

University of Groningen

Status differentiation

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Document Version

Publisher's PDF, also known as Version of record

Publication date:

2016

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Grow, A. (2016). *Status differentiation: New insights from agent-based modeling and social network analysis*. University of Groningen.

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Chapter 1

Introduction

1.1 Introduction

Understanding how status differentiation comes about is a core task of sociology since the beginnings of the discipline (Jasso, 2001; Ridgeway, 2014). One reason “is the near-universality of the phenomenon: across a wide range of scales and contexts, actors are sorted into social positions that carry unequal rewards, obligations, and expectations” (Gould, 2002, p. 1143). A second reason is that status differentiation can have far-reaching consequences for those concerned by it. High status individuals tend to be more influential and receive more attention (Berger, Fisek, Norman, & Zelditch, 1977; Berger, Rosenholtz, & Zelditch, 1980), fare better in the educational system and have better chances on the labor market (Foschi, Lai, & Sigerson, 1994; Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012; Schmader, 2002; Steele & Aronson, 1995), are often in better health and report higher subjective well-being (Anderson, Kraus, Galinsky, & Keltner, 2012; Fournier, 2009; Ghaed & Gallo, 2007; Gruenewald, Kemeny, & Aziz, 2006; Huo, Binning, & Molina, 2010; Tay & Diener, 2011), and have higher life expectancy (Marmot, 2004) than lower status individuals. Status differentiation is thus considered a major source of social inequality that affects virtually all aspects of individuals’ lives (Ridgeway, 2014).

As Ridgeway and Correll highlighted, “status can be understood as an evaluative ranking between social groups in which one group (e.g., professionals) is held in the culture to be more socially significant and worthy of respect than is another (laborers). Yet status can also be seen as an evaluative hierarchy among individuals in which one person is more respected, deferred to and influential than another” (Ridgeway & Correll, 2006, p. 431). In the present dissertation, I aim to contribute to the understanding of the processes that lead to status differentiation at both levels. Specifically, in Part 1 (Chapters 2 and 3), I focus on the processes that can lead to the emergence of status differentiation between social groups. In Part 2 (Chapters 4 and 5), I focus on the processes that can lead to the emergence of status differentiation between individuals. As I will discuss below, the processes that lead to status differentiation at the two levels are inherently intertwined (Ridgeway & Correll, 2006). That is, understanding how status differentiation emerges between social groups requires an understanding of how status differentiation emerges between individuals, and vice versa. Both issues therefore feature in all chapters of this dissertation, with varying emphasis.

How do sociologists explain the emergence of status differentiation between individuals and social groups? For example, how do they explain that in many social settings status hierarchies emerge in which some individuals are more respected than others (Bales, 1950, 1970; Goode, 1979; Gould, 2002)? And how do they explain that in many Western societies men are assumed to be more worthy than women (J. W. Balkwell & Berger, 1996; Brashears, 2008; Hopcroft, 2002; Moss-Racusin et al., 2012; Ridgeway, 2011), that whites are seen as

more competent than blacks (E. G. Cohen, 1982; Steele & Aronson, 1995), and that the middle aged are often more respected than the old (Ishii-Kuntz & Lee, 1987)?

Traditionally, sociologists have assumed that individuals obtain status either through the possession of valuable resources or power, that enable them to engage in acts of social exchange and dominance (cf. Anderson & Kilduff, 2009; Cheng, Tracy, Foulsham, Kingstone, & Heinrich, 2013; Ridgeway, 1987). From an exchange perspective, actors who possess valuable resources desired by others can use these resources as a currency in exchange for respect and deference (Blau, 1964; Flynn, Reagans, Amanatullah, & Ames, 2006; Flynn, 2003; Goode, 1979). From a dominance perspective, individuals who are more powerful than others can use this advantage to extort gestures of respect and deference from those who are less powerful (cf. Cheng et al., 2013). Applied to the group level, these explanations hold that status differentiation is the result of factors that lead to systematic resource and power differences between the members of different social groups. In the case of gender, for example, it has been argued that certain religious beliefs, inheritance practices, and modes of production tend to create social structures in which resources and power become concentrated among men, thereby leading to differences in the worth and respect attributed to the different sexes (Hendrix & Hossain, 1988; Sanderson, Heckert, & Dubrow, 2005; Stover & Hope, 1984). Similarly, differences in the modes of production and inheritance customs across societies have been assumed to translate into variation in the resources and power that the elderly control. This variation might partly explain why older people have low status in some societies, but high status in other societies (C. Balkwell & Balswick, 1981; Ishii-Kuntz & Lee, 1987).

The foregoing illustrates that traditional explanations locate the causes of status differentiation in factors largely exogenous to the status system. More recent research in the expectation states framework (Berger et al., 1977, 1980; Wagner & Berger, 2002), and in particular in status construction theory (Mark, Smith-Lovin, & Ridgeway, 2009; Ridgeway & Balkwell, 1997; Ridgeway, 1991, 2000), has described alternative processes in which the causes of status differentiation can be endogenous to the status system. These processes do not require any objective resources and power differences between individuals or social groups.

The expectation states framework focuses on interactions in small groups with a collective task focus (e.g., work teams, student learning groups, and neighborhood organizations) as building blocks of society. It holds that such groups can spontaneously develop hierarchies of influence and deference in which some individuals appear more resourceful and worthy of respect than others. Status construction theory, which is part of the expectation states framework, argues that when such differentiation occurs consistently between members of different social categories, even if only by accident, individuals can come to believe that the social distinction generally coincides with differences in resources and social worth. Once emerged, such a belief can diffuse throughout the population, because individuals carry it into new group contexts, treat new interaction partners accordingly, and thereby create hierarchies that teach their belief to others. By that, spontaneous status differentiation between individuals can lead to status differentiation between social groups, even when there are no resource and power differences between the individual members of the different groups.

Research in the expectation states framework and status construction theory has

significantly advanced our understanding of how status differentiation between individuals and social groups might emerge. Despite these advances, there are still significant gaps in our knowledge that I seek to narrow in this dissertation. In Part 1, I focus on the notion that status differentiation between social groups can be completely arbitrary and does not require any initial resource or power differences between the members of the groups involved. My goal is to shed more light on the conditions under which such social construction is likely to occur in small group interaction (Chapter 2) and on the conditions under which the resulting beliefs are likely to spread throughout society (Chapter 3). In Part 2, I focus on the processes that can lead to the emergence of status differentiation between individuals in small group contexts. I highlight that existing research in the expectation states framework has mostly been conducted in the laboratory and has almost exclusively concentrated on groups with a collective task focus. My goal is to show how some of the processes that the expectation states framework describes play out outside the laboratory, in groups with a collective task focus (Chapter 4) and in groups without a collective task focus (Chapter 5).

Taken together, I aim to improve our understanding of the processes that can lead to status differentiation at both the individual and social group level. In this introductory chapter, I first discuss the dynamics by which, according to earlier research, interactions in groups with a collective task focus can lead to status differentiation between individuals and social groups. Then, I discuss the limitations of earlier research on this topic and how I address these in this dissertation.

1.2 Status Differentiation from Task Focused Interaction

The expectation states framework and status construction theory describe behavioral and cognitive processes that can lead to the emergence of status differentiation between individuals and social groups. Research in this area focused on social groups based on categorical distinctions that create at least two mutually exclusive social categories. These should be easy to discern in face-to-face interaction, as is typically the case for characteristics such as gender and race. I follow this tradition and use the terms ‘social groups’ and ‘social categories’ interchangeably. Mostly I use ‘social categories’ to avoid confusion with the term ‘small groups’.

1.2.1 The individual level

The development of the expectation states framework was induced by the observation that small problem solving groups tend to quickly develop inequalities in patterns of participation and influence among their members (Correll & Ridgeway, 2003; Skvoretz, 1988). That is, small group researchers were struck by the fact that experimental decision-making groups tend to quickly develop hierarchical structures in which some group members receive more attention, gain more opportunities to contribute to the collective goal, are more influential, and receive more positive performance evaluations than others (Bales, Strodtbeck, Mills, & Roseborough, 1951; Bales, 1950). Another striking feature was that such differences often are aligned with salient social distinctions, such as gender and race (Strodtbeck, James, & Hawkins, 1957;

Strodtbeck & Mann, 1956). Since these early works, many studies have examined the conditions under which status hierarchies emerge and which factors facilitate or hinder this emergence (for recent reviews see Correll & Ridgeway, 2003; Wagner & Berger, 2002).

Research in the expectation states framework has developed within clear scope conditions. The framework centers on the emergence of status differentiation among previously unacquainted individuals in group settings with a collective task focus (Berger et al., 1977). Collective task focus means that individuals perceive the successful completion of some important task as the primary purpose of their membership in the group and that success can only be accomplished through teamwork. In such a context, the framework holds that individuals behave as if one of their tasks is to determine who is highly skilled in the task, to be able to structure their work effectively and efficiently (Driskell, 1982). That is, in their pursuit of goal achievement, group members somehow need to coordinate their work on the collective task and hierarchical differentiation (in the form of differential performance opportunities and influence) is often instrumental to achieving this goal (cf. Halevy, Chou, & Galinsky, 2011). Yet, the framework does not assume that hierarchies are always beneficial for group performance or that individuals always consciously try to establish hierarchical differentiation. It only assumes that people act ‘as if’ they try to maximize the chances of success by determining who is potentially able to make valuable contributions to the group’s goals and coordinating their input on the task accordingly (Berger et al., 1977).

Thus, at the core of the framework is the assumption that in groups with a collective task focus, inequalities in participation and influence – in short, status – emerge from the need to coordinate collaborative work. Formally, the framework conceptualizes assumptions about relative abilities as *performance expectations* (Berger et al. 1977) that group members hold for each other. Such expectations can be specific or general. They are specific when they apply to a small set of well-specified tasks (e.g., when individuals think ‘this person will probably perform well in mechanical tasks’). They are general when not restricted to one situation (i.e. when individuals think ‘this person is generally very capable and will probably perform well in many tasks’) (Berger et al., 1977). Performance expectations affect the way group members coordinate their work on the task, so that those expected to perform better than others are more likely to receive performance opportunities (e.g., they are more often asked for their opinion) and their task inputs are evaluated better, even if they are similar to the input of members for whom performance expectations are lower (Balkwell 1991a; Berger, Rosenholtz, & Zelditch 1980; Driskell 1982).

How do individuals develop performance expectations of each other, according to the expectation states framework? Three sources, the focus of much of the existing research, are relevant in the context of this dissertation. First, information about task relevant abilities and competence are taken as immediate cues as to which group members are more likely to be able to make valuable contributions to the group’s task. In the expectation states framework, individual characteristics linked to specific performance expectations are called *specific status characteristics* (Berger et al., 1977). To illustrate, imagine a group of social science students who have to jointly solve a problem in the area of mathematical sociology for course credit. Imagine further that one of the group members previously obtained a minor in math, before

switching to social science, and imagine that the other group members know this. It is likely that in this situation the group members will expect the individual with the background in math to have relatively high mathematical ability (specific status characteristic), which will lead the group to have high and very specific performance expectations for the math student compared to the rest of the group. Consequently, the group is more likely to listen to and appreciate the suggestions this individual makes for solving the task.

Second, in groups of previously unacquainted individuals, information about each other's abilities and competence is often hard to come by. So people tend to rely on *diffuse status characteristics* (Berger et al., 1977) as a further source of information. A diffuse status characteristic is any social distinction that has at least two states differentially evaluated in society and associated with both specific and diffuse performance expectations (paraphrased from Berger et al., 1980, p. 483). To illustrate this, consider the example of gender. In many Western societies, gender is a diffuse status characteristic, because men are more respected than women (differential evaluation) and because men are often assumed to be generally more able and competent than women (general performance expectation). Additionally, men are often assumed to be better at mathematics, whereas women are often assumed to be better in work with children (specific performance expectations). Consequently, performance expectations are typically higher for men when it comes to mathematics, but also when it comes to tasks not explicitly related to gender. In this dissertation, my focus is on the cognitive and behavioral processes that create and derive from such diffuse status characteristics. For simplicity, from here on I use the term status characteristic to refer to diffuse status characteristics as defined here; I use terms like abilities, skills, and competence to refer to specific status characteristics as defined above.

Third, individuals tend to infer ability and competence differences from behaviors that usually *result* from ability and competence differences. For example, when group member A_1 is very appreciative and accepting of the suggestions of group member A_2 , whereas A_2 criticizes and rejects A_1 's suggestions, it can appear to observers that A_2 is more competent than A_1 and has better leadership qualities in the specific context than A_1 . Therefore, group members will have higher performance expectations for A_2 than for A_1 . More formally, in the expectation states framework, interaction patterns assumed to signify ability and competence differences between individual group members are called *behavior interchange patterns* (Fisek, Berger, & Norman, 1991). The information that individuals derive from such patterns can combine with other sources of performance expectations and thereby can lead to a reinforcement of existing status differences between group members (Webster & Rashotte, 2010). For example, when gender is a status characteristic that favors men over women, male individuals are more likely to find their suggestions accepted by women in a given group context. Such acceptance establishes behavior interchange patterns that support the existing belief that men are generally more competent than women. This strengthens the status differences that exist between them in the local group context (Webster & Rashotte, 2010).

Behavior interchange patterns have the potential to generate stable status differentiation, even in the absence of any status characteristics or competence differences among group members. Whenever two persons interact, there is a chance that during their interactions a

behavior interchange pattern becomes established in which one individual appears more able and competent in the task at hand than the other, even if only by coincidence. The resulting shift in performance expectations that benefit this group member makes it more likely that their suggestions will receive more attention and that their contributions will be evaluated positively. This, in turn, leads to a situation in which more behavior interchange patterns become established that further contribute to the impression that they are more capable than others (cf. Lynn, Podolny, & Tao, 2009; Skvoretz & Fararo, 1996).

1.2.2 The social group level

The foregoing illustrates that in the expectation states framework status differentiation at both the individual and social group level are connected by a process of *status generalization* (Webster & Driskell, 1985).¹ In this process, people apply widespread beliefs about differences in the social worth and competence between members of different social categories to specific individuals. Such status generalization can lead to hierarchical differentiation in small, socially heterogeneous groups. Status construction theory holds that this process can also work the other way around. That is, the observation of status differentiation between individuals can lead to generalized beliefs about the social worth and competence of members of different social categories.

The theory builds on the insight that behavior interchange patterns can induce assumptions about the abilities and competence that people possess and argues that individuals tend to apply such assumptions to whole social categories, when the members of one category frequently appear to be more competent than the members of another category. To illustrate this, consider the case of a mixed-gender discussion group and assume initially that gender has no status value. If a group pattern emerges in which men typically accept the suggestions of women and evaluate their input positively, whereas women typically reject the suggestions of men and evaluate their input negatively, observers and group members can come to believe that this differentiation provides information about the respectability and competence that men and women largely possess relative to each other. As a result, individuals acquire *status beliefs* (Ridgeway, 1991) that transform the social distinction into a status characteristic in the eyes of the belief-holders.

Such belief acquisition is most likely to occur when a social distinction is associated with apparent competence differences in a comprehensive and consistent manner (Ridgeway, 2000). Comprehensive means that individuals have observed several behavior interchange patterns between members of two different social categories and consistent means that these patterns generally favor the members of one category over members of the other category (Ridgeway & Correll, 2006; Ridgeway, 2000). Once a status belief emerges in at least some individuals, it has the potential to spread throughout the population, given that it affects the way its holders treat their interaction partners. That is, when individuals have acquired a certain status belief in one context, they tend to carry this belief into other contexts and treat their interaction partners

¹ The theory specifically focusing on status generalization processes in the expectation states framework has been called 'status characteristics theory' or 'status generalization theory' (Correll & Ridgeway, 2003).

accordingly. This means that in the next group in which they take part, behavior interchange patterns are likely to emerge that reflect the beliefs that they hold. These new behavior interchange patterns teach the beliefs to others which is how they diffuse throughout society (Ridgeway, 1991).

In the initial formulation of the theory, Ridgeway (1991) highlighted the importance of an initial resource difference between the members of at least two different categories for status beliefs to emerge, spread, and become widely consensual in the larger population. This is because such a correlation ensures that in many parts of the population, the members of one category tend to be more respected and take the higher status position in their interactions with members of the other category. Even if the initial correlation is weak, so Ridgeway reasons, the learning and diffusion processes that status construction theory describes should tend to amplify the initially small advantage that members of one category have, thereby leading a corresponding status belief to spread and become widely consensual in the population. The formal modeling work presented by Ridgeway and Balkwel (1997) strongly supports the logical consistency of this argument, but more recently Mark et al. (2009) showed that from a theoretical point of view an initial correlation between a social distinction and resources is not necessary for status beliefs to emerge, spread, and become widely consensual in the larger population.

In developing their argument, Mark et al. (2009) started from the insight that during face-to-face collaborative work status differentiation can emerge spontaneously. If this is the case, and if there is no systematic resource difference between the members of two social categories, behavior interchange patterns that benefit either category should emerge randomly and in equal numbers in the population. That is, in some parts of the population hierarchies will emerge that favor the members of category *A*, but in other parts of the population, such hierarchies will favor the members of category *B*. If there were no systematic resource difference between the two, nothing would systematically lead to an advantage for one. Consequently, the emergence and diffusion processes that status construction theory describe should lead to equal numbers of individuals believing that members of either category are more competent than members of the other category. Thus, status beliefs would not become consensual in the population. Yet, as Mark et al. (2009) showed mathematically, the foregoing prediction holds only if the numbers of instances in which the members of the different categories appear in the superior position are perfectly balanced. Any small, random perturbation of this balance is likely to be reinforced by the interaction and diffusion processes that status construction theory describes, so that the corresponding belief will first become dominant in the population and ultimately widely consensual. Mark et al. highlighted that this implies that the processes that status construction theory describe have a strong tendency to create status differentiation between social groups, even in the absence of resource and competence differences between the groups.

1.3 Limitations of Past Research and Research Questions

As the foregoing discussion illustrates, the explanations of status differentiation that the expectation states framework and status construction theory offer are compatible with

traditional explanations offered in sociology, particularly explanations based on the notion of social exchange. That is, the expectation states framework and status construction theory also hold that status differences between individuals and social groups can emerge from resource differences. Yet, compared to earlier research, the expectation states framework and status construction theory add the notion that both individuals and social groups can attain status even in the complete absence of such differences.

Over the last decades, empirical research verified many of the basic assumptions and propositions of the expectation states framework and status construction theory. Similarly, analytical work has illustrated some of the striking implications that the assumptions of the expectation states framework and status construction theory have for the emergence of status differentiation. However, as I argue in this section, there are still important gaps in our knowledge. I discuss these gaps in two parts. In the first, I discuss some analytical work done in status construction theory and argue that it is limited by neglecting complexities that derive from the fact that status construction processes are based on many individuals' interactions occurring simultaneously in different parts of society. In the second part, I discuss some empirical work done in the expectation states framework and argue that the reliance on artificially created laboratory groups and the concentration on groups with a collective task focus limits the generalizability of the insights gained in this area.

1.3.1 Part 1: The complexity of status construction processes

The insight that status construction processes can lead to completely arbitrary status differentiation between social groups provides an important new view on the creation of social inequality. However, I argue that the analytical work that underlies this insight is limited by two important simplifications. The first simplification is the focus on the dyad as the smallest possible group in which status differentiation between members of different social groups can emerge. The second is the assumption that interactions between the members of different social groups occur at random in the population. Both simplifications aimed at reducing complexity and making the processes under consideration analytically tractable. Here I discuss each simplification in turn and formulate corresponding research questions that remain unanswered so far.

1.3.1.1 The focus on the dyad

In their formal modeling work, Mark et al. (2009) focused on the dyad as the smallest possible group in which hierarchical differentiation can occur. This is a useful starting point for examining status construction processes, because it allows us to abstract from some of the complex interaction dynamics that might develop in larger groups. In particular, in dyads any hierarchical differentiation that emerges is fully aligned with any social distinction that might differentiate group members. In larger groups, by contrast, more complex status structures can arise and these structures might provide partially contradicting information about competence differences between the members of different social categories.

To illustrate the complex structures that can arise in larger groups, consider the following. Imagine a group of four individuals differentiated by a nominal social distinction N that has

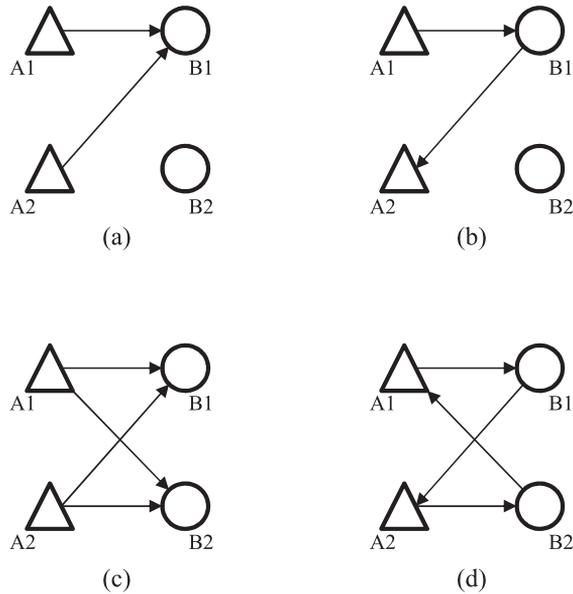


Figure 1.1 Examples of status structures in small groups with a collective task focus that vary in consistency and comprehensiveness. Triangles and circles represent individuals for which $N_i = A$ and $N_i = B$ respectively. A directed tie between two individuals indicates that a behavior interchange pattern has been established, in which the source appears in the higher competence role and the sink appears in the lower competence role. Panel (a): consistent, but not comprehensive structure; panel (b): inconsistent and not comprehensive structure; panel (c): consistent and comprehensive structure; panel (d): inconsistent, but comprehensive structure.

two categories, A and B . In real life, this distinction could represent gender with the categories male/female, or race with the categories white/black. Imagine further that two group members belong to category A and two belong to category B . The four panels in Figure 1.1 illustrate different structures of behavior interchange patterns between the members of the different categories. For simplicity, I only focus on status differentiation between individuals who belong to different social categories and neglect status differentiation between individuals who belong to the same category.

Panels (a) shows a situation in which the two members of category A (i.e. A_1 and A_2) both argued with individual B_1 about how to solve the collective problem and B_1 has, after some disagreement and discussion, accepted their suggestions. Therefore, both A_1 and A_2 appear more competent and more akin to leaders than B_1 . In this situation, the existing competence information consistently favors members of category A and this has the potential to induce the belief that members of this category are generally more competent than members of category B . Despite this consistency, the members of the group are not very likely to acquire such a belief yet, given that so far only a part of the possible interactions between the members of the

different categories have taken place. That is, status relevant information is not comprehensive yet. Panel (b) shows a situation that is similarly comprehensive, but that is less consistent given that the status information that it provides is very mixed. During their interactions, B_1 appeared less competent than A_1 but appeared more competent than A_2 . This implies that there is no association between competence and differences in the social distinction. Panels (c) and (d) show examples in which the status structures provide very comprehensive information, but in which the level of consistency varies strongly. In panel (c), the observed status information is fully comprehensive and consistently puts members of category A in the higher competence role. By contrast, in panel (d), there is no association between apparent competence differences and differences in the social distinction.

The examples shown in Figure 1.1 illustrate that in groups larger than the dyad different status structures can arise that either support or undermine the formation of status beliefs. The larger groups become, the more complex these structures can get and the longer they take to evolve. By focusing on dyads, Mark et al. (2009) abstracted from such complex structures and the associated cognitive and behavioral principles by which such structures affect face-to-face interaction. It remains hitherto unexplored how likely interactions in groups larger than the dyad are to generate the conditions that make the creation of status beliefs possible and developing hypotheses about this is far from trivial.

Consider, for example, the effect that the emergence of behavior interchange patterns has on subsequent interactions, as described in Section 1.2. Individuals who are involved in behavior interchange patterns in which they appear more competent than their interaction partners, are more likely to be involved in subsequent interactions, and are more likely to convince others of their views. Applied to the example shown in panel (a) of Figure 1.1, this implies that individual B_1 is less likely to be involved in the next task-related interaction that takes place in the group. Even if this individual is involved in the next interaction, the likelihood that he/she can convince other group members of his/her opinion is lower than it was before any behavior interchange patterns had been established. Conversely, A_1 and A_2 are more likely to be involved in the next interaction and their suggestions are more likely to be accepted. Thus, when A_1 or A_2 interact with B_2 it is likely that a new behavior interchange pattern emerges that supports the belief that A s are generally more able and competent than B s. This example suggests that the effects that behavior interchange patterns have on interaction dynamics might facilitate the emergence of hierarchical structures that can lead to the emergence of status beliefs. However, in the example shown in panel (b), the effect of the existing patterns is less certain, given that they might either benefit the status of the members of category A (if A_1 interacts with B_2) or might undermine it (if A_2 interacts with B_2).

Taken together, to date we know little about the dynamics that in groups larger than the dyad might lead to the emergence of status beliefs. Given that in today's societies many interactions with a collective task focus take place in groups larger than the dyad, we lack knowledge about a sizable share of the interactions that might be involved in the creation of social inequality. In this dissertation, I therefore address the following research question:

Research Question 1: How do the principles of task focused interaction that the expectation states framework describes for groups larger than dyads affect the formation of status beliefs in such groups?

1.3.1.2 The assumption of random interactions

The formal modeling work presented by both Ridgeway and Balkwell (1997) and Mark et al. (2009) suggests that status construction processes are a potent force in the creation of status differentiation and that there should be a strong tendency for social distinctions to attain population-wide status value. This notion is intriguing from a theoretical point of view, but it often seems to be inconsistent with empirical evidence. While it is clear that in most societies there are social distinctions with widely consensual status value, it is also clear that the status value of many social distinctions varies widely across the population. Consider, for example, the status value that gender has across the USA. Although gender is generally considered a status characteristic that favors men over women in most societies, Rice and Coates (1995) reported that the status advantage of men tends to be lower in the North than in the South of the USA. Even more, Gilleard and Gurkan (1987) reported stark differences in Turkey in the status that the old receive compared to the young in urban and rural areas. While in rural areas older men have very high status compared to the young, in cities they tend to have a comparatively lower status. If status construction processes are such a potent force in the creation of status differentiation, how can we explain persistent regional variation in the status values of certain social distinctions within a given society?

As indicated in Section 1.1, earlier research suggests that one reason might be regional variation in resource and power differences between the members of the different social categories. Such differences will undoubtedly have played an important role in many of the cases of regional variation in status values that we observe today. Yet, in this dissertation, I explore the possibility that regional variation in status values might derive from the interactional processes that the expectation states framework and status construction theory describe, even in the absence of regional variation in resource and power differences. I argue that for this it is crucial to recognize that interactions with a collective task focus between the members of a given population do not occur at random, as assumed by both Ridgeway and Balkwell (1997) and Mark et al. (2009). Instead, interactions tend to be strongly patterned by spatial distances.

A large body of empirical research suggests that face-to-face interactions are generally constrained by spatial distance, so that individuals who live closer to each other are more likely to interact than individuals who live further apart. For example, there is evidence that in the organizational context, in which most every-day interactions with a collective task focus take place, spatial distances negatively affect the occurrence of interactions (Balland, 2012; Katz, 1994; Niles & Hanson, 2003; Ponds, Van Oort, & Frenken, 2007; Rouwendal, 1999). The same applies to virtually all other face-to-face interactions that take place between individuals (cf. Faust, Entwisle, Rindfuss, Walsh, & Sawangdee, 1999; Mok, Wellman, & Basu, 2007). From a social network perspective, the occurrence of interactions between two individuals can be represented as a social tie between them and, given the effect that distance has on interactions, existing research suggests that such networks tend to be *spatially clustered* (Wong, Pattison, &

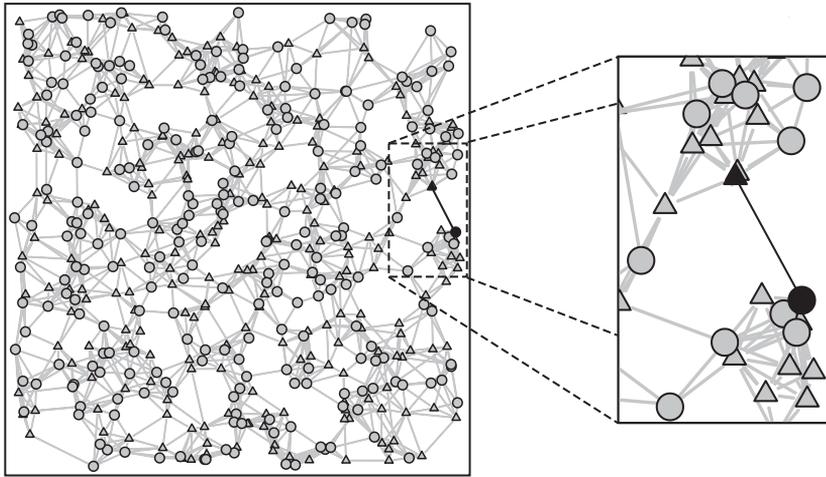


Figure 1.2 Illustration of spatial network clustering with detail view. Triangles and circles represent individuals with the states of the social distinction $N_i = A$ and $N_i = B$ respectively. Lines between individuals indicate the possibility for interactions between them.

Robins, 2006). This means that interaction networks are typically sparse, so that only few of the many possible ties are realized, and that those interactions that actually occur tend to take place among individuals who live in comparatively close physical proximity to each other. Consequently, there often are communities of actors who are highly connected internally, but loosely connected to members of other highly inter-connected communities (Wong et al., 2006). Figure 1.2 illustrates such a spatially clustered network structure for a hypothetical population spread across a two-dimensional landscape. As the detail view illustrates, the two focal individuals are members of two different communities, so that they share many of their ties with those who live close to them but share none of their ties with each other.

Abstracting from network structures and their relation to spatial distances, as both Ridgeway and Balkwell (1997) and Mark et al. (2009) have done, is a useful simplification because it greatly facilitates the formal modeling of diffusion processes (cf. Epstein, 1999; Macy & Flache, 2009). However, related research on the diffusion of innovations, opinions, and diseases shows that network clustering can affect the spread of such objects in larger populations. Specifically, network clustering can facilitate the emergence of local consensus in opinions, beliefs, and attitudes, while at the same time inhibiting their spread throughout the larger population (Flache & Macy, 2011). Therefore, when it comes to diffusion processes, network clustering can lead to a situation of population-wide diversity with local convergence. In this dissertation, I explore the possibility that spatially clustered interaction networks might in a similar way account for regional variation in status values, given the behavioral and cognitive process that the expectation states framework and status construction theory describe.

That is, I address the following research question:

Research Question 2: Can status construction processes explain regional variation in status values when the spatial clustering of interactions with a collective task focus is taken into account?

1.3.2 Part 2: The laboratory and scope conditions

In the context of collectively oriented, task focused groups, research in the expectation states framework has significantly advanced our understanding of the processes that can lead to the emergence of status differentiation. Despite these advances, I argue that we know comparatively little about how these processes play out in much of the real world. The reasons for this are twofold. First, existing research in the expectation states framework is mostly conducted with ad hoc created laboratory groups. Second, existing research almost exclusively concentrates on groups with a collective task focus. In this section, I discuss each of the two limitations in turn and formulate corresponding research questions that remain unanswered so far.

1.3.2.1 Task focused interaction outside the laboratory

As indicated in Section 1.2, research in the expectation states framework focuses on groups whose members worked on a collective task in the setting of the laboratory. In this setting, participants were typically unacquainted with each other and interactions took place for a limited period of time via a computer terminal (for a description of the standard experimental protocol of the expectation states framework see Berger et al., 1977). To understand why such a setting might limit the generalizability of existing findings, it is helpful to first consider how individuals might react to status differentiation in every-day life.

Research in the extant status literature commonly assumes that status has subjective value to individuals, given the influence, power, and privileged access to valued resources that come with it (Anderson, Hildreth, & Howland, 2015; Frank, 1985; Magee & Galinsky, 2008). This makes status similar to other valuable commodities that individuals strive for, but it is also different from many ‘normal’ commodities because status is ‘zero-sum’ (Frank, 1985). This means that the increase in status of one person necessarily implies a decrease in the status of at least one other person. To illustrate this, consider a group in which all group members are equally respected. In such a context, nobody will be in a position to exert more influence or to acquire privileged access to resources. Yet, as soon as one group member is more respected than others, he/she will receive these benefits at the costs of all other group members. Consequently, striving for status has the tendency to generate positional treadmills on which individuals compete with each other for the respect of their peers (cf. Loch, Huberman, & Stout, 2000). Additionally, status is not something that can be owned independently of others, such as an expensive car. Instead, status is a purely relational commodity that is conferred by others (Magee & Galinsky, 2008). Therefore, in group settings, those who demand status are those who control its supply (Blau, 1964; Brennan & Pettit, 2004).

The fact that status is a zero-sum commodity that needs to be provided by those who

compete for it can create conflicting pressures for individuals, even in group settings with a collective task focus. This dilemma derives from the fact that individuals need to engage in some form of trade-off between acting in a way that is best for the group and acting in a way that is good for their own status. That is, on the one hand, a given individual might help the group by using respect as a selective incentive to motivate others to perform well and thereby act in the best interest of the group. On the other hand, the individual might try to withhold respect from others in an attempt to maintain or even enhance their own status position in the group.

Given these conflicting interests and competitive pressures, the process of hierarchy formation in real life groups has been compared to a political process (Anderson & Kennedy, 2012) in which individuals often compete for high status positions by trying to convince others of their superior qualities, even when they are not superior at all. In this process, they might even try to actively undermine the status position of others to increase their own ranking in the group (Bendersky & Hays, 2012). Status competition therefore has the potential to undermine the functioning of task focused groups (Loch et al., 2000) and some scholars even argue that in the organizational context the threat to performance is so high that management will often need to channel status competition into the right direction (Loch, Galunic, & Schneider, 2006).

A second factor that potentially makes the status allocation process problematic is the fact that individuals often value the friendship and social support of their peers. Similar to status, strong, supporting social relations have value to individuals, because they can provide them with indirect access to valuable resources, such as information and political and emotional support (cf. Koster, Stokman, Hodson, & Sanders, 2007). Yet, active status competition tends to undermine such relations due to the conflict and tensions that it can generate among direct competitors. Therefore, a concern for the social relations with their peers might affect the way individuals confer and compete for respect.

Taken together, concerns for status competition and social relations might affect individuals' willingness to confer status for performance in group settings. In the laboratory settings employed in earlier research, concerns for status competition and social relations are unlikely to play a strong role in the status conferral behavior of participants. This is because in these settings, interactions are typically so short-lived, artificial, and impersonal that individuals might not expect to gain much from high status and cannot possibly develop social relations with their interaction partners. In enduring groups outside the laboratory, by contrast, concerns for status competition and social relations might affect individuals' willingness to make their gestures of respect and deference contingent on the performance of others, even when the main purpose of the group is to successfully accomplish some collective task. To date, how individuals trade-off the concerns that I have just described remains unexplored, as do the factors that might affect these decisions. Therefore, this dissertation addresses the following research question:

Research Question 3: Under which conditions are the members of groups with a collective task focus outside the laboratory willing to show respect and deference for high performance of other group members?

1.3.2.1 The absence of a collective task focus outside the laboratory

Groups with a collective task focus are important building blocks of society and certainly play a significant role in both shaping and re-enforcing status differentiation and social inequality. However, many group settings without a collective task focus still play an equally significant role. Consider school classes as just one example. The performance that individuals show at school and the educational choices that they make during this period will affect them for the rest of their lives. Existing research suggests that being confronted with the content of existing stereotypes regarding the academic abilities of the social categories that individuals belong to (e.g., ‘women can’t do math’, ‘blacks are worse at academic tasks than whites’, etc.) can induce cognitive stress that can lead to reduced performance in precisely this area (Nosek, Banaji, & Greenwald, 2002; Steele & Aronson, 1995; Steele, 1997). This contributes to the maintenance of existing stereotypes and can even induce low status individuals to select themselves out of educational fields in which they are expected to perform poorly (Correll, 2004; Ridgeway, 2011). Therefore, being confronted with ability and competence stereotypes at school might have lasting effects for the concerned individual and might lead to the re-enforcement of existing stereotypes.

Correll and Ridgeway (2003) argued that many of the cognitive processes that the expectation states framework describes should also occur in settings without a collective task focus. In particular, status generalization processes should affect the abilities that people attribute to each other, even when they do not have to work on a collective task with each other. Correll and Ridgeway argued that status characteristics should affect ability attributions whenever individuals have to engage in comparative ability evaluations, because “[t]he anticipation of [such comparison] creates a pressure for actors to assess their task competence relative to others who they imagine are also being or have been evaluated” (Correll & Ridgeway, 2003, p. 47). In such a context, the information that ability and competence stereotypes associated with salient status characteristics provide can affect individual judgments, because they provide at least some information that enables individuals to evaluate each other.

While the arguments of Correll and Ridgeway (2003) are compelling, there is also reason to expect that status generalization might play out differently in groups with no collective task focus. As indicated in Section 1.2, in group settings with a collective task focus, ability and competence evaluations are motivated by the goal to coordinate group work effectively so that the group’s goal will be attained. This context creates a pressure among group members to assess each other’s abilities as accurately as possible, given the information that is available. In groups without a collective task focus, such a pressure toward accurate assessments is missing and, therefore, motives other than ‘accuracy’ might become more important in the ability attribution process. In particular, recent experimental research by Oldmeadow and Fiske (2010) suggests that the notion of belonging to a low status group might create a negative self-image in individuals, which they try to enhance by rejecting existing ability stereotypes in the attribution process. That is, it seems that when members of low status groups have to assess the abilities of members of their own group in a context without a collective task focus, they tend to attribute higher abilities and competence to the members of their own group than members

of other groups would do. To date it remains unexplored to what extent this process intervenes in status generalization processes in enduring groups outside the laboratory.

Taken together, hitherto we know relatively little about how the cognitive processes that affect ability attributions in enduring groups without a collective task focus. In this dissertation, I focus on the effects that status characteristics have on ability and competence attributions and address the following research question:

Research Question 4: How do status characteristics affect ability and competence attributions in enduring groups without a collective task focus?

1.4 Methodological Approach and Data

The research questions that I address in the different parts of this dissertation differ in their analytical focus. The questions formulated in Part 1 focus on the dynamics that can lead to the emergence of status differentiation between social groups in small and large collectives (i.e. in small groups and in the population), from a theoretical point of view. The research questions in Part 2, by contrast, focus on the conditions under which certain fundamental cognitive and behavioral processes occur outside the laboratory, from an empirical point of view. Accordingly, I chose different research methods to answer the different questions.

1.4.1 Part 1: Social complexity and agent-based computational modeling

Ridgeway and Balkwell (1997, p. 15) highlighted that the arguments of status construction theory are complicated and their logic is difficult to evaluate when they are only formulated verbally. This is one of the reasons why both Ridgeway and Balkwell (1997) and Mark et al. (2009) chose formal modeling techniques (i.e. difference/differential equations) to rigorously assess the logical implications of the theory. Undoubtedly, by moving from the dyad to larger groups and by introducing the notion of spatial network clustering, developing hypotheses about the outcomes of status construction processes becomes even more complex and more difficult without the use of formal modeling techniques. In this dissertation, I chose agent-based computational modeling to deal with this increased complexity.

Agent-based computational modeling is a relatively new approach to research in the social sciences that has its roots in computer science and artificial intelligence (Macy & Flache, 2009, p. 247). With this approach, societal phenomena such as the emergence of social institutions, social segregation, and the spread of innovations are studied from the ‘bottom up’, by simulating the behavior and interactions of the individuals that make up society (Epstein & Axtell, 1996; Gilbert & Troitzsch, 2005; Gilbert, 2008; Macy & Flache, 2009; Macy & Willer, 2002). Compared to other formal modeling techniques, agent-based computational modeling is particularly useful when individual behavior can be assumed to be non-linear and characterized by if-then rules, when individuals show learning and adaptation, and when interactions occur in network structures (paraphrased from Bonabeau, 2002, pp. 7280–7281). Each of these factors applies to the processes and social systems that I study in Chapters 2 and 3 of this dissertation; agent-based computational modeling therefore is particularly suitable for my purposes.

Advocates of agent-based computational modeling highlight the fact that developing

simulation models forces researchers to explicate their theoretical assumptions about the processes under consideration (cf. Billari, Ongaro, & Prskawetz, 2003). However, existing theories are often not specific enough to provide unambiguous information as to how certain model aspects should be implemented (cf. Harrison, Lin, Carroll, & Carley, 2007). According to critics of agent-based computational modeling, this led to a form of ‘anarchy’ in terms of how the same processes are implemented in different simulation models (Richiardi, Leombruni, Saam, & Sonnessa, 2006) and led to the introduction of seemingly arbitrary assumptions and parameter values (Waldherr & Wijermans, 2013). This dissertation addresses these criticisms in two ways. First, my models build on existing simulation models. I aimed to keep the changes in these models to a minimum, so that my results are maximally comparable to those presented in earlier research. Second, whenever possible, I aimed to base my assumptions and model parameters on empirical research concerned with formalizing and predicting the behavioral and cognitive processes that the expectation states framework describes. Thus, I could keep the ad hoc assumptions and parameterizations to a minimum.

1.4.2 Part 2: A network approach to status processes in the field

Studying status processes in enduring groups outside the laboratory is complicated by the fact that observations of status-related outcomes are often statistically interdependent. For example, individuals might be aware of the abilities and competence that other group members attribute to each other and this might affect their own attributions. Ignoring such influence processes can be particularly problematic if we are interested in studying the effects that status characteristics have on ability and competence attributions. To illustrate this, consider again the small problem solving groups shown in Figure 1.1. If individual B_1 has managed to build a reputation as being particularly intelligent, many other group members will attribute high competence to this particular individual. If we neglect that these attributions all share the same target, it might appear that members of category B are on average viewed as more competent than members of category A , even if the ability attributions that B_2 receives are not very different from the attributions that A_1 and A_2 receive.

The few existing studies that examined status processes as described in the expectation states framework in enduring groups (e.g., B. P. Cohen & Zhou, 1991; York & Cornwell, 2006) largely neglected the problem of statistical interdependence in their data. By contrast, studies in the status literature at large recognized this problem (Agneessens & Wittek, 2012; Wittek, 1999). In line with this earlier research, I address the issue of statistical interdependence by using statistical methods that originated in the area of social network analysis. As indicated in Section 1.3, in a social network perspective, relational objects between individuals (such as interactions, friendships, family relations, etc.) are represented as ties and it is well known that the probabilities with which such ties exist are often statistically interdependent (Lusher, Koskinen, & Robins, 2013). Over the last years, social network researchers therefore developed increasingly sophisticated methods that enabled them to deal with this issue. In this dissertation, I build on these developments by conceptualizing central status outcomes as ties that generate social network structures, which can be analyzed with tools from social network analysis.

The data that I use in the empirical analyses come from two sources. The first source is a

longitudinal study that colleagues and I conducted in a medium-sized Dutch childcare organization. The study involved four departments that shared a focus on treating non-institutionalized children with special social and psychological needs. The departments consisted of 16–42 staff members who were either directly involved in treating the children or had supportive functions. Data collection took place by means of paper-and-pencil questionnaires distributed in spring and autumn 2011. The questionnaires consisted of two parts. The first part had a round robin design that asked respondents to rate the other members of their department on several characteristics. The second part consisted of respondents' self-ratings on various social-psychological measures and questions about demographic characteristics. Together, these two parts of the questionnaire enabled me to address Research Question 3.

The second source is data collected in November 2010 as part of the project 'Wired into Each Other: Network Dynamics of Adolescents in the Light of Status Competition, School Performance, Exclusion, and Integration' conducted at the Research Center for Educational and Network Studies (RECENS). The data comprise information from pupils of 43 classes (in grade 9) from seven public schools distributed across Hungary. The survey contained social network modules, which gave pupils a roster with the names of their classmates and asked them to indicate those who they perceived to possess different attributes. Additionally, pupils were asked several demographic background questions, which, together with the social network items, enabled me to answer Research Question 4.

1.5 Outline of the Book

The first part of this book comprises Chapters 2 and 3, and focuses on the complex dynamics involved in status construction processes in order to answer Research Questions 1 and 2. The second part comprises Chapters 4 and 5, and focuses on the basic behavioral and cognitive processes that the expectation states framework describes outside the laboratory in order to answer Research Questions 3 and 4

In Chapter 2, I develop an agent-based computational model of interactions in small groups with a collective task focus. The model builds on earlier simulation models that centered on the formation of hierarchical differentiation in small groups (e.g., Skvoretz & Fararo, 1996) and draws on earlier formalizations of task focused interaction as described in the expectation states framework (e.g., J. W. Balkwell, 1991a). I use this model to study (1) whether the basic principles of task focused interaction that the expectation states framework describes systematically favor the emergence of status beliefs in groups larger than dyads and (2) how this emergence is affected by the timeframe over which small groups interact and the exact size of the group. Additionally, (3) I explore the possibility that status beliefs might affect the interactions in the groups in which they were acquired. To the best of my knowledge, no studies examined how the experience of consistent hierarchical differentiation between, say, men and women in a given group affects the performance expectations that group members have for each other, if gender previously had no status value. If beliefs affected performance expectations in the context in which they were acquired, this might greatly contribute to the maintenance of the behavior interchange patterns that led to their emergence. From a theoretical

point of view, I cannot rule out this possibility and therefore I explore the dynamics that such a process might generate.

In Chapter 3, I model belief emergence and diffusion processes in the context of spatially clustered interactions in larger populations. The model builds on and extends the model of status construction processes developed by Mark et al. (2009). The work presented in this chapter is similar in spirit to this earlier work, but it is also decisively different. Mark et al. showed how the interplay of some of the micro-level mechanisms described in that status construction theory could generate population-wide consensus in the status value of a given social distinction. In Chapter 3, I show how the individual-level mechanisms that status construction theory describes can lead to diversity in the status value of a given social distinction, when they are combined with the macro-level condition of spatially clustered interaction networks. Thus, I uncover a social dynamic that can lead to diversity in status beliefs, which previously was not in the scope of status construction theory. To generate network structures that resembled structures observed in real life, I draw on empirical work concerned with predicting the effect that spatial distances have on the occurrence of face-to-face interactions (e.g., Daraganova et al., 2012).

In Chapter 4, I turn from exploring the emergence of status differentiation between social groups to examining some of the basic behavioral and cognitive process involved in the creation of status differentiation outside the laboratory. I focus on organizational teams as one archetype of groups with a collective task focus and draw on related management (e.g., Doerr, Freed, Mitchell, Schriesheim, & Zhou, 2004; Koster et al., 2007) and small group research (e.g., Bianchi & Lancianese, 2007; Blau, 1964) that suggests that the amount of task interdependence and informal interdependence that individuals experience in such a context might crucially affect their willingness to confer status to group members who make outstanding contributions to the collective task. The argument is based on the assumption that these forms of interdependence affect the costs and benefits that individuals expect to derive from conferring status to others. When team members experience higher levels of task interdependence, they will perceive their own outcomes more depended on the performance of their colleagues and will therefore expect to benefit more from motivating these colleagues to higher performance. Consequently, they will be more willing to reward high performance with respect. When team members experience higher levels of informal interdependence, by contrast, they will be more concerned that performance-based status differentiation might undermine the strong social bonds that exist in the team. Therefore, they will be less willing to make their respect contingent on performance.

In Chapter 5, my focus remains on small groups outside the laboratory, but I move to a context that lacks a collective task focus and explore how status characteristics affect ability attributions in such a context. Additionally, I explore an alternative mechanism that might intervene in status generalization. Recent experimental research suggests that a need for positive self-esteem can induce in-group favoritism that leads status beliefs to affect members of status-advantaged and disadvantaged categories differently (Oldmeadow & Fiske, 2010). In this view, men tend to attribute higher abilities to other men but women tend to reject such differences and attribute equal abilities to men and women. If in-group favoritism indeed affects

ability attributions, we might not find a uniform effect of status characteristics. I do not claim to be the first to recognize that in-group favoritism might affect status generalization (cf. Foschi et al., 1994; Oldmeadow, Platow, Foddy, & Anderson, 2003). However, to date the relative importance of the two processes has not been examined in the field.

Chapter 6 closes this dissertation with a summary of the main findings and a discussion of implications for future research. Finally, I discuss how the research presented in this dissertation significantly advances our understanding of the processes involved in the creation of status differentiation between individuals and social groups.

Part 1

The Complexity of Status Construction Processes

