Almost since their inception, cooperative learning methods have been applied in desegregated, multigroup educational settings. Underlying all these efforts has been the fundamental principle, demonstrated years earlier by Sherif and Sherif (1956), that people who help each other and who join forces to achieve a common goal will generally grow to feel more positively about each other and will be willing and able to interact constructively when performing a collective task. Cooperative learning methods have brought this principle to bear on the design of normative classroom pursuits instead of continuing to view learning and social relations as separate domains requiring different programs and settings. Learning in school has transpired within a social context replete with complex social processes and relationships (Schmuck & Schmuck, 1982). When the class is comprised of pupils from different ethnic, racial, or cultural backgrounds, these processes and relationships suddenly assume for teachers a degree of salience that they may not have had when all of the students were of the same social group. Teachers report that the multiethnic class presents a far greater instructional challenge than the so-called homogeneous class (Amir & Sharan, 1984). Teachers, when confronted by this challenge, may become more open to a possible change in their style of classroom management and teaching, provided there is some prospect of developing positive intergroup relations and collaboration in the learning effort.

The first chapter in this section poses some fundamental questions about the social ideology directing the desegregation enterprise in general, and the application of cooperative learning techniques to multiethnic classrooms in particular. Shelagh Towson's chapter is thought-provoking on several accounts, not the least of which is the fact that it relates cooperative learning to a wider social context. Clearly, investigators of interethnic cooperation in desegregated settings do not necessarily share the same social ideology. Some may subscribe to an
assimilationist position. They would construe cooperation as a vehicle for promoting the eventual absorption of the minority group and culture, perceived as relatively primitive, by the more advanced and "progressive" majority-group culture. Other educators concerned with intergroup cooperation may subscribe to a pluralistic ideology that views cooperation as a form of social exchange where the contributions of all social subgroups play a role in building the social order, but where the integrity of each group is safeguarded and supported by society. The latter position is doubtless more difficult to sustain in a competitive and individualistic society. Assimilationist ideology has a long tradition in human social history, and many subgroups have embraced this ideology in the hope that eliminating their separate identity will lead to total acceptance by the majority and to sharing in the material benefits of the larger society. Many minorities hover on the brink of self-negation because they have lost any conscious sense of their self-worth. Pluralism seems to have been far less prevalent as a form of social organization, at least in the Western world.

It is of interest to note that the assimilationist ideology itself is not monolithic in its goals or motives. Some spokespersons for this outlook maintain that their primary concern is for social stability and cohesiveness. They argue that, if education promotes subgroup identities, it will actually be encouraging social divisiveness and atomization. The more subgroups see themselves as separate and unique, the less they will identify with the society as a whole. Other assimilationists take a position more akin to the "white man's burden" ideology, that, by having minority-group children cooperating with majority-group children in the same classroom, the lower status pupils will imitate or adopt the values and strivings of the higher status pupils. Both versions of the assimilationist position could advocate employing cooperative learning methods in desegregated classrooms as the preferred means of fostering ethnic integration, but each approach would support cooperative learning for distinctly different reasons.

Educators favoring pluralism in the sense of supporting ethnic identity would advocate interethnic cooperation in schools directed at cultivating equal coexistence and mutual respect among pupils from different ethnic groups. Concurrently, they would argue that fostering subgroup integrity need not undermine the cohesion of the social order. Quite the contrary: A deepened sense of group identity is fertile soil for a sense of connectedness with others and an ability to perceive other groups without threat to one's own integrity. Groups secure in their own sense of self and survival may be prepared to assume heightened responsibility for the fate and progress of the larger society (Sharan,
Amir, & Ben-Ari, 1984). Failing to cultivate this sense of group identity can be a potential source of great social unrest: "Ignored differences assert themselves, and in the end rise against efforts to ride over them in favor of an assumed, or desired, uniformity" (Berlin, 1982, p. 353). In sum, the techniques of cooperative learning can be employed to promote uniformity or diversity. What these methods will achieve probably depends, to some extent at least, on how they are implemented and under what circumstances and in what context. We are in Towson's debt for drawing our attention to these ideologies as they may impinge on the use of cooperative learning and the subtle implications of these different orientations.

The second and third chapters in this section describe two extensive experiments conducted at the same time 9,000 miles apart—in California and in Israel. Both studies were quite complex, comparing the effects of three instructional methods that the investigators implemented and evaluated in multiethnic classrooms. In California, the groups involved were white, black, and Mexican-American children, and in Israel, the groups were Jewish children from Middle Eastern and Western backgrounds. Both studies encompassed a wide range of measures to assess the effects on academic achievement and on social relations and attitudes within and between the ethnic groups in these mixed-ethnic classes. These features alone set these studies apart from most other work, which has concentrated on a small set of dependent variables and on the direct comparison of one cooperative method versus whole-class instruction. This is the first time that two cooperative methods, albeit different ones in each of the two experiments, are compared to each other. These are the main similarities between the two studies.

Among the more important differences between the two experiments are these: the experiment of Spencer Kagan, G. Lawrence Zahn, Keith F. Widaman, Joseph Schwarzwald, and Gary Tyrrell compared TGT and STAD with whole-class teaching; both of the former methods are peer-tutoring approaches (Sharan, 1980); and the study by Shlomo Sharan, Peter Kussell, Yael Bejarano, Shulamit Raviv, Rachel Hertz-Lazarowitz, and Yael Sharan compared STAD and the Group Investigation method, as well as comparing them to whole-class teaching. Hypothetically, these four methods could be placed on a continuum representing varying degrees of cooperation involved in the procedures of the different methods:

<table>
<thead>
<tr>
<th>Low cooperation</th>
<th>High cooperation</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>WC</td>
<td>TGT</td>
</tr>
<tr>
<td>3</td>
<td>STAD</td>
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<td></td>
<td>GI</td>
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Except for TGT (see Kagan et al.'s chapter), the degree of cooperation inherent in these methods also reflected the degree of competition in inverse order; that is, GI was least competitive and WC most competitive. Thus, Kagan et al.'s study included the three methods placed on the left side of the continuum, omitting the most cooperative Group-Investigation method, whereas Sharan et al.'s study selected the two more cooperative methods on the right of the continuum to compare to the most competitive method.

Both these experiments introduce concepts into the field of cooperative learning research that have not figured prominently in the studies available thus far. Kagan et al.'s thesis regarding structural bias in classroom instruction, to the effect that some teaching methods exert negative effects on pupils from certain ethnic groups, can be heuristically fruitful not only for cooperative learning but for a wide range of research in education. This concept emerged organically from Kagan's entire research career on the cooperative-competitive behavior of children as a function of their cultural history (Kagan, 1980). As Mexican-American children display a more cooperative orientation than their Anglo-American peers, it was reasonable to anticipate that traditional whole-class instruction, with its competitive orientation and its liberal use of social comparison as a major strategy for arousing pupils' motivation to learn, would exert a wide range of negative effects on the behavior of Mexican-American children in school settings.

Kagan places his research in the context of person-by-situation interaction studies. Cooperative learning provides a set of methods for designing educational procedures that are more consistent with the social orientation of various cultural subgroups in society. However, person-by-environment research focuses largely on the individual's aptitudes or inclinations. This school remains in the tradition of the psychology of individual differences typical of American psychological research. For all its similarity to this approach, Kagan's work concentrates squarely on the social values and orientations shared by many of the members of historically, culturally, and ethnically identifiable groups. Thus, this research is a genuinely social-psychological approach to evaluating educational phenomena because the reality of the group's value systems and social history is its fundamental premise. Kagan's work is unequivocally on the side of pluralism, in terms of the issues raised by Towson. Kagan views the social order as comprised of groups, not of disconnected individuals, and consequently, this approach is not "culture-blind," nor does it assume, or preach, that everyone is, or should be, alike. Treating the social orientation of an ethnic group toward cooperation and competition as a factor that should influence the design of the children's educa-
tional experience is an important way of acknowledging and supporting the integrity of that group. Obviously, there are many equally important educational techniques for accomplishing this goal. Kagan’s work occupies what may be a unique place in psychoeducational research because of its social and behavioral approach to ethnicity and schooling, which differs from the individualistic and content-oriented methods of recognizing ethnic identity and integrity.

Empirical investigation of the structural bias concept will require a long research effort. If we agree that many Western societies explicitly or implicitly embrace an assimilationist ideology in their educational institutions, it is unlikely that the educational establishment in various nations will wish to allocate the resources needed to pursue this topic. Yet, failing to do so runs counter to several urgent goals of these societies to provide effective schooling for multiethnic populations in desegregated classrooms. Hence, the concept of structural bias, once empirically substantiated—and Kagan et al.’s work reported here takes a big step in that direction—will prove to be a politically unpopular notion with considerable potential for understanding and improving educational practice. Is that not the position in which many important innovative ideas in education have found themselves? Perhaps this time, the cost of ignoring this message will be seen to be too great to incur.

One is tempted to compare the results of the research conducted in Israel by Sharan and colleagues with those reported by Kagan et al. in California. However, these introductory comments do not presume to integrate or evaluate the results of these studies, a task that the editors must leave in large part to the reader. Such a comparison would actually require a chapter all is own. One point, however, deserves special mention to ensure that it will not be overlooked. Only limited findings indicating the differential effects of cooperative learning methods on pupils from Middle Eastern and Western ethnic background in Israel appeared in the Sharan et al. study. Hence, at this time, we cannot draw cross-cultural analogies in terms of the concept of structural bias proposed by Kagan, at least not for the cooperative learning methods. No evidence was generated in the Israel study supporting the notion that cooperative learning affected children differently as a function of their ethnic identity. The pupils from both major ethnic groups responded similarly to the cooperative learning methods, in the academic as well as in the social domains evaluated in the study reported here. Results concerning achievement are not independent of the subject matter involved or of the manner in which pupil learning is evaluated, and the differences between the two studies presented here might be a function, in part, of those factors.
Interestingly, the traditional whole-class method exerted a negative effect on pupil's ethnic attitudes in the Israel study. Although the size of the effect was distinctly larger for Middle Eastern pupils, it was nevertheless significant in the attitudes expressed by Western-background pupils as well. Thus, the overall finding from the Sharan et al. study was that cooperative learning methods promoted better achievement and more positive social relations, within and between ethnic groups, for all pupils regardless of their ethnic background. Whole-class instruction was found to be less effective because it fostered a lower level of learning and less positive, more competitive social relations among peers, as well as negative ethnic attitudes. This outcome was not due to bias for or against any particular ethnic group.

We must not omit mention of the fact that, unlike Kagan et al.'s work, the Israel study had no data base for predicting the differential effects of any given instructional technique on pupils from either ethnic group. It is not known if one group typically displays more or less cooperation and/or competition than the other group. Consequently, the Sharan et al. study does not support the structural bias thesis as far as Israeli society is concerned. Of course, it may be that the Middle Eastern ethnic group, many of whom immigrated to Israel from the less urbanized and less industrialized nations of North Africa and Asia, already underwent a thorough process of acculturation into the competitive values of Israel as a Western technological society, similar to the process that has overtaken some ethnic groups in other parts of the world (Graves & Graves, 1978; Kagan, 1980). That interpretation remains to be documented. Another interpretation, with much empirical evidence, refers to the fact that the two ethnic groups in Israel affirm their common historical and religious heritage, perceive themselves as belonging to one historical nation now restoring its political sovereignty in its own land, and, despite the differences that have developed between various Jewish subgroups, are still more similar to each other than are the ethnic subgroups in countries like the United States, England, and Germany (Amir & Sharan, 1984). Hence, facile analogies between social conditions regarding ethnicity and its consequences in these different countries are often misleading.

The Sharan et al. study also stresses some new approaches and topics that have not been explored heretofore in the cooperative-learning research literature. These include an explicit theoretical framework to account for the relationship between cooperative interaction in small groups and the learning of given subject matter (in this case, the study of English as a second language); the introduction of behavioral measures to document interethnic cooperation as a function of having
been exposed to particular classroom procedures, rather than employing self-report measures exclusively; and the evaluation of ethnic attitudes and stereotypes regarding particular ethnic groups as social entities, rather than inferring ethnic attitudes and relationships from measures of relationships with given individuals whose ethnicity is not identified explicitly (such as sociometric questions and peer evaluations). This latter emphasis is consistent with Towson's rejection of "colorblindness" as the criterion for tolerance implicit in much research on school desegregation and ethnic relations.

The final chapter in this section is directed toward the future. Geoffrey Maruyama provides a multidimensional perspective for investigating what surely must occupy center stage in future research on cooperative learning in general, and on its effects in desegregated classrooms in particular. That subject is the analysis of how classroom processes affect learning outcomes. Maruyama's model could sustain an entire research program concerned with specifying how social relations transpiring during cooperative learning influence pupils' academic achievement, with particular emphasis on how peer interactions occurring in the cooperative learning class induce changes in minority-group pupils' learning. Research thus far, including the work reported in this volume, has demonstrated repeatedly the relative effectiveness of cooperative learning methods in promoting academic achievement (Slavin, 1983). However, we know relatively little about how these effects come about. Webb's (1982) process-product research has begun to explore this issue from a cognitive perspective. Maruyama's thoughtful and provocative contribution to this subject will, we hope, lead the next generation of investigators to focus on the relationship between social and learning processes.

In the majority of research studies published thus far on the effects of cooperative learning, in all of its various manifestations, social and academic learning variables have been studied as parallel rather than as interrelated phenomena. Hence, the proposals made by Maruyama in his chapter not only suggest a new approach to data analysis but require revisions in the basic conception of how cooperative learning experiments should be conducted. The proposed model urges us to plan studies that have a far more integrative perspective than that employed here-tofore, a perspective that is likely to encompass a wider scope of topics and variables perceived within a nexus of relationships. Maruyama has instructed us on how to analyze the data obtained from such studies. What remains to be explained in detail, and to be demonstrated, is a plan for carrying out experiments in real-life settings with the degree of complexity required by the theoretical model.
What must not be overlooked is the clear change in direction required by this model and by the process–product research now emerging from the school of investigators concerned with peer cooperation and learning in schools. Schooling almost universally occurs with relatively large classroom groups rather than with aggregates of individuals. The study of the relationship between peer interactions and influences and their relation to school learning appears, finally, to be receiving serious acknowledgment by educational researchers, enriching previous research focusing on individuals’ traits and their interaction with educational treatments. The fact that Maruyama has produced this model at this time may suggest that the social interactional aspects of life in classrooms is finally attracting the attention that it deserves from theoreticians and students of the educational process.

Given the way in which peer cooperation in small learning groups can be linked with a wide range of theoretical positions about intergroup relations of various kinds, only some of which were touched on in the research reported here, we anticipate that cooperative learning will continue to be employed in many more studies dealing with intergroup contact in educational settings.

REFERENCES