A "collective voluntarism" framework can be used to achieve greater analytical precision and improve theoretical development of the landmark "knowledge gap hypothesis" which has stimulated considerable research and debate about the nature and existence of socially structured public affairs knowledge. The original knowledge gap hypothesis locates differential acquisition of public affairs knowledge within the social structure and explains the emergence and consequences of gaps for collectivities, particularly communities. Combining the two dichotomies of: (1) whether sociocultural phenomena are represented as naturally occurring or as voluntary human constructions; and (2) whether these phenomena are best explained by analyzing the propensities of individual actors or those properties unique to collectivities produces four categories. The categories are: societal naturalism, individual voluntarism, atomic naturalism, and collective voluntarism. The first three categories are represented by existing research on the knowledge gap hypothesis. Three ideas within current knowledge gap work can serve as points of departure for a collective voluntarist perspective: the model of collectivity employed, the manner in which knowledge is conceptualized, and the value of such knowledge. Readily available concepts with which to organize a contextual, collective voluntarist view are those of "culture" and "social process." The process of knowledge gap construction can be studied in depth with the tools of event sequence analysis. Although no known studies of knowledge differentials fulfill the definition of "collective voluntarism," parts of several studies both within and outside the knowledge gap literature suggest approaches which could be included and expanded in such research. (Contains 45 references, 2 data tables, and 12 notes.)

(RS)
"Collective Voluntarism and Public Affairs Knowledge: A Typology for Knowledge Gap Theory Development"

Emanuel Gaziano
Doctoral student
Department of Sociology
Indiana University
Bloomington, IN 47405

Cecilie Gaziano, Ph.D.
President
Research Solutions, Inc.
4511 Fremont Ave. S.
Minneapolis, MN 55409

Presented at
the 20th Annual Conference of the Midwest Association for Public Opinion Research
Radisson Hotel
Chicago, IL
November 19, 1994
Introduction

Over the past quarter century, the landmark "knowledge gap hypothesis" of Tichenor, Donohue, and Olien (1970) has stimulated considerable research and debate about the nature and existence of socially structured public affairs knowledge. Several contending views of gap phenomena have been developed in opposition to the original hypothesis, notably Ettema and Kline (1977) and Dervin (1980; 1989), which have in turn opened up debates regarding the validity and comparison of empirical results. Unfortunately, alternative proposals and the discussions they have engendered have suffered from two serious drawbacks. First, they tend to be relatively unselfconscious regarding differences in conceptualizing gap phenomena, and therefore often rely on brute empiricism or illegitimate comparisons to settle strictly theoretical arguments. Second, alternative proposals have rarely spawned very active alternative research programs. Instead, writers have been content to comb through existing literature in an attempt to force the results of very disparate studies into accord with one another, instead of developing research questions and corresponding methods which would better fit their theoretical perspective. One reason for inconsistent knowledge gap results, then, is that researchers often combine and confuse concepts from different perspectives which vary in levels of analysis and assumptions. With these considerations in mind, we shall propose 1) a single framework which is intended as an aid to greater analytic precision and improved theory development; 2) the expansion of the stock of methodological approaches available to the knowledge gap researcher based on this framework; and 3) a sketch of some extant models for future knowledge gap research development.

The proposed framework is based upon a typology for analyzing social theories developed by a University of Chicago sociologist, Donald N. Levine (in press, chapter 15). He argues that social theories may be classified according to central defining features described by two dichotomies: 1) whether sociocultural phenomena are represented as naturally occurring or as voluntary human constructions, and 2) whether these phenomena
A typology for knowledge gap theory development are best explained by analyzing the propensities of individual actors or those properties unique to collectivities. The first dichotomy represents two fundamentally different ways of conceptualizing social reality. Examples of naturalistic explanations would include universal human passions (e.g., for freedom, or the propensity to truck, barter, and trade), biological urges or instincts (aggressivity, the reproductive urge), or reference to the social organism. By contrast, voluntarists would reject the reduction of human phenomena to natural propensities and mechanisms, whether individual or collective, and emphasize instead the construction of meaning and values (gender, for example, is a concept developed to counter the perceived essentialism or inflexibility of naturally given sex characteristics). The second dichotomy serves to locate social ontology in the individual or the collective, and consequently entails implications for subjectivity or agency as well as the level of analysis in terms of causal mechanisms.

Combining these terms, the four resulting categories are "societal naturalism" (sometimes "social realism"), "individual voluntarism," "atomic naturalism," and "collective voluntarism"¹ rendered in Table 1:

Table 1: A typology of social theories

<table>
<thead>
<tr>
<th>Human phenomena are:</th>
<th>The proper unit of analysis is:</th>
<th>The collectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>natural</td>
<td>atomic naturalism</td>
<td>societal naturalism</td>
</tr>
<tr>
<td>constructed</td>
<td>individual voluntarism</td>
<td>collective voluntarism</td>
</tr>
</tbody>
</table>

A typology for knowledge gap theory development

Although these terms also may be combined, collapsed, or otherwise synthesized in numerous ways, each perspective represents certain well-established approaches in the social sciences. Examples of atomic naturalism would include behaviorist social psychology, economic and other maximization theories (including rational choice, information, and game theory), and cybernetics, among others. Societal naturalism is well represented in the various functionalisms, and social systems theories in general. Individual voluntarism encompasses such approaches as psychoanalysis, certain strains of symbolic interaction and ethnomethodology, and phenomenology. Collective voluntarism, finally, includes much of cultural anthropology (e.g., cultural hermeneutics and structuralism/poststructuralism), cultural history, civilizational studies, and "pragmatic" sociology. These perspectives are social scientific worldviews in the sense that they profoundly influence the kinds of questions researchers ask as well as the kinds of phenomena social scientists observe as "real." Perspectives are, furthermore, unprovable: no empirical evidence could demonstrate that the proper unit of analysis is either the individual or the collectivity, nor could such evidence demonstrate whether society is a natural phenomenon or a constructed one.

Applying this framework to knowledge gap theories highlights three competing theoretical perspectives on knowledge gap phenomena and suggests how a fourth, as yet unrealized, area could contribute to the further development of knowledge gap research.

---

2 Categorizing symbolic interaction and ethnomethodology under this heading is somewhat misleading since both perspectives are interactionist. Therefore, although both of these shade over into collective voluntarism, we include them under this heading based upon their methodological orientation toward the individual.

3 We list disciplines here merely to illustrate the concrete use of the perspectives of Levine's typology in contemporary social science. However, there are no necessary connections between perspectives and specific disciplines, and they should not be conflated with one another: sociology, for instance, includes work done from all four perspectives—all of which is necessarily sociological. Although people commonly speak of a "sociological" approach when they mean societal naturalism or a "psychological" approach when they mean atomic naturalism, we maintain that disciplines have no essential content in terms of perspective, and that these adjectives are therefore vague at best, inaccurate at worst. In one sense perspectives are like glasses that allow one to see better at certain ranges (and not others). As such, they may be removed or exchanged for other glasses. On the other hand, researchers often commit to a certain perspective and set of methods as the only true one. We seek to sidestep a narrow view by locating our commitment at the level of research questions appropriate to the relevant social process.

4 This analysis was begun in C. Gaziano and E. Gaziano (in press), with a less explicit treatment of the Levine typology, in order to outline the development of knowledge gap theory and methods since 1970.
A typology for knowledge gap theory development

The exemplars and central propositions that typify these approaches to the knowledge gap are summarized in Table 2:

<table>
<thead>
<tr>
<th>Atomic Individualism</th>
<th>Societal Naturalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dervin (1989): Knowledge deprivation due to user alienation from design and function of information delivery systems</td>
<td>Tichenor et al. (1970): Differential knowledge acquisition rates between socioeconomic strata maintains status quo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual Voluntarism</th>
<th>Collective Voluntarism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ettema &amp; Kline (1977): Situational needs and motivations of individual actors determine knowledge differences</td>
<td>?</td>
</tr>
</tbody>
</table>

The original knowledge gap hypothesis of the Tichenor-Donohue-Olien team locates differential acquisition of public affairs knowledge within the social structure, and explains the emergence and consequences of gaps for collectivities, particularly communities. The themes within their explanations are consistent with societal naturalism, and indeed they conceive of society as a naturally occurring supraindividual collective entity whose organizational qualities cannot be reduced to its individual parts. Even when they mention such factors as interest, motivation, salience, and conflict, these are always conceived in terms of collective structuring. These themes occur in the original hypothesis, which states that:

As the infusion of mass media information into a social system increases, segments of the population with higher socioeconomic status tend to acquire this information.

That piece contains a detailed exposition of the translation of the societal naturalist perspective of the original hypothesis into methods of research and empirical results which parallels our treatment of collective voluntarism here. The present paper forms the second in a series of three related efforts. The third will concern the knowledge gap and structural and Blumerian variants of symbolic interactionism.
A typology for knowledge gap theory development

at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease (Tichenor et al. 1970, pp. 159-160).

The Tichenor-Donohue-Olien group locate their causal analysis of knowledge gap phenomena in system organization itself by emphasizing that differential knowledge acquisition serves to maintain the status quo power relationships of social structure (p. 170; Tichenor, Rodenkirchen, Olien, and Donohue 1973, p. 5; Olien, Donohue, and Tichenor 1983, p. 458). In other words, knowledge gaps are functional for maintaining elites, and possibly signal the vanguard of progressive social change, although they also may cause increased social tensions.

In contrast, Ettema and Kline's well-known 1977 review and reformulation of the hypothesis questioned the theoretical perspective of structural explanations and recast the debate in terms of "differences" versus "deficits." They represented knowledge gap phenomena in the terms of individual voluntarism by emphasizing the necessarily different situational needs and motivations of individual actors. Their stance can be viewed through the concepts of symbolic interaction (not a term they employ), which represents the instrumental activities of individual actors — attitudes, beliefs, motivation, perception, thought, and choice — relative to the conditions and resources of the situation. Since symbolic interaction itself was developed partly in response to perceived social structural or cultural determinism, it is well suited to describe Ettema and Kline's division of knowledge gap results into audience-related (or individual) and message-related (or situational) factors.

But Ettema and Kline also modified the original view of knowledge itself in a voluntarist direction. Where the Tichenor-Donohue-Olien group mostly conceives of knowledge as qualitatively undifferentiated public affairs data and news facts, Ettema and Kline argue for

---

5 The different perspectives on social phenomena also have profound implications for the practical dimension of social scientific work (Levine in press, chapter 15). The practical dimension of knowledge gap research, particularly in terms of information campaigns and work in "developing" countries, is extremely important although we shall not treat the matter further here.
A typology for knowledge gap theory development

the notion that individuals may employ differing cognitive schemata to interpret this incoming information: "Higher and lower SES persons... may well see the world in somewhat different ways" (p. 189).

Brenda Dervin's challenge to knowledge gap theory (1980; 1989; Dervin & Nilan 1986), represented in the first cell of Table 2 as an example of atomic naturalism, has features in common with Ettema and Kline's view and shares a little of the Tichenor-Donohue-Olien orientation, yet has many differing features. She blends a cybernetic model of information delivery systems from library science with certain insights from phenomenology to produce a mechanistic and individualist, yet context-sensitive, account of gap phenomena. Picking up on Ettema and Kline's theme of difference versus deficit interpretations of knowledge gap phenomena, she contrasts "traditional" and "alternative" approaches to communication and asserts that all traditional models of mass communication contribute to deficit interpretations of gaps. She considers any data on differentials to be mere "numeric myths" (1980, p. 81). True to an atomic model of human phenomena, Dervin does not recognize society in the collective sense, since she considers it merely the "product of past and present cognitive/behavioral events" rendered in aggregated form (1989, p. 226). On the question of construction versus nature, however, Dervin synthesizes aspects of both. On the one hand, she portrays individuals as the human components of an information delivery system which they interface with as "users" or receivers of information. On the other, she believes that each individual creatively constructs meaning which is wholly unique to his or her situation, although bounded by "time, space, change, and physiology" (p. 223). Similar to Ettema and Kline, then, Dervin also recognizes the possibility that gaps may be due, in part, to differences in meaning construction between the senders and receivers of information (1980, p. 94).

The knowledge gap as collective voluntarism
A typology for knowledge gap theory development

The fourth cell of the analytical framework in Table 2 is reserved for collective voluntarism. No known research on knowledge disparities fits neatly into this category, yet research within such an orientation could yield insights obscured by the other three perspectives. Explanations from this perspective would be similar to those of the original hypothesis in that they would emphasize a collective, in contrast to an individual or merely aggregate, level of human organization. But in opposition to the original hypothesis, and more in line with the approach of Ettema and Kline, Dervin, and others, a collective voluntarist view would emphasize the important dimension of meaning construction and value in knowledge gap phenomena. After sketching some relevant themes of this new view with reference to the knowledge gap, we shall investigate two existing models for future work from this perspective: community-based studies of the knowledge gap and urban sociology.

Three ideas within current knowledge gap work may serve as points of departure for a collective voluntarist perspective: the model of collectivity employed, the manner in which knowledge is conceptualized, and the value of such knowledge. These ideas are the thematic counterparts to the assumptions of the original knowledge gap hypothesis. Tichenor, Donohue, and Olien initially assumed that 1) education indexes socioeconomic status, 2) information flow may be characterized by irreversible linear or curvilinear trends with no upper limit of such information reached, and 3) public affairs and science news actually possess a "more or less general appeal" (1970, p. 160). A collective voluntarist perspective would alter each of these assumptions.6

Model of collectivity

We may begin by critiquing the formulation of the original hypothesis in terms of the "variables" paradigm of social structural social science.7 Tichenor, Donohue, and Olien

---

6 We present only a selective sketch. Other versions of collective voluntarism would be possible.
7 In essence, variables are employed by all those who use or emulate experimental methods. There are numerous possible critiques of the "variables" paradigm, some of which have been addressed over the years by various authors (Abbott 1992a; Blumer 1969; Duncan 1984; Lieberson 1984). Once again, we are not
conceived of knowledge gaps as occurring between socioeconomic strata, and they indexed such strata by reference to educational levels attained. These strata are defined as internally homogenous, as well as abstracted from their location in particular social times and spaces. "SES" and "education" have the same causal relation to "knowledge" regardless of context. Note that the critique is not that they don't employ enough variables: natural "gender," "race," "time," and so forth all operate according to the same logic. But the question arises, does it mean the same thing to be "lower-middle class," or "a high school graduate," in Magnolia, Schaumburg, and Chicago? Or, does it mean the same thing to be black on the south side of Chicago as it does to be black on the south side of Minneapolis? In general, variables-based research necessarily neglects context in favor of generality and the explanation of "variance."

Some readily available concepts with which to organize a contextual, collective voluntarist view are those of "culture" and "social process." Although culture can be a vague or mysterious concept in social research, especially when it merely refers to "belief systems," we shall suggest, in somewhat broad strokes, how this idea may be profitably put to work in knowledge gap research. After all, anthropologists and others have employed culture to discuss knowledge throughout this century. There are essentially three models of culture: a formal language model, a text model, and a practice model. We shall concentrate on the first two.

The formal language model essentially conceives of culture as composed of a system, or systems, of signs whose conceptual content is defined by their positional

---

8 Please note that the Tichenor-Donohue-Olien team rather quickly moved their analysis to a more (but not fully) contextual level when, in 1973, they began to focus their research efforts on specific communities, rather than abstract social systems.

9 This is a rather coarse view of culture and somewhat arbitrary, however it provides a usable beginning for a collective voluntarist view of knowledge gaps. Further, this division is not like a cartel arrangement, since for instance, practice theory entails a rather sophisticated view of both formal language as well as narrative/text/discourse (see Bourdieu 1977, and the selections in Calhoun, LiPuma, & Postone 1993).
A typology for knowledge gap theory development

interrelations. Signs, or more broadly schemata, mutually determine their value in a relational system of pure differences (not unlike economic value). In general, such a view would treat knowledge or information as elements within such a system, and therefore susceptible to structural analysis. By contrast, meaning is discerned through hermeneutic or interpretive analysis and is largely expressed in narrative, discourse, and text. This is the text model of culture, in which culture is thought of as an ensemble of texts which we "strain... to read over the shoulders of those to whom they properly belong" (Geertz 1973, p. 452). This view is closely related to other strains of interpretive sociology as well, with their emphasis on the role of social actors. We may inquire not only about the meaning and value of public affairs knowledge, but we may also investigate the various strategies used to disseminate and/or suppress certain knowledges as well as the interests which are involved. Ultimately, we cannot draw too sharp a line between meaning and value, though, for the simple reason that they necessarily implicate one another in the course of social life. Cultural schemata enable and constrain narrative and discourse, as those schemata are revalued or otherwise altered in the course of interested, strategic use by actors.

These different models also indicate that knowledge gap research could be supplemented with appropriate methods in a research program geared to answer questions about contextual differences found in phenomena. The formal language model would indicate semiotic or structural modes of analysis, while the text model would require ethnographic or participant observation, textual or discourse analysis, and more in-depth, clinical interviews. Suitably executed, the already widely employed methods of content

---

10. This approach has roots in the structural linguistics of Saussure ([1915] 1986) and the American school of empirical linguistics (Edward Sapir, Benjamin Whorf). For a good general overview, see Hawkes (1977). For perhaps more directly applicable insights, see Barthes (1967), and more recently Schudson (1989) and especially Sewell (1992) for modifications to a purely structural view. Sullins (1985) is a theoretically sophisticated, yet empirically driven employment of a structural perspective in reference to historical analysis. We go into little detail as to how structural and narrative models would be applied to knowledge gap research for the simple reason that such a discussion ought to be based upon empirical analysis. There are, furthermore, a number of possible routes that researches could follow.

11. For a recent, general overview, see Steinmetz (1992).
A typology for knowledge gap theory development

...analysis and survey research could be very profitable from this perspective as well. In no case is quantification excluded. Although we are recommending a number of methods which seem appropriate to research from a collective voluntarist perspective, we want to emphasize that we are not engaging in a qualitative versus quantitative polemic here. Rather, we are interested in these methods for the light they can shed on knowledge gap phenomena in areas which have been recognized, but hitherto neglected in actual research.

Knowledge and context

What are the implications of a contextual, collective voluntarist focus for knowledge itself? Recall that Tichenor, Donohue, and Olien originally conceived of knowledge or information as something that could be represented as linear or curvilinear, that is, in terms of internally homogenous variables. In turn, Ettema and Kline, and Dervin, held that knowledge was individually relative. We suggest a course between these two positions, one which retains a sense of collective structuring yet is flexible enough to account for difference and context.

Park (1940) expanded upon James's distinction between "knowledge of" (informal, unsystematic, intuitive, clinical, akin to common sense) and "knowledge about" (formal, analytic, systematic, scientific). He placed news, an ingredient in public affairs knowledge, near "knowledge of," although both are applicable. The kinds of knowledge investigated by knowledge gap researchers have fallen into both knowledge categories, with differentials being found often for scientifically verifiable or otherwise culturally diffused, textbook kinds of knowledge. Differences in cultural definitions and social interpretations of knowledge abound, and may be placed within "knowledge of." In this area much new work can be done to elaborate collective voluntarist hypotheses. In addition, the few studies touching on inaccurate information or "misinformation" could be recast in collective voluntarist terms--as differences in collectivities' definitions (for
A typology for knowledge gap theory development

misinformation see Frazier [1986]; Jacoby and Hoyer [1982]; and Salmon, Wooten, Gentry, Cole, & Kroger [1994]).

There is context to diachrony as well. Knowledge gap researchers seldom think in terms of comparing individuals' or collectivities' knowledge across in time, using historical methods, but comparisons of how definitions of knowledge change could enlarge our understandings of these processes. The degree to which collectivities' histories diverge or converge could be studied in depth. In what ways do histories (or beliefs about histories) contribute to the development of values, beliefs, definitions, norms, and differences in knowledge?

Furthermore, the processes of knowledge gap construction itself could be studied in depth with the tools of event sequence analysis (see, e.g., Abbott 1992b). The thesis here is that the unfolding of knowledge gaps on a particular topic possess a certain discernible "event logic." Although there are a number of possible routes in such an analysis, one particularly promising one seems to be the event structure analysis developed by David Heise. Event structure analysis requires a lexicon of events to be analyzed. In our case, perhaps these events would consist of a newsworthy happening or scientific finding of public interest, the various dissemination of this information, and the differential assimilation of this information by different populations. (The computer assisted content analysis developed by David Fan could be particularly helpful here). A formal description of event sequence would then be developed through the use of an "interactive computer algorithm" that asks the respondent to tell the computer whether downstream event B required upstream event A, and so on across the time ordered set of events. The computer uses this information on necessary causality to prepare a formal diagram of dependencies among the events, a diagram that captures the underlying... structure" (446).

Knowledge and relative value

---

12 Heise's program is called ETHINO.
Finally, a collective voluntarist approach to the knowledge gap would inquire as to whether, or to what extent, public affairs knowledge and science news really have a "more or less general appeal" and value for different populations. Are the ideals of democratic and egalitarian participation in political affairs really universal? Is the value of "health" universal? How are community involvement, or the particular definitions of health, conceived and acted upon within different populations? Concerns such as these are also central to cross-cultural and cross-national work involving the knowledge gap. Inevitably, discussions such as this must touch on the notion of "relativism." We shall not dwell on this point, but rather indicate that the variety of relativism that a formal, culturally contextual view endorses is not dissimilar to the relativism of the European currency grid: the value of any currency is relative to that of other currencies at any point in time. They exist within a system of values. Similarly, we are suggesting that knowledge exists relative to other knowledges held by different people in different—yet specific—circumstances, or that the value of any one news item exists in positional interrelation with news items in a community knowledge system. Of course, knowledge also has utility, which is in turn relative to the interests of those who utilize it.

Some available models for research

No known studies of knowledge differentials fulfill the definition of "collective voluntarism" as proposed here, but parts of several studies both within and outside the knowledge gap literature suggest approaches which could be included and expanded in such research.

The construct, "schema," was used by Fredin, Monnett, and Kosicki (1994) as an example of "the active processes by which people construct their understandings of the world... Schemata arise from experience, are often culturally transmitted, and are strategies that are essential for coping efficiently with complexity" (p. 178). They believed they uncovered a gap of disaffection among educated women, in which higher education led to
greater attention to school issue coverage and to lower trust in government in a dynamic process resulting in lower media credibility and also increased knowledge of the issue. The schema concept can be exploited more fully within a collective voluntarist perspective, and is, in fact, closely related to a practice view of culture.

Wu (1992) suggests an approach to collectivities which could be developed further in collective voluntarist terms. His discriminant analysis of data from a sample in southeastern Missouri produced four publics, varying in education and other demographics, active and passive communication behaviors, involvement or connection to the issue (earthquake preparedness), and communication effects. Adding values, norms, or beliefs to this mixture, among other variables, might be beneficial to new insights.

A study of a heterogeneous inner-city neighborhood in Minneapolis provides an example of collectivities' varying in definitions of knowledge (C. Gaziano 1985). Definitions of four neighborhood issues were measured, including causes, solutions, and actors. These definitions were contrasted among 1) 52 leaders of neighborhood organizations linked to those issues, 2) two neighborhood newspapers' coverage of the issues, and 3) a random sample of 239 neighborhood residents. The sample of residents was divided into low, medium, and high education groups, which themselves varied on issue definitions. Overall, the group leaders, who tended to be college educated, were more similar in issue definitions to the most educated neighborhood residents, especially about actors, causes, and solutions. The neighborhood press did not publicize such information well, except on the housing issue (the mostly highly covered issue). The leaders were least in tune with the least educated group when issues received lowest public attention and were most in tune with that group when issues had high public attention.

Another kind of collectivity, which can vary within larger collectivities, is the family. Pan (1990) found that democratic "concept-oriented" family communication was positively related to adolescents' knowledge levels, and that authoritarian "socio-oriented" family communication was negatively related to adolescents' knowledge levels, regarding
A typology for knowledge gap theory development

the 1980 Presidential campaign initially, but not necessarily across time (p. 195). Concept-oriented families tended to be of higher SES, and socio-oriented families tended to be of lower SES. The ways in which values and social definitions are related to family communication patterns and connect these collectivities to each other might illuminate our understanding of knowledge inequalities.

Hornik (1988; 1989) suggests more ways of conceiving research oriented to collective voluntarist concepts. Discussing reasons why resolution of knowledge gaps does not necessarily lead to decreased behavior gaps, Hornik noted good reasons often exist to explain why non-adoption or unanticipated responses occur. These reasons can be discovered when one examines the way in which new knowledge will fit into the intended audiences' lives. Many times their responses derive from their beliefs, frames of reference, norms, social roles, social structure, social definitions, and so forth. Although Hornik focused mainly on developing countries, his discussion would apply to industrialized nations as well.

Another available model exists in the urban sociology of writers such as Gerald Suttles (1968; 1972; 1984; 1990). Although this work does not deal with the issues of the knowledge gap explicitly, it is steeped in a tradition of contextual research in urban environments which takes communication and collective organization seriously (see also Park [1938] 1972), and therefore speaks to many of the issues raised here. In particular, Suttles's work may serve as an exemplar of the urban ethnography of both community leaders as well as the "rank-and file" (see the "Methodological Appendix" to Suttles 1990). In addition, he also employs semi-formalist analyses of urban culture and iconography, particularly city-images, which he sees as defined in opposition to one another and organized in a nested fashion (1984; see also Slovak 1989). City images, for instance Chicago's, exist within a relational, contrastive system in which the conceptual value of "Chicago" is compared and contrasted with an older or more refined culture of the East coast or European cities, while it is simultaneously contrasted with growth-frontier cities.
such as Los Angeles, as well as its own "authentic" imagery, and so on. The social structure of public affairs knowledge should be particularly susceptible to similar modes of analysis. Both of these approaches could be integrated into a collective voluntarist research program on the knowledge gap, providing both methodological and theoretical inspiration as well as connections to disciplines outside the traditional orbit of knowledge gap researchers.

**Conclusion**

That associations exist between SES characteristics, or social structure more broadly, and knowledge we take as demonstrated in the empirical literature (C. Gaziano 1983; in preparation). However, the correlation between these phenomena does not mean that knowledge gaps have been explained or fully interpreted. First, mere correlation by no means indicates cause (see Lieberson 1984, Duncan 1984). Second, and more important from the point of view of collective voluntarism, are the following questions: What does knowledge mean for different groups located in different times and places? What is the value of that knowledge? What are the processes of community knowledge construction? Is there variation within SES categories, and more broadly, what is the social context of knowledge? These and related questions have been the concern of this essay. In the language of generic scientific method, then, this paper has been about the internal validity of knowledge gap concepts, and we have sought to specify their conceptual extent and interrelations. After all, the clarity of our concepts will have direct, nontrivial implications for the meaning of our measurements.
References


———. In preparation. "A twenty-five year review of knowledge gap research."


