# Chapter 7
# Prosocial Behavior and Social Status

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## Prosocial Behavior and Social Status

Among the Kwakiutl of Vancouver Island, chiefs actively compete with one another for prestige by hosting elaborate feasts known as potlatches (Piddocke 1965). At potlatches, items of wealth like canoes and blankets are generously donated to other tribes, and "rival" chiefs must in turn host an equally elaborate or more expensive feast to avoid losing prestige. This example is far from unique: people across the globe use generosity as a route to social status, either directly as in the Kwakiutl or indirectly as a means of acquiring the material or social capital necessary for social success including status competition (reviewed by Barclay 2010a).

By contrast, recent research suggests that high status people are *less* likely to be generous in several situations than low status people. Compared to low status people, high status people give less in experimental games, are less endorsing of charitable donations, and are more likely to endorse a number of unethical behaviors (Piff et al. 2010, 2012). Such results seem to contradict the suggestion that prosocial behavior is positively related to social status. What's going on?

Social status and prosocial behavior are ubiquitous in human interactions, but it is not necessarily obvious how and why they should interact. Does prosocial behavior affect one's social status, and if so, when and to what extent? Or does one's social status affect one's prosocial behavior, and if so, does it increase or decrease prosociality? The current chapter examines the interactions between social status and prosocial behavior, in both directions of causation: how prosocial behavior affects the acquisition of status, and how possession of status affects prosocial behavior. We

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will also discuss how (and why) the effects of status on prosociality depend on how status changes the costs and benefits of prosociality by affecting factors like people's (in)dependence, vested interest in group members, ability to be prosocial, and desire to maintain status. Before diving into the details, we must first define "status" and "prosociality" and explain why we should predict that they will affect each other.

## What is Status? Why Connect Social Status and Prosociality?

Social status includes, but is not limited to, constructs such as socioeconomic status (SES), social class, resource-holding potential, and social influence. Broadly defined, it refers to the influence one has over group decisions and over the distribution and use of valuable resources, such as food, territories, mates, and coalition partners (reviewed in Cheng et al. 2010). These resources are essential for survival and reproduction, so controlling them results in higher-status individuals having higher reproductive fitness in humans and other primates (e.g., Mealey 1985; Nettle and Pollet 2008; Pusey et al. 1997). Natural selection "designs" organisms to strive for and desire things that positively impact reproductive success (e.g., food, sex, and safety), so it should be no surprise that the pursuit of status is pervasive in human (and nonhuman) social life (see the other chapters in this volume). Of course, people need not be aware of any link between status and reproduction: status motives are a *proximate mechanism* that triggers behavior within the individual, but the *ultimate function* of possessing those motives (i.e., the reason why those motives evolved in primates) is because possessing high status brings survival and reproductive benefits (see Tinbergen 1963 for this distinction between proximate and ultimate causes, see also Scott-Phillips et al. 2011).

Prosocial behavior refers to acts that increase the well-being of other individuals, often at a cost to oneself. Why connect this with status? There are at least two reasons. Firstly, prosocial behavior can be used to help achieve status. Researchers distinguish between two types of status: *dominance*, which typically involves the imposition of costs on others; and *prestige*, which typically involves the distribution of benefits to others (Henrich and Gil-White 2001; Cheng et al. 2013; see Cheng and Tracy, Chap. 1, this volume). We will argue that prosocial behaviors like generosity, public service, and enforcement of group norms can be used to increase or maintain status by either: (1) leading directly to prestige-based status, and (2) directly resulting in material gains which will later affect how successful one is at either type of status competition (dominance or prestige). Table 7.1 outlines some of these ways that prosociality results in material gains.

A second reason to connect status and prosociality is that possessing status can change the costs and benefits of engaging in prosocial behavior. For example, some forms of cooperation can help the cooperator avoid punishment; if high status individuals are able to avoid punishment due to their status, they may have less need to engage in those forms of cooperation. One specific case of this is with tax

**Table 7.1** People who help others can benefit in a number of ways, as outlined by the theoretical concepts below (reviewed by Barclay and Van Vugt in press). These can all affect the acquisition of status either directly (e.g. acquisition of prestige), or because the return benefits from helping others will put the helper in a better position later when competing over status in more traditional ways. People need not be aware of these benefits when they help. The explanations below are not mutually exclusive, because more than one concept may be involved in the explanation for a given phenomenon. For each of the theoretical rationales below, we also outline potential connections with status, especially ways in which the possession of status could change the costs and benefits for helping

| Theoretical concept | Explanation | Why help? | Examples | Connections with status |
|---|---|---|---|---|
| Hamiltonian nepotism (e.g. Hamilton 1964) | Helping kin | Inclusive fitness gains: Kin are statistically likely to carry copies of rare genes, so genes that cause nepotism are benefiting copies of themselves | Parental care; hiring relatives | Kin support each other in status competition; high status individuals are more likely to be related to group members (i.e. more nepotistic incentives to help group members) |
| Reciprocity: direct or indirect (e.g. Trivers 1971; Nowak and Sigmund 2005) | Helping that will likely be repaid either directly by the recipient or indirectly by others in the population who observe the help | Reputational benefits: the average gains from receiving help later outweigh the costs of helping now | Lending money; "Secret Santa" gift exchanges; exchange of coalitional support ("you scratch my back and I will scratch yours") | Gains from reciprocity can be used for status competition (e.g. coalitional support); high status individuals can help at lower cost but might also need less reciprocation |
| Stake or vested interest (e.g. Roberts 2005; Tooby and Cosmides 1996) | Helping those whose well-being is directly valuable to you | Stake in recipient's welfare: the benefits from the ongoing relationship outweigh the costs of helping | Giving coffee to your driver at night; participating in collective defense of one's group; saving a researcher who is about to discover the cure for your disease | High status individuals benefit more from the group's existence; other group members may have greater vested interest in the well-being of prestigious individuals |
| Avoiding punishment (e.g. Yamagishi 1986) | Helping others when a failure to do so would result in punishment | The cost of helping can be less than the cost of being punished for not-helping | Paying taxes; taking one's turn at some duty (e.g. jury, sentry) | High status individuals may be more able to evade or avoid punishment |

**Table 7.1** (continued)

| Theoretical concept | Explanation | Why help? | Examples | Connections with status |
|---|---|---|---|---|
| Byproduct mutualism, including Volunteer's Dilemma (e.g. Clutton-Brock 2009; Diekmann 1993) | Performing actions that benefit yourself and just happen to benefit others also | The benefits to others are an indirect consequence (a.k.a. an "externality") of an otherwise self-benefiting action | Shoveling a sidewalk that others also use; vigilance against predators or threats; fighting common enemies; hunting food that others then scrounge | If one person dispenses externalities, then others confer prestige upon them in exchange for access to those externalities; high status people may pay lower costs for helping or receive a disproportionate share of public goods |
| Costly signals within biological markets (Barclay 2013; Smith and Bird 2000) | Helping others will advertise a trait that is desirable to others (e.g. resources, abilities, willingness to help) | Increased likelihood of being chosen by others for valuable social partnerships and/or avoided as enemies | Extravagant public philanthropy (to signal resources); hunting and sharing difficult-to-acquire game (to signal abilities); unpaid internships or volunteering (to signal willingness to help) | Others directly confer status on those who help; high status individuals can more easily pay the costs of extravagant help; low status individuals pay lower opportunity costs for performing mundane help (see Barclay and Reeve 2012) |

avoidance: paying taxes contributes to group benefits, and failing to pay taxes can result in fines and punishment, but for rich individuals or corporations it is more cost-effective to avoid both taxes and punishment by hiring accountants to find tax loopholes, lawyers to defend against legal charges, and/or lobbyists to influence tax legislation. Table 7.1 outlines a variety of ways that status can alter the relevant costs and benefits for different kinds of prosociality (see also Barclay and Reeve 2012).

These two links between prosociality and status—using prosociality to achieve status and status affecting the cost/benefit ratio for prosociality—can help explain the apparently discrepant findings described at the outset of this chapter. Let us examine each of these links in turn.

## Helping in Order to Gain Status

Evolutionary theory identifies many ways that those who help others may benefit from doing so (see review in Barclay and Van Vugt in press). For example, those who help others are more likely to receive help when in need themselves (Trivers

1971; Nowak and Sigmund 2005). Helping may also communicate information about the helper's ability or willingness to confer benefits upon others, such that people choose helpers as partners and allies and/or avoid them as enemies (e.g., Barclay 2013; Smith and Bird 2000). Alternately, helpers may have a vested interest in the well-being of those who they help, perhaps because they rely on the recipients in some way (e.g., Roberts 2005; Tooby and Cosmides 1996). Table 7.1 outlines various ways in which helpers could benefit from their actions (for a full review, see Barclay and Van Vugt in press). These returns put helpers in a better position to compete with others over status, and sometimes directly lead to an increase in prestige. Do these strategies work, and do people who help more tend to receive higher status? Below we review laboratory and field data from various disciplines, such as economics, psychology, and anthropology, which suggests that they do.

## Field Data

Big game hunters from diverse traditional societies receive more reproductive benefits than nonhunters (e.g., Hill and Kaplan 1988; Smith et al. 2003; Smith 2004). For instance, the Ache, who hunt big game in Paraguay, share their hunted meat with members of the tribe, and the best hunters have more sexual partners than other men do (Hill and Kaplan 1988). Similarly, among the Meriam turtle hunters from the Torres Strait, hunters who share turtle meat have higher reproductive success: Hunters, compared to age-matched nonhunters, have earlier first mating experiences, more children, and have access to more desirable females (Smith et al. 2003; Smith 2004). Hunters even purposefully aim their hunting efforts toward difficult targets to advertise desirable qualities (i.e., physical and resource-acquisition abilities), and compete among each other for the title of best hunter, to gain status within the community (Hawkes and Bliege Bird 2002; Smith and Bird 2000).

Much like the Kwakiutl potlatches, various other traditional societies regularly engage in ceremonies to showcase a tribe's status. Numerous New Guinean tribes, such as the Metlpa, Enga, and Gawil, perform elaborate exchanges during rituals known as mokas (Brown 1978). In order to signal a tribe's wealth and status, large pigs are exchanged. Pigs must be in mint condition to avoid humiliation and decrease in status: A tribe able to give away several large and fattened pigs effectively advertises their access to highly indispensable resources. Such exchanges are extremely important not only for the group but also for the individual (Brown 1978). After the exchange, pigs are cooked and served in a large feast where males often propose marriage to females of neighbouring tribes. If a male's tribe contributes too few pigs, or small pigs, to the moka exchange, then the loss of a tribe's reputation could result in the rejection of marriage initiations. Thus, generosity during elaborate ceremonies, such as mokas and potlatches, can serve as a means for tribes to boost, or maintain high, social status.

The previous three examples have focused on prosocial actions signalling resources and/or physical ability as a means to status. Actions that simply signal one's good character can also result in reputational benefits. For example, the Shuar

people of Ecuador highly value helpful contributions to community engagement (Price 2003). In fact, the more one gives to the community (via attendance of community meetings, offered labour for community based needs, and years worked in the community public office), the more the individual is perceived to have high social status. These high status individuals relish in their ability to place sanctions on those who fail to contribute a fair share to the community, and are deemed kind and altruistic for their generous role in collective action (Price 2003). Altogether, these various field examples show that people can gain status and reputational benefits by signal access to resources, physical abilities, or simply one's good character.

## Laboratory Evidence

Across the globe, generosity is not only prominent in the field but also within laboratory settings. Henrich et al. (2001), for example, conducted a cross-cultural study that examined prosocial behavior in fifteen small-scale societies, including herders, horticulturalists, and agriculturalists from twelve countries across five continents. Participants played an anonymous one-shot ultimatum game, whereby one participant (a "proposer") was given a set amount of money equivalent to one or two days' wages, and was asked to divide this amount with another participant (the "responder"). A "proposer" could offer any amount to his/her partner, and if that "recipient" were happy with the offer, he/she would accept it and both participants were allowed to keep the money. If the recipient deemed the offer unfair, however, he/she could reject it and both parties would leave empty handed. Instead of acting out of rational self-interest, whereby the "proposer" would offer the least amount possible and the recipient would accept any amount of money (because any amount of money would be better than leaving with nothing), participants across societies consistently made nontrivial offers to their partners. Additionally, participants in some societies made hyper-generous offers. Follow-up studies have shown similar results with other measures of prosocial behavior (Henrich et al. 2006, 2010). Such results initially appear to be irrational, but could be expected when viewed in light of evidence of the status benefits associated with prosociality (e.g., Barclay 2004; Hardy and Van Vugt 2006; Price 2003; Van Vugt and Hardy 2010; Willer 2009).

Multiple laboratory studies show that prosocial people tend to receive social benefits from others. One way to demonstrate this is to give people the opportunity to act positively or negatively toward helpers. For example, Barclay (2004, 2006) had participants play a cooperative game where people could contribute money toward a group fund which benefited all group members, and then allowed participants to entrust money to other participants based on their reputations. People who contributed more to the group fund were entrusted with more money than people who contributed less. Similar results have been found by other researchers (e.g., Clark 2002; Milinski et al. 2002a; Semmann et al. 2004; Van Soest and Vyrastekova 2004). People who contribute toward their groups are also chosen more often as interaction partners (Barclay and Willer 2007; Sylwester and Roberts 2010), preferred as leaders (Milinski et al. 2002b), rated as more desirable partners for long-term

relationships (Barclay 2010b), and are perceived to be trustworthy and have high social status (e.g., Barclay 2004; Hardy and Van Vugt 2006; Price 2003; Van Vugt and Hardy 2010; Willer 2009). Uncooperative people tend to receive verbal criticism or even more tangible punishment (e.g., Barr 2001; Fehr and Gächter 2002; Yamagishi 1986).

For helping to be a useful means of acquiring status, other people must be aware of the help. If status motives underlie helping behavior, we should expect people to be more cooperative when information about their actions will be available to others. Indeed, the tendency for generosity or cooperativeness to decline as anonymity increases is well established by theory and evidence from economics (Hoffman et al. 1994; Andreoni and Petrie 2004; Rege and Telle 2004), psychology (Kurzban 2001; Barclay 2004), biology (Barclay and Willer 2007; Milinski et al. 2002a, b; Sylwester and Roberts 2010; Wedekind and Milinski 2000), and political science (Bixenstine et al. 1966).

Even exposure to a subtle cue of observation, an image of watching eyes, has been shown to increase generosity (Haley and Fessler 2005; Mifune et al. 2010; Oda et al. 2011; Rigdon et al. 2009; Nettle et al. 2013), contributions to publicly shared resources (Burnham and Hare 2007), and condemnation of theft and deception (Bourrat et al. 2011). This "eyes effect" seems to be motivated by a concern for reputation (Oda et al. 2011) and has also been shown to affect various forms of real world cooperation, including charitable donations (Ekström 2011; Powell et al. 2012), garbage clean-up (Ernest-Jones et al. 2011; Francey and Bergmüller 2012), and donations to a public good (Batson et al. 1997). The eyes effect emerges most reliably when there are fewer real observers around (Ernest-Jones et al. 2011; Ekström 2011; Nettle et al. 2013) and may not last very long (Sparks and Barclay 2013). Despite these limits, strategic placement of reputation cues may be an effective way to increase cooperation in otherwise anonymous settings (see Barclay 2012 for a discussion).

People can gain status not only by giving or helping others but by enforcing norms of cooperation. Many researchers have noted that people contribute more to their groups when noncontributors can receive punishment. But why expend the cost and effort to punish others? Barclay (2006) used a cooperative group game to show that people readily paid to punish those who do not contribute toward a group fund that benefited all group members, and that the people who paid such costs were perceived by other participants as being more respected, trustworthy, and group-focused than nonpunishers. Those who punished noncontributors were also entrusted with more money, demonstrating a tangible benefit for enforcing norms (see also Nelissen 2008).

With the benefits gained from a prosocial reputation, it is not surprising that recent evidence has shown individuals actively competing to be more generous than others, a notion known as competitive altruism (e.g., Barclay and Willer 2007; Roberts 1998; Sylwester and Roberts 2010). Barclay and Willer (2007) found evidence of competitive altruism by having participants complete a prisoner's dilemma game in groups of three. In the first round, two of the three participants (i.e., participant A and B) engaged in a one-time cooperative task where each could donate money to the other at a cost to oneself, with any donations increasing in value (a "simul-

taneous gift-exchange"). In the second round, the third participant (i.e., participant C) did this same cooperative task with one of the other two (i.e., with either participant A or B) in one of three experimental conditions: Participant C was either (1) randomly assigned a partner and given no information of the partner's behavior in the previous round, (2) randomly assigned a partner and informed of the partner's behavior in the first round, or (3) allowed to choose a partner after gaining knowledge of the behaviors of potential partners in the previous round. Barclay and Willer (2007) showed that participants A and B escalated their levels of prosocial behaviors when participants C were able to choose partners. Using an almost identical experimental design, Sylwester and Roberts (2010) found similar results in that participants were less prosocial when individuals were randomly assigned partners, and most generous when interaction partners were explicitly chosen. These studies show that individuals will compete to be more generous than others whenever it will affect their reputation and their access to social partnerships (for a review, see Barclay 2013).

## *Priming Status Motives*

Some research has also examined how people behave when status motives are activated experimentally (e.g., Griskevicius et al. 2009). Consistent with the idea of competitive altruism, this research finds that a desire for status can lead people to become more prosocial and self-sacrificing, such as by choosing prosocial products (Griskevicius et al. 2010). For example, consider the reason why over a million Americans have bought a Toyota Prius, a popular Hybrid gas-electric car. In one study Prius owners were asked "What was your primary motivation for buying the Prius?", and the overwhelming majority—66 %—said they bought a Prius because they wanted to be environmentally friendly (Topline 2007). But while many people say they purchase green products such as the Prius to do good for the environment, a consideration of competitive altruism suggests that rather than seeking to help Mother Nature, consumers might instead be seeking to help themselves—by going green to be seen.

To test this idea, researchers had people choose between two cars—a luxurious nongreen model and an equivalently priced but less luxurious green Hybrid; the latter sported an enticing "H" (for Hybrid) to publicly proclaim the owner's pro-environmental concern and awareness. Before people made their choices, though, the researchers activated status motives in half of the participants. These subjects read a short story in which they imagined arriving for their first day at a high-powered job, where they would be competing with several others for an opportunity to move up into a prestigious corner office; this story had been used in previous experiments to cause people to seek the things that would get them status (Griskevicius et al. 2009). The study revealed that status motives had a dramatic influence on people's car choices (Griskevicius et al. 2010). Without a desire for status (in the control condition), most people chose the top-of-the-line combustion car model over the dinkier Hybrid. But when status was activated, people's choices reversed. More than half of

the status-minded people chose the Hybrid. In fact, these go-getters also preferred other green products such as ecologically friendly dishwashers and recycled backpacks over their conventional counterparts.

Why did a desire for status lead people to forgo luxury and go green? Is it because these upward-bound risers were somehow inspired to be altruistic and self-sacrificing for the environment? Not exactly. Instead, a second study found that a status motive led people to go green only if they could show off their green wares to others (Griskevicius et al. 2010). If your neighbors could not easily see the sacrifices you're making to help the planet, then it was not worth it. The "going green to be seen" studies suggest that many choices that appear altruistic often belie a deeper desire for status that comes from appearing altruistic. From this perspective, a Prius is essentially a mobile billboard conspicuously advertising the owners' prosocial green concerns. Other studies have found similar results in different domains of helping: for example, being primed with romantic motives causes women to report more willingness to engage in prosocial behavior like volunteering to help others, and causes men to report more willingness to engage in heroic helping such as rescue others from dangerous situations, but this only appears when such acts are conspicuous (Griskevicius et al. 2007).

## *Applications*

Consideration of competitive altruism suggests that people are particularly motivated to compete for status through prosocial and environmental behaviors that can signal self-sacrifice. A key component of harnessing the desire for status to benefit the environment (for example) is that environmental acts need to be visible to others (e.g., Barclay 2012). For example, recall that status desires motivated people to seek green products only when someone was around to see it. This suggests that firms or organizations should provide people with visible signs or tags for choosing prosocial options, so that people can clearly display their self-sacrificing acts.

Competitive altruism also suggests that a particularly effective strategy to facilitate prosocial behavior is to publicize lists that rank the greenest or most philanthropic companies, celebrities, or ordinary citizens. Media mogul Ted Turner, for example, once bemoaned the influence of the *Forbes 400* list of richest Americans, pointing out that this publicized list discouraged the wealthy from donating to charity for fear of slipping down in the rankings. Perhaps it was not a coincidence that a public list of top philanthropists—the *Slate* 60—was established the very same year that Turner publicly pledged 1 billion $ to humanitarian relief. Similar types of publicized lists of "least polluting companies" in India have been remarkably effective at motivating firms to voluntarily reduce pollution (Powers et al. 2008), suggesting that people worldwide are willing to engage in self-sacrificing behavior to avoid appearing at the bottom of a status hierarchy.

Consideration of competitive altruism also has implications for the pricing of green and other types of prosocial products. This perspective suggests that some-

times increasing the price of a green product can lead that product to become *more* desirable because it signals that purchasers are prepared to incur costs. For example, after US tax credits for the pro-environmental Toyota Prius expired, sales increased by 68.9% (Toyota 2008). Although this increase might have been even larger had the tax incentive remained, pundits were similarly bewildered by Lexus's decision to begin selling a hybrid sedan priced at more than $ 120,000. Yet again, sales of the pro-environmental and ultra-expensive Lexus LS600h exceeded projections by more than 300% (Ramsey 2007).

When green products are cheaper than their nongreen counterparts, their desirability can decrease because such products might convey to peers that their owners cannot afford more expensive alternatives (Griskevicius et al. 2010). This means that making some green products cheaper, easier to buy, and more time-saving might undercut their utility as a signal of environmentalist dedication. A similar argument holds for all other types of socially responsible products. There is a careful balance between making such products expensive enough to serve as conspicuous signals of status, yet cheap enough to be usable by more than just the elite. For example, companies may wish to develop two lines of green products: an expensive line to appeal to the wealthy, and a cheaper line to appeal to as many others as possible (especially for privately consumed products). When it comes to applications, the idea of competitive altruism presents many fruitful directions. Whereas competition for status has often been viewed as an unsavoury endeavour, the same thirst for status can be channelled to facilitate socially beneficial rather than wasteful behavior. For example, encouraging competition on pro-environmental outcomes might motivate people and firms to voluntarily adopt more sustainable practices.

## Helping (or Not-Helping) as a Consequence of Status

> Power tends to corrupt, and absolute power corrupts absolutely. Great men are almost always bad men.—Lord Acton

The previous section described how prosocial behavior can be a means of accessing the material and social rewards that accompany elevated status, and how status-seeking can motivate prosocial behavior. Having already examined how prosocial behavior affects status, we now reverse the causal arrow and examine how status affects prosocial behavior.

Does achieving higher status change people's behavior? Experimental economists Ball and Eckel (1998) artificially conferred high status on half of their participants by presenting them a gold star in an award ceremony. After this simple manipulation, higher status players received better offers in bargaining simulations. In market games, higher status buyers paid lower prices and higher status sellers received higher prices. Ball and Eckel (1998) concluded: "the economic value of status is that it changes everyone's expectations about what is a reasonable outcome of an economic game… a mere star induces subjects to behave differently, even when it is awarded based on transparently random criteria." (p. 511) (see also Ball et al. 2001).

Why would a mere star change someone's behavior, let alone change behavior so reliably that everyone expects it? Such a simple cue probably changes people's expectations about what others will demand and will grant, and helps form a focal point for people to coordinate their behavior around (a focal point is any salient point that people naturally converge on when solving coordination problems; see Schelling 1960). Status differentials may be a common way to solve coordination problems (Eckel et al. 2010). On a deeper level, this simple manipulation is a window into a psychology that is powerfully designed for negotiating status relations and their effects on what one can and cannot do. In this section, we discuss how status changes the costs and benefits of social behaviors, and along the way we review and integrate evidence from several disciplines about the effects of status on prosocial behavior. The literature shows that possessing status can increase or decrease prosocial behavior, depending on how it affects the costs and benefits of prosociality.

We will discuss four examples of ways in which possessing status can affect the costs and benefits of prosociality (and thus affect levels of prosociality): by affecting people's dependence on others, their vested interest in others, their ability to be prosocial, and their need for status maintenance. There are many other ways, however, that possessing status could change the costs and benefits and benefits of prosociality. For example, unstable status hierarchies create greater opportunity costs for investing in prosociality instead of status competition, and thus increase high-ranking people's tendencies to manipulate group members (Barclay and Benard 2013). The costs and benefits of prosociality may also be different for status based on prestige versus dominance.

## Conceptual Links Between Status and Social Behavior

### *(In)dependence*

Greater resource access affords high status individuals more freedom and independence in the pursuit of their goals. By contrast, limited control of material and social resources leaves low status people more dependent on others to fulfill their needs and wants. As such, status-based differences in social dependence are associated with differences in social cognition, social emotion and social behavior, including prosocial behavior.

If someone's outcomes depend on forces outside of his/her direct control, then he/she would benefit from being more aware of social situations (and the influence of situations on behavior). Accordingly, lower-status people are more attentive to context and are more likely to favour contextual explanations of outcomes than are high-status people, who tend to endorse dispositional explanations (Krauss et al. 2009). Social context is especially important, because with heightened vulnerability to external forces and dependence on others comes a greater need to understand others' goals and feelings. Psychologists employing a variety of correlational and experimental methods have shown that lower status people are better at gauging the

emotional and mental states of others (Snodgrass 1985, 1992; Galinsky et al. 2006; Thomas et al. 1972; Rutherford 2004). Krauss et al. (2010) found that low socioeconomic status was significantly associated with greater accuracy in identifying the emotions experienced by another participant during a mock job interview. The extent to which each participant used contextual explanations on an unrelated task was an even better predictor of their accuracy in identifying emotions than their socioeconomic status, which supports the contention that differences in empathetic accuracy associated with status are caused by differential attention to the social environment (Krauss et al. 2010).

So, material circumstances and personal control influence social cognition and emotion such that higher status people tend to be more self-oriented, and lower status people more other-oriented, in their thoughts and feelings (Krauss et al. 2011). Piff et al. (2012) hypothesized that these tendencies would lead to predictable differences in antisocial behavior as a consequence of status. A series of experimental and correlational studies confirmed that higher class individuals are more likely to perform or endorse unethical behaviors including lying in negotiations, cheating to win cash, cutting off other drivers in violation of traffic laws, taking candy from children, and engaging in unethical business practices. Similar logic may explain why men with dominant facial and vocal characteristics are more unethical and aggressive (Haselhuhn and Wong 2012; Puts et al. 2012): those more capable of pursuing their goals independently derive less benefit from considering and acting on the interests of others.

Antisocial behavior does not necessarily imply a lack of prosocial behavior, so we need to explicitly ask: do the same patterns hold for prosocial behavior as for antisocial behavior? Because high status individuals are generally more independent, we should expect they'll be less attentive to the needs of others and thus engage in less helping behavior. Piff et al. (2010) found support for this hypothesis in a series of four studies, finding (1) people reporting lower subjective SES gave more money to an anonymous partner, (2) those who were experimentally made to feel of a lower social rank more strongly endorsed charitable donations than those made to feel higher ranking, (3) lower educational attainment and annual household income was significantly associated with more egalitarian social values and more trusting behavior in an economic game, and (4) people reporting lower past and current incomes assigned less work to a distressed partner (taking on more of it themselves) than wealthier individuals. These studies establish a clear association between high status and reduced prosocial behavior.

## *Vested Interest*

Being part of a social group is valuable, and so people directly benefit from efforts to preserve the existence of their groups (Barclay and Benard 2013; Kokko et al. 2001; Lahti and Weinstein 2005; Reeve and Hölldobler 2007). Within groups, those of higher status claim a disproportionate share of group benefits by definition (Henrich and Gil-White 2001; Reeve and Shen 2006) and thus are disproportionately harmed by threats to the group. As a consequence, they may benefit more than low

status individuals from helping behaviors that preserve group stability and viability, such as vigilance, group defense, and enforcement of group norms. In addition to receiving disproportionate benefits, high status individuals may have more kin in their groups, either because those kin helped them to attain status (Chagnon 1997) or because they used their status to produce more offspring (Mealey 1985; Nettle and Pollet 2008). This higher relatedness to group members—when present—could also cause high status individuals to be more prosocial than low status individuals. We look forward to tests of these predictions.

This prediction—that greater vested interests will cause high status people to help more than low status people—might seem to contradict the evidence presented earlier that high status people help less because the former are more independent. There is no theoretical contradiction here. Instead, we are pointing out how two different forces—vested interests versus independence—can push in opposite directions (Barclay and Reeve 2012). The relative importance of vested interests and independence will vary across situations and with different kinds of prosociality. If cooperation is the only way to manage threats to the group, threat conditions will reduce or eliminate the relative independence of goal-pursuit that higher status people normally enjoy; the champ might have many more ways to feed himself or find a mate than the chump, but the only way either can survive an impending massive attack by their hostile neighbors is through highly coordinated collective defense. Also, the tendency for high status people to be less considerate of the interests of others and more self-focused is less of an obstacle to helping when everyone's interests are aligned. The interaction of such forces requires more theoretical and empirical investigation.

## *Ability*

By definition, people with higher status enjoy privileged access to money, education, and valuable social institutions. Those who control more resources can deliver the same objective quantity of help at a lower personal cost (i.e., a lower percentage of their total resources), which may make them more likely to provide that help (Barclay and Reeve 2012). For example, if a person pays lower costs for providing a public good because of a greater ability, then that person is more likely to provide the public good (Diekmann 1993). Also, high status primates are more likely to intervene in others' conflicts than low status primates, because the former are less likely to get hurt doing so (Silk et al. 2004). We should predict that whenever possessing status results in a greater ability to help others at a lower personal cost, we should predict that high status people will provide more help (all else being equal).

## *Status Maintenance*

We've discussed how prosocial behavior can be a means to increase one's status. Similarly, dispensing valued help can aid high status individuals maintain their

privilege. Group leaders who are insufficiently generous are often criticized by group members, which can lead to a loss of status (Boehm 1999). After all, subordinates will only follow a leader if they gain by doing so (Van Vugt 2006), so if a leader does not share then it will reduce others' willingness to follow him/her.

*Noblesse oblige* refers to a social norm obliging powerful people to act benevolently toward those less privileged. Fiddick et al. (2013) conducted a cross-cultural study investigating the noblesse oblige phenomenon. Their experiment asked participants to imagine themselves in a hypothetical carpooling arrangement between a (high status) factory boss and his (low status) employee in which one of the individuals was withholding the agreed-upon fuel contribution. Participants who were asked to the take the boss perspective were more tolerant of the noncompliance and more willing to continue the arrangement than those taking the employee perspective. Another study paired German children attending schools of varying levels of prestige for a "Dictator Game" (i.e., one person is given money and decides how much to share with a recipient). The naturally occurring status differences were highly predictive of generosity: the students of the highest status schools displayed noblesse oblige toward students of less prestigious schools; ingroup favoritism also occurred but was less evident in pairings with less pronounced status differences (Liebe and Tutic 2010; Fiddick et al. 2013).

Earlier we showed evidence that high status people were *less* generous (because their independence makes them less attentive to the needs of others). The noblesse oblige phenomenon involves *more* generosity (e.g., tolerance of noncompliance, financial donations) by high-status individuals, but only in situations where status differentials are clearly invoked. Once again, higher status people seem to be more discriminating helpers. That noblesse oblige serves a status maintenance function seems consistent with other anthropological findings. If this noblesse oblige only comes out when pre-existing status differentials are clearly invoked, then we should also predict that reactions to noblesse oblige will depend on how clear the status differentials are. People should resent it when others attempt to inappropriately display noblesse oblige if there is no clear pre-existing status differential, given that one person's gain in status is someone else's loss in relative status (Barclay 2013). Refusing others' generosity may be a strategy for resisting the unwarranted imposition of inferior status (Henrich et al. 2005; see also Nadler and Halabi 2006; Zahavi and Zahavi 1997).

## Summary, Conclusions and Applications

We started with the question of whether prosociality affects social status, or vice versa. The evidence shows that the causation is bidirectional. Laboratory and field evidence both show that prosociality can be used to gain or maintain prestige, or to acquire the material and social capital necessary for status competition. Once acquired, possessing status then changes the costs and benefits for engaging in prosocial behavior, for example because possessing status will affect one's level of independence and vested interests in fellow group members, one's need for recip-

rocation from others, or one's ability to be prosocial. When we see how possessing status can increase some benefits of prosociality (e.g., by increasing vested interests) while reducing others (e.g., less dependence on others means less to gain from helping), it becomes clear that status will be positively associated with prosociality in some contexts and for some types of prosociality, yet negatively related with prosociality in other contexts. We should predict that when a particular type of benefit is particular salient in a given context, then it will carry more weight in terms of affecting behavior. We must also remember that there are many types of prosociality, each with different benefits, performance costs, and opportunity costs, so variables like status can affect them all differently (Barclay and Reeve 2012).

How can we use this knowledge? Two possibilities are immediately obvious. The first is to alter the cost-benefit ratio for prosocial behavior for all individuals, not just high status persons, as possessing status is just one way to affect costs and benefits. The second is to provide opportunities for people to gain a good reputation for prosocial behavior, as this increases prosociality. For example, we can use status motives to promote sustainable products and responsible consumerism. This will require greater visibility and branding of such products, and finding the fine balance between status symbols for the wealthy and products available to the most people possible. We may even try to incite competitive altruism by explicitly comparing the generosity of different individuals, giving the most recognition to the most generous individuals (e.g., expanding the *Slate 60* list of philanthropists), and allowing opportunities for the most generous individuals to selectively assort with each other. When status is based on prestige, we can demand noblesse oblige from those of high status as a condition of granting them prestige. There are of course risks and unknowns with harnessing the power of reputation (see Barclay 2011, 2012), and these require careful consideration and further study, but the possible gains are immense.

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