1

Perceived Variability, Entitativity, and Essentialism
Introduction and Overview

VINCENT YZERBYT
Catholic University of Louvain at Louvain-la-Neuve

CHARLES M. JUDD
University of Colorado

OLIVIER CORNEILLE
*Catholic University of Louvain at Louvain-la-Neuve
and the Belguim National Fund for Scientific Research*

*T*his volume represents an attempt to provide an integration of three different lines of research in social psychology. These three are reflected in our choice of title: "Perceived Variability, Entitativity, and Essentialism." Each of these three terms emerged from distinct lines of work, much of it done by contributors to this volume. As we will see, these three terms, when applied to the perception of social groups, refer to related concepts. Our goal in launching this volume was to clarify their definitions, their relations, their causes, and their consequences.

One line of work, the Entitativity part of our title, derives from a seminal theoretical article that Donald T. Campbell published in 1958 on the perceptual reality of social groups. He suggested that groups may vary in the extent to which they are perceived as being a "real thing" or an entity, and he coined the rather unfortunate term *entitativity* to refer to this characteristic. He went on to speculate about cues that perceivers might use to infer the entitativity of groups. Such cues were thought to include the extent to which group members are similar to each other, whether group members function in a coordinated

manner in pursuit of shared goals, whether group membership is stable and group boundaries relatively fixed, and whether group members are physically near each other.

Although Campbell offered no data in support of his ideas about these perceptual cues, a number of subsequent researchers have carried his work on group entitativity forward (e.g., Abelson, Dasgupta, Park, & Banaji, 1998; Brewer & Harasty, 1996; Dasgupta, Banaji, & Abelson, 1999; Hamilton, Sherman, & Lickel, 1998; Lickel, Hamilton, Wieczorkowska, Lewis, Sherman, & Uhles, 2000; S. J. Sherman, Hamilton, & Lewis, 1999). This work has clearly demonstrated that indeed groups do differ in the extent to which they are perceived to be entities and that many of the perceptual cues that Campbell outlined are in fact attended to in forming such perceptions.

Independent of this work on groups as entities, stereotyping researchers have been interested in the strength of group stereotypes, focusing in particular on perceptions of group variability, the second term in our title. Presumably, if perceivers have particularly strong stereotypes about given social categories, then they should see relatively little diversity among the members of such categories. The attributes associated with the category as a whole should also be associated with nearly every category member, allowing strong inferences to be made from the group to individual members and vice versa.

Because of the fact that stereotypes have traditionally been associated with significant social categories (e.g., gender or ethnicity), nearly all of this work has focused on the perceived variability of such categories rather than other sorts of social groups (e.g., task groups, intimacy groups). Additionally, most of the work on perceived variability has focused on one particular determinant of perceived group variability, namely whether the target group is an ingroup or an outgroup. A robust, although not universal finding is the outgroup homogeneity effect, whereby perceivers judge ingroups to be more variable than outgroups (e.g., Judd & Park, 1988; Linville, Fischer, & Salovey, 1989; Park & Rothbart, 1982; Park & Judd, 1990; Quattrone & Jones, 1980). More recently, research has focused on the ways in which power, status, and category size (minority versus majority) may moderate these ingroup / outgroup differences in perceived variability (e.g., Simon & Brown, 1988; Lorenzi-Cioldi, 1988; Guinote, Judd, & Brauer, 2002).

The third line of work that we seek to integrate derives from work in cognitive and developmental psychology on categorization processes. This work has differentiated between two different kinds of categories, typically labeled natural kinds and human artifacts. The former are categories where there is an essence, often biological in nature, that defines and dictates category membership. The latter consists of categories that are constructed by perceivers in the absence of any inherent or biological basis for categorization. The prototypic natural kind category is a species (e.g., leopards, elephants). Human artifact categories are exemplified by object categories, such as chairs or tables. Cognitive and developmental psychologists have argued that perceivers routinely dis-

tinguish between these two different sorts of categories and reason about them in rather different ways (e.g., Gelman, 1988; Hirschfeld, 1996; Keil, 1989).

Based on this work, social psychologists have recently become interested in the extent to which social groups and categories are "essentialized" (the third term in our title) or seen as natural kinds. For instance, Rothbart and Taylor (1992) and Yzerbyt and colleagues (Yzerbyt, Corneille, & Estrada, 2001; Yzerbyt, Rocher, & Shadron, 1997; Yzerbyt & Rogier, 2001) have argued that perceivers often treat social categories as natural kinds, assuming there exists some underlying essence that unites category members. Haslam and colleagues (N. Haslam, 2002; N. Haslam, Rothschild, & Ernst, 2000) have explored the components and consequences of essentialized views of groups. And Levy, Plaks, and colleagues have examined individual differences in the tendency to see social categories as natural kinds (Levy, Plaks, Hong, Chiu, & Dweck, 2002; Levy, Stroessner, & Dweck, 1998; Plaks, Stroessner, Dweck, & Sherman, 2001).

A few years ago, when we decided to initiate this volume, it seemed evident to us that the central constructs from these three research traditions were related. Groups that were perceived as entities probably also were groups where the perception of variability was low and were also probably more likely to be essentialized. Yet the literature to integrate theoretically these three was remarkably absent. Our hope is that this volume now fills this void.

The chapters in this volume are grouped into two sets. Those in the first we consider to be more definitional and theoretical in nature. Here authors who have been active contributors to one or more of the above traditions have attempted to theoretically delineate these constructs and their interrelations. The chapters in the second set are a bit more empirically oriented, and they tend to explore the causes and consequences of entitativity, perceived variability, and essentialism in the perception of groups. In the sections that follow in this chapter, we briefly provide a road map for chapters in both sections. In so doing, we also hope to provide our own perspective on the theoretical integration of these three terms and their research traditions.

SECTION ONE: DEFINITIONAL CONSIDERATIONS

We see the chapters in this section as struggling with the issues of (a) what exactly do we mean by the terms *perceived variability*, *entitativity*, and *essentialism*, and (b) how are these related to each other, both theoretically and empirically. As will be clear on a close reading of these chapters, our authors have rather different perspectives on these two issues and argue for theoretical integration in rather different ways. Although this diversity ultimately threatens our goal of providing a quick and easy integration of these traditions and literatures, it does mean that the reader must attempt his or her own unique theoretical understanding, and we see this as a very positive outcome indeed.

The initial chapter in this section, by Marilynn Brewer, Ying-yi Hong, and

Qiong Li, focuses in particular on one of the central attributes that D. T. Campbell (1958) recognized as a cue in the perception of entitativity: whether or not a group has a set of shared goals and purposes and acts in a coordinated manner toward those. Brewer et al. argue that the perception of similarity or homogeneity of group members is not a sufficient condition for the perception of group entitativity. Rather, entitativity is inferred either when the group is a seen as a natural kind (essentialized) or when it is seen as acting in a coordinated manner on common goals and purposes. And these two bases for the perception of entitativity have somewhat different consequences, with the perception of essence influencing more judgments about individual group members and the group prototype, and the perception of agency or common goals influencing emotional reactions to the group (and its purposes) as a whole.

Beyond these theoretical considerations, Brewer and colleagues report some data from cross-national samples in which perceptions of both a group essence and group agency are shown to predict judgments of entitativity. Although they report some cultural differences, the bottom line is that both are influential in both cultures.

Like Brewer et al., David Hamilton, Steven J. Sherman, and Julie S, Rodgers primarily focus on the perception of group entitativity and how it relates to the other constructs of essentialism and perceived homogeneity. They argue that these three concepts, while they are certainly positively correlated, are not redundant. Further they argue that the exact relations among them depend on the type and function of the group involved. Specifically, their empirical work has differentiated among social categories, task groups, intimacy groups, and loose associations (e.g., people waiting for a bus together), and the relative degree of entitativity, homogeneity, and essentiality for all four types of groups. They suggest that intimacy groups (e.g., families) are the highest on entitativity, but typically do not have strong stereotypes associated with them. They suggest that social categories may be essentialized, but they are actually fairly low on perceived variability compared to the other types of groups. For task groups, they argue that perceptions of entitativity are relatively high, but again essentialism and perceived homogeneity may be relatively lower than for other types of groups.

The bottom line in the Hamilton et al. chapter is that while these three constructs are related, they are clearly discriminable, with different causes and consequences. By focusing on the four different types of groups that their research has uncovered, they characterize the differences between entitativity, perceived homogeneity, and essentialism primarily by discussing how they vary (and covary) between types of groups, rather than how they vary (and covary) across groups within a given type. This is a somewhat different approach than that followed by the authors of the other chapters in this section.

The Brewer et al. and Hamilton et al. chapters seem most focused on entitativity and its relations to other constructs. Nick Haslam, Louis Rothschild, and Donald Ernst, on the other hand, clearly come out of the research tradition

on essentialism and the properties that differentiate essentialized groups from groups that are less likely to be seen as "natural kinds." They start their chapter with a fascinating tour of the history of thinking about essentialism, tracing the origin of the concept in the linguistic and philosophical traditions. They then report on a series of empirical studies that have explored the characteristics of essentialized groups. From this work, they argue that there are two components to essentialism, with groups varying more or less independently on them both. Characteristics included in the first component have to do with traditional notions of what constitutes a "natural kind": they are groups that are immutable, natural, historically invariant, have sharp boundaries, and necessary features. The second component, they argue, is made up of characteristics traditionally associated with entitativity. Characteristics such as homogeneity, inductive potential (i.e., inferring what someone is like from group membership and vice versa), and membership based on shared inherent properties are associated with the second component.

Starting from a theoretical interest in defining the characteristics of essentialized groups, Haslam, Rothschild, and Ernst thus come to the conclusion that there are two components: one having to do with groups being seen as "natural kinds" and the other having to do with the perceived entitativity of groups. Thus, they see entitativity as one component of essentialism, and, within entitativity, perceived homogeneity is one factor that leads to the perception of entitativity. This is clearly, then, a sort of nested structure, with perceived homogeneity as a condition for entititativity and entitativity as a condition for essentialism.

While Brewer et al. and Hamilton et al. start from the point of view of explaining entitativity, and Haslam et al. start from the point of view of explaining essentialism, Mick Rothbart and Bernadette Park emerge much more squarely out of the stereotyping literature. Accordingly, their initial question is focused on the process by which stereotypes may be changed, and in this regard they necessarily focus on factors that affect whether individual group members who disconfirm a group stereotype will be functionally integrated into the group and thereby lead to change. They suggest that whether a disconfirming group members is functionally included in or excluded from the group depends on both the perceived variability of the group and the degree to which the group is seen as an entity. They further argue that entitativity is not simply the same thing as perceived variability. Group entitativity is also affected by the extent to which a group is seen as acting on common goals or its degree of agency (consistent with Brewer et al.). Finally, they suggest that essentialized groups are a subset of groups that are seen as entitative, having both high perceived similarity and a sense of agency.

All of this leads them to suggest that disconfirming group members will be functionally excluded, and stereotype change inhibited, when group boundaries are strong. And this is most likely to be the case in entitative groups that possess shared attributes and common goals, and are essentialized.

The final chapter in this section, by Vincent Yzerbyt, Claudia Estrada, Olivier Corneille, Eléonore Seron, and Stéphanie Demoulin, also starts by asserting that these three constructs are not one and the same thing. But they argue in particular for a different relationship between entitativity and essentialism than that articulated by others. They suggest that entitativity is the observable or phenotypic attribute of "groupness," whereas group essence is the underlying or genotypic attribute that results in the phenotypic expression. They then show, in a series of reported studies, that when essentialism is manipulated, entitativity and perceived similarity are consequences. Thus, perhaps like Rothbart and Park, they suggest that essentialism is the most fundamental of the three concepts, that essentialism requires perceived similarity and entitativity, and that perceived similarity and entitativity are broader constructs and, as such, can be found with nonessentialized groups.

This brief summary of these chapters (admittedly not the summary that these authors themselves might have provided) clearly points to diversity in both the author's starting points and the conclusions they eventually reach. Yet we believe that there are threads of consensus that are apparent across the chapters, and hopefully they show the way to a more integrative account of the theoretical relationships among entitativity, perceived variability, and essentialism.

First, no one argues that these are one and the same construct. Groups vary in the extent to which they are perceived to be real real or meaningful, the extent to which their members are seen to be diverse, and the extent to which they are seen to have an essence that defines them as a "natural kind." Although these perceptions certainly covary, they are not one and the same thing.

A necessary corollary of this is that these three characteristics of groups have at least somewhat different causes and consequences. The factors that cause a group to be seen as entitative, that lead to perceptions of homogeneity, and that result in an essentialized view of group membership are not one and the same. And yet we would suggest that all three of these perceptions have the potential for influencing each other. Many of the studies that are summarized in these chapters suggest that each of these perceptions has potential implications for the others. Manipulations of essence lead to higher perceived similarity and higher entitativity. Groups that come to be seen as less variable are more likely to be seen as entitative, and so forth. Though not identical constructs, and though potentially having different causes and consequences, they nevertheless are causally related to each other. And the causal relations are certainly reciprocal and nonrecursive.

If we grant this, then the next obvious question concerns whether these constructs share a nested or hierarchical structure of relations or whether they are simply overlapping sets, capable of influencing each other in a probabilistic manner. Here, we are taken by many of the ideas contained in Figure 1 of Rothbart and Park. Consistent with Brewer et al., it seems that entitative groups derive their "realness" either from the perceptions of similarity of members or from a sense of agency and purpose. And the conjunction of the two is particu-

larly likely to lead to group entitativity. But essentialism seems to us to be more than just another partially overlapping set of groups. Groups that are essentialized seem to us to necessarily have a realness to them that cannot be denied, and that realness inevitably leads to strong and impermeable group boundaries with high perceived genotypic similarity.

In this sense, essentialism seems to have a rather different conceptual basis from the other two constructs, in that it implies attributional consequences that the other two do not. Perceived homogeneity focuses on the extent to which group members share attributes. Entitativity focuses on the extent to which a group is seen as real or coherent. Essentialism derives from both of these but it seems to us to imply more. It entails not just a description of a group and what makes it a group, but also a theory about why group membership matters and what it implies. If a group is essentialized, then we are permitted to make inferences about why this group exists (why it is an entity) and why group members are similar to each other. We are not saying simply that the group is an entity and that its members are similar, but we are implying an attributional process for the origins of entitativiy and similarity: this is a group and its members are similar to each other *because* they all share an essence that is invariant and unmutable. Essentiality, in other words is not just the conjunction of similarity and entitativity. It really implies a theory about the origins of similarity and entitativity. It implies that the perceiver has a "natural kind" explanation for the existence of the group and for why its members are similar to each other. It suggests that the perceiver attributes groupness and similarity to internal, dispositional, and immutable characteristics of group members.

Turning to the distinction made by Hamilton et al. among different types of groups, it seems to us particularly interesting that it is often social categories (rather than task groups or intimacy groups) that are imbued with essentialistic qualities. And then the interesting question for us concerns not the differences among these types of groups (categories versus intimacy groups versus task groups) but the conditions under which social categories are essentialized. This focus on social categories, and the question of when they are essentialized, enables us to effectively bridge the three diverse traditions that we identified at the start of this preface and that gave rise to our notions of entitativity, perceived variability, and essentialism. Strong stereotypes, prejudice, discrimination, and hostile intergroup relations have been issues at the core of social psychology since its founding. And from our point of view, notions of entitativity, perceived variability, and essentialism take on particular interest to the extent that they help us understand these social problems. Strong stereotypes occur when the members of social categories are viewed as very similar to one another and when the boundaries that differentiate those categories are seen as sharp and fixed. And then when perceivers go the additional step of essentializing those categories, then the definition of a social stereotype takes on a very different aspect: category membership becomes inevitable and immutable. Category members resemble each other *because* of their unchangeable and true essence.

And the boundaries that divide groups and that lead to social conflict are seen as fixed forever as a natural part of the world, just like the lines that separate different species. Such essentialized social categories, it seems to us, are what leads to the most severe forms of intergroup conflict and hostility, and ethnic cleansing, or ethnic genocide, when it has occurred historically, has certainly been accompanied by an essentialistic rhetoric.

From this point of view, what becomes important is the evolution of essentialistic thinking about social categories: the factors that lead to more essentialistic views of social categories, given perceived entitativity and similarity. And this leads us to want to understand the dynamic relations among these constructs and the factors that lead to changes in all three, within the same social categories, over time and across perceivers. The chapters in the first section of the book, discussed above, really focus more on defining the three constructs and to a lesser extent on their dynamic interrelations. The chapters in the second set, which we now briefly summarize, are concerned more with the various factors that lead to the perception of group entitativity, group homogeneity, and essentialism. They also stress some of the consequences of entitativity and essentialism. And from our point of view, when talking about social categories, these are the important questions to be addressed in the attempt to understand why it is that groups and people conflict and how such conflicts might be ameliorated.

SECTION TWO: VARIATIONS ON THE THEME

As we have argued above, the perspective prevailing in some of the definitional chapters is that the perception of homogeneity, entitativity, and essentiality depends largely on the particular group that is being appraised (Hamilton et al., this volume; Haslam, this volume; but see Yzerbyt et al., this volume). This target-based approach has proven fruitful in stressing some major differences among groups. At a very general level, two images of social groups seem to emerge. Whereas some groups elicit the belief that their members are closely connected, well organized, and working together to reach some joint outcome, others are associated with the idea that similarity of group members is the key feature, some deep underlying marker making it difficult if not impossible to change or deny group membership. From this point of view, a perceiver's impression of a group depends on the particular characteristic of that group.

With a few exceptions, the chapters in this second section tend to stress a rather different approach, one that we see as most promising. Rather than assuming that groups have defining characteristics that affect how they are perceived, most authors of the chapters in this second section concentrate on possible structural and social factors that may shape a perceiver's propensity to see any given group as a coherent entity or as a looser set of people. A neat illustration of this perspective is the chapter by Jason E. Plaks, Sheri R. Levy,

Carol S. Dweck, and Steve J. Stroessner. These authors build a strong case for an individual difference approach that complements the view according to which entitativity or perceived variability primarily derives from the intrinsic features of the target groups. To be sure, most if not all social psychologist would agree that the stimulus is not the sole factor in the perception equation and that the perceiver plays a most critical role. Still, according to Plaks and colleagues, most contemporary efforts may have somewhat underestimated the extent to which group perception also resides in the eye of the beholder. People's a priori beliefs about human nature, whether chronic or more transitory, should likely orient their perception of entitativity and homogeneity. In line with this idea, Plaks and colleagues identify two contrasting lay theories that underlie quite divergent perspectives for understanding individuals as well as groups. Whereas "entiteists" view personal characteristics as fixed entities that are unlikely to change over time and they expect a high degree of consistency in people's behaviors, "incrementalists" prefer to see personal characteristics as dynamic and open to modification, and they situational forces that impinge on people's actions.

Plaks and colleagues provide an impressive body of evidence to suggest that these two views translate into distinct takes on group perception. Studies indeed reveal that, compared to "incrementalists," "entiteists" more readily apply psychological traits to groups, perceive less within-group variability and greater between-groups differences, form and endorse stronger stereotypes, and process information about the group members in such a way that less attention is given to the counterstereotypic evidence. Entity theorists not only use and preserve their stereotypic beliefs more so than "incrementalists," they also are more likely to believe that innate factors rather than shared environmental experience are accountable for shaping group members' characteristics (see also C. L. Martin & Parker, 1995; Yzerbyt & Rogier, 2001). In contrast, Plaks and colleagues argue, "incrementalists" are more sensitive to the presence of shared goals as a cue to group coherence.

There are a number of links that can be drawn between the contribution of Plaks and colleagues and other chapters in this volume. In particular, we would point to the overlap between their analysis and Brewer's distinction between groups organized around some essence and those organized around some goals. Also, we see interesting parallels between Plaks et al.'s suggestions and those made by Social Identityy Theorists (SIT) about stability and permeability, entity theorists living in a world where groups are clearly segregated and the social structure is seldom challenged and "incrementalists" believing the social landscape is largely open to revision.

In addition to perceiver differences, it is clear that a number of other factors affect the perception of group homogeneity, entitativity, and, possibly, essence. Most of the remaining chapters help us identify these factors. To be sure, these factors can be grouped in various ways. One way that we find rather convenient in organizing the various chapters builds on the extent to which the perceiver plays an active role in the construction of entitativity. At one end of

the spectrum, one can identify a set of factors to which the perceiver simply responds. He or she plays no real active role or does not engage in what could be seen as truly motivated or strategic group perception and cognition. Familiarity with a group is a good illustration of this kind of factor: Differences in group familiarity may affect the perception of group entitativity and homogeneity, but these differences are not actively sought out or strategically motivated on the part of the perceiver; rather he or she just happens to have more or less knowledge about the group, and this affects perceptions.

Going to the opposite end of the continuum, the perception of entitativity might be seen to result from a deliberate line of actions and cognitive strategies. For instance, if the perceiver is motivated to think of his or her own group as needing to realize some personally important goal, to reach a specific end, then actions may be undertaken to organize the group toward that purpose, and more entitative group impressions will ensue. At this end of the continuum, then, the perceiver actively and strategically affects the group itself in ways that lead to changes in how entitative it is seen to be.

Halfway along the continuum, one might find that processes purposively engaged in by the perceiver might end up in promoting the perceived entitativity of the groups even though this was not the perceiver's primary goal. For instance, sometimes people talk with each other about their own groups and other groups. The goal of communication is not to strategically affect the perceived entitativity of those groups. But it may still have these unanticipated outcomes.

In the remainder of this introductory chapter, we would like to walk you through this continuum from one pole to the other, discussing each of the chapters in turn. Needless to say, this tour only provides a highly subjective and necessarily partial account of the content of the various chapters. Having reviewed all the chapters, we will then come back to a number of issues that allow us to compare and to contrast more specific contributions.

A first factor that may affect the extent to which perceivers see groups as being coherent wholes is the very act of categorization. By slicing the social environment into different zones of coherence, perceivers may well end up overestimating the cohesiveness of the groups they have categorized. In short, the mere act of categorization is likely to promote similarity among the members of same category and, as a consequence, entitativity of the category. This observation is of course far from new, and the single most famous empirical demonstration of the phenomenon dates back to the study conducted by Tajfel and Wilkes (1963). The original paradigm has come in many disguises. The most popular version is the so-called "Who said What?" paradigm in which participants observe a discussion between a limited number of members comprising two distinct social categories, black versus whites, males versus females, overestimators versus underestimators, etc. At the end of the discussion comes a surprise memory test in which observers are presented with individual statements and asked to assign them to the correct speaker. Categorization is assumed to have affected the perceptions of homogeneity if errors of recognition

more frequently involve within-category confusions than between-category confusions.

In their chapter, Karl Christoph Klauer, Katja Ehrenberg, and Ingo Wegener take issue with this working assumption and provide a thorough examination of the various components that may be responsible for memory errors in experimental settings that rely on the "Who said What?" paradigm. Instead of comparing the number of between-categories and within-category confusions, the authors suggest that the paradigm be altered by adding a set of distracters to the list of statements comprising the memory test. Doing this would allow researchers to disentangle the impact of a number of independent cognitive processes, some directly relevant to the issue of homogeneity and some not, and to examine the impact of various contextual factors thought to affect the emergence of homogeneity. The relevant cognitive processes are person memory (Is there a memory of the person who made the statement?), category memory (Is there a memory of the category of the person who made the statement?), and category guessing (Are there cues that can be used to infer the category membership of the person making the statement even though category membership cannot be recalled?). Whereas accurate person memory within a category is indicative of heterogeneous processing of the discussants, both category memory and category guessing suggest rather different processes indicative of homogeneity in perception.

Klauer and colleagues present a series of studies aimed at validating the relations between the process indicators and the underlying mental operations. For instance, a manipulation of the salience of the categories only affected the category memory parameter and not the other indices. Beyond establishing the convergent and discriminant validity of the various process measures, the authors examine the impact of a series of important contextual factors on group perception such as relative group size and crossed categorization. Their findings lead them to argue for the dissociation between various facets of category-based processing, possibly allowing a reconciliation of contradictory findings with regard to the impact of cognitive load in social perception.

Keeping with the discussion of some fundamental processes involved in the categorization processes, Craig McGarty considers how prior expectations about the existence of group differences interacts with stimulus information one receives about groups to affect the extent to which those groups are seen as entitative. He argues that the mere existence of prior beliefs that says that groups differ from each other is sufficient to trigger the formation of group stereotypes and the perception of groups as entities, assuming that in fact there is sufficient information received about those groups to enable effective categorization.

McGarty uses these general ideas to offer an insightful explanation for illusory correlation results, suggesting some nice extensions to Fiedler's (1991) and E. R. Smith's (1991) account based on information loss and unreliability of judgment. McGarty's explanation suggests that the typical illusory correlation results are due to the expectation that the groups must differ in some way and

then by the availability of sufficient information about the two groups to permit that expectation to result in rather different stereotypic beliefs.

In a similar vein, McGarty suggests that perceivers may hold prior expectations about the degree to which social categories are essentialized. And, consistent again with his theoretical position about the constraints that exist between expectations and the available stimulus information, he suggests that these expectations may permit essentialized beliefs for some social categories more than for others.

Continuing with the idea that the perceived entitativity of groups may emerge simply from extraneous factors that involve little strategic or motivated reasoning on the part of the perceiver, Patricia W. Linville and Gregory W. Fischer extensively discuss the role of differential familiarity with groups as a factor that affects their perception. Interestingly, rather than examining a variety of prototypic attributes thought to characterize groups in general, these authors concentrate on a somewhat neglected facet of the mental representation of groups, namely the perception of covariation among the features describing category members (but see Judd & Lusk, 1984; Park, Ryan, & Judd, 1992). This is an important consideration because, as Linville and Fischer argue, perceived covariation is likely to be related to the degree to which people make distinctions among group members. Moreover, there is no reason to expect any strong link between the perceived covariation among a set of attributes and the perceived variance along each individual attribute. As much as we have learned from closer scrutiny of the perception of single feature variability, it may be fruitful to examine the perception of multiattribute covariability.

Linville and Fischer's contribution revolves around two main ideas. First, perceptions of covariation generally overestimate the actual level of covariation, and this tendency is stronger at lower levels of familiarity. Supportive evidence for this conclusion comes from several studies using various broad social categories such as age, gender, occupation, or even race groups. When people have extensive contact with members of the target group, when they are members of the group, or when they are otherwise knowledgeable about the group, their judgments entail lower perceived covariation among the various attributes. Additional work on highly entitative groups such as basketball teams confirms this pattern and additionally indicates that familiarity and expertise allow people to make less biased estimates of objective feature covariation. Interestingly, Linville and Fischer's strategy for collecting information about perceived covariation is highly implicit in that participants are not directly asked to make covariation judgments. Rather, perceived covariation is computed from judgments that are given along trait dimensions.

Second, Linville and Fisher suggest that implicit perceptions of covariation play a role in social judgment inasmuch as a higher degree of covariation should be associated with more extremity in judgments. Again, data from high and low entitative groups seem to be consistent with this conjecture. Linville and Fischer conclude by saying that perceived covariation need not be related in any simple

way to group entitativity. Depending on the basis for entitativity, either similarity or interdependence, one might expect more or less perceived covariation.

Unlike Linville and Fischer, who focus almost exclusively on familiarity, Mark Rubin, Miles Hewstone, Richard J. Crisp, Alberto Voci, and Zoë Richards additionally tackle the factors of group size and group status and examine how all three factors play a role in the emergence of the outgroup homogeneity effect, i.e., the tendency to perceive the outgroup as being more homogeneous than the ingroup. On the basis of the evidence obtained in minimal group studies and with gender groups, Rubin and colleagues question the status of differential familiarity as a necessary cause for the outgroup homogeneity effect to emerge. In fact, and contrary to both the differential familiarity hypothesis and Lorenzi-Cioldi's position on gender effects, gender outgroup homogeneity (OH) can be seen as a modest yet reliable phenomenon (Park & Judd, 1990). The authors then engage in a critical analysis of Lorenzi-Cioldi's interpretation of the larger OH effect among men than among women. On the basis of the accumulated evidence, they conclude that members of high status groups, and thus men, perceive greater outgroup homogeneity effects. In contrast, members of low status groups, and women in particular, show no such tendency. Rubin and colleagues also discuss the so-called minority group homogeneity effect as well as the interactive effect of group status and group size.

In the second part of their chapter, Rubin and colleagues present a research program aimed at disentangling the impact of these three factors on the perceived dispersion of members of gender groups. Their studies reveal that group size is indeed more strongly associated than status or gender with a tendency to perceive outgroup homogeneity, familiarity playing no causal role in the process. Interestingly, however, measures that make reference to individual group members (dispersion rather than global similarity) and targets that stress interpersonal comparisons (individual targets rather than abstract categories) suggest that men are more prone than women to enhance their personal identity, a tendency that facilitates the emergence of outgroup homogeneity among men.

Ana Guinote's chapter presents yet another perspective on the role of group size and group status on the perceived homogeneity of groups, adding the factor of power. The empirical work that is being reviewed rests on two main hypotheses. For one thing, Guinote argues that the position of individuals in the social structure directly affects their perception of control. This perception of control, in turn, influences the extent to which perceivers will attend to the variability of the groups out there. Being able to count on numbers, status, and power thus leads people to see other groups in a more homogeneous manner. For another, Guinote holds that perceived control also has some bearing on the actual spontaneity in behaviors, that is, people's objective heterogeneity. Members of large, high-status, or otherwise powerful groups are likely to act in more deliberate ways and thus be inherently more variable than members of small, low-status, or powerless groups. These two phenomena converge so that the

members of subordinate groups come across as less variable than the members of dominant groups. A series of studies are presented that lend support to these two hypotheses.

With the two following chapters, we continue the journey along our continuum. After concentrating on homogeneity and entitativity as the accidental result of the peculiarities of people's perceptual and cognitive processes or their mere position in the social structure, we now turn to work that assigns a more active role to social perceivers. Indeed, a number of contributions see homogeneity, entitativity, and possibly essence, as emergent products of social interaction.

As a case in point, Markus Brauer, Charles M. Judd and Micha S. Thompson tackle the important question of whether communication about a group may indeed affect the perceived entitativity of a target group. Building upon Park and Hastie's (1987) distinction between instance-based versus abstraction-based stereotype acquisition, the first study uses a rumor transmission paradigm to show that people end up holding more extreme and less variable views about a target group when they learn about the group only from other people than when they form their impression solely on the basis of first-hand behavioral observations. Brauer and colleagues further show that this communication effect is not restricted to recipients of communication but that people asked to tell others about their impressions of a group similarly form more stereotypic views than people simply asked to study the materials. Relying on actual group communication settings, two additional studies confirmed the fact that these two effects combine to polarize stereotypes about a target group but only when all group members possess an equal (small) share of counterstereotypic information. Clearly, this chapter provides convincing evidence regarding the role of communication in the formation and preservation of stereotypes and, as such, stresses the social nature of stereotypic beliefs (for a related set of issues, see McGarty, Yzerbyt & Spears, 2002).

In the following chapter, Yoshihisa Kashima further stresses the idea that beliefs about groups are social constructions. Indeed, this contribution focuses on the psychological processes involved in the production and reproduction of social reality. A central tenet of Kashima's analysis is that communication contributes to providing a sense of realness to whatever is the topic of the exchange. Importantly, communication takes place between people in the context of a larger cultural background. In line with the theme of the present book, this phenomenon applies to social categories as much as to anything else. That is, within a given cultural context, communication makes social categories become entitative and real. As a consequence, Kashima argues, people tend to endow social categories with some essence. A noteworthy feature of Kashima's argument is the distinction between the notion of entitativity as proposed by D. T. Campbell, which rests on a series of "measurable" perceptual clues and refers to the ontology of groups, and the concept of essentialism, which more directly relates to the psychological sense of realness and is highly sensitive to the occurrence of communication (see also Yzerbyt, Corneille, & Estrada, 2001). Several

pieces of empirical evidence allow Kashima to argue that communication indeed not only produces more polarized and homogeneous impressions of groups but also leads perceivers to see the characteristics of the target group to be more unalterable. Additional cross-cultural work also shows the nonnegligible role of culture in the attribution of essence to social entities. Kashima's chapter is particularly important in that it simultaneously stresses the active part people play in constructing social reality and the critical role of communication in providing the psychological sense of that reality.

The remaining chapters in the book carry us to the more strategic end of the continuum. For many of the authors of this third category of chapters, entitativity comes across as a feature that is being monitored, relied upon, used, and even sought out and constructed. To be sure, we note a progression in the extent to which the authors subscribe to such a functional perspective in their treatment of group entitativity. Starting with the idea of a genuine interest in the perception of regularities among the group members, one ends up with some indication that people are indeed doing their best to construct the perception that a group is a coherent social entity.

Carey S. Ryan provides a good demonstration of people's special attention to aspects of group homogeneity and entitativity. Her chapter focuses on the process by which individuals become socialized into groups, specifically concentrating on the ways in which socialization affects the perception of group variability, particularly of the ingroup. According to Ryan et al., new group members initially prefer to pay attention to the similarities of individuals within the ingroup at the expense of their idiosyncrasies. Why is this? According to Ryan, discovering what the common themes are among ingroup members allows new members to deal with their uncertainty and lack of knowledge about the group and maximizes their chances of acceptance. At the intergroup level, such a group-level approach helps them to map the social landscape and to clarify the distinctive features of their ingroup. At the intragroup level, the construction of a schematic understanding of the group provides a means to reassure the other members that one is a good recruit. Ryan's model is thus essentially predicting a stronger need for a homogeneous view of the ingroup at early stages of group membership. As time passes, a greater increase in perceived dispersion is found for ingroups than for outgroups, meaning that outgroup homogeneity should emerge over time. Data from a longitudinal study with new members of sororities lend strong support to these conjectures.

Ryan et al. also presents experimental evidence confirming that people who join new groups and are uncertain about their entry in the group primarily search for information about the group rather than about the individual members of the group. As a whole, the data presented by Ryan et al. are unique in examining dynamic impressions of groups over time. They show that forming an individualized view of group members may not be the most functional way to gain access to and become a good member of a group. Instead, constructing some global understanding of one's group by spotting the similarities is an

efficient strategy, at least in the initial phases of membership. Only with the passage of time does the focus on the formation of an adequate representation of the group as a whole give way to some concern for individual differences within the group.

Russell Spears and colleagues also focus on homogeneity as a valued characteristic of the group. Adopting a social identity and self-categorization framework, these authors focus on the concept of distinctiveness rather than entitativity. According to them, distinctiveness may well entail a stronger emphasis on the motivational role of the social self and indeed seems to be more directly tied to the consideration of an intergroup context, two features which also have a number of consequences at the measurement level. Having said this, Spears and colleagues set out to examine the different functions of group distinctiveness. In a nutshell, distinctiveness is thought to provide group members with a sense of identity ("who are we?") as well as with a way of dealing with unfavorable social status ("what can we do?").

As far as the identity function is concerned, Spears and colleagues make a number of suggestions that are strongly reminiscent of other views presented in this volume. Specifically, they note that the perception of the distinctiveness of a group can be as much a reflection on the nature of things as a reaction to the lack of structure and clarity in the social environment. Indeed, empirical evidence is presented showing that group members may sometimes be motivated to differentiate their group from other groups. As to factors that promote such a response, Spears and colleagues suggest that the type of groups and the visibility of other group members play a key role here. Turning to the instrumental function, Spears and colleagues propose that distinctiveness is likely to be useful in the pursuit of group goals that require coordinated group action. Not surprisingly, the presence of a group project should be critical in promoting the willingness of group members to emphasize the coherence and cohesiveness of the group. Interestingly, the authors note that these two functions of distinctiveness are complementary: Distinctiveness/entitativity as ends is a prerequisite for distinctiveness/entitativity as means. Spears and colleagues then go on to present an impressive series of studies that focus on the way people's level of identification with the group moderates the search for distinctiveness, be it for identity or instrumental reasons.

The idea that group entitativity may serve a group in promoting collective action is also very much present in Katherine J. Reynolds, Penelope J. Oakes, Alex Haslam, John C. Turner, and Michelle K. Ryan's contribution. Still, these authors propose quite a different take on a number of themes that have been tackled in previous chapters. First, like Plaks and colleagues and a few other chapters in this collection, they emphasize that the emergence of entitativity is both a function of characteristics of the target groups and of the perceivers. Concerning the observed groups, the notion of comparative fit is used here to refer to the regularities observed in the social environment. Turning to the perceivers, Reynolds and colleagues stress the role of normative fit and perceiver

readiness in shaping people's tendency to appraise the social situation in terms of intergroup rather than interpersonal relations. Clearly, the notion of normative fit shares a number of features with that of naive theories. As for perceiver readiness or accessibility, one can distinguish more chronic preoccupations linked to social identification and more transient concerns deriving from the context.

Reynolds and colleagues then go on to propose that structural factors such as the level of power that people enjoy and the nature of the relationship between the groups, i.e., the security of the group's status and the permeability of the group boundaries, are likely to play a major role in the emergence of entitativity. Taking issue with the findings showing that low status groups should be the ones seeing high status groups as heterogeneous, Reynolds and colleagues provide intriguing evidence indicating that low status groups confronted with impermeable and secure relations more readily engage in stereotyping as they derogate the outgroup and see it as a coherent whole to a greater extent than the members of the high status group do. As in the chapters of Guinote and Rubin et al., the work by Reynolds and colleagues makes clear that the perceived homogeneity of a group is highly dependent on the larger social context and that structural variables play a key role in triggering dynamic perceptions of entitativity.

In their own way, these last two chapters stress the importance of entitativity in intergroup relations. When observers perceive a group as a coherent whole, they are likely to engage in different behaviors than when they perceive the group as a much less consistent entity. What happens when perceivers draw the conclusion that they are facing a real group rather than a collection of individuals is precisely the question addressed by Wildschut, Insko, and Pinter. Summarizing an impressive program of research, these authors build a case for the idea that groups come across as more threatening than individuals. The repeated observation of the so-called *discontinuity effect* in mixed-motive situations, i.e., groups are more competitive than individuals, led these authors to investigate in more detail both the content of the outgroup schema as well as the factors that contribute to its activation. As for content, Wildschut and colleagues provide convincing evidence that there is a negative schema of the outgroup consisting of beliefs or expectations that intergroup interactions are competitive, unfriendly, deceitful, and aggressive. So, for instance, communication about future moves in a mixed-motive game is less credible and persuasive when it emanates from groups rather than individuals. People also seem to believe, both at an explicit and at an implicit level, that intergroup interactions are less agreeable and more abrasive than interindividual interactions. They expect interactions with groups to be more competitive than with individuals, and, indeed, discussions involving groups include more statements about distrust than discussions between individuals. Finally, people not only experience interactions with groups as being more competitive but memory comes into play and worsens the picture even more.

Turning to the activation issue, Tim Wildschut and colleagues argue that

the outgroup schema will be activated whenever an aggregate of individuals is seen as an entity. A key factor in triggering the image of an entitative group is that people's behaviors and outcomes are seen to be interrelated in producing the group's response, which the authors call *procedural interdependence*. Such procedural interdependence is of course reminiscent of D. T. Campbell's (1958) notion of common fate and, Wildschut and colleagues argue, may be fostered by a variety of factors. For instance, when people are confronted with a series of individuals known to rely on consensus in order to reach a group decision, these individuals are likely appraised as a social entity. As a result, fear increases and competition steps up. All in all, the message emerging from this line of work indicates that outgroup fear may be very difficult to reduce.

The fact that Wildschut and colleagues paint such a somber picture of entitative outgroups should not be interpreted as a sign that entitativity is a negative feature altogether, one that groups should see as undesirable and try to avoid. As a matter of fact, intuition and empirical evidence alike confirm that entitative outgroups are frequently seen in a negative light (Abelson, Dasgupta, Park, & Banaji, 1998), but this is not the whole story. Often, seeing a group as one coherent block is exactly what perceivers would prefer if collective action is to be initiated or if discrimination and conflict is to be rationalized. It may thus be desirable and indeed most important that a group be perceived as an entity. In fact, for quite a few contributions in the book, the take-home message goes exactly in this direction. Interestingly, the distinctive feature is that these chapters all turn their attention to the degree of perceived homogeneity of the ingroup as opposed to the perception of the outgroup or of both groups.

A good illustration of this perspective can be found in the chapter by Dominic Abrams, Jose M. Marques, Georgina Randsley de Moura, Paul Hutchinson, and Nicola J. Bown. These authors provide a thorough review of their recent empirical efforts on their subjective group dynamics approach. This line of research, which is an extension of Marques, Yzerbyt, and Leyens's (1988) earlier work on the black sheep effect, is mainly concerned with people's reactions to ingroup deviance. The subjective group dynamics model holds that people will simultaneously strive to maximize intergroup distinctiveness and to validate ingroup norms. Whereas the former goal is associated with a high level of category processing, the latter goal implies instead a fair degree of intragroup differentiation. Because people value membership in groups that are entitative, they should feel threatened in the presence of deviant group members who imperil the coherence of the group.

Abrams and colleagues present the results of several studies showing that counternormative ingroup deviants are indeed more harshly evaluated than equally counternormative outgroup members. Moreover, they provide evidence that the phenomenon is amplified in group threatening situations. Clearly, a lack of entitativity encourages group members, especially the highly identified ones, to derogate the antinorm deviant, possibly in an attempt to try and restore

the perception of group coherence and a sense of subjective reality of the group and the ingroup norms.

The idea that people may want to see the ingroup as entitative is taken a step further in Emanuele Castano's chapter. A first central idea of the chapter is both simple and far-reaching in its implications. If people like to see their ingroup as being rather entitative, they may react more positively to an ingroup that displays coherence as opposed to an ingroup for which there is a lower level of groupness. That is, entitativity occupies the role of an independent variable. Along with a number of colleagues, Castano conducted a series of studies supporting the idea that group members like it when their group is entitative. Specifically, people were found to identify more with groups that were more entitative. A noteworthy feature of this program of research is the use of a wide variety of group features used to trigger entitative perception of the group in the first place. Be it through boundedness, common fate, similarity, or salience, all the features identified by Campbell succeeded in fostering an entitative representation of the ingroup.

The second part of Castano's chapter examines two possible reasons for people's positive reaction toward an entitative ingroup. The first reason refers to what Castano calls the terrestrial value of entitativity: Groups that are more coherent are endowed with higher intentionality. In other words, there is a sense of purposiveness that entitative groups have that make them threatening if they are outgroups and attractive if they are ingroups. The second reason is the so-called celestial value. Building upon some intriguing empirical research in which terror management theory plays a central role, Castano suggests that membership in a close-knit social entity allows individuals to extend themselves through space and time and releases them from a sense of finitude about their own lives. The chapter concludes with a discussion of the relevance of this work for a series of hot issues in political psychology and international relations.

In the next contribution, Michael A. Hogg addresses a number of themes that clearly mirror the issues dwelt upon by Abrams and colleagues and by Reynolds and colleagues. They also extend some of the issues addressed by Castano. The chapter examines the reasons that may lead people to join highly entitative groups, which he calls "totalist" groups. One possible way to account for the seductive power of more entitative as opposed to less entitative groups, Hogg argues, is that such groups are particularly functional in addressing people's needs to resolve uncertainty. The point of departure of Hogg's line of reasoning is that, contrary to what social identity theory would want us to believe, self-enhancement is likely not the sole reason underlying group identification. As a vast literature indicates, people are also concerned with acquiring a clear sense of who they are, how they are supposed to behave, and what they should expect from others. Social identification with a group that sends out a clear message regarding these different issues offers an ideal means of reducing subjective uncertainty. In other words, the process of depersonalization with respect to

group prototypes that are concentrated, focused, simple, and unambiguous con-stitutes a most effective way to reduce uncertainty. Such group prototypes are typically associated with groups that are highly distinctive and strongly hierar-chical, that is, totalist groups. In support of this conjecture, Hogg summarizes a series of experimental and correlational studies suggesting that an increase in or high level of uncertainty leads people to join groups, and in particular to join groups that are highly entitative, and to identify more strongly with those groups. Such findings, Hogg argues, suggest that the documented success of some totalist groups may well derive from people's attempts to deal with the increased levels of uncertainty they face in the social environment.

Given the impact of a group's entitativity on perceivers, it comes as no surprise that people may want to keep an eye on the kind of image their own group sends out to others. This is the basic question that Richard L. Moreland and Jamie G. McMinn address in their chapter. The authors start by noting that the current meaning of the word *entitativity* refers mainly to the perception of a group as being real or not, despite the fact that D. T. Campbell coined the word to refer to the actual rather than perceived reality of groups. Given the contemporary emphasis on perception, the authors propose the concept of "so-cial integration" to refer to the objective reality of a group. Building upon the fact that the levels of entitativity and social integration of groups may some-times correspond but also diverge, Moreland and McMinn take us on a fasci-nating analysis of the ways by which people may manage how real their groups is seen to be.

A number of different situations may lead people to present their group as more entitative and real than it is. Presumably, declining levels of integration, such as recurrent conflicts within a group, be it a large social entity such as a company or a political party or a smaller group such as a couple, may lead some of its members to exaggerate the strength of the group. As the chapters by Castano and Hogg would suggest, an image of a healthy group may also help to gain new members. Moreland and McMinn review a series of cases in which people may instead want to make the group seem less real that it actually is. Indeed, bot dyadic associations, such as extramarital affairs, office romances, or homosexual relationships, and groups involving larger numbers of people, such as subversive groups, provide evidence aplenty that people are not always keen to let others notice the existence of links among them. Interestingly, although efforts may be made on the part of group members to manage the impression others may have regarding their group, Moreland and McMinn also consider the possibility that group members are sometimes less concerned with the per-ception of the groupness than with the actual level of social integration of their group. Ironically, a prime strategy here may well be to rely on entitativity. The fact that human beings are social creatures by nature, the authors note, should indeed make it more easy to persuade observers about the presence than the absence of a group. This final chapter confirms, if this was still needed, that entitativity is a most powerful determinant of people's reactions to social targets.

FINAL THOUGHTS

Over the last decade, scholars of intergroup relations have made impressive progress in their understanding of the antecedents and consequences of perceived group variability. More recently, this interest generalized to the study of perceived group entitativity and essentialism. Empirical and theoretical advances on the latter two concepts have significantly improved our understanding of important social issues such as the development and maintenance of prejudice and discrimination toward groups or the nature of social behavior directed toward (or emerging from) ingroup members and newcomers.

As research developed at an ever increasing rate on these notions, it became clear that efforts toward conceptual integration should be made. As we already noted, current evidence suggests that perceived variability, entitativity, and essentialism tend to overlap with each other, both at the conceptual and empirical levels, yet they are also distinct constructs in many ways. Importantly but problematically, scholars in the field have both defined and operationalized these constructs in a variety of different ways. Inevitably, this divergence has meant that research conducted by one laboratory on the relations among these three constructs might be less than useful to other laboratories, where different definitions and operationalizations were used. This distressing state of affairs meant that laboratories were speaking past each other rather than to each other, with the consequence that little conceptual progress was being made through abundant data were accumulating. It was this sad state of affairs that prompted us to edit this volume, with the goal of providing a forum where the diverse points of view could speak to each other. It seemed to us that only through such an exchange could we arrive at some common definitions and perspectives, and that these would lead hopefully to some substantial scientific progress on these concepts.

In addition to addressing these theoretical and methodological concerns, we also wanted to document the impressive amount of work that has already been conducted on the role of perceived variability, entitativity, and essentialism in social perception and intergroup relations. We chose to organize these research contributions by focusing on the extent to which the social perceiver is seen to be relatively passive or active in the social construction of group perception. At the one end, perceptions of group variability and entitativity are seen to derive from structural conditions that affect perception and to which the perceiver simply responds. At the other end, perceived variability and entitativity are affected by motivated and even strategic processes that the perceiver actively engages in. Certainly these chapters could have been organized in other ways, along other dimensions. One advantage of the present structure, however, is that it makes clear that the perception of group variability, entitativity, and essentialism can have both negative and positive social consequences. For instance, enhanced perceived entitativity and essentialism facilitate people's social identification to, or socialization within, groups. However, the search for

social identification and integration may occasionally lead people to join totalist groups, or it can also more generally contribute to the development not only of ingroup favoritism but also of outgroup derogation.

In this sense, we need to distinguish between the processes involved in perceiving variability, entitativity, and essentialism and their consequences. The processes per se really do not have evaluative implications. That is, perceptions of group variability, entitativity, and essentialism in and of themselves, and the factors that influence these, are neither desirable nor undesirable. But it is the content and interpretation that are put upon these perceptions by the social world that have evaluative implications. Seeing a group as less variable and more entitative is a good thing if one is a member of the group and if one is able to take collective action in pursuit of desirable ingroup goals. On the other hand, outgroups that are less variable, more entitative, and more essentialized are more likely to be seen as effective in acting on their goals and thus, to the extent that there exists conflicts between groups, more likely to be targets of discrimination and intergroup hostility.

The various contributions to this book represent a fascinating theoretical and empirical journey into the word of intergroup relations. Our hope is that this volume will stimulate further theoretical and empirical work within social psychology on the fundamentals of group perception. The issues that are raised in this volume extend beyond social psychology, however, and therefore we hope that neighboring disciplines may also find the issues addressed to be provocative. Indeed, one of the obvious lessons of the advances made in the study of group perception is its potential relevance both in terms of concepts and methods for such fields as political science, sociology, and anthropology. Finally, we also believe that the chapters assembled here will prove useful for social practitioners and decision makers who are generally concerned about social beliefs and interactions. The goal of improving intergroup relations is one that requires efforts from both academics and community-based organizations. We ultimately hope that the present contribution will foster exchanges between these social groups as well.