a real sister a greater crime than incest with a clan sister. What he means is that the intensity of the emotional reaction to incest fades as one moves from real sisters to clan sisters. Malinowski’s account of the Trobriand incest taboo provides a vivid example of the difference. In the course of excoriating his predecessors for relying “completely upon the question and answer method,” a method that “obtains at best a lifeless body of laws, regulations, morals, and conventions which *ought* to be obeyed, but in reality are often evaded,” Malinowski compares two views of the Trobriand incest taboo. What the natives *say* suggests that “marriage and sexual intercourse within the clan are neither allowed nor ever practiced and that they do not even constitute a serious temptation to the natives,”⁴²⁴ but what the natives *do* argues that the emotional meaning of the taboo varies radically with genealogical distance. Sex with a real sister is regarded as “unnatural and unthinkable” and “is of rare occurrence either in reality or in legend”; sex with a subclan sister “is regarded as wrong, but not horrible; as daring and dangerous, but not abominable”; and sex with a sister who belongs to a different subclan, “though officially forbidden, ruled to be improper, and surrounded by supernatural sanctions, is yet everywhere committed.” Some young men consider it “a desirable and interesting form of erotic experience.”⁴²⁵

Stimulated by Malinowski’s account many of his successors have looked and found similar evidence in other societies. A particularly clear example appears in Harold Scheffler’s study of the Choiseul Islands. Like their fellow Melanesians in the Trobriands, the Choiseulese extend their incest taboo to distant relatives, but here again, “the force of the restrictions and shame diminishes with genealogical distance and spatial separation.”⁴²⁶ According to Scheffler, “The relationship between true siblings is ‘very *tabo*,”

and the same is true of first cousins if they reside in the same or adjacent hamlets. "But beyond these limits people begin to feel less ashamed, and others are less likely to feel that a moral wrong has been committed should infringements occur. After all, it is noted, they are only 'distant siblings.'"⁴²⁷ Moreover, like the Trobrianders, the Choiseulese "delight in 'illicit' sexual relations" with their distant cousins. A line of one lament popular with Choiseulese women goes, "I call you 'brother' but you crossed the mat and came to me at night." As appears to have been the case in the Trobriands, "the suggestion of illicitness contained in 'brother' makes the affair all the more intriguing."⁴²⁸

Further west on Kosrae in the Caroline Islands Philip Ritter found a similarly graded incest taboo. Because the Kosraean taboo included almost everyone recognized as kin and thus almost everyone living in the same village, it was "not uncommon for second cousins to become lovers." This was considered incestuous but enjoyed nonetheless. Ritter's younger informants told him that "such affairs are actually considered physically more pleasurable than similar involvement with nonkin." They claimed that "as long as the couple did not marry, incest between second cousins was not of serious consequence in the long run."⁴²⁹

In Moala in the Fiji Islands sex or marriage with relatives standing as classificatory parents or siblings was "theoretically forbidden," but the moral injunction rested "most heavily on 'true relatives' of these categories." According to Marshall Sahlins, "a sexual affair with a 'true relative' [was] considered 'confusing descent' (*vakaseskawa*) or incest in the fullest sense." It was said "that the partners would not be fertile and would die of supernaturally inflicted illness." Despite this Sahlins found that "it does happen that distant classificatory relatives not related as cross-cousins have sexual intercourse and may marry. In proportion to genealogical distance, marriage between those standing even as 'mother' and 'son,' or 'brother' and 'sister,' becomes feasible. These marriages may not be popularly approved, but there is rarely expression of public disapproval, even though ridicule."⁴³⁰

A more concrete illustration of Malinowski's point occurs in John W.M. Whiting's study of the Kwoma. Although all the females of a boy's own sib and generation are termed "sister" and are theoretically taboo as sexual partners, Whiting found that what really mattered to the boys he knew was how closely a girl was related. Encouraged by Whiting's account of adolescent sex in America, one boy told him that he had had sex with six girls, three of them his "sisters." Whiting then asked him if he had ever had intercourse with Afi, his real sister. "He became very serious and said, 'No, indeed! She is my real sister. Those other girls I have told you about are my *sumwe sumwe mowe*, my "sisters nothing."'"⁴³¹

The evidence from Africa makes the points as clearly as that from Melanesia. Eileen Kirge reports that among the Zulu "the reactions to incest vary according to the closeness of the relationship of the people concerned"⁴³²; Absolom Vilakazi reports, also regards the Zulu, that a ritual of condonement performed to allow a man to marry within the clan "is never performed for a man who has offended against the incest taboo within the lineage"⁴³³; Charles Meek, that among the Igbo "no deep sense of incest or pollution" is attached to forbidden unions if the couple are not members of the same extended family⁴³⁴; Paul Spencer, that among the Maasai "it is not heinous to seduce a distant 'sister,'" but only "a matter of ridicule which grows stronger with degrees of closeness"⁴³⁵; Jacques Maquet, that Rwandans "recognized order in the degrees of gravity in incestuous relationships"⁴³⁶; Laura and Paul Bohannan, that among the Tiv "clandestine love affairs may occur within the minimal exogamic lineage without magical or social penalty"⁴³⁷; and A. T. Culwick, that while the Bena speak of incest as "an unthinkable offence," the fact is that some forms of incest are more common than they admit or most observers imagine.

As far as the writers' knowledge of the Wabena extends, the more heinous forms of incest—mother-son, father-daughter, brother-sister, mother- and son-in-law, father- and daughter-in-law—are indeed

extremely rare and quite genuinely regarded with horrified disgust. But the incestuous union of a man with his parallel cousin, his "sister," is by no means as rare as one would expect if the savages were the law-abiding fellow many would have him.⁴³⁸

A more detailed example is provided by Gunter Wagner's account of the Bantu-speaking Kavirondo who prohibited marriage between a man and women "if anyone of her four grandparents belonged to the same clan as any one of his four grandparents." Wagner makes it clear, however, that "while the full rules of exogamy are taken into consideration when a marriage is contemplated . . . the stringency with which they are observed and with which breaches of them are dealt with tends to decrease with the increasing remoteness of the relationship."

Thus the notion of incest is primarily limited to the occurrence of sexual relations among members of the *same* clan, and even within the same clan the attitude towards the offenders is not the same in the case of "real" (i.e. physical) siblings or a "real" parent and child as in the case of classificatory clan relatives.⁴³⁹

E. E. Evans-Pritchard would not have liked my argument, but his evidence supports it. In his highly regarded study of kinship and marriage among the Nuer he makes a point of noting that "The incest taboo is not uniform in its force nor in the consequences its breach is believed to entail. Some incest is very bad and has very serious consequences. Other incest is not so bad, is even thought little of, and is not expected to bring about serious, or even any, consequences."⁴⁴⁰

The worst incest of all would be with the mother, and Nuer were astonished when I asked them if they had known cases of it: "But that would be immediate death." Incest with the uterine sister or the daughter is also terrible. I have heard of one case of each. Incest with the paternal half-sister, whether daughter of pater or genitor, is bad but, so Nuer told me, occasionally occurs. Incest with cousins is not so

bad and with paternal cousins not uncommon. . . . Generally speaking, the farther the man and woman are from one another genealogically the less seriously incest between them is regarded, especially if they live in different districts, and the taboo is less stringent and has a narrower range for natural kinsmen than for legal kinsmen.⁴⁴¹

We have seen above that in many African societies incest was required of anyone wanting to become an effective witch. This being the case a generalization offered by A. R. Radcliffe-Brown stands as strong evidence that for many Africans the intensity of the incest taboos faded with genealogical distance. He writes: "There is a widespread belief in Africa that a man can obtain the greatest possible powers as a sorcerer by incestuous intercourse with his mother or sister. Intercourse with a more distant relative would be quite ineffective."⁴⁴²

Similar evidence can be found in every society for which we have detailed evidence. Grenville Goodwin found that the Western Apache considered "incest between close blood relatives" as "considerably worse than that between clan relatives"⁴⁴³; Robert Dunning, that in the view of the northern Ojibwa "there is a clearly marked difference in the degree of seriousness of incest committed between different genealogical relatives"⁴⁴⁴; Irving Goldman, that while the Cubeo punished incest within the family "by expelling the offenders from the sib, incest outside of the family was not regarded seriously"⁴⁴⁵; Robert Murphy, that "incest within the nuclear family is considered unthinkable by the Murdurucu, but they frown in decreasing degree upon sexual relations within the clan, phratry and moiety"⁴⁴⁶; Truman Michelson, that cross-cousin marriage is forbidden among Arapaho, "but if a man has carnal relations with his cross-niece, he is not looked down upon provided she is not actually but merely classified as such"⁴⁴⁷; James Brow, that Vedda custom allowed one "to correct" an incestuous relationship with a distant cousin, but not with a close kinswoman like a brother's daughter⁴⁴⁸; J. H. Hutton, that while an

Angami Naga girl “*might* take a lover from her own clan, she would be rigidly forbidden to take one from her own kindred”⁴⁴⁹; Douglas Oliver, that while Siuian custom absolutely forbids marriage between members of the same sib, “casual love affairs between distant sib-mates sometimes take place”⁴⁵⁰; Michael J. Harner, that if Jivaro cross-cousins marry they are jokingly called worms (because “worms enter wherever they like”), but “if a man has intercourse with his own sister, a brother has the right to slash his head”⁴⁵¹; and Verrier Elwin, that despite the “the strictest rule against clan-incest” the Muria say that “‘When the door is shut there are no clans, we are only *chelik* and *motiari*’; ‘Once the door is shut and the fire dies down, all relationships are leveled out’; ‘Our tribal laws extend to the border of the sleeping-mat; we watch the youngsters as far as that; what happens inside of the country, no one knows.’”⁴⁵²

I conclude from this and other evidence not cited that Murdock’s fourth generalization stands as stated. As Murdock himself summarized it, the evidence says that “the prohibitions against sexual intercourse and marriage with an own mother, sister, and daughter are the strongest of all the incest taboos.”

Other relatives may fall under an equally severe ban, but analysis of our data reveals no instance where a relative outside the nuclear family is more stringently tabooed than one within it. The reverse, however, is often the case. Of the handful of ethnographers who give adequate information on the differential intensity of incest taboos, all report for their respective tribes that, for example, the taboos apply more strongly to own than to “classificatory” sisters, to half sisters than to cousins, to first than to second or remote cousins, and so on.⁴⁵³

This conclusion says that what varies across societies is largely “laws, regulations, morals, and conventions which,” as Malinowski put it, “*ought* to be obeyed, but in reality are often evaded.” These typically carry some degree of what John Searle calls deontic force, but breaches are not seen as entailing “something ominous, some-

thing very unusual, regarded as predicting evil.” Thus our question is less formidable than it first appears. It is not why the extent of the incest taboos varies. It is only why the nominal—one might better say putative—extent of the taboos varies.

46. Beyond the family

Murdock’s sixth conclusion is that “incest taboos are highly correlated with purely conventional groupings of kinsmen.” This fact is critical to my argument because it says that the initial conditions that need to be taken into account in explaining the variable scope of the incest taboos are these conventional groupings. The incest taboos vary because for a variety of reasons, these groupings vary. All we need to add given these groupings as our initial conditions is an explanation of why the incest taboos were applied to them. My argument will be that this was the inevitable consequence of the predominant role of kinship in acephalous societies and the solidary character of the human family.

In an essay entitled “People Without politics” R. Lauriston Sharp notes that among the Yir Yoront, one of the native peoples of the Cape York Peninsula, “the only clearly differentiated non-kinship role was the masculine one of curet.”⁴⁵⁴ Otherwise, the social life of the Yir Yoront was entirely governed by kinship. “Any Yir Yoront,” Sharp says, “can lead a full and active social life with a repertory of only twenty-eight kinship roles, fourteen for interaction with kin of his own sex and fourteen for interaction with the opposite sex. Practically the entire range of aboriginal activities and sentiments in which the behavior of two or more people is involved, overtly or covertly, is encompassed in these few roles.”⁴⁵⁵

There are roles, and rules for the roles, and a system of law with specified kin serving as public agents with authority to act in defined circumstances, and provision for changes in the roles and rules through public action or inaction. But all of this is simply kinship. In the field of conduct, there is no distinguishable social organization for economics, for

religion, or for government. The Yir Yoront are a people without sovereignty, without hierarchy outside the family, whose whole life operates through the familial institution—they are a people without politics.⁴⁵⁶

Although it is all but certain that the kinship systems of our Neolithic ancestors varied, it is also all but certain that they knew no social relations other than those defined by kinship. Many of the acephalous societies known to anthropology included a few non-kinship roles, but in most cases they were the result of interaction with more complex societies. In Australia where there were no complex societies before the Europeans arrived kinship ruled unchallenged. The trading partnerships that brought the Yir Yoront stone axe heads from the south and sent in return spears tipped with sting-ray spines did not lead to the creation of specialized statuses. They were seen by the people involved “simply as a dimension of the distant older brother–younger brother relationship.”⁴⁵⁷

The Australian evidence says that until only recently human social relations were everywhere kinship relations. If this was the case—and there is no evidence to the contrary—the problem we are addressing is considerably simplified. The conventional groupings in Murdock’s fourth conclusion were all regulated by kinship because all social relations were regulated by kinship. The only outstanding question is why sexual relations within these groupings were proscribed as incest. We can imagine their being organized in ways that allowed endogamous relations.

Put this way our question takes us back to Westermarck by way of Malinowski and the Australian aborigines. It was Malinowski, as Westermarck’s protégé, who defended the latter’s claim that the family consisting of parents and children is an ancient and nearly universal institution.⁴⁵⁸ Because the Australian aborigines were then regarded as the most primitive people on earth, only recently risen from the Lower Stage of Savagery, Malinowski undertook to demonstrate that they did not qualify Westermarck’s generalization. What he found is that “the individual family” played “an important part in the social life of the natives” and was “well defined by a

number of moral, customary and legal norms.” As in all other societies for which we have reliable evidence, it was characterized by “a sexual division of labor,” “an intimate relation between parents and children,” and “an individual relation between husband and wife.”⁴⁵⁹

What the Australians teach us then is not only that in early times all social relations were kinship relations, but also that the nuclear family was everywhere a vital part of societies so organized. This being the case, the answer to our question is obvious. When corporate groups like the Australian totemic clans appeared on the social landscape, they were modeled on the family because there were no other appropriate models. The family was not only the only solidary kinship group. It was the only solidary group of any kind. The jural dimension of the family incest taboo was extended to the new organizations because it was a salient part of the rules governing the family. This was not for the purpose of proscribing sexual relations in the new groups, but simply because the incest taboo was an inherent aspect of family organization. One of the many faults of conventionalist thinking is to look for purposes where there are none.

The best evidence for this explanation of the incest taboos are the taboos themselves. They have a largely constant core centered on the nuclear family and widely variable ranges when applied to persons outside of the nuclear family. The core familial prohibitions have “a peculiar emotional intensity” that the variable extra-familial prohibitions lack. The essential elements of this structure—a constant core with variable ranges and an intensity that fades with genealogical distance—are exactly what is to be expected if the incest taboos originated in the family and were later extended to larger kinship groups modeled on the family.

47. The argument in review

My argument is that previous solutions of the incest problem fail because they neglect one or the other half of the problem—either incest avoidance or the incest taboos. The authors I call

conventionalists ignore incest avoidance by assuming that it reflects the incest taboos, while the authors I call constitutionalists dismiss the incest taboos by treating them as expressions of incest avoidance. I defend the constitutionalists' account of incest avoidance but argue that they fail to account for the incest taboos. I therefore construct a second argument that treats the taboos as products of a human disposition to fear abnormal events. The argument is constitutionalist in finding the source of the taboos in an innate disposition, but it takes an appreciably different form from the constitutionalist account of incest avoidance. Instead of giving the taboos a purpose by attributing them to the dangers of inbreeding, it treats the taboos as incidental expressions of dispositions selected for other reasons.

The argument arrives at this conclusion by way of twelve steps. Plainly stated, they are:

1. Inbreeding is dangerous, raising the excess death-plus-major-defect rate by 20 to 40 percent in the case of primary relatives.
2. The selection pressure generated by the dangers of inbreeding has so shaped primate sexuality that early association inhibits sexual relations.
3. Because children are normally reared by their parents and siblings with one another nuclear family incest is rare except as child abuse.
4. Being an exceptionally emotional species human beings are startled by rare events and see them as predicting misfortune.
5. Nuclear family incest is a rare event and is therefore startling.
6. There is always a consensus condemning incest because most people interpret incest as threatening and the few who do not, accept the majority view because they want to belong.

7. Human institutions are created when people agree that something exists and agree to assign it a purpose.
8. The incest taboos are the creation of a consensus condemning incest and have the purpose of forestalling the dangers it threatens.
9. The incest taboos have a moral quality because they are the products of a general reaction that does not appear to serve any selfish interest.
10. The nuclear family is universal and everywhere existed before the creation of larger kinship groups like the clan.
11. When larger kinship groups like the clan were created they were modeled on the nuclear family and therefore included incest taboos as constitutional features.
12. The scope of the extended incest taboos varies because the composition of the groups modeled on the family varies.

Taken together these twelve statements account for most if not all of what is known about incest avoidance and the incest taboos. They add up to a constitutionalist solution to the incest problem because they are claims about human nature or rest on assumptions about human nature.

48. A backward glance

“Anthropology should go back to Hume and start over.” This is my admittedly ill-tempered reaction to conventionalists who deny the relevance of our origins and attempt to explain our behavior without reference to our species nature. What I have in mind is partly summarized by the first of the two epigraphs chosen for this book. Replying to Bishop Berkeley’s claim that “if there were external bodies, it is impossible we should never come to know it,”⁴⁶⁰ Hume argued that though the skeptic cannot pretend to prove it, he must assent to the existence of body. More

than a hundred years before Darwin he wrote, "Nature has not left it to his choice, and has doubtless esteem'd it an affair of too great importance to be trusted to our uncertain reasonings and speculations."⁴⁶¹

Contemporary conventionalists do not go as far as Berkeley in questioning the existence of anything outside of the mind, but they come close when they insist that human beings are largely what their culture makes of them, unwitting prisoners of one or another web of meanings. I challenge conventionalists with Hume to suggest that while we create culture, we are not constituted by culture and would not be capable of culture if we were. We have what Marx called "a species nature" that includes many abilities, dispositions, and assumptions that nature has thought of too great importance to our survival to be trusted to reasoning. They include more than a belief in the external world, the ability to infer causation, and something that prompts us to extract a sense of self out of our experience. They also include an innate sense for the structure of human languages, an ability to infer other people's state of mind, an impressive capacity for creating tools, and as I hope to have demonstrated, a natural tendency to avoid sexual relations with childhood associates and an emotional intelligence that looks for danger in rare events.

What I take to be the difference between the conventionalist view of our species and that implied by Hume can be dramatized by imagining what would happen if a dozen or so children were provisioned but otherwise left to fend for themselves. Clifford Geertz, twentieth-century conventionalism's most eloquent spokesman, argued that "thrown back upon the cruel wisdom of their animal instincts," the children would turn out as "unworkable monstrosities with few useful instincts, fewer recognizable sentiments, and no intellect: mental basket cases."⁴⁶² I think that given Hume's emphasis on what nature has provided to insure our survival, he would predict that the children would soon invent a new culture. It would differ in detail from any known culture but

would fall well within the range of known cultures. In Hume's view all cultures are constructed out of the resources provided by human nature. That is why he argued that "in pretending to explain the principles of human nature, we in effect propose a compleat system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security."⁴⁶³

STATISTICAL APPENDIX

TABLE I
*Proportion of Concubines Among All Wives
by Form of Husband's First Marriage, Ma-kung City
and Three Villages in the Pescadores Islands*

Location	Major marriage		Minor marriage	
	Number of wives	Proportion concubines	Number of wives	Proportion concubines
Urban	1,422	1.90	279	5.73
Rural	1,198	2.00	488	7.79
Combined	2,620	1.95	767	7.04

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 2
*Percentage of Women Reportedly Involved in
Extramarital Relations by Form of First Marriage*

District	Major marriage		Minor marriage	
	Number of women	Percentage involved in extramarital relations	Number of women	Percentage involved in extramarital relations
A	56	16.1	43	30.2
B	53	13.2	58	51.7
C	56	33.9	41	58.5
D	36	22.2	26	26.9
E	114	7.9	68	23.5
Total	315	16.5	236	37.7

SOURCE: Arthur P. Wolf and Chieh-shan Huang, *Marriage and Adoption in China, 1845-1945* (Stanford, Calif.: Stanford University Press, 1980), table 11.1, 159.

TABLE 3
*Probability of Divorce by Form and Duration of First Marriage,
 Two Towns and Eleven Villages in Hai-shan*

(1)	Major marriage				Minor marriage			
	Woman years	(2)	(3)	(4)	Woman years	(2)	(3)	(4)
0	2,682	17	.006	.006	1,439	15	.010	.010
1	2,561	23	.009	.015	1,423	25	.018	.028
2	2,419	17	.007	.022	1,380	23	.017	.044
3	2,305	24	.010	.032	1,357	26	.019	.062
4	2,205	10	.005	.037	1,341	24	.018	.079
5	2,106	10	.005	.041	1,321	25	.019	.097
6	1,995	9	.005	.046	1,309	30	.021	.117
7	1,905	7	.004	.049	1,298	18	.014	.129
8	1,831	5	.003	.052	1,286	16	.012	.140
9	1,756	8	.005	.056	1,271	19	.015	.153
10	1,686	17	.010	.066	1,247	11	.009	.161
11	1,601	8	.005	.070	1,223	16	.013	.172
12	1,533	2	.001	.071	1,192	11	.009	.179
13	1,481	2	.001	.073	1,156	11	.010	.187
14	1,431	5	.003	.076	1,131	9	.008	.194
15	1,382	4	.003	.079	1,101	3	.003	.196
16	1,337	1	.001	.079	1,060	8	.008	.202
17	1,282	2	.002	.081	1,040	5	.005	.206
18	1,224	1	.001	.082	1,028	2	.002	.207
19	1,158	1	.001	.082	1,131	3	.003	.210
20	1,105	3	.003	.085	968	6	.006	.214
21	1,042	1	.001	.086	934	2	.002	.216
22	985	0	.000	.086	896	0	.000	.216
23	940	0	.000	.086	865	0	.000	.216
24	890	0	.000	.086	824	0	.000	.216

COLUMNS: (1) Marriage duration, (2) Number of divorces, (3) Annual probability of divorce, (4) Cumulative probability of divorce

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 4
*Probability of Divorce by Form and Duration of First Marriage,
 Twelve Villages in Hsin-chu*

(1)	Major marriage				Minor marriage			
	Woman years	(2)	(3)	(4)	Woman years	(2)	(3)	(4)
0	3,597	45	.013	.013	1,156	15	.013	.013
1	3,345	44	.013	.025	1,079	29	.027	.039
2	3,089	44	.014	.039	995	29	.029	.067
3	2,848	32	.011	.050	927	27	.029	.095
4	2,645	24	.009	.059	869	19	.022	.114
5	2,467	14	.006	.064	805	20	.025	.136
6	2,298	16	.007	.071	761	22	.029	.161
7	2,145	7	.003	.074	701	11	.016	.175
8	1,980	4	.002	.076	652	13	.020	.191
9	1,850	7	.004	.079	612	3	.005	.195
10	1,722	7	.004	.083	574	7	.012	.205
11	1,588	2	.001	.084	534	7	.013	.215
12	1,468	2	.001	.085	498	2	.004	.218
13	1,362	4	.003	.088	476	2	.004	.222
14	1,249	1	.001	.089	456	5	.011	.230
15	1,258	0	.000	.089	433	0	.000	.230
16	1,078	0	.000	.089	410	1	.002	.232
17	985	2	.002	.090	387	1	.003	.234
18	895	0	.000	.090	364	2	.006	.238
19	811	1	.001	.092	340	1	.003	.240
20	737	3	.004	.095	312	2	.006	.245
21	653	1	.002	.097	278	1	.004	.248
22	592	0	.000	.097	251	0	.000	.248
23	524	1	.002	.098	228	0	.000	.248
24	469	0	.000	.098	204	0	.000	.248

COLUMNS: (1) Marriage duration, (2) Number of divorces, (3) Annual probability of divorce, (4) Cumulative probability of divorce

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 5
*Probability of Divorce by Form and Duration of First Marriage,
 Ma-kung City and Three Villages in Pescadores Islands*

(1)	Major marriage				Minor marriage			
	Woman years	(2)	(3)	(4)	Woman years	(2)	(3)	(4)
0	2,833	36	.013	.013	703	11	.016	.016
1	2,644	36	.014	.026	673	12	.018	.033
2	2,459	23	.009	.035	638	22	.034	.067
3	2,262	27	.012	.047	594	19	.032	.096
4	2,080	13	.006	.053	561	16	.029	.122
5	1,926	14	.007	.060	527	11	.021	.141
6	1,773	15	.008	.067	502	13	.026	.163
7	1,651	8	.005	.072	472	9	.019	.179
8	1,529	9	.006	.077	455	4	.009	.186
9	1,413	2	.002	.079	438	5	.011	.195
10	1,312	6	.005	.084	421	4	.009	.203
11	1,226	4	.003	.087	400	2	.005	.207
12	1,143	2	.002	.088	375	2	.005	.211
13	1,046	2	.002	.090	357	3	.008	.218
14	976	2	.002	.092	335	3	.009	.225
15	895	0	.000	.092	313	1	.003	.227
16	815	1	.001	.093	295	0	.000	.227
17	747	0	.000	.093	272	1	.004	.230
18	691	1	.001	.094	255	2	.008	.236
19	647	0	.000	.094	230	1	.004	.239
20	584	0	.000	.094	212	0	.000	.239
21	521	0	.000	.094	198	1	.005	.243
22	470	0	.000	.094	182	0	.000	.243
23	425	0	.000	.094	168	0	.000	.243
24	383	0	.000	.094	156	0	.000	.243

COLUMNS: (1) Marriage duration, (2) Number of divorces, (3) Annual probability of divorce, (4) Cumulative probability of divorce

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 6
*Cumulative Probability of Divorce Among Minor Marriages
 When Wife's Age at Adoption Is Less than Three Years*

(1)	Hai-shan sites			Hsin-chu sites			Pescadore sites		
	Woman years	(2)	(3)	Woman years	(2)	(3)	Woman years	(2)	(3)
0	1,212	7	.005	660	9	.012	556	9	.016
1	1,206	26	.027	613	15	.036	534	8	.031
2	1,130	25	.048	558	19	.069	505	19	.067
3	1,092	26	.071	514	18	.102	468	16	.099
4	1,037	18	.087	470	15	.130	440	14	.128
5	999	23	.109	429	12	.155	407	10	.149
6	969	23	.130	403	17	.190	385	11	.174
7	940	14	.143	365	7	.206	357	9	.195
8	923	15	.157	341	8	.224	345	3	.202
9	895	17	.173	320	1	.227	333	4	.211
10	866	13	.185	302	5	.240	320	4	.221
11	833	15	.200	276	5	.253	301	2	.226
12	792	5	.205	252	2	.259	278	2	.232
13	762	5	.210	239	2	.266	263	1	.235
14	732	10	.221	229	4	.278	246	2	.241
15	685	3	.224	214	0	.278	228	0	.241
16	656	1	.225	200	0	.278	214	0	.241
17	626	4	.230	185	1	.282	198	1	.245
18	590	3	.234	169	2	.291	185	1	.249
19	550	2	.237	159	1	.295	164	1	.253
20	515	2	.240	142	1	.300	147	0	.253
21	473	1	.242	124	0	.300	135	1	.259
22	432	1	.243	112	0	.300	123	0	.259
23	406	0	.243	100	0	.300	113	0	.259
24	365	1	.245	89	0	.300	106	0	.259

COLUMNS: (1) Marriage duration, (2) Number of divorces, (3) Annual probability of divorce

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 7
*Age-specific Marital Fertility by Form of Marriage,
 Two Towns and Eleven Villages in Hai-shan*

Form of marriage	Age of wife					
	15-19	20-24	25-29	30-34	35-39	40-44
<i>Number of woman-years lived</i>						
Major	3,711	9,219	9,044	7,794	6,409	5,038
Minor	3,911	6,415	6,249	5,591	4,877	4,064
<i>Births per 1,000 woman-years lived</i>						
Major	328	346	297	253	199	99
Minor	265	248	234	215	159	83

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 8
*Age-specific Marital Fertility by Form of Marriage,
 Twelve Villages in Hsin-chu*

Form of marriage	Age of wife					
	15-19	20-24	25-29	30-34	35-39	40-44
<i>Number of woman-years lived</i>						
Major	5,399	11,639	10,467	7,971	5,631	3,687
Minor	3,146	4,592	4,041	3,166	2,410	1,707
<i>Births per 1,000 woman-years lived</i>						
Major	314	353	306	270	213	110
Minor	241	272	254	214	181	90

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 9
*Age-specific Marital Fertility by Form of Marriage,
 Ma-kung City and Three Villages in the Pescadores Islands*

Form of marriage	Age of wife					
	15-19	20-24	25-29	30-34	35-39	40-44
<i>Number of woman-years lived</i>						
Major	2,749	9,640	9,048	6,798	4,896	2,100
Minor	1,121	2,822	2,860	2,371	1,803	1,339
<i>Births per 1,000 woman-years lived</i>						
Major	330	363	320	283	225	113
Minor	204	240	241	224	184	90

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 10
*Age-specific Fertility of Minor Marriages When Wife's Age
 at Adoption Is Less than Three Years, by Location of Sites*

Location of sites	Age of wife					
	15-19	20-24	25-29	30-34	35-39	40-44
<i>Number of woman-years lived</i>						
Hai-shan	3,481	5,643	5,439	4,789	4,090	3,359
Hsin-chu	1,753	2,409	1,968	1,464	1,034	671
Pescadores	876	2,247	2,216	1,798	1,332	991
<i>Births per 1,000 woman-years lived</i>						
Hai-shan	259	244	231	212	155	83
Hsin-chu	218	250	238	204	173	92
Pescadores	184	226	227	209	170	83

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE I I
*Age-specific Fertility of Major Marriages Comparing Women
 Raised by Their Natal Family and Those Raised as sim-pua*

How wife was raised	Age of wife					
	15-19	20-24	25-29	30-34	35-39	40-44
<i>Number of woman-years lived</i>						
Raised as daughter	8,893	24,319	23,221	18,525	14,140	9,147
Raised as <i>sim-pua</i>	2,967	6,184	5,342	4,012	2,800	1,684
<i>Births per 1,000 woman-years lived</i>						
Raised as daughter	330	360	310	269	211	102
Raised as <i>sim-pua</i>	398	330	294	266	213	121

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

TABLE 12

*Probability of Divorce in Major Marriages Comparing Women
Raised by Their Natal Family and Those Raised as sim-pua*

(1)	Women raised as daughters				Women raised as <i>sim-pua</i>			
	Woman years	(2)	(3)	(4)	Woman years	(2)	(3)	(4)
0	10,053	104	.010	.010	2,964	45	.015	.015
1	9,935	127	.013	.023	2,818	49	.017	.032
2	9,269	100	.011	.034	2,605	39	.015	.047
3	8,538	93	.011	.044	2,409	29	.012	.058
4	8,085	56	.007	.051	2,319	30	.013	.070
5	7,589	39	.005	.056	2,195	14	.006	.076
6	7,124	43	.006	.061	2,042	15	.007	.083
7	6,700	21	.003	.064	1,904	15	.008	.092
8	6,309	20	.003	.067	1,775	5	.003	.095
9	5,970	23	.004	.076	1,670	8	.005	.099
10	5,673	28	.005	.081	1,565	13	.008	.106
11	5,350	11	.002	.082	1,439	5	.003	.109
12	5,043	6	.001	.084	1,342	7	.005	.114
13	4,765	12	.003	.087	1,261	4	.003	.117
14	4,508	5	.001	.088	1,148	6	.005	.121
15	4,247	3	.001	.088	1,064	1	.001	.122
16	3,999	4	.001	.089	985	0	.000	.122
17	3,729	4	.001	.092	912	1	.001	.123
18	3,471	2	.001	.093	840	0	.000	.123
19	3,247	6	.002	.095	760	1	.001	.124
20	3,022	6	.002	.097	687	0	.000	.124
21	2,733	4	.002	.098	616	0	.000	.124
22	2,494	0	.000	.098	555	0	.000	.124
23	2,267	2	.001	.099	495	0	.000	.124
24	2,042	1	.001	.099	423	0	.000	.124

COLUMNS: (1) Marriage duration, (2) Number of divorces, (3) Annual probability of divorce, (4) Cumulative probability of divorce

DATA SOURCE: Household registers compiled by Japanese colonial government in 1905-45.

NOTES

1. Violent or abusive incest (as in incestuous child abuse) inflicts harm, but because it is violent or abusive, not because it is incest.

2. I use the labels “constitutionalist” and “conventionalist” to avoid the political implications parasitically attached to most of the alternative terms.

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6. See Arthur P. Wolf, *Sexual Attraction and Childhood Association: A Chinese Brief for Edward Westermarck* (Stanford, Calif.: Stanford University Press, 1995).

7. For a recent review of the primate evidence see Anne Pusey, “Inbreeding avoidance in primates,” in *Inbreeding Incest, and the Incest Taboo*, ed. Arthur P. Wolf and William H. Durham (Stanford, Calif.: Stanford University Press, 2005), 61–75.

8. For a summary of what these and others have said about the incest question see Wolf, *Sexual Attraction and Childhood Association*, ch. 1, 1–19.

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11. Roy Wagner, "Incest and identity: A critique and theory on the subject of exogamy and incest prohibition," *Man* 7 (1972), 601.
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13. Wagner, "Incest and identity," 601.
14. See below, pp. 8–10.
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19. *Ibid.*, 449–50.
20. *Ibid.*, 438–39.
21. *Ibid.*, 447.
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23. Isaiah Berlin, "The Counter-Enlightenment," in *Against the Current* (Oxford, U.K.: Oxford University Press, 1981), 13.
24. Schneider, "Meaning of incest," 160.
25. Ernst Nagel, *The Structure of Science* (London: Routledge and Kegan Paul, 1961), 462.
26. George Peter Murdock, *Social Structure* (New York: Macmillan, 1949), 284–85.

27. Ibid., 207.
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30. Walter Scheidel, "Ancient Egyptian sibling marriage and the Westermarck effect," in *Inbreeding, Incest, and the Incest Taboo*, ed. Arthur P. Wolf and William H. Durham (Stanford, Calif.: Stanford University Press, 2005), 93.
31. Meillassoux, *Maidens, Meal, and Money*, 12.
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33. Leslie A. White, "The definition and prohibition of incest," *American Anthropologist* 50 (1948), 416.
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38. William H. Durham, *Coevolution: Genes, Mind, and Culture* (Stanford, Calif.: Stanford University Press, 1991), Table 6.2, 306.
39. Ibid.
40. Ibid.

41. See Alan H. Bittles, "Genetic aspects of inbreeding and incest," in *Inbreeding, Incest, and the Incest Taboo*, ed. Arthur P. Wolf and William H. Durham (Stanford, Calif.: Stanford University Press, 2005), 52–53.
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44. Charles Darwin, *The Variation of Animals and Plants Under Domestication*, vol. 2 (1868; New York: Appelton, 1890), 103.
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46. Ralph V. Burton, "Folk theory and the incest taboo," *Ethos* 1 (1973), 505.
47. Durham, *Coevolution*, 347.
48. *Ibid.*, 347–49.
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