STUDYING STATUS: AN INTEGRATED FRAMEWORK

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This paper reports development of an integrated framework for studying status. The framework provides models and methods for addressing long-standing, unresolved issues, such as (1) the emergence of status, (2) distinguishing between the status of individuals and the status of characteristics, and (3) measuring and understanding the status gap between subgroups (between men and women, or between races). The framework, which covers both small groups and large societies, and both task and nontask groups, utilizes ideas and insights from several literatures to identify three types of status, linked in precise ways to two kinds of personal characteristics (quantitative and qualitative). The three types of status are mathematically specified, and initial theoretical development is presented for all three, including, for each, formulation of measures, derivation of testable implications, and analysis of how to change status and the status structure. Testable implications cover such phenomena as status differences between group members, status gaps between subgroups, overall status inequality, and status gains and losses from discrimination – all under varying conditions, including the number and intercorrelation of status-conferring personal characteristics and the proportions in the subgroups. The new status theory also identifies two mechanisms involved in the phenomenon of "internalized oppression." The framework thus opens many avenues for future work, both theoretical work, deriving more and sharper implications, and empirical work, testing the implications and using the new measures for the status of persons and the status of characteristics to assess key status phenomena in surveys and experiments.

STATUS processes are central to the social life, and understanding status is a central task for sociology. Status processes play a part in the development of powerful inequalities, which shape the structure of groups and societies as well as, directly and indirectly, the opportunities of individuals (Berger, Rosenholtz, and Zelditch 1980). Moreover, recent conjectures and preliminary evidence suggesting that status may directly affect physical health (Marmot 2000; Sapolsky 1993; Smith 1999; Wilkenson 1996) provide new urgency for obtaining sharper, more precise, and more reliable knowledge about the operation of status.

Although much has been learned, many basic questions about status remain unanswered; and the insights that could be marshaled for sustained inquiry reside in separate literatures. In this paper I develop an integrated framework for studying status.[1] The framework provides models and methods for addressing long-standing, unresolved issues. These issues include: (1) the emergence of status; (2) how to distinguish between, and measure, the status of persons and the status

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[1] Status, as used in this paper, refers to evaluations of the worth of individuals and characteristics; synonyms include "honor, esteem, respect, and prestige" (Zelditch 1968:250, 253).

of characteristics; (3) whether quantitative and qualitative characteristics operate differently; (4) how to measure status gaps between subgroups of a group or society; (5) how to assess the effects of the proportions in different subgroups; (6) how to incorporate multiple bases for status; (7) how status processes differ in small groups and large societies; (8) how status processes differ in task groups and other kinds of groups; and (9) how status is shaped by the degree of correlation among valued personal characteristics.

The proposed framework has three key features. First, it distinguishes between two kinds of characteristics (quantitative and qualitative) and between three types of status which are linked in precise ways to the two kinds of characteristics. Second, it builds carefully on previous work, incorporating seminal ideas and insights into a consistent, coherent whole; chief among these ideas and insights are (1) the mathematical specification for the production of status from quantitative characteristics (owed to Goode [1978] and Sørensen [1979]), (2) the link between the status conferred on individuals by quantitative characteristics and the status acquired by qualitative characteristics (owed to Ridgeway [1991, 1997b], Ridgeway and Balkwell [1997], and Webster and Hysom [1998]), and (3) the multidimensional specification of the status of individuals (analyzed by Barber [1968], Goode [1978], Rossi [1979], and Turner [1984, 1995]). Third, the framework is fully mathematized, leading to precise predictions about the magnitude of status conferred on individuals and the magnitude of status obtained by qualitative characteristics, and about the conditions conducive to greater or lesser status and larger or smaller status gaps, and providing as well a set of measures ready for use in empirical work.

For example, it is universally believed that in almost all societies, men have higher status than women. But the status gap between the sexes is also known to vary greatly, and there has not been a theory-based way to measure it. The status-gap continuum extends from societies in which women are not permitted to vote or to own property to societies in which women and men work in teams (on earth and in space, in war and in peace), vote their conscience, and face no legal bars to income and wealth. The new framework provides a coherent set of models and tools, based on the status, prestige, and stratification literatures, which enable both measurement of the status gap and analysis of why and how the status gap varies in magnitude.

The new framework not only enables examination of all the unresolved issues but also yields unexpected results. It shows that key ideas and insights from the several status literatures, when combined together, produce unexpected synergies, providing new testable implications and opening new avenues for status research. The initial set of testable implications includes implications for the effects on status and status structure of (1) the number and intercorrelation of personal characteristics, (2) the availability of information about personal characteristics, and (3) the proportions of a group in each category of a qualitative characteristic. Status processes have a long reach, and the new status theory identifies two mechanisms that may be involved in the phenomenon of "internalized oppression" (Bourdieu 1997; Ridgeway 1997a:222; Stanton-Salazar 1997), provides a new way to understand gains and losses from discrimination, and yields ceteris paribus implications for a wide range of behavioral and social phenomena including coalition formation, defection, identity and reference-group processes, response rates and missing data in surveys, veiling customs, relative size and skill of political parties, and the tension between individualism and collectivism.

Of course, the new framework for status analysis is preliminary, and further theoretical and empirical inquiry will no doubt lead to modifications. To make the framework as useful as possible, I take a threefold approach: First, I lay the foundation carefully, formalizing the three basic status functions (corresponding to the three kinds of status identified by the framework), which become the three basic assumptions of the new status theory. Second, I provide a sampling of the kinds of theoretical development enabled by the framework, deriving implications for several special cases, including both small groups and large societies under a variety of conditions. Third, I take a brief look at how

to change status and the status structure, including speculation linking measures and mechanisms identified by the framework to potential empirical applications across a broad spectrum of social contexts. This threefold approach invites further work on the content of the functions and assumptions, on additional special cases for deriving implications, and on empirical applications, including surveys and experiments.

The next section provides an overview of the framework. It is followed by three sections, focusing, respectively, on the three kinds of status.

OVERVIEW OF THE FRAMEWORK FOR STATUS ANALYSIS

The objective is to develop a general framework for the study of status—a framework that will cover status phenomena and status processes in all settings (e.g., task groups as well as nontask groups) and at both micro and macro levels (e.g., in both small groups and large societies), that distinguishes clearly between the status of individuals and the status of characteristics and between status and its determinants and its consequences, and that enables both measurement and analysis. The framework should contain the basic building blocks which provide the starting assumptions from which a variety of testable implications can be derived and which provide measures ready for use empirically. Future work can then proceed on three fronts—expanding and refining the framework, building theories and deriving more and sharper implications, and testing the implications and accumulating information on magnitudes and correlates of key status phenomena.

The framework draws insights and reasonings from the many pertinent literatures, including literatures on social organization, social stratification, status organizing processes, and inequality.[2] The emphasis throughout is on developing a foundation for coherent and fruitful synthesis. Of course, not all status topics are covered, but future work can draw them in, expanding and refining the framework as needed, as well as establishing links to other frameworks.

This section discusses the two basic ingredients in the framework: (1) a distinction between two kinds of personal characteristics; and (2) a distinction between three types of status.[3]

TWO TYPES OF CHARACTERISTICS: QUANTITATIVE AND QUALITATIVE

The new framework distinguishes between *quantitative* and *qualitative* characteristics. Quantitative characteristics are characteristics of which individuals can have "more" or "less"; qualitative characteristics, in contrast, describe features of individuals that have no inherent ordering but which can be used to classify them into groups or categories. Quantitative characteristics may be cardinal (like wealth) or ordinal (like beauty). Qualitative characteristics may be binary (like gender) or polytomous (like race and ethnicity).

Until a decade ago, status research did not distinguish between quantitative and qualitative characteristics; any possible distinctiveness in status processes had not been noticed. For example, Berger et al. (1980) observed:

> The key concept in the study of status organizing processes is the *status characteristic*, any characteristic of actors around which evaluations of and beliefs about them come to be organized. Examples include age, sex,

[2] Valuable contributions to these literatures include Barber (1968); Berger et al. (1977); Berger et al. (1980); Fararo (1989); Goode (1978); Homans (1967); Lipset (1968); Merton ([1949, 1957] 1968); Parsons [1949] 1964; Ridgeway (1991, 1997b); Ridgeway and Balkwell (1997); Rossi (1979); Sørensen (1979); Skvoretz and Fararo (1996); Stinchcombe (1968); Turner (1984, 1995); Veblen [1899] 1953; Wagner and Berger (1993); Weber [1922] 1978; Webster and Hysom (1998); and Zelditch (1968).

[3] For simplicity, the framework is presented in terms of persons, personal characteristics, and the status of persons and of personal characteristics. Status processes, however, also operate at other levels of analysis, such as that of social entities. Orchestras differ in status, as do countries. The framework is, with minor modifications, applicable to status processes at all levels of analysis. For example, replacing the word "person" with the word "actor" extends the framework to corporate actors.

> race, ethnicity, education, occupation, physical attractiveness, intelligence quotients, reading ability. . . . (P. 479)

Ridgeway (1991) was the first to pose the question of how *qualitative* characteristics acquire status value, and pioneered development of a theory of status construction in which cardinal characteristics produce status for qualitative characteristics (Ridgeway 1991, 1997b; Ridgeway and Balkwell 1997). Webster and Hysom (1998) extended the theory so that ordinal as well as cardinal—that is, all quantitative characteristics—can be used to produce status for qualitative characteristics.

QUANTITATIVE CHARACTERISTICS: GOODS AND BADS. Within the set of quantitative personal characteristics, most status research has focused on characteristics which have the property that "more" is preferred to "less"; for convenience, these will be called "goods." For simplicity, this analysis is couched in terms of goods, but, of course, "bads" (less is preferred to more) may also operate in status processes and their handling is straightforward.

QUANTITATIVE CHARACTERISTICS: CARDINAL VERSUS ORDINAL GOODS, AND RANK VERSUS AMOUNT OF CARDINAL GOODS. Two related questions arise: whether to distinguish between cardinal and ordinal goods; and whether, among cardinal goods, amounts play a part in status processes or only ranks. Note that the operation of cardinal and ordinal goods can only be distinguished by incorporating amounts of cardinal goods; and, conversely, if only rank matters in cardinal goods, then there is no distinction between cardinal and ordinal goods.

As discussed below, the process of choosing a functional form for first-order status led to the rank-based function that Sørensen (1979) proposed in his work on the status of occupations; and thus the status of individuals is modeled as a function of rank only. A shortcoming is that the distribution of a quantitative characteristic such as wealth is treated as flat, rather than, say, as a peaked distribution with most individuals located in some region of the distribution. This shortcoming is mitigated somewhat, however, by two things: First, the status function, as will be seen, is not flat, being a nonlinear function of rank; and, second, ranks are flexible in that situations with most people in some region can be modeled by the use of tied ranks.

Nonetheless, this element of the framework merits further research. Such research should proceed along two lines. One is mathematical—searching for functional forms capable of incorporating cardinal and ordinal goods. The other is substantive—assessing the extent to which status processes are responsive to rank rather than to amounts of cardinal goods.

THREE TYPES OF STATUS: S1, S2, AND S3 STATUS

The framework distinguishes between three types of status. First-order status, denoted S1, is a property of individuals and is based on quantitative personal characteristics. Second-order status, denoted S2, is a property of qualitative characteristics. Third-order status, denoted S3, is a property of individuals; it arises as a way to impute status to individuals when S1 cannot be generated because there is no information on quantitative characteristics, but may linger after information is obtained, combining both S1 and S2 types of status. Each of the three types of status operates in distinctive ways—each arises and is maintained or altered via distinctive processes, as elucidated below.

The work on S1— the first kind of status, which is a property of individuals and which is based on quantitative characteristics—besides building in a general way on the status-relevant literatures, builds in a specific way on two seminal contributions to the mathematical specification of status, Goode (1978) and Sørensen (1979). Similarly, the work on S2—the second kind of status, which is a property of qualitative characteristics—builds directly on Ridgeway (1991, 1997b), Ridgeway and Balkwell (1997), and Webster and Hysom (1998). The work on S3—the third kind of status which is a property of persons and which arises when S1 cannot be generated—builds on the multidimensionality aspect of status and prestige (Barber 1968; Goode 1978; Rossi 1979; Turner 1984, 1995).

Modeling S1 status requires a function which yields a clear status metric and em-

Table 1. Summary of the Three Types of Status in the Framework for Status Analysis

Characterization	Three Types of Status		
	S1	S2	S3
Property of	Person	Qualitative characteristic	Person
Produced by	Quantitative characteristic	S1	S2, and possibly S1
Information required	Rank on quantitative characteristic	Correlation between quantitative characteristic and qualitative characteristic	S2
Formula	$\sum_{g=1}^{G} w_g \ln\left(\frac{1}{1-r_g}\right)$	$S2_c = [M(S1)]_c$	$\mathbf{wS1} + \mathbf{wS2}$

Note: Quantitative characteristics are orderable characteristics; they may be cardinal (like wealth) or ordinal (like attractiveness). Quantitative characteristics of which more is preferred to less are called "goods"; quantitative characteristics of which less is preferred to more are called "bads." Qualitative characteristics are unorderable characteristics (e.g., race and sex).

In the formulas above, g denotes a good (indexed from 1 to G), w denotes the weight, r denotes rank on a quantitative characteristic, c denotes a category of a qualitative characteristic, $M(\cdot)$ denotes the average (mean, median, etc.), and bold characters denote vectors.

bodies the properties discussed in the status literatures. Chief among these properties is the property analyzed by Goode (1978) that, as rank increases, status increases at an increasing rate, rising steeply at higher ranks. The search for a function satisfying properties desirable in an S1 function led to the function proposed by Sørensen (1979) to measure the status of occupations. The simplicity, elegance, and tractability of this function made it an appealing choice.

PERSONAL CHARACTERISTICS AND TYPES OF STATUS. Quantitative characteristics play a special role in the framework, as they form the basis for first-order status (S1). In this framework, building on Ridgeway's fundamental insight, qualitative characteristics cannot confer first-order status, but rather they must first acquire second-order status. Accordingly, qualitative characteristics are used to form subgroups; the subgroups are characterized by a summary measure of the members' first-order status, and this summary measure in turn attaches to each category of a qualitative characteristic, becoming its measure of second-order status (S2).

SUMMARY MEASURE OF S1 WITHIN THE CATEGORIES OF A QUALITATIVE CHARACTERISTIC. The summary measure of S1, which becomes a category's measure of S2, can be any measure of location, such as the arithmetic mean, the geometric mean, or the median. For simplicity and concreteness, in the theoretical development below, we use the arithmetic mean. As will be seen, choice of summary measure affects some results but not others. Future research might investigate both preference for, availability of, and effects of alternative measures.

INFORMATION AND TYPES OF STATUS. Information is of two kinds: (1) information about the quantitative characteristics of particular individuals, and (2) information about the summary measure of first-order status in the subgroups formed by qualitative characteristics. Information about individuals' ranks on quantitative characteristics is used to produce first-order status (S1). Information about the average first-order status of the subgroups formed by qualitative characteristics is used to generate second-order status (S2) in the qualitative characteristics. In the absence of information about the quantitative characteristics of particular individuals (i.e., when first-order status cannot be generated), second-order status is used to produce an imputed individual status, the third-order status (S3). But S3 may not disappear when information about the quantitative characteristics of particular individuals is obtained; the process by which

Table 2. Self-Other S1 Status Matrix

$$\begin{bmatrix} S1_{11} & S1_{12} & S1_{13} & \dots & S1_{1J} \\ S1_{21} & S1_{22} & S1_{23} & \dots & S1_{2J} \\ S1_{31} & S1_{32} & S1_{33} & \dots & S1_{3J} \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ S1_{N1} & S1_{N2} & S1_{N3} & \dots & S1_{NJ} \end{bmatrix}$$

Note: Each individual (i = 1 to N) accords S1 status to each individual (j = 1 to J). Each row represents the S1 status accorded by one individual (to Self and to Others), and each column represents the S1 status received by one individual. Thus, each row represents the S1 status structure in the mind of one person. In the special case of consensus, the matrix collapses to a vector.

S3 combines both S1 and S2, with S2 lingering even in the face of S1—a form of discrimination—is analyzed below.

SUMMARY TABLE OF THREE TYPES OF STATUS. Table 1 provides a summary of the three types of status, including the formulas to be presented below. The table may be helpful not only as an outline of the exposition but also as a guide to further theoretical work (e.g., assessing alternative functional forms for S1) and empirical work (e.g., formulating information conditions in experiments).

STATUS MATRICES

Corresponding to each type of status is a matrix containing each actor's evaluations of the status of persons (S1 and S3) and the status of characteristics (S2). To illustrate, consider S1 status in a collectivity of N persons. Each individual (called "Self") accords S1 status (or makes prestige payments, in Goode's [1978] evocative phrase) to every individual (to "Others" and also to "Self"). Group members may differ in the first-order status they accord to any given Other. Different individuals may value different quantitative personal characteristics; for example, one individual may value wealth, while another may value beauty, and a third may value both. Moreover, different goods may be weighted differently; for example, one individual may weight wealth two-thirds and beauty one-third, while a second may do the opposite. Thus, the S1 status order is represented by a matrix (Table 2).

The S1 and S3 matrices are square, each member of the collectivity represented by both a row and a column. In the S2 matrix, each person occupies a row and each characteristic is represented by a set of columns, one column for each category of the characteristic.

If all the rows of a matrix are identical, the matrix collapses to a vector. An important area of research focuses on the processes by which individuals agree, or not, on status matters, for example, how individuals choose the quantitative characteristics they use in the S1 function, how individuals shape the societal S1 function and societies in turn shape individuals' S1 functions.[4]

The initial theoretical development below follows a twofold approach. First, as in most status research, we characterize groups by a single status function, asking, for example, what status processes look like if all group members share the same S1 function (i.e., use the same quantitative characteristics as bases of evaluation and weight them the same way). Second, we consider strategies for changing status structures, some of which involve parallel status structures. For example, individuals make, and expect, prestige payments (in Goode's words) based on the S1 structure in their heads; conversely, they receive prestige payments based on the S1 structures in others' heads. Important and interesting phenomena accompany such interindividual differences in S1 structure.

FIRST-ORDER STATUS (S1)

S1 ASSUMPTION AND FUNCTION

We begin with the general S1 function, written to accommodate multiple goods, denoted g, and differential weights, denoted w (with bold characters denoting vectors). Formally:

Assumption 1a (General First-Order Status Function): First-order status (S1) is a weighted function of goods,

$$S1 = S1(\boldsymbol{wg}). \quad (1)$$

[4] For insightful analysis of diffusion and consensus processes, see Berger et al. (1998), Blau (1977), Friedkin (1998), Ridgeway and Balkwell (1997), and Skvoretz and Fararo (1996).

The weights, which may take zero or positive values, must sum to one; if zero, the associated good does not produce status, and if one, the associated good is the only good that confers first-order status.

Following Goode (1978), we assume that first-order status is a special kind of function: it is not only an increasing function of the quantitative personal characteristics but also it increases at an increasing rate. As Goode (1978:142) observes, "prestige payments rise steeply." As discussed above, we adopt the function proposed by Sørensen (1979), which has the upwardly-concave property as well as other appealing properties. Accordingly, we specify S1 status as a function of rank on a valued characteristic:

$$S1 = \ln\left(\frac{1}{1-r}\right), \quad (2)$$

where r denotes the relative rank (between zero and one) on the valued quantitative characteristic.[5] For convenience, we will refer to this function as the "log-rank function." The log-rank function ranges from zero to infinity, approaching but never reaching the value zero. When working with small groups, the rank r is approximated by $i/(N+1)$, where i denotes the raw rank (the sequence of integers from 1 to the group size N, with 1 assigned to the lowest-ranking person).[6] The formula for the small-group case is:

$$S1 = \ln\left(\frac{N+1}{N+1-i}\right). \quad (3)$$

Extending Sørensen's (1979) function to the multiple-good case and making explicit the assumption about the specific form of the S1 function:

Assumption 1b (Specific First-Order Status Function): First-order status is the weighted sum of good-specific S1 components, where each component is the log-rank function of a good:

$$S1 = \sum_{g=1}^{G} w_g \ln\left(\frac{1}{1-r_g}\right). \quad (4)$$

[5] Formally, the first-order status function has positive first and second derivatives.

[6] The formula can incorporate tied ranks. Both the sequence of integers and the set of ranks incorporating tied ranks sum to the same quantity, $N(N+1)/2$.

S1 Initial Theoretical Development

In this initial theoretical development, we analyze the operation of first-order status in several settings, varying the number of goods and their association and modeling S1 in both small groups and large societies. The theoretical results are empirically testable implications. Of course, many more results can be obtained, and the framework can be applied to many new arenas.

S1 in the special case of one-good small groups. To examine how first-order status operates, we begin with the simplest one-good case in small groups of size ranging from 2 to 12, with no tied ranks. Table 3 presents the magnitudes of S1 for each member of such groups; the valued characteristic can be any quantitative personal characteristic (e.g., wealth or beauty or athletic skill).[7] The figures immediately reveal three important implications of the S1 function in the one-good case. First, the status of the lowest-ranking person (Member 1) declines as group size increases. Second, the status of the highest-ranking person (the last member in each column) increases as group size increases. Third, average status increases as group size increases. Thus, the status difference between the lowest- and highest-ranking members of the group increases steeply with group size, from .7 S1 units in the dyad and 1.1 in the triad to almost 2.5 in the 12-member case.[8]

Many of the status phenomena in small groups involve interactions within subsets of the members. The status difference in each of the possible pairs of members of a group is thus an important feature of groups. The number of pairs rises steeply from one in the two-member group to 66 in the 12-member group. To investigate dyadic status difference in small groups, Table 4 presents the complete S1-difference structure for the possible pairs in three groups, those of sizes 4, 5, and 6. Although the full

[7] The figures in Table 3 are obtained by applying the S1 formula to the one-good case; see equations 2, 3, and 4 and the notes to Table 3.

[8] Formally, the range of S1 is equal to $\ln(N)$. The average of S1 can also be expressed as a function of group size, as shown in the note to Table 3.

Table 3. S1 Status in One-Good Small Groups: By Group Member and Group Size

	Group Size										
Member	2	3	4	5	6	7	8	9	10	11	12
1	.405	.288	.223	.182	.154	.134	.118	.105	.095	.087	.080
2	1.099	.693	.511	.405	.336	.288	.251	.223	.201	.182	.167
3	—	1.386	.916	.693	.560	.470	.405	.357	.318	.288	.262
4	—	—	1.609	1.099	.847	.693	.588	.511	.452	.405	.368
5	—	—	—	1.792	1.253	.981	.811	.693	.606	.539	.486
6	—	—	—	—	1.946	1.386	1.099	.916	.788	.693	.619
7	—	—	—	—	—	2.079	1.504	1.204	1.012	.875	.773
8	—	—	—	—	—	—	2.197	1.609	1.299	1.099	.956
9	—	—	—	—	—	—	—	2.303	1.705	1.386	1.179
10	—	—	—	—	—	—	—	—	2.398	1.792	1.466
11	—	—	—	—	—	—	—	—	—	2.485	1.872
12	—	—	—	—	—	—	—	—	—	—	2.565
Mean	.752	.789	.815	.834	.849	.862	.872	.880	.887	.894	.899

Note: S1 status is a function of one valued quantitative characteristic. Group members are ordered from lowest ranking to highest ranking on the valued characteristic. S1 status is given by the formula, $\ln[1/(1-r)]$, where r denotes the relative rank and is approximated by $[i/(N+1)]$, where i, in turn, denotes the raw rank and N denotes the group size. The equivalent formula expressed directly in terms of the raw rank i and group size N is: $\ln[(N+1)/(N+1-i)]$. The formula for the arithmetic mean of S1 is: $E(\text{S1}) = \ln \frac{N+1}{\sqrt[N]{N!}}$.

structure could be reported in the triangle above the diagonal, Table 4 presents completely filled-out matrices; these have the advantage that they directly show not only the set of S1 differences for the group but also the set of S1 differences for each individual.

As expected from Table 3, the magnitude of the smallest status distance decreases with group size, and the magnitude of the largest status distance increases with group size. Additionally, there are three main results in Table 4. First, the magnitude of the S1 difference increases for successive ranks; Member 1 in the 4-member group is not only farther away from Member 4 than from Member 3 and farther away from Member 3 than from Member 2 but also the increment in the status distance increases for each successive rank (from .288 to .405 to .683). Second, a group member is always closer to the individual below than to the individual above. For example, in the 6-member group, Member 3 is closer to Member 2 than to Member 4, but Member 2 is closer to Member 1 than to Member 3. Thus, dyadic relations are not symmetric. Third, a few (very few) group members are equally distant from two group members, one below and the other above, with the one below being not immediately below and the one above being immediately above. In Table 4 there are three such persons, one in each group: Member 3 in the 4-member group, Member 4 in the 5-member group, and Member 5 in the 6-member group. These individuals may play pivotal parts in group dynamics, being uniquely situated to bridge status distance in two directions.

There is evidence from previous empirical research that observable behaviors produced by status follow the predicted S1 patterns. For example, Bales (1999) documented the acts initiated by each member of a group, in groups of size 3 to 8, coding both acts directed at the group and acts directed at another member. The number of acts initiated increases at an increasing rate with rank, and who-to-whom matrices of acts initiated indicate that each member is closer in status to the lower neighbor than to the higher neighbor, as predicted here.

S1 IN THE SPECIAL CASE OF TWO-GOOD SMALL GROUPS. Consider now the case in

Table 4. S1 Status Differences among Members of One-Good Groups: By Member Pairs in Groups of Three Different Sizes

Group Size and Member	Member 1	Member 2	Member 3	Member 4	Member 5	Member 6
N = 4: Six Pairs						
Member 1	—	.288	.693	1.386	NA	NA
Member 2	.288	—	.405	1.099	NA	NA
Member 3	.693	.405	—	.693	NA	NA
Member 4	1.386	1.099	.693	—	NA	NA
N = 5: Ten Pairs						
Member 1	—	.223	.511	.916	1.609	NA
Member 2	.223	—	.288	.693	1.386	NA
Member 3	.511	.288	—	.405	1.099	NA
Member 4	.916	.693	.405	—	.693	NA
Member 5	1.609	1.386	1.099	.693	—	NA
N = 6: Fifteen Pairs						
Member 1	—	.182	.405	.693	1.099	1.792
Member 2	.182	—	.223	.511	.916	1.609
Member 3	.405	.223	—	.288	.693	1.386
Member 4	.693	.511	.288	—	.405	1.099
Member 5	1.099	.916	.693	.405	—	.693
Member 6	1.792	1.609	1.386	1.099	.693	—

Note: Group members are ordered from lowest ranking to highest ranking on the valued quantitative characteristic; each person's S1 status appears in Table 3 (see the previous page). Each row and/or column provides the set of pairwise S1 status differences involving each member of the group. The full set of pairwise S1 status differences for the entire group occupies the triangle above the diagonal (and is duplicated in the triangle below the diagonal).

which the members of a small group use two quantitative characteristics as bases of evaluation; as in the previous special case, there are no tied ranks. If the two goods are perfectly positively associated—that is, each member's rank is the same on both characteristics—then the S1 structure remains the same as in the one-good case. However, if the two goods are independent or negatively associated or imperfectly positively associated, then S1 structure changes. Here we investigate the case in which two equally weighted goods are perfectly negatively associated. Other special cases can be similarly studied.

Table 5 reports the status structure in the case of two goods negatively associated and equally weighted, for groups of size 4, 5, and 6. For each group member, the table reports S1 derived from each of the two goods, denoted $s1_1$ and $s1_2$. Member number denotes the rank on the first good. Thus, for example, Member 1 in the 4-member group ranks lowest on the first good and highest on the second good; Member 1 has a magnitude of .223 on $s1_1$ (the lowest status) and a magnitude of 1.609 on $s1_2$ (the highest status). The two-good S1 status is the unweighted average of $s1_1$ and $s1_2$, namely, .916.

Table 5 shows that the status structure is dramatically compressed, although the average status in each group remains the same (compare with Table 3). First, S1 no longer approaches zero, but now has a floor of ln(2), or approximately .693.[9] Second, the status of the top person—who is always the person who ranks highest and lowest on the two characteristics—is reduced by the amount $\ln\sqrt{N}$; for example, S1 for Member 1 in the 5-member group is reduced from 1.792 (as in Table 3, as well as for the second good's status $s1_2$ in Table 5) to .987. Third, the range of S1 is substantially reduced, for example, from 1.792 (1.946 –

[9] The lowest value of S1 is always ln(2) in odd-sized groups and approaches it in even-sized groups.

Table 5. S1 Status in Small Groups with Two Negatively Associated, Equally Weighted Goods: By Group Member and Group Size

	Group Size								
	4			5			6		
Member	$s1_1$	$s1_2$	S1	$s1_1$	$s1_2$	S1	$s1_1$	$s1_2$	S1
1	.223	1.609	.916	.182	1.792	.987	.154	1.946	1.050
2	.511	.916	.714	.405	1.099	.752	.336	1.253	.795
3	.916	.511	.714	.693	.693	.693	.560	.847	.703
4	1.609	.223	.916	1.099	.405	.752	.847	.560	.703
5	—	—	—	1.792	.182	.987	1.253	.336	.795
6	—	—	—	—	—	—	1.946	.154	1.050
Mean	.815	.815	.815	.834	.834	.834	.849	.849	.849

Note: The status components $s1_1$ and $s1_2$ are each functions of a single valued quantitative characteristic (as in Table 3). Member number refers to rank on the first valued characteristic, corresponding to the status component $s1_1$. The two characteristics are perfectly negatively associated. In this example, the two characteristics are weighted equally, and thus S1 is the unweighted average of $s1_1$ and $s1_2$. A direct formula for S1 in this case is given by: $-\ln\sqrt{r-r^2}$, where r denotes the relative rank on the first characteristic and is approximated by $[i/(N+1)]$, where i, in turn, denotes the raw rank, and N denotes the group size. The equivalent formula expressed directly in terms of the raw rank i and the group size N is: $\ln\left[(N+1)/\sqrt{i(N+1-i)}\right]$.

.154) to .347 (1.050 − .703) for the 6-member group. Fourth, all the groups are symmetric, such that the S1 scores are symmetric about the midrange. Thus, except for odd-sized groups, each member has a fellow group member of identical status; for example, in the 4-member group, Members 1 and 4 have identical status, and Members 2 and 3 have identical status.

To the extent that a group's status structure defines its character, the groups in Table 5 are dramatically different from their one-good counterparts in Table 3—they have less inequality, less status distance, and more dyadic symmetry.

To more carefully assess these two-goods/equally-weighted/negatively-associated small groups, Table 6 presents the status-distance matrices for the groups portrayed in Table 5. The results are striking. First, whereas the one-good status-distance matrices of Table 5 had large status distances—for example, ranging from .288 to 1.386 in the 4-member group—the corresponding status distances in these two-good matrices are small—for example, ranging from 0 to .203 in the 4-member group. Second, the status-distance matrices retain the property that the largest status distance increases with group size, but the smallest status distance is now independent of group size, being zero for every group size. Third, all group members have several identical status distances from other members, in contradistinction to the one-good groups in which very few group members were in this situation; for example, in the 4-member group, every member has identical status distances from two other members.

Figure 1 illustrates the contrast between the one-good and the two-goods/negatively-associated small groups, displaying the full set of S1 differences for the 4-member and 5-member groups (i.e., with 6 and 10 status differences, respectively). It is clear from Figure 1 that the one-good group has considerably more status inequality.

S1 IN THE SPECIAL CASE OF LARGE SOCIETIES. Status phenomena and processes occur in groups and societies of all sizes, and thus it is important to investigate the operation of first-order status (S1) in large societies as well as in small groups. To do so, we use techniques from the study of probability distributions (Stuart and Ord 1987).[10] Sub-

[10] Formally, many of the formulas and results for large societies may be thought of as the limit, as N increases to infinity, of the formulas and results for small groups.

Table 6. S1 Status Differences among Members of Small Groups with Two Negatively Associated, Equally Weighted Goods: By Member Pairs in Groups of Three Different Sizes

Group Size and Member	Member 1	Member 2	Member 3	Member 4	Member 5	Member 6
N = 4: Six Pairs						
Member 1	—	.203	.203	0	NA	NA
Member 2	.203	—	0	.203	NA	NA
Member 3	.203	0	—	.203	NA	NA
Member 4	0	.203	.203	—	NA	NA
N = 5: Ten Pairs						
Member 1	—	.235	.294	.235	0	NA
Member 2	.235	—	.059	0	.235	NA
Member 3	.294	.059	—	.059	.294	NA
Member 4	.235	0	.059	—	.235	NA
Member 5	0	.235	.294	.235	—	NA
N = 6: Fifteen Pairs						
Member 1	—	.255	.347	.347	.255	0
Member 2	.255	—	.091	.091	0	.255
Member 3	.347	.091	—	0	.091	.347
Member 4	.347	.091	0	—	.091	.347
Member 5	.255	0	.091	.091	—	.255
Member 6	0	.255	.347	.347	.255	—

Note: Group members are ordered from lowest ranking to highest ranking on the first valued characteristic, as in Table 5; each person's S1 status appears in Table 5. Each row and/or column provides the set of pairwise S1 status differences involving each member of the group. The full set of pairwise S1 status differences for the entire group occupies the triangle above the diagonal (and is duplicated in the triangle below the diagonal).

stantively, the model is set up as before. S1 is a function of valued quantitative personal characteristics; the function is the log-rank function given in equations 2 and 4. Because, as seen, the case in which S1 arises from one good is identical to the case in which S1 arises from two perfectly positively associated goods, we present an integrated theoretical development in which two goods are used as bases of evaluation. As before, let the two goods be weighted equally in the S1 function. Also as before, we distinguish between perfectly positively associated goods and perfectly negatively associated goods; we also introduce a new case, which arises naturally in the study of probability distributions—namely, the case in which the two goods are independent.

At the outset it is known that the distribution associated with S1 in the positively associated case is the exponential and that its mean equals 1. Because the mean of the average of two identical variates is equal to the original mean, it is also known that the mean of S1 in the negatively associated and independent cases equals 1.

The formula for S1 in the two-goods/negatively-associated case is straightforward to obtain. The two formulas for both the positively and negatively associated cases, with equally weighted goods, may be expressed:

$$S1 = \begin{cases} \ln\left(\dfrac{1}{1-r}\right), & \text{positively associated goods} \\ \ln\left(\dfrac{2}{\sqrt{1-r^2}}\right), & \text{negatively associated goods.} \end{cases} \quad (5)$$

As before, r denotes the relative rank; in the negatively associated goods case, r is the relative rank on one of the two goods.[11]

When the two goods are independent, it is not possible to obtain an algebraic formula for S1. However, S1 can be numerically approximated by interpolating from the cumu-

[11] In probability-distribution terms, the formulas for S1 in equation 5 are quantile functions.

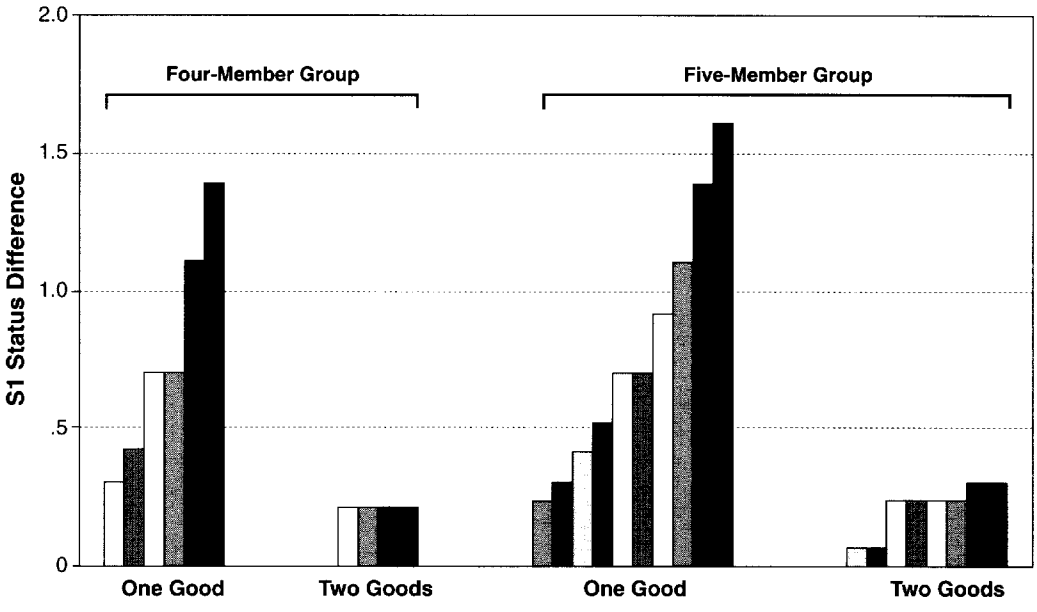

Figure 1. S1 Status Differences in Small Groups

Note: In the two-good case, the goods are equally weighted and negatively associated. In the four-member group there are 6 pairs, and in the five-member group there are 10 pairs. In each of the two-good groups, there are two pairs with S1 status differences equal to zero.

lative distribution function of the Erlang variate.[12]

Table 7 reports the first-order status (S1) for individuals at selected relative ranks (from 0 to 1, in increments of .05), for the three cases—positively associated goods, negatively associated goods, and independent goods. As expected from the work with small groups, the positively and negatively associated cases differ both with respect to the lower extreme value of S1 and to the compression of S1. In the independent-goods case, S1 retains the lower extreme value of zero but, with respect to compression, occupies an intermediate place between the positively and negatively associated cases. In all three cases, the majority of the population have S1 magnitudes below the mean of 1—59.4 percent in the independent case, 63.2 percent in the positively associated case, and 67.7 percent in the negatively associated case.

[12] The sum of two independently and identically distributed exponential variates is distributed as an Erlang variate; the unweighted average of two *iid* exponentials is also an Erlang. The Erlang is a member of the larger gamma family.

A different way to gauge the three types of S1 structures is to examine their probability density functions (pdf). Figure 2 presents graphs of the three pdf's. The graphs indicate several important features: First, there are individuals of very high status in all three types of S1 structure. Second, there are individuals of very low status (approaching zero) only in the positively associated and independent cases; as already known, in the negatively associated case, S1 has a floor of approximately .7. Third, in the positively and negatively associated cases, the mode occurs at the lower extreme value and in the independent case it occurs at .5; that is, there is a concentration of low-status persons. These graphs provide vivid depiction of the sociological insight that high status is relatively scarce and the philosophical insight that societies differ dramatically according to whether valued characteristics are positively or negatively associated.

How to Change S1 and the S1 Structure

Individuals are accorded status because they possess quantitative characteristics which

Table 7. S1 Status in Three Kinds of Two-Good Large Societies, by Member's Relative Rank

Member's Relative Rank	Two Characteristics, Positively Associated	Two Characteristics, Negatively Associated	Two Characteristics, Independent
0	0	.693	0
.10	.105	.698	.266
.15	.162	.704	.342
.20	.223	.714	.413
.25	.288	.725	.481
.30	.357	.740	.549
.35	.431	.758	.618
.40	.511	.780	.689
.45	.598	.806	.762
.50	.693	.837	.840
.55	.798	.873	.922
.60	.916	.916	1.012
.65	1.050	.968	1.110
.70	1.204	1.030	1.220
.75	1.386	1.106	1.347
.80	1.609	1.204	1.498
.85	1.897	1.334	1.687
.90	2.303	1.524	1.945
.95	2.996	1.857	2.372
1	∞	∞	∞

Note: Member's relative rank is the relative rank corresponding to (a) both characteristics in the positively associated case, (b) one characteristic in the negatively associated case, and (c) the composite rank in the independent case. The formulas for S1 status are: (a) in the positively associated case, $S1 = \ln[1/(1-r)]$; and (b) in the negatively associated case, $S1 = \ln\left[2/\sqrt{1-r^2}\right]$. In the independent case, S1 is approximated numerically from the cumulative distribution function of the S1 distribution (see Appendix Table A).

individuals and groups reward and use as a status-conferring device. If individuals lose the valued characteristics, they lose their status, holding constant the goods in the S1 function. Conversely, if individuals change their minds about what they find admirable and desirable, then receipt of S1 is altered. For example, suppose that Smith is the best swimmer in the world. As long as some individuals (swimming enthusiasts, say) value swimming skill and Smith retains the skill, Smith will be accorded the highest status on the S1 swimming component (by swimming enthusiasts). However, if Smith loses the skill or if swimming enthusiasts disappear, Smith will lose status. Similarly, the strategy for the film character who says, "I don't get no respect," is to promote admiration for, or desirability of, some characteristic on which he or she ranks high.

Note that the strategy of changing the quantitative characteristics used to confer status appears in two versions. In the first version, an individual attempts to change others' valued goods, for example, by persuading them that wealth is meaningless and should not be used as a status-conferring device or that writing poetry is the most admirable and desirable skill. In the second version, an individual changes his or her own valued goods, effectively ceasing to make prestige payments, in Goode's (1978) evocative phrase, and thus putting an end to this micro form of "internalized oppression."

To illustrate, consider two college roommates in a fraternity house: One is wealthy and an athlete of no particular distinction; the other comes from a poor family and is a

Figure 2. S1 Status in Two-Good Large Societies

Note: Formulas for the probability density function are reported in Appendix Table A.

gifted athlete.[13] If both roommates value wealth only and use it to confer status, then the rich roommate will be accorded higher status than the other roommate—by both of them. The athlete roommate can change this S1 structure by two methods: (1) S/he can persuade him/herself and the rich roommate that athletic skill is highly desirable and should also be used to confer status; or (2) s/he can relinquish his/her love of riches and value only athletic skill. Under the first method, if successful (and athletic skill and wealth are weighted equally), the S1 structure would be transformed into one of perfect equality—the two goods are perfectly negatively associated, hence both roommates would receive equal magnitudes of S1. Under the second method, if successful, the athlete roommate would no longer accord higher status to the rich roommate. Of course, if the rich roommate still uses wealth as a basis of evaluation, there would be a new tension arising from their having discrepant S1 functions.

As shown, the kind of statistical association between two or more valued goods—whether they are positively associated, negatively associated, or independent—powerfully affects first-order status. The association between any pair of goods is less open to alteration than the choice of valued goods, although it can be changed by changing the population, through recruitment or expulsion of members.

SECOND-ORDER STATUS (S2)

S2 Assumption and Function

First-order status is a property of persons—individuals obtain first-order status from their quantitative characteristics. Individuals also have qualitative characteristics and, by processes of status generalization (Berger et al. 1977; Ridgeway 1991, 1997b; Ridgeway and Balkwell 1997; Webster and Hysom 1998), if in a group or society there is an association between the valued quantitative characteristics (the goods) and a qualitative characteristic, the qualitative characteristic acquires status by that association. This status acquired by qualitative characteristics we call second-order status (S2).[14]

[13] This example was suggested by an anonymous reviewer.

[14] In the analysis of second-order status, a new kind of association figures prominently. Whereas in the analysis of first-order status the focal as-

Thus, as discussed earlier, we assume that qualitative characteristics cannot produce status; they can only derive it from some already produced status. Formally, letting c denote a category of the qualitative characteristic and $M(\cdot)$ denote the average (mean, median, etc.):

Assumption 2a (Second-Order Status): Second-order status is obtained by a qualitative characteristic if and only if the average first-order status differs across its categories. In such case, the second-order status attached to each category is equal to the average first-order status in the category:

$$S2_c = [M(S1)]_c. \quad (6)$$

The second-order status gap follows immediately. Letting c_A and c_B denote two categories of the qualitative characteristic and *gap* denote the gap in second-order status between them:

Assumption 2b (Second-Order Status Gap): The S2 status gap is the difference in S2 between the categories of a qualitative characteristic:

$$S2_{gap} = [M(S1)]_{c_A} - [M(S1)]_{c_B}. \quad (7)$$

The second-order status gap ranges from zero to high positive values. For a given qualitative characteristic, there is a set of second-order status gaps defined as the set of gaps for all pairs of categories. For example, while gender has only one pair of categories and hence only one possible second-order status gap, ethnicity could have 3, 6, 10, 15 pairs of categories, and so on, and hence could have that many second-order status gaps. If all gaps are equal to zero, then the qualitative characteristic has not acquired second-order status.

Note that the process of generating S2 status may operate simultaneously for many qualitative characteristics, each acquiring S2 status (or not) depending on the average S1 status in its categories. For example, gender, race, ethnicity, and religion all potentially can acquire S2 status simultaneously.

S2 Initial Theoretical Development

We focus here on two outcomes—second-order status (S2) and the gap in second-order status between the categories of a qualitative characteristic ($S2_{gap}$)—and on determinants of these outcomes. We examine the effects of (1) the number of valued goods in the S1 function and the goods' association, (2) the association between the valued good(s) and the qualitative characteristic, and (3) the relative sizes of the categories of the qualitative characteristic. The summary measure of S1 is specified as the arithmetic mean.

Sufficient conditions for second-order status. To begin, look back at the layout of first-order status in one-good small groups presented in Table 3. If there is a perfect association between the good (i.e., the quantitative characteristic used to confer first-order status) and a binary qualitative characteristic, then the qualitative characteristic will acquire second-order status. For example, in the group of size 4, if Member 1 is female and Members 2 through 4 are male, or if Members 1 and 2 are female and Members 3 and 4 male, or if Members 1 through 3 are female and Member 4 male, then gender will acquire second-order status, such that the category "male" will have a higher magnitude of S2 than the category "female." And conversely, if the association goes in the opposite direction. Thus, the combination of (1) a one-good S1 function with (2) a perfect association between the good and a qualitative characteristic is sufficient to induce second-order status for the qualitative characteristic. Moreover, because the S1 structure of a one-good society is identical to that in a society with several perfectly positively associated goods, the combination of (1) perfectly positively associated goods in the S1 function with (2) a perfect association between the goods and a

sociation is between quantitative characteristics (as between wealth and beauty), in the analysis of second-order status the focal association is between one quantitative characteristic and one qualitative characteristic. Put differently, given that the term "goods" is used for quantitative characteristics of which more is preferred to less and given that here we are not working with "bads," the focal association in the analysis of S1 is between two goods, whereas the focal association in the analysis of S2 is between a good and a qualitative characteristic.

qualitative characteristic is also a sufficient condition for second-order status to arise.

Consider now a somewhat more complicated case, that of societies with negatively associated goods. Look at Table 5. If there is a perfect association between one of the two goods and the qualitative characteristic and if group members are assigned in equal numbers to categories of a binary qualitative characteristic (e.g., let Members 1 and 2 of the four-member group be men and Members 3 and 4 be women), then the average S1 among men equals the average S1 among women. In this situation, gender does not acquire status. On the other hand, suppose that Members 1 and 4 are women and Members 2 and 3 are men—that is, eliminate the perfect association between the valued goods and the qualitative characteristic—then average S1 status differs across the two sexes and gender acquires second-order status.[15]

Combining the results obtained from inspection of Tables 3 and 5 leads to statement of sufficient conditions for the emergence of S2 status: Given a perfect association between one quantitative good and the qualitative characteristic, singly sufficient conditions for the qualitative characteristic to acquire second-order status are: (1) S1 is based on one good; (2) S1 is based on several perfectly positively associated goods; (3) S1 is based on two perfectly negatively associated goods, and the group size is odd; (4) S1 is based on two perfectly negatively associated goods, and the subgroup split is not fifty-fifty.[16]

Note again that even in this case of perfect association between one quantitative good and the qualitative characteristic, there are situations in which S2 will not arise, including the situation, obvious from Table 5, in which S1 is based on two perfectly negatively associated goods and the subgroup split is fifty-fifty.[17]

S2 IN THE SPECIAL CASE OF ONE-GOOD SMALL GROUPS. Consider a group of size 12 (as in Table 3). First-order status (S1) is based on either one good or several positively associated goods, there are no tied ranks, and the qualitative characteristic is binary. Next, suppose that there is a perfect association between the good(s) and the qualitative characteristic. The subgroup with the lowest-ranking individuals on the quantitative characteristic is called the bottom subgroup, and the subgroup with the highest-ranking individuals is called the top subgroup. Now imagine all possible subgroup splits, ranging from the case in which the bottom subgroup has 1 member and the top subgroup has 11 members to the opposite case in which the bottom subgroup has 11 individuals and the top subgroup has only 1.

Table 8 reports the average first-order status in each subgroup formed by the 11 possible subgroup splits (with each split represented by a row). As shown, average S1 differs for the two subgroups in each row; for example, in the case of a fifty-fifty split, average S1 is .33 in the bottom subgroup and 1.47 in the top subgroup. Thus, this situation unambiguously produces second-order status. If, in the example just given, the qualitative characteristic is gender, then gender acquires second-order status, and if women are the top subgroup and men are the bottom subgroup, then the magnitudes of S2 are .33 for the category "men" and 1.47 for the category "women."

Table 8 also reports the S2 gap between the two categories of the qualitative characteristic. As shown, the second-order status

[15] The case of imperfect correlation between the quantitative and qualitative characteristics is an important one to analyze. Although space constraints prevent such an analysis here, two things are worth noting: First, a priori it is obvious from equation 7 that the status gap will be smaller if the correlation is weaker; the bottom subgroup will include higher scorers, so to speak, and the top subgroup will include lower scorers, thus attenuating the status gap. Second, attenuation of the status gap, especially in situations of multiple qualitative characteristics acquiring S2, may lead to competition among alternative views for structuring status relations.

[16] Work is underway to analyze the case of two independent goods.

[17] This is a highly suggestive case for gender phenomena. For example, if heroism (or, say, wealth or hunting skill) is perfectly negatively associated with beauty and concomitantly perfectly associated with sex and if the sex split is fifty-fifty, then the average S1 status will be the same among both sexes and gender will not acquire S2 status. The new framework enables fresh interpretation of many situations in history and literature, including the rise of veiling customs and their link to gender inequality.

Table 8. S2 Status (Average S1 Status) in Two Subgroups of Group of Size 12

Bottom Subgroup		Top Subgroup		S2 Status
Size	S2 = E(S1)	Size	S2 = E(S1)	Gap
1	.080	11	.974	.894
2	.124	10	1.054	.931
3	.170	9	1.142	.973
4	.219	8	1.239	1.020
5	.272	7	1.347	1.074
6	.330	6	1.468	1.138
7	.394	5	1.607	1.214
8	.464	4	1.770	1.307
10	.636	2	2.218	1.583
11	.748	1	2.565	1.817

Note: Each group member's S1 status is reported in Table 3. Direct formulas for calculating S2 status (average S1 status) in the two subgroups and the S2 gap (letting N denote the group size and n denote the size of the bottom subgroup) are:

S2 in bottom subgroup: $S2_{bot} = \ln(N+1) - \ln\sqrt[n]{\frac{N!}{(N-n)!}}$;

S2 in upper subgroup: $S2_{top} = \ln(N+1) - \ln\sqrt[N-n]{(N-n)!}$;

S2 gap: $S2_{gap} = \left[\frac{-N}{n(N-n)}\right]\{\ln[(N-n)!]\} + \frac{1}{n}\ln(N!)$.

gap increases as the relative size of the bottom subgroup increases. To illustrate, if women are wealthier than men, such that the poorest woman is richer than the richest man, then the S2 gap between men and women is lowest when there is only one man and there are 11 women (a gap of .89 S1 units) and it is highest when there are 11 men and one woman (a gap of 1.82 S1 units).

S2 acquisition is a general process, and this analysis applies to any qualitative characteristic. For example, consider the status of academic disciplines. Suppose that a given interdisciplinary course enrolls first-year graduate students from discipline A and third-year graduate students from discipline B. If competence is valued and if it increases with years of study, then S2 status arises, favoring discipline B. Moreover, if the disciplines differ in sex ratio and racial or ethnic composition, then a train of further status inequalities is set in motion.

S2 IN THE SPECIAL CASE OF ONE-GOOD LARGE SOCIETIES. Consider now S2 in large societies in which a binary qualitative characteristic is perfectly associated with the good(s). As in the analysis of S1 in large societies, techniques from the study of probability distributions make it possible to obtain many a priori results. Table 9 presents, as in Table 8, the S2 acquired by the two categories of the qualitative characteristic and the S2 gap. As shown, and consistent with the previous results, in both categories, second-order status increases with the relative size of the bottom subgroup. More important, the second-order status gap also increases with the relative size of the bottom subgroup. This means, for example, that given a racially divided society in which two races are, respectively, advantaged and disadvantaged on the good, the status gap will be substantially larger if the disadvantaged race constitutes 90 percent of the population and the advantaged race constitutes 10 percent of the population than if the disadvantaged race constitutes 10 percent of the population and the advantaged race constitutes 90 percent of the population.

To more fully appreciate the results, it is useful to graph S1 and S2 (average S1) for each subgroup split of interest. Figure 3 reports the graphs of S1 and S2 for the case in which the population is evenly split between the two categories of the binary qualitative characteristic. As expected, S1 increases at

Table 9. S2 Status (Average S1 Status) in Two Subgroups of Large Society

Bottom Subgroup		Top Subgroup		S2 Status
Relative Size	S2 = E(S1)	Relative Size	S2 = E(S1)	Gap
.05	.025	.95	1.051	1.026
.10	.052	.90	1.105	1.054
.15	.079	.85	1.162	1.083
.20	.107	.80	1.223	1.116
.25	.137	.75	1.288	1.151
.30	.168	.70	1.357	1.189
.35	.200	.65	1.431	1.231
.40	.234	.60	1.511	1.277
.45	.269	.55	1.598	1.328
.50	.307	.50	1.693	1.386
.55	.347	.45	1.798	1.452
.60	.389	.40	1.916	1.527
.65	.435	.35	2.050	1.615
.70	.484	.30	2.204	1.720
.75	.538	.25	2.386	1.848
.80	.598	.20	2.609	2.012
.85	.665	.15	2.897	2.232
.90	.744	.10	3.303	2.558
.95	.842	.05	3.996	3.153

Note: Subgroup S2 status (average S1 status) is based on S1 arising from a single valued characteristic or several perfectly positively associated characteristics. S1 status for representative persons in this population is reported in the second column of Table 7. Formulas for calculating the S2 status (average S1 status) in the two subgroups and the S2 status gap in this large-population case (letting p denote the relative size of the bottom subgroup) are:

S2 in bottom subgroup: $S2_{bot} = 1 - \left(\frac{1-p}{p}\right)\ln\left(\frac{1}{1-p}\right)$;

S2 in upper subgroup: $S2_{top} = 1 + \ln\left(\frac{1}{1-p}\right)$;

S2 gap: $S2_{gap} = \frac{1}{p}\ln\left(\frac{1}{1-p}\right)$.

an increasing rate as relative rank increases. A vertical dashed line divides the population into the two equal-sized subgroups. Average first-order status is represented by horizontal lines; the two short lines are for S2 in each of the two subgroups, and the long line is for average S1 over the entire population.

In this equal-split case, the two categories' magnitudes of second-order status are equidistant from the overall average S1 of 1; and the S2 gap between the two categories is 2ln(2). (There are precise relations between each subgroup split and the S2 gap.)

This kind of analysis, carried out more elaborately and examining the effects of all the elements in play (e.g., the number of goods and their intercorrelations and weights, the correlation between good(s) and qualitative characteristics, and population subgroup splits) may prove useful in understanding gender relations as well as intergroup relations across a wide variety of settings, including, for example, empires, colonial societies, and multiracial societies.

HOW TO CHANGE S2

We have described the process by which qualitative characteristics acquire status. The question arises, how second-order sta-

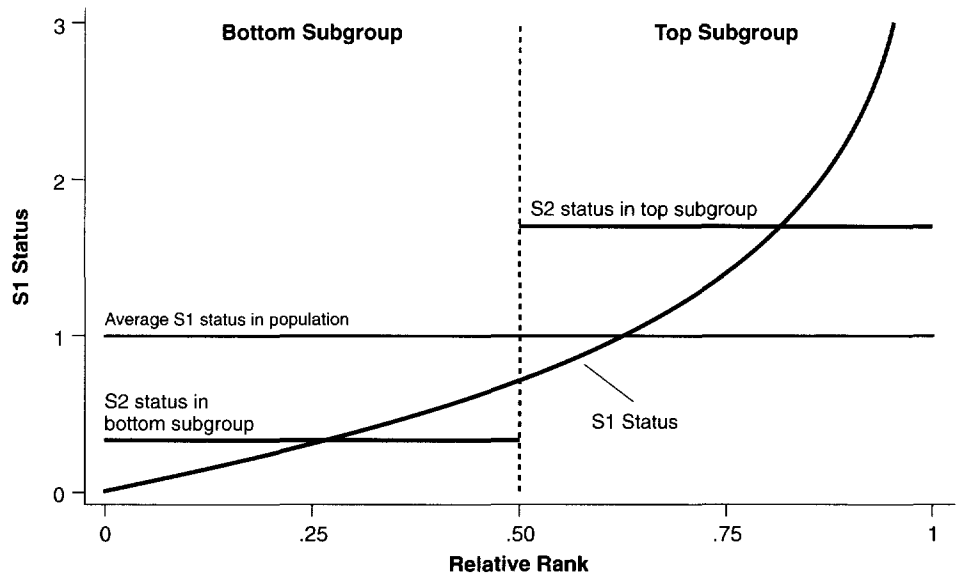

Figure 3. S1 Status and S2 Status in a One-Good Society with Two Equal-Sized Subgroups

Note: Subgroup S2 status equals average S1 status in each subgroup. The vertical dashed line denotes the division of the society into two equal-sized subgroups. Horizontal lines denote average S1 status in each subgroup and in the population as a whole. S1 values are reported in Table 7 (see page 108) and S2 values in Table 9 (see page 113).

tus changes, is maintained, or is discarded. According to the framework, S2 is totally dependent on S1 and on the configuration of goods, their weights, their association with each other and with the qualitative characteristic. Thus, S2 cannot be directly affected; rather it is altered by altering the determinants of S1 and the association between the goods and the qualitative characteristic.

To illustrate with an example based on the work of Ridgeway (1991, 1997b), Ridgeway and Balkwell (1997), and Webster and Hysom (1998): Suppose that wealth is the valued good and that wealth is perfectly associated with gender, such that men are richer than women. Wealth produces first-order status, and first-order status generates second-order status—the category "male" has greater S2 than the category "female." Strategies to make gender shed its second-order status include: (1) change the S1 function (e.g., by eliminating wealth or by introducing a second good negatively associated with wealth); and (2) change the association between wealth and gender (e.g., by recruiting wealthy women and/or destitute men into the society).

These strategies illuminate the underlying dynamics, pointing to a mechanism that may play a part in the phenomenon of "internalized oppression" (Bourdieu 1997; Stanton-Salazar 1997). If women did not value wealth, gender would not have acquired S2. The members of the bottom subgroup are always in collusion, so to speak, with the members of the top subgroup. By agreeing that wealth is desirable, members of the bottom subgroup let wealth confer first-order status, and once wealth confers first-order status, given the association between wealth and gender, gender acquires second-order status. Hence, a radical way to remove S2 from gender is to renounce wealth. The literature on utopian communities provides trenchant insights into this process for removing S2 from qualitative characteristics. Note, however, that if women renounce wealth but men still value it, then there will be two parallel status structures, with men making prestige payments on the basis of wealth (to both men and women) and women making prestige payments on the basis of something else (to both men and women). The ensuing windfalls and shortfalls in status constitute a

new avenue for research, with many new special cases to be analyzed, together with the mechanisms for achieving a new consensus.

The second strategy is less drastic. One can continue to value wealth and enjoy its use, but one has to search for anomalous individuals and import them into the society, thus reducing or eliminating the association between wealth and gender.

THIRD-ORDER STATUS (S3)

S3 Assumption and Function

We have described the processes for producing first-order status—which is a property of individuals and arises from individuals' quantitative characteristics, together with information about their ranks—and for producing second-order status—which is a property of qualitative characteristics and arises from first-order status. Now consider the case in which first-order status cannot be produced because there is no information about an individual's ranks on quantitative characteristics. Suppose that wealth is the basis of evaluation, but there is no information about an individual's wealth rank. In this case, if the individual can be categorized with respect to a qualitative characteristic (e.g., can be classified as male or female) and if there is information about the average S1 status in that category of the qualitative characteristic, then third-order status is produced and imputed to the individual. Formally:

Assumption 3a (Third-Order Status): If information about an individual's ranks on quantitative characteristics (goods in the S1 function) is not available so that first-order status cannot be produced, and if there is information about the average S1 in the category of a qualitative characteristic corresponding to the individual, then third-order status (S3) is imputed to the individual. S3 for the jth person in the cth category of a qualitative characteristic is equal to the second-order status of the category:

$$S3_{jc} = S2_c. \tag{8}$$

The S3 formula may be generalized in a number of ways. First, there may be information about average S1 status for subsets formed by more than one qualitative characteristic (e.g., "black women," "white men," etc.). Second, if S1 is produced by more than one quantitative characteristic, there may be separate information about average S1 status derived from one good in one qualitative characteristic and average S1 status derived from another good in another qualitative characteristic (e.g., average S1 status due to wealth in each category of gender and average S1 status due to beauty in each category of race).

There is another important process. S2, once produced, acquires a life of its own, so to speak. Even if information about the pertinent quantitative characteristic(s) becomes available, there may be a reluctance to relinquish the S2 component of S3, leading to a generalized version of S3, denoted S3*. Formally:

Assumption 3b (Generalized Third-Order Status): Given that third-order status has been produced, a generalized version of S3, S3*, is generated; this is a weighted sum of S1 and S2:

$$S3^* = \boldsymbol{w}\mathbf{S1} + \boldsymbol{w}\mathbf{S2}. \tag{9}$$

(As before, bold characters indicate vectors and the weights must sum to one.)

This process of combining S1 and S2 is related, in part, to the empirical tradition pioneered by Rossi (1979) in which the prestige of an individual is linked to a large set of the individual's quantitative and qualitative characteristics. Thus, consistent with the theoretical framework developed here, if S1 is generated by schooling and earnings and S2 is acquired by race and gender, then S3 may respond to all four characteristics. A primary research objective would be to ascertain whether, given information about schooling and earnings, race and gender have no effect or whether, alternatively, S2, once generated, is long-lived.

S3 Initial Theoretical Development

Why would use of S2 survive introduction of the information required to produce S1? Look again at Figure 3. Notice that the sub-

group S2 lines intersect the S1 curve. To the left of the intersection in each subgroup, S2 status (average S1 status) is greater than the individual's first-order status (S1), and to the right, S2 status (average S1 status) is smaller than the individual's S1. This indicates that there are status gains and losses from the use of S2: Individuals whose S1 is lower than their subgroup's S2 gain status from the use of S2, while individuals whose S1 is higher than their subgroup's S2 lose status from the use of S2.[18]

Use of S2 is a form of discrimination—individuals are not assessed on their individual S1-pertinent quantitative characteristics but rather are treated as part of a subgroup and their subgroup's characteristics are imputed to them. Thus, there are status gains and losses from discrimination, and they may not be what one expects. That is, it would be reassuring to find that all members of the bottom subgroup suffer from discrimination and that all members of the top subgroup gain from discrimination. But the reality is more complex, with some individuals in the bottom subgroup gaining status from discrimination and some individuals in the top subgroup losing status from discrimination.[19]

S3 IN THE SPECIAL CASE OF ONE-GOOD SMALL GROUPS. To analyze S3 in small groups, we return to the case of a 12-member group which values one good and in which that good is perfectly associated with a binary qualitative characteristic. The members' S1 was presented in Table 3, and the subgroups' S2 was presented in Table 8. Table 10 reports the status gains and losses from discrimination in each subgroup and the total gain and loss, for all possible subgroup splits from 1–11 to 11–1. For each subgroup, Table 10 reports the Member ID numbers of those who gain and those who lose, and the percentage of the subgroup who gain and lose. For example, in the 3-9 subgroup split, the two lowest-ranking members (Member IDs 1 and 2) gain from discrimination and the third member of the bottom subgroup (Member ID 3) loses from discrimination—within the subgroup, then, 67 percent gain from discrimination and 33 percent lose from discrimination. Meanwhile, in the top subgroup, the bottom five members gain from discrimination and the top four lose from discrimination; thus, within the top subgroup, 56 percent gain from discrimination and 44 percent lose. Looking at the group as a whole, seven members gain and five members lose, for total percentages of 58 percent who gain from discrimination and 42 percent who lose. Of course, when the subgroup has only one person, as in the bottom subgroup of the 1–11 split and the top subgroup of the 11–1 split, the person neither gains nor loses from discrimination; in those cases, the total gain and loss do not sum to 100.

Table 10 shows that the majority gain from discrimination in all subgroup splits except the 8–4 (a tie) and the 11–1 (which has a plurality gaining from discrimination). If individuals care about their status, then in most situations the majority will want to retain S3 even if information becomes available to generate S1.

If affinities arise from similarity in interests and if individuals care about their status, then there is a natural affinity between those members of the bottom subgroup who gain from discrimination and those members of the top subgroup who also gain from discrimination. Similarly, there is a natural affinity between those members of the bottom subgroup who lose from discrimination and those members of the top subgroup who also lose. Accordingly, the stage is set for coalitions to form. These coalitions have the interesting property that proponents of discrimination are drawn from among the least advantaged of each subgroup, while opponents of discrimination are drawn from among the most advantaged of each subgroup (regardless of the summary measure of S1 underlying S2). Thus, if the quantitative characteristic which confers S1 status is correlated with political skill, then opponents of discrimination—although almost always outnumbered—may by cunning win the day.

[18] Note that this result continues to hold even if S2 is measured by the median of S1, or by any other location measure, rather than by the mean of S1. In contrast, the proportions who gain and lose from discrimination depend on the summary measure of S1.

[19] Note the importance of distinguishing between use of S2 when S1 cannot be generated and use of S2 when S1 is available. Note also that similar reasonings may be used to analyze identity and reference-group processes.

Table 10. Status Gains and Losses from Discrimination in a Group of Size 12

Bottom Subgroup					Top Subgroup					Total	
	Gain $S1_i < E(S1)$		Loss $S1_i > E(S1)$			Gain $S1_i < E(S1)$		Loss $S1_i > E(S1)$		Gain	Loss
Size	Member ID	Percent	Member ID	Percent	Size	Member ID	Percent	Member ID	Percent	Percent	Percent
1	—	—	—	—	11	2–8	63.6	9–12	36.4	58.3	33.3
2	1	50.0	2	50.0	10	3–8	60.0	9–12	40.0	58.3	41.7
3	1–2	66.7	3	33.3	9	4–8	55.6	9–12	44.4	58.3	41.7
4	1–2	50.0	3–4	50.0	8	5–9	62.5	10–12	37.5	58.3	41.7
5	1–3	60.0	4–5	40.0	7	6–9	57.1	10–12	42.9	58.3	41.7
6	1–3	50.0	4–6	50.0	6	7–10	66.7	11–12	33.3	58.3	41.7
7	1–4	57.1	5–7	42.9	5	8–10	60.0	11–12	40.0	58.3	41.7
8	1–4	50.0	5–8	50.0	4	9–10	50.0	11–12	50.0	50.0	50.0
9	1–5	55.6	6–9	44.4	3	10–11	66.7	12	33.3	58.3	41.7
10	1–6	60.0	7–10	40.0	2	11	50.0	12	50.0	58.3	41.7
11	1–6	54.5	7–11	45.5	1	—	—	—	—	50.0	41.7

Note: The entries in this table are obtained by comparing each person's S1 status from the rightmost column of Table 3 (see page 103) with the subgroups' S2 status (average S1 status) from Table 8 (see page 112). When a subgroup has only one member, that member's S1 equals the average, and hence he or she neither gains nor loses status from discrimination. In those cases (the top and bottom rows of the table), the percentages of the entire group with status gains and losses from discrimination do not sum to 100; the residual may be thought of as unaffected by discrimination.

***S3* IN THE SPECIAL CASE OF LARGE SOCIETIES.** Next we analyze the status gains and losses from discrimination in large societies which value one good or several positively associated goods. S1 in such societies was reported in Table 7, and S2 in Table 9. Table 11 indicates that, for every subgroup split, majorities of both the bottom and top subgroups gain from discrimination. The sizes of these majorities differ between bottom and top subgroups and across the subgroup split. While in the top subgroup, the percentages who gain and lose are constant across all subgroup splits—63 percent always gain and 37 percent always lose—in the bottom subgroup, the percentage who gain increases with the relative size of the bottom subgroup, and the percentage who lose decreases.[20]

To flesh out Table 11, suppose that the bottom subgroup (or its leadership) decides to fight against discrimination and the top subgroup (or its leadership) decides to fight for discrimination. Both the bottom and top subgroups are vulnerable to defections; that is, members may disagree with the leadership and refuse to participate in the fight or even sabotage it. The figures in Table 11 quantify the danger of defection. In the bottom subgroup, those who gain from discrimination are at risk of defecting; and in the top subgroup, those who lose from discrimination are at risk of defecting. Accordingly, while the top subgroup has a constant risk of defecting of approximately 37 percent of the membership, the bottom subgroup has a larger subset at risk of defecting—the lowest subset at risk of defecting is over half (50.2 percent in the .05 subgroup split)—and the subset at risk increases with the subgroup's relative size.

Thus, the bottom subgroup is more difficult to discipline (to prevent defections) than is the top subgroup. And the difficulty increases as the bottom subgroup increases in relative size.

[20] Analysis of the formulas underlying the quantities in Table 11 (Appendix Table B) indicates that in the bottom subgroup, as the subgroup split approaches zero, the proportion who gain from discrimination approaches its lower limit of .5 and the proportion who lose from discrimination approaches its upper limit of .5.

Table 11. Status Gains and Losses from Discrimination in Large Societies

Bottom Subgroup					Top Subgroup					Total	
	Gain $S1_i < E(S1)$		Loss $S1_i > E(S1)$			Gain $S1_i < E(S1)$		Loss $S1_i > E(S1)$			
Relative Size	Rank	Percent	Rank	Percent	Relative Size	Rank	Percent	Rank	Percent	Gain Percent	Loss Percent
.05	0–2.5	50.2	2.5–5	49.8	.95	5–65	63.2	65–100	36.8	62.6	37.4
.10	0–5	50.4	5–10	49.6	.90	10–67	63.2	67–100	36.8	61.9	38.1
.15	0–8	50.7	8–15	49.3	.85	15–69	63.2	69–100	36.8	61.3	38.7
.20	0–10	50.9	10–20	49.1	.80	20–71	63.2	71–100	36.8	60.8	39.2
.25	0–13	51.2	13–25	48.8	.75	25–72	63.2	72–100	36.8	60.2	39.8
.30	0–15	51.5	15–30	48.5	.70	30–74	63.2	74–100	36.8	59.7	40.3
.35	0–18	51.8	18–35	48.2	.65	35–76	63.2	76–100	36.8	59.2	40.8
.40	0–21	52.1	21–40	47.9	.60	40–78	63.2	78–100	36.8	58.8	41.2
.45	0–24	52.5	24–45	47.5	.55	45–80	63.2	80–100	36.8	58.4	41.6
.50	0–26	52.8	26–50	47.2	.50	50–82	63.2	82–100	36.8	58.0	42.0
.55	0–29	53.3	29–55	46.7	.45	55–83	63.2	83–100	36.8	57.7	42.3
.60	0–32	53.7	32–60	46.3	.40	60–85	63.2	85–100	36.8	57.5	42.5
.65	0–35	54.2	35–65	45.8	.35	65–87	63.2	87–100	36.8	57.4	42.6
.70	0–38	54.8	38–70	45.2	.30	70–89	63.2	89–100	36.8	57.3	42.7
.75	0–42	55.5	42–75	44.5	.25	75–91	63.2	91–100	36.8	57.4	42.6
.80	0–45	56.2	45–80	43.8	.20	80–93	63.2	93–100	36.8	57.6	42.4
.85	0–49	57.2	49–85	42.8	.15	85–94	63.2	94–100	36.8	58.1	41.9
.90	0–52	58.3	52–90	41.7	.10	90–96	63.2	96–100	36.8	58.8	41.2
.95	0–57	60.0	57–95	40.0	.05	95–98	63.2	98–100	36.8	60.1	39.9

Note: The entries in this table are obtained by applying the mathematical formulas in Appendix Table B, which compare each person's S1 status, as in the second column of Table 7 (see page 108), with the subgroups' S2 status (average S1 status), as in Table 9 (see page 113).

Although the subgroup-specific patterns are monotonic (or constant, as in the top subgroup), they combine to form totals which are nonmonotonic. As shown in Table 11, the overall percentage who gain first decreases as the relative size of the bottom subgroup increases, then when the bottom subgroup contains approximately 70 percent of the population, the overall percentage who gain begins to increase. Meanwhile, the overall percentage who lose first increases, then, when the bottom subgroup contains approximately 70 percent of the population—mirroring the pattern among the percentage who gain—the percentage who lose begins to decrease. However, although the percentages who gain and lose vary, a majority always gains. Thus, in a contest adjudicated by majority rule, and in which everyone voted and everyone voted for the platform under which their own status would be highest, discrimination would win.

However, as noted above, the proponents of discrimination are drawn from the bottom ranks of each subgroup, while the opponents of discrimination are drawn from the top ranks of each subgroup. Thus, if the status-conferring quantitative characteristic is correlated with political skill, then opponents of discrimination—though always outnumbered—may be able to snatch victory.

A different way to approach these results is to assess the sources of support for and opposition to discrimination. Table 12 presents, separately for the subset who gain status from discrimination and presumably support it and the subset who lose status from discrimination and presumably oppose it, the percentage drawn from the bottom subgroup and the percentage drawn from the top sub-

Table 12. Sources of Support for and Opposition to Discrimination, by Population Subgroup Split

Percentage in Bottom Subgroup	Support for Discrimination		Opposition to Discrimination	
	Percentage from Bottom Subgroup	Percentage from Top Subgroup	Percentage from Bottom Subgroup	Percentage from Top Subgroup
5	4.0	96.0	6.7	93.4
10	8.1	91.9	13.0	87.0
15	12.4	87.6	19.1	80.9
20	16.8	83.2	25.0	75.0
25	21.3	78.7	30.7	69.3
30	25.9	74.1	36.1	63.9
35	30.6	69.4	41.4	58.6
40	35.5	64.5	46.5	53.5
45	40.4	59.6	51.4	48.6
50	45.5	54.5	56.2	43.8
55	50.7	49.3	60.8	39.2
60	56.0	44.0	65.4	34.6
65	61.4	38.6	69.8	30.2
70	66.9	33.1	74.1	25.9
75	72.5	27.5	78.4	21.6
80	78.1	21.9	82.6	17.4
85	83.7	16.3	86.8	13.2
90	89.2	10.7	91.1	8.9
95	94.7	5.3	95.4	4.6

Note: The population subgroup split is represented by the percentage in the bottom subgroup in the leftmost column. The sources of support for discrimination sum to 100 percent, as do the sources of opposition to discrimination. Thus, for example, in a society split into two equal-sized subgroups, the majority of supporters for discrimination are drawn from the top subgroup (54.5 percent), and the majority of opposers to discrimination are drawn from the bottom subgroup (56.2 percent). The entries in this table are obtained by applying the formulas in Appendix Table B.

group. The percentages from the bottom and top subgroups sum to one. For example, in the case where 25 percent of the population is in the bottom subgroup (the fifth row), support for discrimination relies heavily on the top subgroup, which constitutes 78.7 of its base; concomitantly, opposition to discrimination also relies heavily on the top subgroup, which provides 69.3 percent of its constituency.

The sources of support and opposition to discrimination operate monotonically. As the percentage in the bottom subgroup increases, the percentages of both the support and opposition constituencies drawn from the bottom subgroup increase, and the percentages drawn from the top subgroup decrease.

A final way to examine the status gains and losses from discrimination is to graph the proportions of the entire population who are in each of the four subsets (those who gain and are in the bottom subgroup, those who lose and are in the bottom subgroup, those who gain and are in the top subgroup, and those who lose and are in the top subgroup) as a function of the relative size of the bottom subgroup. Figure 4 presents these plots. As shown, the two subsets from the top subgroup decrease linearly, the gain subset from the bottom subgroup increases nonlinearly, and the loss subset from the bottom subgroup increases throughout most of the range but then shifts direction (at a subgroup split of approximately .955).

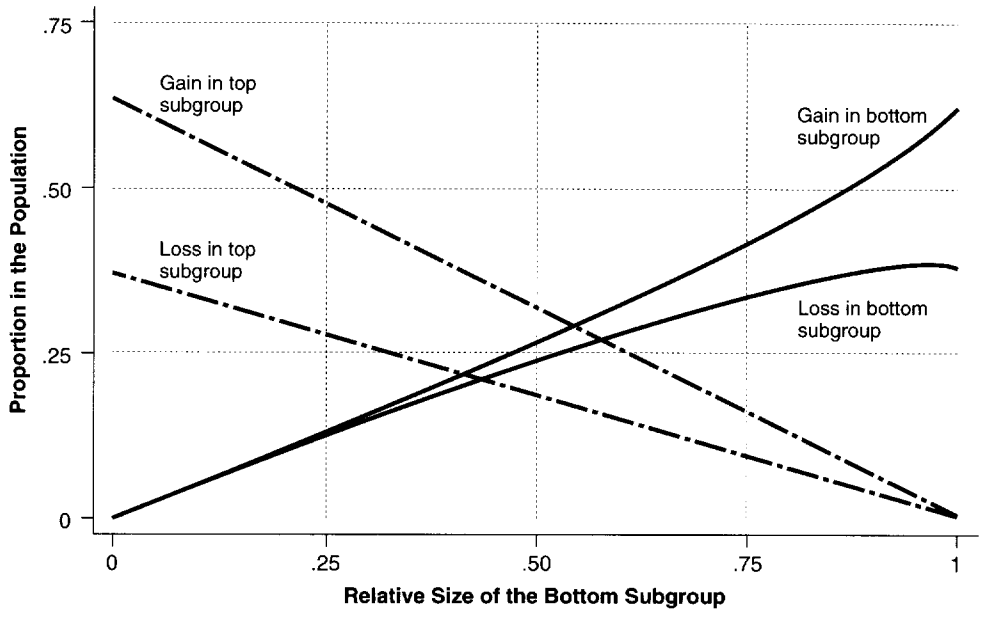

Figure 4. Status Gains and Losses from Discrimination

Note: For a given population subgroup split (represented by the relative size of the bottom subgroup), the proportions in the four subsets sum to one. Formulas are reported in Appendix Table B; related values are reported in Table 11 (see page 118).

Because the proportions in the four subsets sum to one, Figure 4 enables assessment of which sets dominate, by population split. For example, in societies in which the proportion in the bottom subgroup is less than a little over half, the largest subset in the society is the one composed of top-subgroup members who gain from discrimination. Similarly, at the point where the top-gain and bottom-gain subsets intersect (i.e., when the proportion in the bottom subgroup is a little over half), the two subsets (top-gain and bottom-gain) are of equal size.

It is especially interesting to examine Figure 4 at the points corresponding to an equal population split. As shown, the smallest subset consists of individuals from the top subgroup who lose from discrimination (18 percent), and the largest subset consists of individuals from the top subgroup who gain from discrimination (32 percent); the two subsets from the bottom subgroup occupy intermediate places (26 percent in the bottom-gain subset and 24 percent in the bottom-lose subset). Given that the gender split is approximately fifty-fifty, it would be useful to reexamine data generated by experiments on gender and status in light of these results.

How to Change (or Keep) S3

Third-order status arises because of the lack of information on quantitative personal characteristics; but provision of such information does not guarantee its elimination. Nonetheless, provision of the information may be useful in eliminating S3—for those who wish to eliminate it. Perhaps the most intriguing result is that some members of the disadvantaged subgroup gain from discrimination, suggesting another mechanism producing and maintaining "internalized oppression" (Bourdieu 1997; Ridgeway 1997a: 222; Stanton-Salazar 1997). Thus, devising strategies to change S3 entails devising strategies for all actors.

Those who gain status from discrimination have as their objective to maintain S3 as a function exclusively of S2; introducing S1, even mildly weighted, diminishes their status. Accordingly, a useful strategy for them is to, first, prevent the free flow of information, second, discount the information or dispute its accuracy, and, third, make arguments for ignoring individual characteristics and focusing instead on subgroup membership or other communal considerations. Because

there are people in both subgroups who gain from discrimination, they will form partnerships; these partnerships can then be used to underscore the amicable relations that obtain between the two subgroups.

The strategy for those who lose status from discrimination is exactly the opposite—except that they will still form partnerships with their natural allies in the other subgroup. For these individuals, the goal is to increase information, make it widely available, express confidence in it, extol individualism.

Finally, a little insight for political activists and organizers, who often must go into unfamiliar situations: In both subgroups, the lowest-ranking individuals (on the quantitative characteristic that confers S1 status) are likely to support discrimination, and the highest-ranking individuals are likely to oppose discrimination. Thus, lobbyists for discrimination should seek out low-ranking persons, and lobbyists against discrimination should seek out high-ranking persons.

Further Implications

S3 status provides fertile ground for substantial further theorizing. One avenue involves the effects of status processes on identity phenomena. Suppose that activation of a subgroup identity produces status gains and losses, exactly as in the analysis of discrimination. Then, among other things, two ceteris paribus implications follow: First, in self-report surveys, the higher-ranking in each subgroup formed by a qualitative characteristic (such as race or ethnicity) will be less likely to answer subgroup-identification questions; thus, average schooling, skills, and income will be underestimated in all subgroups. Second, in face-to-face interviews, if interviewer characteristics or behavior activate subgroup identity, there will be a tendency for higher-ranking prospective respondents to decline to participate in the survey; thus, nonresponse will be disproportionately greater among persons with higher schooling, skill, and income.

Finally, suppose that the cross-subgroup coalitions discussed above lead to formation of political parties—an "individualistic" party comprising those who lose from discrimination (or from subgroup identification) and a "collectivistic" party comprising those who gain from discrimination (or from subgroup identification). Then the individualistic party is predicted to be smaller but higher-skilled.[21]

CONCLUDING NOTE

This paper presented an integrated framework for studying status. The framework combines ideas and insights from several literatures in order to address long-standing, unresolved issues in status research, such as: (1) the emergence of status; (2) how to distinguish between, and measure, the status of individuals and the status of characteristics; (3) how to measure and understand the status gap between subgroups (e.g., between men and women, or between races); and (4) how to distinguish the operation of quantitative and qualitative characteristics in the production of status.

By identifying three distinct types of status and linking them in distinctive ways to quantitative and qualitative characteristics, the framework makes it possible to analyze a wide variety of status phenomena in a broad range of groups and societies.

The new status theory yields many testable implications and, based on the work to date, appears capable of yielding many more implications beyond the ones presented here. The initial set includes implications for the effects of (1) the number and intercorrelation of personal characteristics, (2) the availability of information about personal characteristics, and (3) the proportions of a group in each category of a qualitative characteristic. The derived implications cover such phenomena as status differences between group members, status gaps between subgroups, and overall inequality in the status structure, all under varying conditions. For example, the analyses suggest that under certain given conditions: (1) status inequality is lower if the valued goods are negatively correlated; (2) in a two-subgroup society, the least advantaged from both subgroups gain status from discrimination, and the most advantaged

[21] The "Florida phase" of the 2000 U.S. presidential election may provide a case in point (see Nagourney and Barstow 2000).

from both subgroups lose status from discrimination, leading to cross-subgroup coalitions; (3) the status gap between two subgroups increases with the relative size of the disadvantaged subgroup; (4) when two subgroups are fighting for and against discrimination, it is more difficult to prevent defections in the bottom subgroup than in the top subgroup; and (5) opponents of discrimination are outnumbered.

The new framework for status analysis opens many avenues for future work—refining the basic status functions, building theories and deriving more and sharper implications, and testing the implications and using the new measures for the status of persons and the status of characteristics to assess key status phenomena and their correlates in surveys and experiments.

Ahead, a further integration looms on the horizon. The status analyzed here refers to evaluations of the worth of individuals and characteristics (footnote 1). This kind of status is related to the other major kind of status of interest in social science—the "status" in status attainment (Sewell and Hauser 1972, 1992)—in that the status in status attainment consists of the characteristics which confer the evaluation kind of status. Ultimately, this evaluation status cannot be fully understood without understanding how individuals come to have the characteristics they bring to the social arena—and, importantly, the two processes may be dynamically linked. Thus, a more complete framework than the one developed in this paper would integrate the two kinds of status, providing fertile ground for new substantive and methodological synergies.

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Appendix Table A. Principal Functions and Parameters of the S1 Status Distribution, in Four Special Cases

Case	Variate Family	$f(x)$	$F(x)$	$Q(\alpha)$	$Q(0)$	$E(X)$	$Q(1)$
One Characteristic	Exponential	e^{-x}	$1-e^{-x}$	$\ln\left(\frac{1}{1-\alpha}\right)$	0	1	∞
Two Characteristics:							
Positively associated	Exponential	e^{-x}	$1-e^{-x}$	$\ln\left(\frac{1}{1-\alpha}\right)$	0	1	∞
Negatively associated	Unnamed	$\frac{4e^{-x}}{\sqrt{e^{2x}-4}}$	$\sqrt{1-\frac{4}{e^{2x}}}$	$\ln\left(\frac{2}{\sqrt{1-\alpha^2}}\right)$	$\ln 2$	1	∞
Independent	Erlang	$4xe^{-2x}$	$1-\left[e^{-2x}(2x+1)\right]$	—	0	1	∞

Note: This appendix table presents principal functions (probability density function $f(x)$, cumulative distribution function $F(x)$, and quantile function $Q(\alpha)$) and parameters of the S1 status distribution arising in four special cases defined by the configuration of valued personal characteristics. In the three two-good cases, the two goods are equally weighted.

Appendix Table B. Formulas for Calculating Gains and Losses from Discrimination

Quantity	Bottom Subgroup	Top Subgroup
(1) Relative rank at which S1 = E(S1)	$1-\left(\frac{1}{e}\right)\left(\frac{1}{1-p}\right)^{\frac{1-p}{p}}$	$1-\frac{1-p}{e}$
(2) Those who gain status from discrimination, as a proportion of the population	$1-\left(\frac{1}{e}\right)\left(\frac{1}{1-p}\right)^{\frac{1-p}{p}}$	$(1-p)\left(1-\frac{1}{e}\right)$
(3) Those who lose status from discrimination, as a proportion of the population	$p-1+\left(\frac{1}{e}\right)\left(\frac{1}{1-p}\right)^{\frac{1-p}{p}}$	$\frac{1-p}{e}$
(4) Those who gain status from discrimination, as a proportion of the subgroup	$\frac{1-\left(\frac{1}{e}\right)\left(\frac{1}{1-p}\right)^{\frac{1-p}{p}}}{p}$	$1-\frac{1}{e}$
(5) Those who lose status from discrimination, as a proportion of the subgroup	$\frac{p-1+\left(\frac{1}{e}\right)\left(\frac{1}{1-p}\right)^{\frac{1-p}{p}}}{p}$	$\frac{1}{e}$

Note: In the formulas, p denotes the relative size of the bottom subgroup. The four proportions given in rows 2 and 3—representing those who gain and lose status from discrimination, in both subgroups. as proportions of the population—sum to one. In each subgroup, the two proportions in rows 4 and 5—representing those who gain and lose status from discrimination, as a proportion of the subgroup—sum to one.

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