Chapter 2
Prestige and the Ongoing Process of Culture Revision

Jerome H. Barkow

Prestige, Culture, and Cultural Transmission

Because these terms will be used throughout this chapter, it will be useful to begin with some of their complexities and simplifications.

What is "Prestige"?

Human beings *hierarchize*, defined as the tendency for social interaction to generate a social hierarchy. Hierarchies are usually conceptualized (depending on the language) either as composed of individuals who are "higher/lower than" or "in front of/behind" others. Thus, in the 1960s, in a study of self-esteem, I could show Hausa-speaking farmers in northern Nigeria a sheet of paper with a horizontal line on it and tell them that the Emir was at one end and a leper at the other. They immediately understood and, given a pencil, had no difficulty marking their own position (Barkow 1973). Hausa farmers, being human, hierarchize. In English, we have a rich vocabulary for describing relative standing (a term which itself implies in front of or behind) and status or rank. A commonly used term in discussion of relative standing is "prestige," defined by Barkow (1989, p. 203) as "respect and approbation accorded to one by others." Henrich and Gil-White (2001) add "freely conferred" to this definition, but the addition brings the difficult philosophical issue of "free will" to a discussion already sufficiently complex. Can respect and approbation be other than freely conferred? "Coerced prestige" is apparently an oxymoron. Or is it?

What do we make of the Stockholm syndrome, in which hostages come to respect, sympathize with, and even bond with their captors so that the fear and hatred initially "freely accorded" becomes freely accorded prestige? Human relationships

J. H. Barkow (✉)
Department of Sociology and Social Anthropology, Dalhousie University, Halifax, Canada
e-mail: barkow@dal.ca

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are characterized by complexity and ambivalence. Respect and approval may mask or even include, for example, fear, sexual attraction, or envy. The initial emotion attached to a relationship is not necessarily permanent, and we may come to respect and regard as prestigious individuals whom we previously had feared or even despised, or vice versa. As celebrities and lovers know, we are a fickle species.[1] Be that as it may, "prestige" may only be one component in a shifting mix of sentiments involving multiple and likely complex psychological mechanisms, as exemplified by the Stockholm syndrome.

Hierarchical relationships in particular tend to include much ambivalence—one frequently both respects and fears one's superior, and often there is little enough of respect. For example, in situations in which hierarchy is formal—the boss in a work environment, for example—there is often a conflict between the amount of prestige attached to the position and the extent to which the individual occupying the position is capable of eliciting respect/prestige from the "underlings." In simple terms, one's boss may lack *charisma*, defined as the ability to nonverbally and paralinguistically win respect from others (Barkow 1989). Charismatic individuals are readily identifiable by their ability to (apparently) automatically draw positive attention from others. Promotion and political success, especially in societies in which status is more achieved than ascribed, may depend on personal charisma, but may also be due to accident of birth or doing well on civil service examinations. Thus, it is not uncommon to have little respect for one's formal superior: Formal rank is not prestige. (The US Army deliberately seeks to work around this problem. As Col. George E. Reed [2004, p. 68] writes, "The Army inculcates an attitude that one must respect the rank, even if one does not respect the person.")

Culture

"Culture" has any number of definitions and has even been contested within its originating discipline, anthropology (Aunger 2000). Here is what culture means, for present purposes: All species adapt to environment or go extinct. Over the long term, that adaptation is genetic—species evolve. Over the short term, however, members of a species may adapt to environment through behavioral changes some of which are learned from conspecifics, that is, they are products of social learning. In our own species, groups over time very often *accumulate* information of varying degrees of utility. When this learned information is considered as a socially

[1] Barkow (1978) has argued that the Stockholm syndrome reflects the inappropriate triggering of mechanisms that evolved to help young children internalize norms crucial for survival. The triggering takes place because the extraordinary amount of power the kidnappers have over their captives is comparable to the power parents have over young children. The triggered mechanisms cause the victims to sympathize with, respect, and even (at times) admire their captors and to believe in their cause. Fear is replaced by or at least joined with admiration that may be construed as "freely conferred" because it can endure even after captivity ends. The problem here is that "freely conferred" is a simplistic folk concept that is incompatible with modern understanding of the complexities of human psychology.

transmitted information pool associated with a particular population or populations, we can speak of a *culture*. A culture's population(s) may be geographically localized or distributed over noncontiguous geographic areas. Any particular informational item may occur in multiple cultures, resulting in what is often substantial cross-cultural overlap. A *society* is an organized collectivity of people, a *culture* is an information pool whose information is lodged in the brains of the individuals who participate in it. Anglophone Canada and the USA are distinct societies whose cultural information pools largely (but certainly not entirely) overlap. A society may include populations with different cultures, provided these cultures share rules for social and political organization (otherwise the society will be politically unstable).

Culture Is Not Necessarily Adaptive

Our own species has a hypertrophied reliance on culture. This extreme reliance is surprising because unfiltered, unedited pools of cultural information accumulate maladaptive items while missing out on new, potentially adaptive ones (Barkow 1989; Barkow et al. 2001, 2012; Boyd and Richerson 1985; Enquist and Ghirlanda 2007; Richerson and Boyd 2004). Barkow (1989, pp. 296–297) presents a general discussion of maladaptive cultural traits that (with possibly excessive alliteration) situates the problem of cultural misinformation in the context of four processes: (1) *Environments alter.* Cultural information that once was adaptive may have outlived its usefulness. For example, efforts may continue to grow a particular crop even after climate change or a new plant disease has rendered the cultivar unsuitable for the area. Similarly, successful fishing techniques may lead to overfishing and the collapse of the fishery so that the cultural fishing knowledge becomes ineffective. (2) *Expenses emerge*. Moving from hunting–gathering to farming, for example, may result in a larger but much less varied food supply, causing nutritional deficiency diseases. Thus, our hunting–gathering ancestors probably never suffered from scurvy (vitamin C deficiency), unlike some cultivators. (3) *Errors accumulate*. Irrelevant or false information can enter the culture. Perhaps young people fail to learn a technique accurately or misunderstand a belief and then teach the error to the next generation, or perhaps the few individuals holding certain information die before others have learned it from them. Erroneous information may or may not be corrected: Generations of young people in North America were taught that tomatoes, which belong to the same family (Solanaceaea) as does Belladonna or "deadly nightshade," are poisonous. (4) *Elites appropriate*. High-status groups may encourage beliefs in their own interest. In medieval Christianity, the poor were taught that obedience to authority was a virtue and that they would be rewarded after death. Among the Kimam-Papuans of South Irian Jaya (described by Serpenti [1984]), young men were taught by their elders that sexual contact with women was ritually very dangerous, permitting the older men to monopolize the young women (Barkow 1989, pp. 361–362). Culture is not just an information pool automatically "transmitted" by "enculturation" or "socialization," as social scientists once imagined: it is an

arena for informational conflict, filled with error and missed ecological opportunities. It must constantly be revised, filtered, and edited. As will be shortly discussed, preferential attention to the prestigious can help edit out erroneous information when that prestige is based on real-world success; but it can also "transmit" irrelevant practices while affording an opportunity for the prestigious to spread cultural information that is in their own interest but not necessarily that of others.

The Need for Cultural Revision

Successful cultures are those that, at least in part, can rid themselves of maladaptive information. Barkow (1989) refers to this process as "culture revision" or "filtering," and more recently (Barkow et al. 2012, 2013) as "culture editing." Enquist and Ghirlanda (2007) speak of "adaptive filtering" for discarding maladaptive information while accepting the adaptive. Revision is always highly problematic and of limited accuracy. This is in part because the same mechanisms may be responsible both for cultural "transmission" and for editing. For example, it has been argued that, if one assumes that high-status (prestigious) people are doing at least some things right, preferentially attending to and learning from them may increase useful practices at the expense of less effective techniques (Barkow 1989, p. 312; Barkow et al. 2001, pp. 138–139; Boyd and Richerson 1985; Henrich and Gil-White 2001; Richerson and Boyd 2004), within a given cultural information pool. (Members of the gene-culture coevolution school of thought usually refer to this as "prestige bias," following the practice of Boyd and Richerson (1985)). As will be discussed shortly, preferential learning from the high-in-status may be as likely to introduce into a culture adaptively neutral/maladaptive traits as useful information. This point is readily apparent when we consider what, in contemporary Western society, young people are learning from our highly prestigious celebrity-entertainers and sports figures. (This topic, too, will be revisited at greater length below.)

The editing of cultural information is a highly uncertain process. Ethnographic records exaggerate the effectiveness of cultural knowledge because ethnographies can be written only for societies that are at least somewhat successful, that is, societies that still exist, or did until very recently: As with animal species, the vast majority of earlier cultures and societies are now extinct, with the failure of cultural editing probably having contributed, in many cases, to that extinction. But the ethnographic record suggests that even successful cultures are studded with misinformation. It could not be otherwise. For example, how does a parent distinguish a child's ill health caused by a heavy parasite load from ill health due to poor nutritional practices (Barkow et al. 2001)? Informational domains in which corrective feedback is lacking tend to be populated with ineffective and even maladaptive beliefs and practices (e.g., the formerly widespread practice of denying the infant the colostrum [Barkow and Hallett 1989]). The editing and filtering of cultural information is as hit-or-miss a process as it is essential to human survival and reproduction. As with other evolutionary processes, there is no requirement for

perfection in cultural editing, only that it be more effective than the cultural editing occurring in rival societies.

Michael Chance, Attention, and Fear and Non-Fear-Based Social Hierarchies

Cultural transmission and revision begin and end with social learning, and social learning begins with attention. The primatologist/ethologist Michael Chance and his collaborators (Chance 1967, 1988; Chance and Jolly 1970; Chance and Larsen 1976) argued that primate social hierarchy is not a simple matter of dominance (fear-based) relationships but, rather, is a structure of social attention: the higher ranking receive preferential attention from the lower in status. The nature of the social hierarchy depended on the type of attention involved. For Chance, primate "hedonic" attention contrasted with "agonistic" or threat/danger attention and were associated with hedonic and agonistic hierarchies, respectively. Chimpanzees tended to have hedonic attention, he (and some of his collaborators) argued, while the social hierarchies of the baboon-macaque group were agonistic. Chance, who for many years studied macaque monkeys at his laboratory at the University of Birmingham (UK), of course understood that agonistic elements were common in hedonic hierarchies and hedonic elements in agonism-based rank systems. For example, he described chimpanzee subordinates fleeing from a threatening higher-ranked individual only to return to the same individual for a reassuring hug. However, Chance believed that, in any one species, either hedonic or agonistic relationships would be predominant, and that the different kinds of relationship and attention led to different types of learning. Agonistic relationships were associated with fear-based learning, learning about how to avoid punishment. Hedonic relationships were associated with unobstructed channels of communication in which a very broad range of information could be conveyed. In our own species, both hedonic and agonistic attention and social hierarchy could exist.

It is not clear exactly what "hedonic" means, other than signaling the occurrence of hugs, embraces, and mutual grooming; "agonistic," however, clearly refers to displays of threat on the part of one individual and a fearful response on the part of the other. It is now well-established that fear learning is quite different, even at a neurological level, from other than kinds of learning (e.g., Öhman and Mineka 2001; Sigurdsson et al. 2007); neuroscientists even speak of a "fear module" associated with the amygdala that operates with fear-associated learning. It is probably best to think of Chance's dichotomy in terms of fear-based attention versus non-fear-based attention. Current discussions of this fear versus non-fear dichotomy in systems of social rank tend to cite not Chance but the overlapping ideas of Henrich and Gil-White (2001).[2] Like Chance, they argue for two different kinds of hierarchi-

[2] While these authors themselves do not cite Chance directly they do cite Barkow (1975), who summarizes Chance's ideas, and they do appear—in my opinion—to have been influenced by his thinking.

cal relationships, their labels being "prestige" and "dominance." The latter appears to be similar to Chance's "agonistic" mode. Henrich and Gil-White argue that high rank (i.e., priority of access to resources, influence, etc.) is a direct result of greater skill or prestige, and it is by virtue of using better techniques that these individuals have gained their rank.

Henrich and Gil-White believe that prestige-linked learning is the product of selection for cultural transmission (a topic not explicitly discussed by Chance, who does, however, write extensively about social learning). Their position overlaps with that of Barkow (1989, p. 312, Barkow et al. 2001, pp. 138–139), who argues that preferential attention to the prestigious tends to revise culture by editing out ineffective knowledge in favor of practices that work. Henrich and Gil-White (2001) and Barkow (Barkow 1989; Barkow et al. 2001) are certainly at least in part correct—Chance's brilliant insight into primate preferential attention to and learning from the high-in-status helps to explain how we could have evolved so strong a dependence on culture without its advantages being wiped out by the accumulation of maladaptive "information." There is now experimental research establishing that we do learn preferentially from the high-in-status and/or successful (Atkisson et al. 2012) and that, as Chance argued, we also attend to them preferentially (Cheng et al. 2013). We are also more likely to imitate those who nonverbally communicate "pride" than from those who do not (Martens and Tracy 2012). Presumably, preferential attention to the high-in-status, a part of primate social hierarchy, served as an exaptation[3] for culture-filtering social learning (though we have no way of knowing if the chimpanzee and humans share preferential learning from the high in rank and success as a result of common ancestry [parallel evolution] or whether they independently evolved the trait [convergent evolution]).

Prestige, Sexual Selection, and Cooperation

Human societies have numerous systems of non-agonistic, prestige-related rank, all based on different sets of symbolic criteria. A symbol is something that stands for something else, and, in this case, the "something else" is a criterion for assessing relative standing. Cultures provide multiple sets of such symbolic criteria; participants in a particular culture may evaluate themselves and others in terms of, for example, various kinds of skills in production and entertainment, membership in a kin or other type of hereditary network, speaking ability, sexual attractiveness, the number of their healthy children and grandchildren, or the degree of prestige accorded to those children and grandchildren[4]. Individuals tend to weigh competing criteria sets in the service of their own self-esteem: The avid footballer "knows" that that

[3] "Exaptation" refers to the fact that the selection pressures which originated a trait may subsequently be replaced by others, so that the trait changes in form and function.

[4] For example, among some groups the stereotype exists of the proud parent who speaks not of "my son/daughter" but of "my son/daughter the doctor," the profession of physician being considered highly prestigious.

sport outranks basketball, the owner of a Maserati and the self-consciously "green" bicycle owner may have very different ideas about their relative standing. Some sets of criteria may be age and gender specific, so that, pre-teens and teenagers may compete in terms of quite different criteria, and, depending on the culture, success among women may be evaluated in ways distinct from that of success among men.

Many sets of prestige evaluation criteria can be placed along a situational versus overweaning axis. At the overweaning extreme are criteria that imply that prestige is inherent in the individual and always relevant regardless of circumstances, at the situational end are prestige criteria that apply only under very specific circumstances. For example, prestige as a cook is mostly situational, as when my guests thank me for the excellent meal I have served them. In contrast, criteria for the rank of monarch have to do with ancestry; being the monarch is always overweaning and never situational. Prestige as a physician is somewhere between these two, the doctor ranks high in the confines of the hospital but not in the police station when accused of a serious crime. In contrast to the multitude of ways in which members of our own species can attract prestige, nonhuman primate societies appear to have only one system of rank, producing a single social hierarchy (though it would not be surprising if primatologists found some degree of nonagonistic situational rank, particularly among the anthropoid apes). Presumably, our distant ancestors, too, had essentially a single hierarchy. How then did we move from primate social hierarchy to human multiple systems of symbolic rank?

Barkow (1989, p. 187) answers this question in terms of sexual selection: "Selection would have favored females who preferred not just males with high agonistic rank but [also] males with high investment ability. It would also have favored males who, finding themselves unsuccessful in competing in agonistic dominance, instead emphasized the procurement of resources. An alternative path to reproductive success was now opened for males, one emphasizing not agonistic competition but competition for resources and in the tool skills associated with resource competition… ." To this, it should be added that selection equally would have favored males who chose to mate with females who exhibited greater skill in resource acquisition and tool skills. Females would, therefore, have been selected to compete in the ability to procure resources (and, possibly, in mothering skills). Thus, for both females and males, there would have been competition not just for agonistic rank but for rank (and therefore, reputation) in terms of skills and abilities: symbolic rank, prestige. The capacity for culture no doubt was the evolutionary product of multiple sets of selection pressures that varied over time, and no single process should ever be considered in isolation; in the context of these multiple selection pressures, however, "primate agonistic dominance would have gradually broadened into the modern multiple-criteria sets of human prestige" (Barkow 1989, p. 187).

Once hominins began to compete in areas other than agonistic dominance, the way was opened to competition in numerous other domains. Geoffrey Miller (Miller 1998, 2000a, b) argues that much of human psychology—a sense of humor, art, music, verbal skill, indeed, almost any skill domain—are products of sexual selection. They are all reliable indicators of "good genes," of genetic fitness, argues Miller. Thus, we find, in human societies, what appears to be an incredible number of cul-

turally varying ways of competing, unified because all involve competition with a standard of excellence. Where Barkow (1989) focuses on sexual selection for skills in resource acquisition, Miller's focus is much broader and emphasizes the self-accelerating, positive feedback process of runaway sexual selection. Combining the two approaches presents a reasonable account of how it is that human societies are today typified by multiple sets of criteria for the allocation of prestige, each set defining an arena for competition and an identity. (To get prestige as a chef I must compete with other chefs in terms of prestige criteria associated with cooking, to get prestige as a philanthropist I must compete with other philanthropists in terms of a set of criteria for prestige allocation specific to philanthropists, and so forth.)

Without symbolic prestige, it is difficult to see how complex societies could have developed. Symbolic prestige permits individuals to be relatively comfortable with their lot in life because their arena of competition is sharply curtailed: As a farmer, I need not directly compete for status with the blacksmith or the aristocrat, just with other farmers. While prestige doubtless plays a role in filtering maladaptive information from culture, it is the *sine qua non* of complex society. Symbolic prestige curtails status competition and thus enables social organization above the level of the troop of nonhuman primates. Only with the relative encapsulation of social strata made possible by symbolic prestige could complex societies have evolved. However, symbolic prestige potentially leads to more social competition for relative standing *within* each stratum of society, even if it entails less competition *among* strata. It is the latter that is more likely to produce social disintegration, after all. As will shortly be argued, symbolic prestige also promotes human cooperation.

No matter how complex the society and no matter how many the different sets of criteria for prestige allocation available, agonism lurks in our social hierarchies (Barkow et al. 2012). Challenging another's prestige can spark anger and an impulse towards violence (suppressed, one hopes). Control over resources and the capacity for physical violence seem to be the bottom line of human social hierarchy. When societies disintegrate, or when colonial conquest destroys existing sets of prestige criteria, these remain. The news media may refer to the new leaders as "warlords" or "gang leaders," but it is these figures, who control resources and violence, who become the respected, the prestigious, the people from whom children learn. The Stockholm syndrome, discussed previously, may reflect a primordial link between power/resource control on the one hand and respect and prestige on the other. From an evolutionary perspective, of course, none of this is surprising: We did not evolve in the psychologist's laboratory where clever experimental design may permit the separation of the agonistic vs. non-agonistic aspects of our relationship to another, we evolved in situations in which the neurophysiological bases of our relationship behavior were always in flux, and agonism was and is our last resort when all other efforts for us to maintain our relative standing fail. Experimental findings in psychology are of immense importance but need to be understood in the context both of ordinary life and of human evolution.

Cooperation

Non-agonistic ("hedonic," "prestige") attention facilitates cooperation. Larsen (1976, p. 263) explains how hedonic attention permits individuals to spend more time learning from and cooperating with one another: "Increased reliance on a hedonic mode of interaction enhances cooperative behavior and social learning as actors are able to move easily in close contact and jointly explore and manipulate the environment. The overall survival value of a net increase in the time spent on nonsocial attention paying is fairly obvious as considerably more time can be spent on initiating environmental manipulation." The time saved can also be spent in cooperative resource-accrual endeavors such as gathering, hunting, and farming, as well as in competing with rival groups or coalitions.

The development of multiple sets of symbolic criteria for the allocation of prestige further promotes cooperation because it mutes competition. This is because the evolution of diverse prestige allocation criteria permitted individuals to believe themselves to be as high or higher in prestige than many of those around them. We see this often among friends, in our own society: I recognize that you make more money than I do but I know that I am superior to you because of my many volunteer activities. You may have more expertise in cuisine than I do, but my body is in better physical shape. You may beat me in tennis but I am better-looking, or have the more desirable spouse, or whatever. If there is no actual sphere in which I am your superior then I can always resort to believing that I am *morally* superior to you (Barkow 1989). So long as we do not speak of these things we may be friends or at least able to cooperate with one another. As early hominins became increasingly able to evaluate relative standing symbolically, cooperation in hunting, gathering, tool-making and sharing, and defense/offense against other bands would have increased. Thus, prestige likely played a role not just in filtering mistaken information from culture but also in promoting cooperation among individuals.

Prestige and Strategic Cultural Learning

If there are multiple criteria for prestige allocation in our society, and we learn preferentially from the prestigious, how do we choose which prestigious person we should attend to and learn from? From an evolutionary perspective, we would expect that the receipt and filtering of cultural information would be strategic and thus dependent on the current status of the "recipient," that is, our age, gender, social class, group membership, relative rank within a group, and likely other factors. If I am a child, then the most prestigious older child in my group is likely to provide the most immediately useful cultural information for me. If I am being trained as a physician, then I will pay preferential attention to practicing physicians[5]. If I am a

[5] Professors with doctorates but not medical degrees who teach in medical schools have been known to complain that the students pay little attention to them, despite their often considerable

heterosexual around puberty, then theory predicts that I pay preferential attention not just to those prestigious in general but to those who appear to be highly successful in intrasexual competition: The actors depicted in films and in the media as having full and successful romantic lives will be the prestigious figures to whose activities I pay close attention.

We choose our competitive arenas strategically because not all spheres of prestige are equal: they themselves are often ranked. In general, the more complex and populous the society, the more spheres of symbolic rank exist. In which arena should I choose to seek prestige and respect? Barkow (1989) argues that the adolescent's problem in our own society is not precisely to find one's "identity," as Erikson (1950) believed, but to choose the arena for competition in which one will do best—it is the choice of arena that sets the identity. Should one be a footballer or a good student, should one seek popularity or a reputation for wildness and daring? The relative standing of different arenas can often be questioned: Who is higher, a chess expert or someone who rebuilds their car from the ground up? Is the professor more prestigious than the banker or the real estate developer, the construction worker more respected than the soldier? Is wealth the ultimate form of prestige or does how one obtains it and what one does with it determine its prestige value? We tend to see the arenas in which we ourselves do well in competition as being of greater value or higher rank than the arenas in which we strategically do not compete. If I was always picked last for the ball team then I will not compete for prestige as an athlete and will tend to withhold respect for athletes as a group. Familiarity also plays a role in my choice of domain of competition: If I have family members in the legal field but none in medicine then I may choose law school over medical school. If no one I know has a military career then I am less likely than the children of military families to seek admission to West Point.

Because we each participate in multiple prestige arenas, we may strategize in our daily interactions. For example, when I meet a stranger, I may mention the garden I am proud of; on finding that the other has a far larger and more beautiful garden than my own, I may move the competition from skill and knowledge of gardening to golf or to cuisine. We remain primates, however: lurking beneath all competition in symbolic spheres is agonism (Barkow 1975; Barkow et al. 2012). If I lose in symbolic competition with you, I may grow angry and physically assault you, or at least want to. In organized sports (soccer, ice hockey, and American football, for example), the symbolic competition of a game with clear rules often breaks down, resulting in actual physical violence. Cultures clearly differ in the extent to which recourse to violence, or at least threat, is compatible with respect and prestige. Honor cultures, as described by Nisbett and Cohen (1996), appear to link rank, prestige, and capacity for effective violence, as do the Yąnomamö (Chagnon 1977). Fessler (2006) shows how the "male flash of anger" can be used strategically, in social interaction. In real life, seeking prestige as opposed to seeking to dominate

eminence as researchers; professors who are practicing physicians seem to find it easier to attract the attention of the students.

through fear are often tactics with the same strategic goal, that of achieving high rank in the hierarchy.

Both mathematical models and experimental design necessarily and legitimately simplify complex social reality. Thus, hierarchical relationships based on fear (agonism, dominance) may be treated by researchers as separate and distinct from those based on respect and affection (hedonic or prestige-related). But it is important not to confuse how social learning and cultural transmission occur in the real world with models and experiments—these supplement but can never replace naturalistic observation and ethnographic fieldwork. In the real world, the world in which we evolved, ambivalence rules, and "hedonic" and "agonistic" attention are likely to be intertwined, perhaps along with envy or even sexual attraction.

Begged Questions in Cultural Learning

Even to argue that "we choose our competitive areas strategically" begs a host of questions. To begin with a major theoretical issue, all social learning starts with social attention, and any attentional mechanism could, in principle, have served as an exaptation for some aspect of the social learning/filtering that is involved in culture "transmission." Prestige is not necessarily the only filter there is for filtering the transmission of cultural information, leading to the following questions:

1. Are there non-prestige related mechanisms for some kinds of cultural learning which play a role in cultural transmission/editing? For example, a mother–infant pair strongly attract our attention. Is child-care information learned through attention to mother–infant pairs regardless of the prestige of the mother and infant? Similarly, danger is an attention attractor: Is danger-related learning independent of the prestige (or other index of relative standing) of the individual(s) from whom we learn about the danger? Finally, we tend to pay close attention to our rivals: does rivalry lead to cultural learning and therefore information transmission?
2. Alternatively, is prestige/relative standing the primary gateway for cultural learning/editing? In that case, we would expect to find conceptually simple evolved mechanisms—switches—that merely determine to which individuals in which situations, given our current age, our gender, and our self-evaluation, we accord prestige and therefore from whom we learn.
3. Are there evolved algorithms that cause us to act as if we were weighing our past history of success in various domains against the local relative standing of each domain vis-à-vis one another? For example, does the prestige of medicine outweigh the difficulty I have in studying it, as opposed to the ease with which I can learn the lower-ranked field of automobile mechanics? (This is what Barkow [1989] refers to as the size-of-frog versus size-of-puddle problem.)
4. Do high-ranked individuals abuse their prestige power by deliberately putting self-serving information into the cultural information pool? This possibility was previously discussed under the "Culture is not necessarily adaptive" subhead-

ing of "Elites appropriate." Certainly, cultural information often seems to favor some groups at the expense of others, e.g., the Hindu caste system, the privileges of the aged in gerontocracies, or the genital mutilation of women and the various other efforts to control female sexuality that are common, cross-culturally: Is it possible to experimentally investigate self-serving cultural transmission on the part of the prestigious?

5. Do the criteria in terms of which we accord prestige to others change in a predictable manner, over the life course?
6. Does the apparent promise of high-value sexual partners affect our choice of domain of competition (and therefore strongly affect cultural learning)? The terrorist recruiters who created websites guaranteeing 72 virgins to male "martyrs" (that is, suicide bombers) obviously thought it did. Sexuality and current mating preferences may strongly influence the behavior and cultural learning of younger humans. This influence may be the product of specialized evolved mechanisms, as suggested in begged question #1, above; or it may be that sexuality influences our choices of whom we find prestigious, in accordance with begged question #2.
7. Did human intelligence in part evolve as a way to filter the filter, that is, to permit us to consciously decide which aspects of a high-status person's behavior are worth acquiring, and which aspects should be ignored?[6] That is, does intelligence mitigate our tendency to learn preferentially from the prestigious?

All of these questions merit further discussion but let us focus on the last: Prestige may filter cultural information but the filter needs a filter, otherwise we would be acquiring more useless than useful information from the high ranking. How do we determine which traits associated with a high-status figure are relevant to attaining that status, and which are irrelevant? That is, how do we isolate adaptive signal from useless (or even maladaptive) noise? One possibility, as was suggested, is that human intelligence in part evolved as a way to do this required secondary filtering. Intelligence may permit us to decide consciously which aspects of a high-status person's behavior to learn about and perhaps acquire ourselves, and which aspects are best ignored. If so, then intelligence and preferential learning from the high-in-status must have evolved in tandem. Support for this hypothesis would require experimental evidence establishing that we are highly discriminating in what we learn from a high-status person, limiting the information acquired or behavioral traits adopted to those likely to enhance our own relative standing. (The marketing industry's use of celebrity spokespeople suggests they are assuming that this hypothesis would not be supported empirically.)

[6] If much of cultural capacity and, indeed, human psychology itself, was indeed produced by sexual selection, then it was our biological "Big Bang;" a constant concern with sex is apparently our species' equivalent of Cosmic Microwave Background Radiation.

Subverting Cultural Transmission by Debasing Local Prestige

Our ancestors lived in small bands of hunter–gatherers; even with the coming of agriculture, 10,000–12,000 years ago, until very recently most of us still lived in small communities. In such settings, prestige as a filter for the transmission of cultural information works well. There is little ambiguity, in small communities, about who has which skills, about which people can keep their babies alive and healthy and which cannot, about who makes the best tools or brings back or grows the most food, about who is the best tracker and who can make people laugh or tell stories and who can settle disputes. Cultural transmission was largely face-to-face, for almost all of human history, and knowledge of relative standing and skill-level was public and largely accurate: Much of cultural learning was directly relevant to everyday experience.

Of course, human communities have rarely been totally isolated. In the past, the occasional traveler, trader, raider, or refugee would have potentially brought new knowledge. Those who gave them respect or fear might learn from them.[7] Local dignitaries, however, could still be respected, permitting the transmission of relevant, local/indigenous knowledge to continue.

In my own field experience (Barkow 1982), upon arriving in the town of Duduguru (near Lafia, in Nigeria's Middle Belt), during the 1970s, my host took me on a tour. He pointed out a woman to me and recited how many children she had had (18) and proudly told me that almost all of them were alive and well. He took me to see a young man playing with his toddler and spoke in awe of the number of hills for yam-planting this man had heaped in a single day. These were local successes, local highly respected individuals. In a society experiencing only slow to moderate change, it would have been adaptive indeed to learn from these people.

But Duduguru and its Migili people were experiencing change at a furious rate. Many of the young men had joined the Nigerian Army and had been shocked to learn that their revered elders, who followed Migili traditional, geography-bound religion (I was shown precisely where the gods live), were held in contempt by the dominant, non-Migili, Moslem population. Shortly before I began fieldwork, many of the young men had withdrawn from the traditional religion and the traditional age-grade social organization and even physically assaulted the elders, resulting in immediate and dramatic change. The religious, political, and economic organization of their society, a gerontocracy, collapsed.

Modern media, first the movies and now the internet, arguably may be turning the whole planet into Duduguru by breaking the ancient chain of cultural transmission. This is because the media present to us figures who apparently have more prestige than do our locally respected characters. They appear to be physically beautiful, in wonderful health, wealthy and powerful, feared or desired by other

[7] Respect or prestige should not be confused with affection or even the absence of enmity. The USA has been hated in much of the world by people who nevertheless readily adopt its entertainers and some of its cultural practices. American-style rap music and fast food, for example, are popular in many places in which America itself is not.

high-status people. Our local politician or police officer, hockey coach or business person, shrinks in standing when compared to the Hollywood or Bollywood star or the gold medal Olympic athlete or the bling-covered rapper with an entourage of attractive people. All over the world, children are learning preferentially not from members of their own community but from media figures whom they perceive as prestigious. Thus, they want to have their own bands, or to be rappers, or to learn kung fu, or to join political and religious movements. Local prestige is debased, and with it, local knowledge and the local path to prestige. When the baker is respected, or the man who can heap 300 hills of earth for yams in a day, or the careful mother who watches over her children and follows modern nutritional and medical practices, those according them prestige can learn readily what to do to achieve comparable success. Local figures provide locally relevant, useful, accessible knowledge. Films about superheroes do not. When the superwealthy are constantly in the news, the locally respected person of moderate means may cease to be a prestigious figure whom young people attend to and learn from. Even worse, proselytizing websites designed to recruit may glorify alien but apparently prestigious figures, deliberately detaching a young person from family and friends and teaching to kill. The world over, many parents are wondering who their children are.

Of course, this jeremiad is overblown. We know surprisingly little about the mechanisms of cultural transmission per se but we do know that they can differ from one knowledge domain to another (e.g., language is not learned the way in which we learn to cook or to do coiled basketry), and they likely change throughout the life course. At different ages, we presumably find different people with different attributes prestigious. Moreover, the change brought by prestigious media figures is not necessarily a bad thing. Larkin (1997, 2008), for example, discusses how Hausa women of the Nigerian city of Kano have, after a diet of Bollywood films, been demanding more romance from their partners! It may be, however, that prestige-based social learning is most salient during adolescence, when choice of identity and prestige criteria—that is, career—appears to be made. It is this group that may be most vulnerable to diversion from the transmission of local knowledge. (These hypotheses are presented here as suggestions for future research.)

Conclusions

Our tendency to hierarchize is vastly important for an understanding of human psychology and society. For the social scientist, social hierarchy can lead to social stratification, the castes and classes that form the scaffolding of large-scale society. Each social class then seeks to keep itself distinct from the classes beneath it, which is why the wealthy happily pay enormous prices for everyday objects—not in spite of their price but because of their price (Saad 2007)—and why professors who cannot compete on the basis of wealth may do so, for example, on the basis of knowledge of ethnic cuisine (Bourdieu 1984). For the marketing expert, understanding the search for prestige and distinction is the royal road to sales. For the psychologist, social hierarchy—rank—is intimately related to self-esteem, and

prestige can certainly boost self-esteem. We have seen, in this chapter, how prestige enables cooperation and, importantly, how it is a significant aspect of the process of cultural editing or filtering.

"Prestige" is of course an ordinary English/French term and it is always risky to seek to remake such a word into a precise, scientific concept (as does Barkow 1975, 1989). Prestige means according respect or approval but it is confusing to apply it to someone as a whole because we may approve of some of what another does but despise other aspects of their behavior: Approval of everything another does is not giving them prestige but adulation, a rather different phenomenon. For research purposes, it may be better to begin by contrasting agonistic with nonagonistic relative standing, and then to analyze the components of the latter; prestige is likely to be a large but probably not the sole element in this category; the current rather global approach to "prestige" may be leading us to pay less attention to other nonagonistic factors that may influence hierarchizing (such as age, gender, physical attractiveness, and verbal facility). We may also find that we need to speak of "domain-specific" respect or prestige, with the term referring not to dedicated evolved mechanisms but to specific spheres of information or skills. Within established groups, there may also be situation-specific social rank (the most respected person when we go hunting may trade places with another when we are talking about investment opportunities). True, contrasting "prestige" with "dominance" has thus far worked reasonably well in the laboratory (e.g., Cheng et al. 2013) and even in field settings (e.g., von Rueden et al. 2011; Reyes-García et al. 2009). We must never forget, however, that both at the individual and collective level, they are typically intermingled. Human relationships are componential, after all, and may include (for example) fear, affection, respect, envy, sexual attraction, and disgust, the dominant sentiment possibly shifting from moment to moment; with each shift a corresponding change in the amount of attention we are paying to a particular individual or to their current activities may take place.

Perhaps even more interesting than how we attend to and learn preferentially from the high-ranking is the consequences for the low: They become invisible. Even Chance, who first understood that we pay preferential attention to the high-in-status, failed to theorize about inattention to the low-in-status. It is embarrassing to realize just how much we know about high-ranking media celebrities, for example, even celebrities whom we profess to despise: We simply cannot take our attention away from them, while it takes a determined effort of will to pay attention to the poor, the lame, the homeless, or the guy who asks us for "spare change" (Barkow et al. 2012). This behavior looks like a lack of compassion but to some extent may simply be a product of evolved inattention. Presumably, our ancestors became our ancestors in part because they paid attention to the individuals who were potentially good mates, reciprocity partners, sources of resources or useful knowledge; or were dangerous. Paying attention to those who fit in none of these categories did not reli-

ably enhance fitness.[8] Today it continues to take an effort of will, moral exhortation, or religious or ideological commitment to attend to the low in relative standing.

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[8] One could argue that, in terms of evolutionary biology's costly signaling theory, attention and aid to those utterly lacking in social rank would be akin to the peacock's plumage, a signal that one's genetic endowment was so superior that one had resources to burn! However, such an argument should not be used to reduce the practice of good works to nothing but costly signaling!

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