Chapter 3
Do Status Hierarchies Benefit Groups? A Bounded Functionalist Account of Status

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Status hierarchies are said to emerge in all human social groups, in that some individuals inevitably develop more respect, prominence, and influence than others (Bernstein 1981; Davis and Moore 1945; Eibl-Eibesfeldt 1989; Hogan 1983; Leavitt 2005; Magee and Galinsky 2008; Mazur 1973; Parsons 1940; Schjelderup-Ebbe 1935; Tannenbaum et al. 1974; Van Vugt et al. 2008). But while status inequality may be ubiquitous in groups, this does not necessarily mean that this inequality is beneficial to them. Here we address the question of whether or not groups benefit from the presence of status hierarchies.

Broadly speaking, there exist two prevailing views of the effects of status hierarchies on group outcomes. *Functionalist accounts* view status hierarchies as vital organizing structures of social order. Scholars associated with this view note important ways in which status hierarchies support groups, for example, reducing intragroup conflict over influence and control (Barnard 1938) and motivating individual sacrifice for the collective good (Willer 2009). Much evidence supports this functionalist account, for example, by demonstrating that clear hierarchies are associated with more peaceful and effective interactions among group members (Bendersky and Hays 2012) and that the lure of higher status can promote group-oriented behavior (Griskevicius et al. 2010).

In sharp contrast, *critical accounts* of status hierarchies see them as divisive sources of inequality at the microlevel. Scholars of this view often note that such hierarchies allocate important social rewards like respect and influence not on the basis of individual competence, but instead based on characteristics assigned value arbitrarily by the larger culture (e.g., race, gender, social class; Berger et al. 1972). Consistent with this view, much empirical evidence demonstrates that status hierarchies can wreak severe damage on groups, for example, impairing collective performance (Anderson

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J. T. Cheng et al. (eds.), *The Psychology of Social Status,*
DOI 10.1007/978-1-4939-0867-7_3, © Springer Science+Business Media New York 2014

and Brown 2010), lowering morale (Smith and Tannenbaum 1963), and undermining group members' satisfaction and well-being (Pfeffer and Langton 1993). How can these findings be reconciled with those supporting functionalist accounts?

We see merit in both perspectives and here seek an integrated view that acknowledges the evidence and logic supporting each perspective.[1] Specifically, we believe an appropriate way to understand the social impact of status hierarchies is through a *bounded functionalist* perspective. Similar to the notion of bounded rationality (Simon 1957), which argues individuals strive to be rational but are limited in their ability to do so, we propose that group members strive to form functional hierarchies that will serve group goals, but are similarly limited in their ability to do so. Individuals aim to allocate status in a merit-based fashion that will benefit groups and their members, but their efforts are constrained by a number of critical obstacles such as the opacity of individual merit and the resisting force of self-interest among members. While group members' intentions to allocate status on the basis of merit result in hierarchies that are based on individuals' perceived value to the group, they are also challenged by the many difficulties in assessing merit and various undesirable behaviors that are encouraged by the lure of status incentives.

In the review below, we first outline the basic tenets of functionalist models of status and summarize empirical evidence supporting this broad perspective. We then discuss wide-ranging evidence that hierarchies often fail to live up to the ideals suggested by functionalism. Finally, we outline a bounded functionalist model of status and summarize evidence to support its claims. By doing so we describe how such a model might integrate and synthesize the many complex and seemingly contradictory findings within the status literature.

Functionalist Perspectives of Status

Many scholars across social scientific disciplines have adopted a functionalist view of status processes (e.g., Anderson et al. 2006; Blau 1964; Gruenfeld and Tiedens 2010; Homans 1950; Magee and Galinsky 2008; Simpson et al. 2012; Thibaut and Kelley 1959; Willer 2009). These scholars vary in some of their specific hypotheses or intellectual traditions, but converge on the idea that status facilitates group welfare by serving numerous social functions. More specifically, status hierarchies are thought to help groups solve some of their most fundamental problems.

One of these problems is collective decision making. Group members possess different perspectives and motivations, and therefore often disagree over the

[1] Note that here we specifically analyze the *group-level* effects of status hierarchies, setting aside the equally important individual-level effects of status hierarchies. Research is divisive on this issue as well, with some work suggesting that status-striving undermines individual well-being (Nickerson et al. 2003) and that much discrimination on the basis of characteristics like race, class, and gender occurs through status processes in groups. At the same time, other work emphasizes that status striving motivates collectively minded behavior (Willer 2009) and status attainment fosters happiness (Anderson et al. 2012) and health (Marmot 2004).

group's collective goals and the appropriate strategies to pursue those goals. Group members must find a way to make decisions in a peaceful, effective, and efficient manner (e.g., Cartwright and Zander 1953; Levine and Moreland 1990; Van Vugt et al. 2008). A second problem is group locomotion or collective action. Groups must motivate individual members to behave in ways that contribute to the group's success, even when such behavior might require personal investment and individual sacrifice (e.g., Hardin 1982; Kerr and Tindale 2004; Latane et al. 1979; Willer 2009). A third problem is the coordination of individual behavior. It is not enough for groups to have a clear vision and for members to act on it. They must also coordinate members' behavior so that they work in concert toward collective success—for example, by allocating complementary tasks and responsibilities to each individual, maintaining effective communication among members, and minimizing intragroup conflict (e.g., Blau and Scott 1962; Cartwright and Zander 1953; Hinsz et al. 1997; Levine and Moreland 1990).

Collective Decision Making

Hierarchies are thought to help groups solve problems with collective decision making by giving disproportionate control to higher-ranking members (Van Vugt et al. 2008). High-status individuals are granted greater control over decisions and allowed to direct others' actions, whereas lower-ranked individuals are expected to defer to others and keep their opinions to themselves (Bales et al. 1951; Berger et al. 1980; Goffman 1967; Keltner et al. 2003). This concentration of control at the top of the hierarchy is thought to help groups make decisions more efficiently and avoid conflict (Cartwright and Zander 1953; Van Vugt et al. 2008).

As evidence, Bales' classic studies of small groups found that the top-ranking group members spoke 15 times more frequently than the lowest-ranking group members and nearly five times more than the next highest-ranking members (Bales et al. 1951). Buzaglo and Wheelan (1999) found that higher-status members of a team dominated team discussions, speaking more than 75 % of the time, even though they represented only 30 % of the team's membership. Anderson and Kilduff's (2009) study of four-person teams found that 94 % of the time, teams chose the first proposal offered by any member as their final answer—and that the top-ranking members were nearly three times more likely to provide the first proposal than anyone else.

Empirical evidence also supports the argument that a clear hierarchy reduces intragroup conflict. When individuals agree over their relative status, groups have lower levels of conflict, higher levels of cohesion, and increased trust among their members (Anderson et al. 2006; Bendersky and Hays 2012; Kilduff et al. 2013). For example, Greer et al. (2011) found that teams with clearer hierarchies engaged in less process conflict, performing better on joint tasks as a result. In Tiedens and Fragale's (2003) studies hierarchical dyads (wherein one person behaved dominantly and the other behaved submissively) were more cohesive than egalitarian dyads (wherein both people behaved dominantly or both submissively).

In facilitating collective decision making, hierarchies are also thought to increase the quality of group decisions by giving disproportionate control to the individuals perceived to be the most competent. Decisions about a group's goals or strategies are often fraught with ambiguity and intimidating complexity. Competent individuals presumably make better decisions for the group than would those with lesser or average acuity (Berger et al. 1980; Davis and Moore 1945; Eibl-Eibesfeldt 1989; Ridgeway and Diekema 1989). Accordingly, groups strive to put their most competent members in charge by allocating influence to those who seem most expert.

Much evidence shows that groups accord higher status to individuals believed to possess greater competence, intelligence, and expertise (e.g., for reviews, see Bass 1981; Berger et al. 1980; Driskell and Mullen 1990; Lord et al. 1986; Van Vugt 2006). In fact, perceived competence may be the most consistent predictor of status across social groups, and the effects of perceived competence can be quite large. For example, Anderson and colleagues have found peer-rated competence in groups to predict status with correlations in the .60's and .70's (Anderson and Kilduff 2009; Anderson et al. 2012). Further, groups perform better when they put their most competent members in charge (Maier 1967; Roby et al. 1963).

Group Locomotion

In addition to collective decision making, groups also face the challenge of motivating their members to make costly contributions to group efforts. Groups must motivate individual members to set aside their personal motives and agendas and contribute to the group's collective endeavors. Status hierarchies are believed to provide social, material, and psychological incentives that help accomplish this goal (Barnard 1938; Blau 1964; Davis and Moore 1945; Frank 1985; Hardy and Van Vugt 2006; Homans 1950; Keltner et al. 2008; Thibaut and Kelley 1959; Willer 2009). For example, higher status involves greater respect and admiration (Berger et al. 1972) and provides higher levels of autonomy (Bales et al. 1951), power (Anderson et al. 2012), self-esteem (Leary et al. 1995), subjective well-being (Tay and Diener 2011), lower physiological stress (Gruenewald et al. 2006), and material resources (Willer 2009).

Groups allocate higher status to members perceived as contributing to the group's goals. Those perceived as making important contributions are granted higher status, whereas those seen as making fewer contributions, or even as undermining a group's success, are assigned lower status. By rewarding group-oriented behavior, status compels individual members to work toward the group's goals, facilitating collective success (Barnard 1938; Blau 1964; Thibaut and Kelley 1959). Individual members are driven to sacrifice and contribute to the group's welfare in order to earn the myriad rewards that come with being on top of the ladder.

Much empirical evidence validates these arguments. Field studies of organizations show employees who help their fellow coworkers are accorded higher status at work (Blau 1964; Flynn 2003; Flynn et al. 2006; Roethlesberger and Dickson 1939; Sutton and Hargadon 1996). Laboratory research has also found that individuals

who give more generously in social dilemmas are accorded a more "positive image score," reflecting their reputation as prosocial (Fehr and Fischbacher 2003; Nowak and Sigmund 1998). Researchers also find that individuals who contribute more to (or take less from) a group fund attain higher status because they are viewed as valuing the group (Hardy and van Vugt 2006; Willer 2009).

Moreover, research demonstrates that the lure of status encourages self-sacrifice for group ends (Willer et al. 2010). When individuals face the possibility of attaining higher status, such as when their behavior is more public, they tend give more generously (Fehr and Fischbacher 2003; Milinski et al. 2002a, b, 2006; Nowak and Sigmund 1998). Baumeister's (1982) review of the self-presentation literature found that when people believe their behavior is public, they give more to charities (e.g., Satow 1975) and help those in immediate danger (Gottlieb and Carver 1980). Therefore, people behave in a more group-oriented fashion when it will benefit their status the most. Studies of "competitive altruism" show that status motives can heighten individuals' generosity (Hardy and van Vugt 2006; Barclay and Willer 2007). Many tribes in the Pacific Northwest Coast engage in the ritual of potlatching, wherein tribal chiefs compete to give away their possessions in order to attain the most respect and prestige (Eibl-Eibesfeldt 1989). Griskevicius et al. (2010) also found status concerns can drive communally minded behavior: When they experimentally boosted participants' desire for status they preferred environmentally friendly products over better performing, more luxurious products. Further, consistent with prior work, this effect was more pronounced when purchases were made in a public setting, such as in a store, as opposed to shopping online at home.

In addition to promoting generosity and helpfulness, studies have shown that status can motivate stronger effort and performance. Research on social facilitation has long shown that in front of an audience (where status gains are at stake), people work harder and perform better on tasks at which they are well practiced (Zajonc 1965), and that these audience effects are driven by concerns over social evaluation of their competence (e.g., Bond 1982; Cottrell et al. 1968), suggesting status concerns might be key to the effect. Kilduff and colleagues' work on rivalry shows that when individuals compete with someone they deem a rival, they feel their status is at stake (Kilduff et al. 2012). These feelings of rivalry in turn motivate people to work harder to perform better (Kilduff et al. 2010). Research on Tesser's (1988) Self-Evaluation Maintenance model also shows that individuals work harder and perform better when their friends outperform them on a laboratory task or in school—especially when they feel personally invested in that domain (and thus likely feel their status is at stake).

Finally, by providing higher status to individuals who contribute more, groups also keep their strongest contributors committed to the collective and dissuade those individuals from leaving the group. Thibaut and Kelley (1959) argued groups use status to compensate individuals who provide a great deal of value to the collective, and who might have alternative groups they could join: "The status system constitutes a form of currency with which members upon whom the group is highly dependent may be paid off." (p. 232). This commitment mechanism has been proposed by a number of scholars (e.g., Barnard 1938; Homans 1950; Frank 1985; Willer 2009).

As evidence, many studies have found that when individuals are accorded higher status they are more committed to their group. Huo et al. (2010) found that when people felt they had higher status in their group they were more committed to it and less likely to leave. Helping establish the causal role of status on group commitment, Willer (2009) as well as Kennedy and Anderson (2013) led randomly selected individuals to believe their laboratory group accorded them high status and led others to believe their group accorded them low status. As expected, following this feedback, those in the high-status condition were more committed to the group.

Intragroup Coordination

Making decisions and motivating members is not the only problem groups must address to be successful. It is also critical for groups to coordinate their members' behavior so that their contributions combine in a maximally effective and efficient way. Hierarchies are thought to help groups address this challenge in a number of ways. As previously mentioned, hierarchies putatively facilitate an orderly division of resources and influence among group members (Barnard 1938; Berger et al. 1980; Chance 1967; Durkheim 1893/1997; Katz and Kahn 1966; Keltner et al. 2008; Leavitt 2005; Magee and Galinsky 2008; Marx 1844/1964; Mintzberg 1979; Parsons 1961; Tiedens et al. 2007). Differential allocation of responsibilities and control helps mitigate the common problem of having "too many cooks in the kitchen," wherein too many individuals try to take on a leadership role.

Hierarchies are also believed to allow information to flow between members more efficiently and for the integration of this information to occur more easily (Bavelas 1950; Leavitt 2005; Scott 1998; Vroom 1969; Williamson 1975). For example, in the prototypical pyramidal hierarchy, information travels up through hierarchical levels until it reaches group leaders. The leaders integrate this diverse information and make relevant decisions. Their decisions then flow down to each respective hierarchical level and are implemented according to leaders' plans.

Supportive evidence for these arguments can be found in classic laboratory studies of communication structure by Bavelas and colleagues (e.g., Bavelas 1950; Leavitt 1951; Christie et al. 1952). These studies experimentally manipulated the communication channels between different group members while they worked on a joint task, allowing some members to directly communicate with each other while precluding others from communicating. For example, in a four-person group with a "wheel" structure, one person was allowed to communicate with all others, while all other members could only communicate with this central person, and all messages thus had to flow through that central person. In contrast, in a "comcon" configuration, all members could communicate with each other, and a priori, no member was more central in the communication flow than any other. These different communication structures determined the steepness of the group's hierarchy (e.g., Bavelas 1950; Leavitt 1951; Shaw 1954). Structures such as the wheel tended to have a

more hierarchical structure, with the central members receiving more leadership nominations and having more control over the decisions made by the group (Mulder 1960). Shaw's (1964) review of this literature found that more hierarchical structures were advantageous for simple tasks, leading to faster solutions 78% of the time and to fewer errors 90% of the time.

Finally, hierarchies are thought to coordinate group activity by providing a system in which individual members model their behavior after high-status individuals. A large body of work has shown that individuals pay inordinate amount of attention to those with high status (Chance 1967; Fiske 1993; Keltner et al. 2003). In fact, some have considered attention and status to be so closely intertwined that attention should be viewed as a defining feature of status (Chance 1967). As evidence, Cheng et al. (2013) used eye-tracking techniques and found participants spent more time visually attending to high-status group members than low-status group members, even after they controlled for differences in how much the group members spoke. In fact, status accounted for 46% of the variance in where individuals directed their attention.

Attention to those with high status likely reflects a general preoccupation with status, but it also likely arises from a drive to model those at the top of the hierarchy (Eibl-Eibesfelt 1989; Festinger 1954; French and Raven 1959). By mimicking high-status individuals' behavior, individuals conform to group norms and behave in ways valued by the group. Anderson et al. (2003), for example, used laboratory procedures to induce and assess emotional responses in college roommates over the course of an academic year. They found roommates became emotionally similar over time; yet it was the roommates with lower status in the dormitory that made virtually all of the change necessary for this convergence to occur. In fact, high-status roommates' emotions at the beginning of the year strongly predicted low-status roommates' emotions at the end of the year ($r=0.69$). By contrast, low-status roommates' initial emotions did not significantly predict high-status roommates' later emotions ($r=0.19$).

Hierarchies also help to solve collective action problems by coordinating both sequences and amounts of contributions via status processes. In a laboratory study in which participants could contribute to a group fund, Simpson et al. (2012) found that higher-status individuals tended to be the first contributors, overcoming the collective action start-up problem. Further, once they have contributed, high-status individuals exert influence over other group members regarding how much they should give to group efforts. Kumru and Vesterlund (2010) randomly assigned participants to be high or low status in a social dilemma game context. In half the groups, high-status participants were designated to make the first decision as to how much they would contribute; in the remaining half, the low-status participant made the first decision. First-movers' contribution decisions were relayed to the second contributor, who then decided how much of his or her private endowment to contribute to the public good. They found lower-status second movers mimicked the contributions of high-status first movers far more than higher-status second movers mimicked first movers.

Status Hierarchies and Group Performance

Additional evidence supporting the functionalist perspective of status stems from studies examining the effects of hierarchy on overall group performance. For example, Carzo and Yanouzas (1969) examined 15-person groups tasked with estimating how much demand existed for a product in various markets and, accordingly, how much of the product they should order from suppliers. They found that groups performed better in a taller (three-level) than in a flatter (two-level) hierarchy. Maier and Solem (1952) found that groups working on a math task performed better when they had a leader than when they did not. Main et al. (1993) found a positive relation between pay disparity within executive teams and firm performance. Ronay et al. (2012) found that teams whose members differed in their power "mindset" or in their testosterone levels performed better in laboratory tasks. Halevy et al. (2013) found that pay disparities among members of professional basketball teams predicted winning percentages and a host of individual-level performance metrics (e.g., assists, defensive rebounds, field goal percentages).

Evidence of Dysfunction Wrought by Status Differences

The evidence cited thus far suggests that the case for functionalism is quite strong. A large number of scholars from diverse intellectual traditions have espoused arguments consistent with the functionalist view of status hierarchies. In addition, some evidence supports many of functionalism's basic claims, showing that clear status hierarchies can mitigate intragroup conflict and that status can promote group-oriented behavior. However, the above arguments and evidence notwithstanding, there is also considerable empirical support for the critical view of the effects of status hierarchies in which status differences have primarily deleterious effects on groups. Indeed, the empirical record paints a much more complicated picture than the functionalist ideal would suggest. It shows, for example, that status hierarchies are often not based on individual competence and commitment, and that hierarchical groups often fare worse than groups with flatter structures. We review this evidence below.

Breakdowns in the Status Organizing Process

Functionalists argue that groups strive to give higher status to individuals who are more competent and committed to the group's goals. By doing so, groups allocate influence and leadership on the basis of relevant skills, motivate individuals to make greater contributions to the group, and help retain their most talented and group-oriented individuals as members. However, much research suggests that groups often fail to accord status meritoriously, placing incompetent or less committed individuals in positions of high status. Failures of status allocation give the

wrong individuals disproportionate control over the group and its decisions, thereby decreasing the group's effectiveness (Barnard 1938). In this review, we focus on two individual characteristics on which groups strive to base status differences: task competence and commitment to the group. We do not mean to imply these are the only individual characteristics relevant to status (e.g., Anderson et al. 2001); but use them as examples because they are highly related to status standing in most group settings (Van Vugt 2006).

Task Competence High-status group members' duties and responsibilities can be social in nature; for example, they are often expected to inspire their group, keep the peace among its members, and facilitate communication between individuals (Van Vugt et al. 2008). However, in most group settings they also must understand the technical problems faced by the group. Having task competent people in charge helps groups perform better (for a review, see Bass 1981). Therefore, many groups prioritize task competence over other factors like social skills when allocating influence (Lord et al. 1980). On a team of engineers, for example, technical ability would likely be seen as more important than the ability to communicate.

However, groups often fail to base their status hierarchies on differences in task competence. For example, much research in the Status Characteristics Theory tradition finds that group members base status allocation on characteristics like gender, race, social class, and physical attractiveness, assuming that these characteristics are associated with general competence, even when they are not (Berger et al. 1972, 1980). Similarly, individuals higher in self-confidence are also more likely to be selected leaders (Edinger and Patterson 1983; Stogdill 1948), though self-confidence is not highly predictive of actual abilities (Dunning et al. 2004; Harris and Schaubroeck 1988).

One particularly telling case concerns the personality trait of dominance. An abundance of research shows that individuals higher in trait dominance tend to attain higher status than others in groups (Anderson and Kilduff 2009; Gough et al. 1951; Judge et al. 2002; Lord et al. 1986; Mann 1959; Megargee 1969). In fact, one meta-analysis found trait dominance to predict status in groups more consistently than any other individual difference variable, including intelligence (Lord et al. 1986). Another meta-analysis including 73 independent samples found dominance to have the strongest relation to status in groups of all personality dimensions examined (Judge et al. 2002).

However, dominance is unrelated to many of the competencies putatively required to attain status. For example, in prior research, individuals high in trait dominance attained status in groups that discussed an ethical dilemma (Aries et al. 1983), worked on mechanical tasks (Megargee et al. 1966; Smith and Foti 1998), and allocated funds to employees in a hypothetical company (Anderson and Berdahl 2002). It is difficult to believe that dominant individuals possessed any special expertise in ethical issues, mechanical tasks, or organizational compensation systems. Further, evidence suggests that trait dominance is largely unrelated to general cognitive abilities (Dodge 1937; Donahue and Sattler 1971; Gough 1949; Schippmann and Prien 1989; Smith and Foti 1998). Of course, dominance might be related to social skills

such as the ability to persuade others, but these social skills are often insufficient for successful leadership in the absence of technical abilities (Van Vugt 2006). The empirical evidence thus suggests that groups allocate status in part on the basis of differences in characteristics unrelated to competence, like gender, race, attractiveness, and dominance.

Commitment to the Group's Success A second individual characteristic on which groups strive to allocate status is group orientation (e.g., Ridgeway 1982). Groups are thought to have a greater chance of success when those at the top of the status hierarchy are committed to the group's well-being rather than their personal agenda. Examples abound of selfish high-status individuals in corporations, politics, and religious organizations who led their groups to disastrous consequences, and empirical research has documented the benefits of having prosocial people in high-status positions. A large meta-analysis covering over 85 years of research showed that agreeableness, which involves a greater concern for others (John and Srivastava 1999), is a significant predictor of leaders' effectiveness (Judge et al. 2002). In 14 samples that included leaders from over 200 organizations, Judge and Bono (2000) also found that agreeableness was consistently related to more effective leadership styles. Bass (1981) also summarizes a range of evidence that groups are more likely to thrive with collectively minded leaders and fail with selfish leaders.

However, despite the benefits of basing status on group orientation, studies suggest that much of the time groups fail to accord high status to prosocial individuals. For example, a meta-analysis showed that agreeableness has the weakest effects on leader emergence of all Big Five personality traits (Judge et al. 2002). Similarly, researchers have found null effects for agreeableness on status in diverse kinds of organizations (Anderson et al. 2008) and in social-living groups like dormitories, fraternities, and sororities (Anderson et al. 2001). McClelland and Boyatzis (1982) even found that individuals lower in the need for affiliation—which involves less of a desire for close and friendly interpersonal relationships—were more likely to ascend their organization's hierarchy. A recent study also found that groups tend to select more "social" rather than "prosocial" leaders, despite their intentions to select prosocial leaders (Livingston et al. 2010). And, even though women tend to be more prosocially minded and have more concern for others than men (for a review, see Feingold 1994), there is vast evidence that women are selected as leaders less often than men (for a review, see Eagly and Karau 1991). Not only do groups often fail to accord prosocial individuals higher status, they even sometimes systematically place more selfish individuals at the top of the status order. Recent research has shown that the desire for higher social rank is associated with selfishness (Willer et al. 2013), and studies have consistently shown that individuals who desire higher rank tend to achieve it (Flynn et al. 2006; McClelland and Boyatzis 1982; Winter 1988). Thus, while experiments find that, all things being equal, more prosocial individuals tend to be viewed as higher status (Willer 2009), other traits correlated with low prosociality (e.g., desire for status, dominance, gender) may often reverse this effect in field settings, with less prosocial people earning high rank as a result.

Status Hierarchies and Group Welfare

Another test of the functionalist view of status hierarchies is whether groups fare better when they have a more hierarchical status structure than when they have a flatter status structure. Groups with a steeper status hierarchy—that is, those with larger asymmetries in members' status—should function better than groups with a flatter structure. Above, we described a few studies showing that more hierarchical groups sometimes outperform flatter groups. However, much evidence also shows that groups with steeper status hierarchies can fare *worse* than those with flatter and more egalitarian structures, both in terms of performance and group members' attitudes.

In terms of group performance, Torrance (1955) examined three-person Air Force flight crews and found "real" crews (that had been actually working together for a long time) performed worse on a math task than crews of strangers constructed temporarily for the sake of the experiment—and that this effect emerged because the real crews were more hierarchical than the temporary crews. For example, when lower-ranked members of real crews knew the correct answer to the problem they were less able to convince the others to accept it. Becker and Blaloff (1969) also manipulated whether three-person groups had an appointed leader or not and had them perform a task in which group members estimated the demand for products based on a series of dimensions, finding that more hierarchical groups performed worse than flatter groups. Berdahl and Anderson (2005) measured the degree to which undergraduate student teams who worked on a group project together naturally formed more centralized leadership structures (i.e., leaders with more control over group activities), and found that more centralized groups performed worse on the team project and received lower project grades. Ivancevich and Donnelley (1975) examined 295 salespeople in marketing departments of three large organizations and found that those working in a more hierarchical organization performed worse (i.e., received fewer orders per client visited) than those working in a flatter organization.

Studies of compensation systems are relevant as well. Pay differences often signify asymmetries in status (Davis and Moore 1945; Desai et al. 2010; Frank 1985; Bloom and Michel 2002). For example, individuals use their relative pay as a sign of how respected and valued they are relative to coworkers—and thus as a sign of where they fall in the workplace status hierarchy (Desai et al. 2010). Studies of compensation systems also place doubt on the benefits of status differences, showing that greater discrepancies in pay across employees of organizations are associated with lower performance (Bloom 1999; Cowherd and Levine 1992; Hambrick and D'Aveni 1992; Pfeffer and Langton 1993).

Status hierarchies can also dampen group members' attitudes and affect. Shaw's (1964) review of communication structure studies found that in 89 % of the relationships he reviewed, there was a negative effect of hierarchy steepness on member satisfaction. Therefore, while more hierarchical structures facilitated better performance when the task was simple, they almost always predicted worse group

member satisfaction. Becker and Blaloff's (1969) aforementioned research found that groups working in a hierarchical structure were more frustrated than groups working in egalitarian structures. In Pierce et al. (1989), managers worked on organization simulation tasks in which their company was more or less hierarchical. In the more hierarchical organization, individuals had lower levels of organization-based self-esteem. Meltzer and Salter (1962) found that steeper hierarchies were related to lower job satisfaction, and this relationship emerged across organizations of different sizes. Smith and Tannenbaum (1963) found that more hierarchical chapters of the League of Women Voters had lower member loyalty; they also found that more egalitarian decision making in divisions of a delivery company predicted better morale. In a study of 2976 managers outside the United States, Porter and Siegel (1965) found that employees of organizations with steeper hierarchies were less satisfied than those in flatter organizations. Carpenter's (1971) study of schoolteachers found that teachers were less satisfied when working in a more hierarchical organizational structure; in particular they reported lower satisfaction with their autonomy and authority levels. Tannenbaum et al. (1974) found that less hierarchical organizations had higher worker motivation; though this effect did not extend to satisfaction. Ivancevich and Donnelley's (1975) study of salespersons found that working in an organization with a steeper hierarchy was related to being less satisfied and experiencing more anxiety and stress than working for a flatter organization. Again, studies of discrepancies in pay across employees show similar results for attitude-related outcomes (Bloom and Michel 2002; Pfeffer and Langton 1993; Trevor and Wazeter 2006; Wade et al. 2006). In sum, therefore, there is an abundance of evidence that status hierarchies can lead to worse group outcomes rather than better.

A Bounded Functionalist Account of Status

The above-reviewed body of research suggests that the links between status hierarchies and group welfare are complex. On the one hand, many studies support basic claims espoused by functionalists, suggesting that status differences can facilitate collective decision making, encourage costly contributions to group efforts, and coordinate group members' behavior. On the other hand, many studies portray status hierarchies as dysfunctional, placing the wrong individuals in high-status positions, basing influence on characteristics unrelated to actual competence, and dampening groups' overall morale and productivity.

What conclusions can be made from these contradictory findings? Should we eschew the functionalist view entirely? Some scholars believe so, arguing that status hierarchies do not emerge to serve any social function and instead are mere by-products of individual status striving and competition (Lee and Ofshe 1981; Mazur 1985). According to this perspective, status differences emerge because individuals compete for status, and some win these contests while others lose. The bases upon which rank is accorded are unrelated, or only loosely related, to individuals' ability

and willingness to benefit the group. The putative "functions" of hierarchies, such as reduced intragroup conflict and group member coordination are mere byproducts of resolved status contests. Once status competition has been decided, individual members tend to stop fighting (Bernstein 1981), and those higher in status take charge of allocating tasks and responsibilities.

However, based on the available evidence, we believe it is inappropriate to throw out functionalism entirely. Instead, we propose that a more accurate way to view status hierarchies is from a *bounded functionalist* perspective. This perspective is akin to Simon's (1957) notion of bounded rationality, which argues that individuals are not perfectly rational in maximizing their utility, as classic economic theory might suggest. Rather, they are constrained in a number of ways, including cognitive limitations and unavailable information. Individuals thus strive to make decisions rationally, but fall short given these constraints.

In a similar way, we believe group members generally intend to form functional hierarchies that will serve their goals effectively, but are limited in their ability to do so. Group members strive to place the individuals at the top of the status hierarchy who offer the most value to the group and to overcome problems of individual self-interest by offering status as a reward for costly contributions that benefit the group. However, group members often fail to arrive at status hierarchies that serve the functions they are intended to, precisely because of factors cited by scholars critical of status inequalities. In the following section, we outline some basic ideas of this bounded functionalist perspective and discuss some of the obstacles groups face in developing functional status hierarchies. In doing so, we outline why bounded functionalism might be the most accurate and useful view of status hierarchies.

The Difficulty in Discerning Individual Merit

Although groups might often allocate high status to people who are not the most competent or committed to the group's success, studies suggest that group members consistently *strive* to do so. As mentioned earlier, there tend to be very strong correlations between individuals' perceived competence and group orientation and their status in a group (e.g., Anderson and Kilduff 2009; Ridgeway 1982). That is, groups accord higher status to individuals they *believe* to be more expert or knowledgeable and to those they believe are committed to the group's success—even if in fact they often fail to allocate status to the people who actually are more competent or group-oriented. Similarly, when group members allocate greater status to individuals on the basis of factors like gender, race, and social class, they generally do so because they view these characteristics as markers of greater competence (Berger et al. 1972). Reliance on such characteristics often weighs more heavily on the group's status hierarchy than information on task-specific competence, leading to diminished group performance (e.g., Thomas-Hunt and Phillips 2004).

Evidence also suggests that group members have negative views of individuals who try to grab status in the group, but who may not be the most competent or group-oriented (Keltner et al. 2008; Ridgeway and Diekema 1989). For example, in

a study by Ridgeway and Diekema (1989), confederates attempted to attain higher status in a group through aggression and domination and not necessarily well-reasoned ideas and arguments. Those confederates were met with strong resistance by their group and failed to attain status. Anderson et al. (2006) also found individuals who claimed higher status than their group believed they deserved were rejected and ostracized (see also Anderson et al. 2008).

However, to successfully allocate status to those who are *actually* the most competent or group-oriented, groups must be able to discern those characteristics accurately in each individual member. As prior work has shown, this process is quite difficult. Individuals' levels of competence and group-orientation reside within them, hidden from others. In most group settings, there is little objective evidence of how talented or prosocial an individual is. Groups are thus forced to judge individuals' inner characteristics based on external observable cues such as outward appearance, nonverbal behavior, or style of speaking.

Take competence for example. As discussed earlier, groups use static characteristics such as gender, race, age, and physical attractiveness as cues of competence, even when those characteristics are wholly unrelated to actual knowledge or ability (e.g., Berger et al. 1972, 1980; Ridgeway et al. 1998; Thomas-Hunt and Phillips 2004). In addition, group members tend to use nonverbal behaviors to infer competence, such as whether the person uses more certain vocal tone (Driskell et al. 1993; Paulhus and Morgan 1997; Ridgeway 1987), speaks more often and in a fluid and assertive way (Carli et al. 1995; Driskell et al. 1993; Paulhus and Morgan 1997; Reynolds and Gifford 2001; Ridgeway 1987), speaks in a lower vocal pitch (Klofstad et al. 2012), uses more direct eye contact (Driskell et al. 1993; Imada and Hakel 1977; Mehrabian and Williams 1969; Ridgway 1987), and exhibits a relaxed and expansive posture (Carli et al. 1995; Imada and Hakel 1977; Ridgeway 1987). These behaviors, however, may not be related to actual competence either (e.g., Anderson et al. 2012). Thus, in trying to accurately discern individual competence, groups frequently misuse the cues available to them, thereby contributing to misalignment between merit and status.

In sum, the opacity of inner individual characteristics leads groups to sometimes accord high status to the wrong members. This misallocation of status likely helps explain the weak linkage between merit and status observed in many groups. Moreover, it might also help explain why steeper hierarchies often predict worse group outcomes. After all, if incompetent individuals are given a particularly disproportionate level of control in a group, one would expect that group to fare particularly poorly.

Individual Desire for Status

An additional obstacle to functional hierarchies is the human desire for status. Status strivings lead people to engage in a range of goal-oriented behaviors aimed at attaining and maintaining high status in their groups. Many of these behaviors can help promote group welfare, as described above; for example, the desire for status can spur prosocial behavior and contributions to the collective (e.g., Griskevicius

et al. 2010; Sutton and Hargadon 1996). At the same time, however, the desire for status can lead individuals to behave in ways that hamper group success. As many scholars have argued, humans have a powerful drive for status and the rewards it brings (Barkow 1975; Frank 1985; Hogan 1983; Lind and Tyler 1988; Maslow 1943). It appears that this strong motive can lead not only to prosocial acts but also self-interested, even antisocial, behavior.

For example, evidence suggests individuals take advantage of groups' reliance on external "competence cues" by behaving in ways that make them appear more competent or committed to the group's success than they actually are. The self-presentation and impression management literatures have widely documented the tendency to "self-promote" or signal one's competence to others (for reviews, see Baumeister 1982; Leary and Kowalski 1990; Schlenker 2012). People tend to publicly portray their competence in disproportionately positive ways, highlight their abilities and downplay weaknesses, and take credit for successes while blaming others for failure (Baumeister 1982). People also often defend past failed decisions, and even invest further in those decisions, rather than admit error (e.g., Staw 1976; Tetlock 2005).

The desire for status also appears to promote competitive behavior that is unhelpful to groups. For example, in a study by Godfrey et al. (1986), individuals trying to appear more competent avoided behaving positively toward others. Blau (1964) as well as Flynn et al. (2006) found that the desire for status led individuals to avoid asking others for help and assistance, requests that would be good for the group, but which individuals believe have the effect of granting higher status to others (Blau 1964; Flynn 2003; Flynn et al. 2006). Moreover, seeking help risks exposing one's own incompetence. As Tessler and Schwartz (1972) found, individuals were hesitant to seek help when failing on a laboratory task, except when they could blame their failure on external causes—thereby avoiding attributions of incompetence. The desire for status might also prevent people from agreeing with others' opinions, regardless of the strength of that person's argument (for a review, see Baumeister 1982). Therefore, the individual drive for higher status can diminish a range of interpersonal behaviors that would help the group, such as expressing positivity toward others, asking for help, and agreeing with and supporting valid ideas.

Some evidence suggests that people sometimes undermine others in pursuit of status, thereby harming relationships between individual group members. Kyl-Heku and Buss (1996) found that people exclude and derogate others in order to get ahead. Much research suggests that status motives can even drive aggressive behavior toward others deemed a threat (Borden 1975; Cohen et al. 1996; Griskevicius et al. 2009; Miller 2001). Research on Tesser's Self-Evaluation Maintenance model suggests people specifically undermine the performance of others who pose more of a status threat (Tesser and Smith 1980), and even distort others' performance downward (Tesser et al. 1984). Kilduff's work shows that people resort to unethical and cheating tactics to beat rivals who challenge their status (Kilduff et al. 2012).

In sum, the empirical evidence suggests that the human desire for status might impede the formation of merit-based hierarchies. While the lure of status can promote many behaviors that facilitate collective success, it also seems to promote

a host of behaviors that can dampen group functioning. Individuals seeking status often behave in ways that make them appear more competent or group-oriented than they actually are, they avoid interactions with others that might boost others' status, and they even can derogate others and act hostilely toward them.

Summary and Discussion

The evidence reviewed in this section suggests that while groups strive to form functionalist status hierarchies, they are constrained in their ability to do so by considerable obstacles. For example, while groups strive to base status differences on individual differences in merit, they are limited by the opacity of individuals' inner characteristics. It is quite difficult to know which individuals are more competent or group-oriented than others, and therefore groups make mistakes in allocating status across individuals. To make matters more complicated, group members' efforts to reward competence and group orientation create rewards for those individuals who can effectively feign these characteristics, leading them to jockey for status by making themselves appear more talented or group-oriented than they actually are. In fact, the individual desire for status appears to promote many behaviors that work against the putative functions of status hierarchies.

The bounded functionalist view suggests potentially fruitful avenues for future research. For example, future work could study which factors affect the degree to which group hierarchies are functional for the group. Based on the above review, we might expect hierarchies to benefit the group most when group members' relevant skills are more visible, the distribution of relevant abilities is unequal, and where group coordination is especially important, e.g., where group activities are highly interdependent (e.g., Halevy et al. 2013). Conversely, status hierarchies will likely be less beneficial, or even dysfunctional, in groups where task-relevant skills are unknown, difficult to perceive, or easy to feign, where relevant abilities are equally distributed, where status ambitions and task competence are negatively or uncorrelated across the group membership, and where group performance depends on eliciting high levels of participation from all group members.

Future research could also investigate various empirical implications of this bounded functionalist view. For example, our model may help explain why even very flawed status hierarchies are often stable and legitimate. Because group members largely intend to assign status on the basis of real merit, inaccuracies in the status hierarchy are largely invisible to them. Further, while many bases of status are generally unrelated to competence or group commitment (e.g., gender, race, dominance), other bases of status are relevant (e.g., specific skills, training, proven willingness to help the group), meaning that status hierarchies will often be "semi-functional." Hierarchies based on a mix of factors relevant and irrelevant to individual merit likely results in hierarchies that are positively, if imperfectly, correlated with individuals' value to the group. Such a positive correlation may be enough to create the impression that a given hierarchy is working to benefit the group, cloaking their imperfections, and helping them persist over time.

Conclusion

In trying to understand the ubiquity of status differences in human groups, many theorists have adopted the functionalist view that status helps social groups solve some of their most important problems. Much empirical evidence supports this perspective, showing that status facilitates collective decision making, encourages individual contributions to the group, and coordinates diverse members' behaviors. At the same time, however, much evidence also demonstrates that status hierarchies can undermine group functioning.

To synthesize these seemingly contradictory findings, we proposed a bounded functionalist view of status. According to this view, group members intend to allocate status in a way that encourages effective group functioning. However, groups are constrained in their ability to do so by a number of limitations and obstacles. These obstacles help explain why hierarchies are often not strongly related to merit, and why groups with larger status differences among members can outperform hierarchical groups with larger status differences among members: if less competent but highly self-interested individuals attain high status and others have far lower status, the group will likely fare worse overall.

This perspective is meant to provide an alternative to strictly functionalist or strictly critical accounts of status hierarchies. That is, status differences do not appear wholly beneficial for groups as strong versions of functionalism might imply. At the same time, status differences do not appear to always assign status arbitrarily, foster undesirable intragroup competition, and undermine group functioning as critical accounts might imply. Instead, status hierarchies appear to emerge from a flawed process originating from largely group-oriented intentions. Groups strive to form status hierarchies based on competence and merit, which would help facilitate their overall success, but are simply limited in their ability to do so.

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