

**Social network and social class:  
Toward an integrated sociolinguistic model<sup>1</sup>**

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**ABSTRACT**

In sociolinguistics, approaches that use the variables of socioeconomic class and social network have often been thought to be irreconcilable. In this article, we explore the connection between these variables and suggest the outlines of a model that can integrate them in a coherent way. This depends on linking a consensus-based microlevel of network with a conflict-based macrolevel of social class. We suggest interpretations of certain sociolinguistic findings, citing detailed evidence from research in Northern Ireland and Philadelphia, which emphasize the need for acknowledging the importance of looseknit network ties in facilitating linguistic innovations. We then propose that the link between network and class can be made *via* the notion of *weak* network ties using the process-based model of the macrolevel suggested by Thomas Højrup's theory of life-modes. (Sociolinguistics, sociology, quantitative social dialectology, anthropological linguistics)

One of the most important contributions of Labov's quantitative paradigm has been to allow us to examine systematically and accountably the relationship between language variation and speaker variables such as sex, ethnicity, social network, and – most importantly perhaps – social class. Language variation in large and linguistically heterogeneous cities as well as in smaller communities has been revealed not as chaotic but as socially regular, and Labov and others have shown how investigating this socially patterned variation can illuminate mechanisms of linguistic change. In this article, we focus on the variables of social class and social network, both of which have appeared in some form in a large number sociolinguistic studies of variation and change. Our principal interest lies not in the complex sociological issues associated with class and network, some of which we discuss here, but in understanding the role of class and network in patterns of linguistic variation and mechanisms of linguistic change.

Social class is fundamentally a concept designed to elucidate large-scale social, political, and economic structures and processes, whereas social network relates to the community and interpersonal level of social organization. Beginning with Bott in 1958 (revised in 1971), a number of British anthropologists developed network-analytic procedures because they were dissatisfied with what they saw as an overreliance on highly abstract social, political, and economic frameworks in accounting for forms of behavior of individuals. Personal social networks were generally seen as contextualized within this broader framework, which was bracketed off to allow attention to be concentrated on developing less abstract modes of analysis capable of accounting for the variable behavior of individuals more immediately. However, it is important to remember that such bracketing off is wholly methodological and does not reflect an ontological reality; no one claims that personal social network structure is independent of the broader social framework that constantly constrains individual behavior. While acknowledging these constraints, a fundamental postulate of network analysts is that individuals create personal communities that provide them with a meaningful framework for solving the problems of their day-to-day existence (Mitchell 1986:74).

Our own work in Belfast has concentrated chiefly on detailed empirical analysis of linguistic and social variation at this interpersonal and community level, and in this article we want to propose a means of integrating research at this level with research that relates language variation to social class. Like the British sociologist Anthony Giddens, who insisted that "the study of day to day life is integral to the reproduction of institutional practices" (1984:282), we prefer to view the so-called micro- and macrolevels of analysis, to which network and class respectively may be thought to correspond, as embodying complementary rather than conflicting perspectives.

A different question, however, is the adequacy of the conceptualization of class that is current in much contemporary sociolinguistics, several scholars having remarked that the social theory implicitly adopted by sociolinguists is in need of explicit formulation and critique. "Sociolinguists have often borrowed social concepts in an ad hoc and unreflecting fashion, not usually considering critically the implicit theoretical frameworks that are imported wholesale along with such convenient constructs as three-, four- or nine-sector scalings of socioeconomic status" (Woolard 1985:738).

What Woolard is criticizing here is the procedure whereby a particular social class model is imported as an initial ad hoc means of organizing data, not because of its theoretical suitability, but for the purely pragmatic reason that it has been widely used in sociological surveys and so is readily operationalizable. Thus, although many impressively consistent patterns of variation have emerged from urban sociolinguistic work, an adequate social framework within which to interpret their results is still lacking. In attempting now to develop such a framework, it seems best to start with the rich so-

ciolinguistic evidence that has been gathered over the last 25 years, only then looking for a social theory that can account for it coherently. Working in this order will allow principled decisions to be made about the kind of framework required.

We do not claim yet to have found the ideal social class model; in this article, we do no more than try to integrate existing findings and suggest the *kind* of model that seems to be required. A number of sociolinguists have remarked that the conception of social class underlying Labov's work in New York City and Philadelphia is not particularly appropriate (Rickford 1986; Sankoff, Cedergren, Kemp, Thibault, & Vincent 1989). His key sociolinguistic notion of *speech community* emphasizes shared norms of evaluation throughout the community, where speakers are said to agree on the evaluation of these very linguistic norms that symbolize the divisions between them. This sociolinguistic model seems to reflect a consensus view of society of the type associated with the sociologist Talcott Parsons, whereby the community is envisaged as fundamentally cohesive and self-regulating. Yet, the vitality and persistence of nonstandard vernacular communities uncovered by many researchers (including Labov) are more readily interpretable as evidence of conflict and sharp divisions in society than as evidence of consensus.

Although we certainly need to assume some kind of consensus to account for data such as the cross-class agreement on the phonolexical rules for raising and tensing of (a) in Philadelphia (Labov 1981), scholars such as Rickford (1986), working on Guyanese creole, have concluded that conflict models of social class have been unduly neglected by sociolinguists. Indeed, support for a conflict model of society is provided by Labov's own recent work in Philadelphia, where he found progressive segregation and linguistic differentiation between black and white networks (Labov & Harris 1986). Furthermore, a conflict model is essential if we are to account for the phenomenon of linguistic change, with which some kind of social conflict is generally associated. Labov himself has acknowledged that "a thorough-going structural-functional approach to language could be applied only if linguistic systems did not undergo internal change and development" (Labov 1986:283).

Although acknowledging that the question here is one of the relative weight given to conflict and consensus perspectives, rather than an absolute opposition between the two (cf. Giddens 1989:705), we suggest that a social class model based on conflict, division, and inequality best accounts for many of the patterns of language variation uncovered by the detailed work of sociolinguists, generally on phonological or morphological variables. The Marxist notion of the linguistic market has been used in urban sociolinguistics (see Sankoff et al., 1989, for a recent example), the general contention being that language represents a form of social and cultural capital that is convertible into economic capital. Dittmar, Schlobinski, and Wachs (1988)

provided a particularly useful exposition of the linguistic market concept in relation to their analysis of Berlin vernacular. However, Woolard (1985) suggested that standard/vernacular opposition emerging from so much research needs to be discussed in terms of *alternative* linguistic markets. This is contrary to Bourdieu's (1977, 1984) view of a single dominant linguistic market where the rule of the legitimate language is merely suspended, its domination temporarily absent, when the vernacular is used.

Our own work as well as that of others supports Woolard's analysis. Just as there is strong institutional pressure to use varieties approximating to the standard in formal situations, effective sanctions are in force in nonstandard domains also. For example, in Belfast, New York City, and (no doubt) elsewhere young men are ridiculed by their peers if they use middle-class forms. Woolard suggested that much recent sociolinguistic work that has concentrated on competing social values using contrastive status/solidarity concepts (or something similar) offers a particularly promising bridge between sociolinguistic and social theory (see Brown & Levinson 1987, for a discussion of such work). A framework that emphasizes competing social values rather than consensus offers a plausible interpretation of the mass of variable linguistic and social detail from inner-city Belfast reported in Milroy and Milroy (1978), L. Milroy (1987a), J. Milroy (1981), and elsewhere. The phonological structure of Belfast vernacular can be coherently described only if it is analyzed as an internally consistent (but systematically variable) vernacular, rather than an unsuccessful approximation to middle-class Belfast or standard English varieties (for a discussion see J. Milroy 1992, Ch. 3). We interpreted close-knit social networks as mechanisms enabling speakers to maintain such vernacular codes, which themselves constitute an actively constructed, symbolic opposition to dominant, legitimized codes.

An analysis in these terms takes us part of the way, but it does not account for wider social structures, and so it needs to be supplemented by an appropriate social class model. The success, persistence, and precise form of the symbolic opposition enacted by small-scale networks will depend not upon community-internal linguistic or interactional factors, but upon the relation of the resisting group to the national economy and to like groups in other cities or states (see Gal 1988). The level of integration of any given group into the wider society is likely to be inversely related to the extent to which it maintains a distinctive vernacular. This is why the outcome in terms of language survival or shift in Belfast may be different from that in Paris or Copenhagen; in Catalonia different from Gascony. It will be constrained by variations in political, economic, and social structures that are specific to these different localities. Furthermore, close study of networks and the language patterns associated with them can give us some idea of the mechanisms that give rise to correlations between language and class.

So far, we have tried to outline some general prerequisites for an integrated and socially coherent sociolinguistic theory, constructed to take account of well-established linguistically detailed findings of urban vernacular research. In the following sections, we summarize the chief principles underlying a network analysis of language variation, looking first at close-knit communities and then at more loose-knit types of network structure of a kind generally associated with mobile individuals. We argue that the structure and social function of what might be described as both "strong" and "weak" network types needs to be considered in order to integrate a network model with a sociolinguistically plausible and socially adequate model of class.

## NETWORK STRUCTURE IN CLOSE-KNIT COMMUNITIES

A social network may be seen as a boundless web of ties that reaches out through a whole society, linking people to one another, however remotely. But for practical reasons the analyst studies social networks as "anchored" to individuals, and interest has most often focused on relatively strong first-order network ties – that is, those persons with whom *ego* directly and regularly interacts. This principle of anchorage effectively limits the field of study, generally to something between 30 and 50 individuals, although it is assumed that second-order ties to whom *ego* is linked through others are also influential (see Milroy 1987a).

Two types of personal network characteristics are generally distinguished by anthropologists: *structural*, which pertains to the shape and pattern of the network, and *interactional*, which pertains to the content of the ties. Both structural and interactional characteristics are important in constraining social action. Investigators from several disciplines who have developed formal methods of analyzing the properties of networks have tended to concentrate on structural properties such as density, whereas social investigators who want to account for the observable behavior of individuals tend to give equal weight to interactional features such as the multiplexity, history, durability, frequency, and intensity of ties (see, e.g., Cochran, Lerner, Riley, Gunnarsson, & Henderson 1990; Surra 1988). Some important structural and interactional features are conveniently listed by Mitchell (1986).

Our analysis of the relationship between language variation and personal network structure in three Belfast inner-city communities attempted to demonstrate that a close-knit, territorially based network functions as a conservative force, resisting pressures for change originating from outside the network. By close-knit we mean relatively dense and multiplex, these two concepts being of critical importance in a comparative analysis of social networks. In a maximally dense and multiplex network, everyone would know

everyone else (density), and the actors would know one another in a range of capacities (multiplexity). Close-knit networks, which vary in the extent to which they approximate to an idealized maximally dense and multiplex network, have the capacity to maintain and even enforce local conventions and norms – including linguistic norms – and can provide a means of opposing dominant institutional values and standardized linguistic norms. Their capacity to do this, however, seems to be dependent on their territorial restriction to specific neighborhoods, the day-to-day behavior of individuals being less constrained by geographically dispersed networks. Network analysis thus offers a basis for understanding the community-level mechanisms that underlie processes of language maintenance, and the persistence over centuries of stigmatized linguistic forms and low-status vernaculars in the face of powerful national policies of diffusing and imposing standard languages is indeed remarkable.

Apart from its theoretical value, a network approach has been found useful in providing a suitable methodology for studying ethnic or other subgroups in the population in situations where a social class model (particularly one that focuses on consensus) is less practical. Quite apart from any theoretical problems, an initial approach in terms of class is difficult if subgroups are distributed unequally with respect to class. A network approach is more feasible with groups who are economically marginal, or powerless, or resident in homogeneous and territorially well-defined neighborhoods. Moreover, a strong sense of ethnicity or of local identity often creates and maintains localized cultural and linguistic norms and value systems that are presented and perceived as sharply opposed to the mainstream values of outsiders. Approaching such communities initially in network rather than class terms can allow the researcher to get a grip on the relation between linguistic variability and social structure. Examples of sociolinguistic applications of network analysis are: Schmidt (1985: Australian aboriginal adolescents), Bortoni-Ricardo (1985: rural immigrants to a Brazilian city), Gal (1979: bilingual peasant workers), Lippi-Green (1989: an Alpine rural community in Austria), V. Edwards (1986: British black adolescents in the Midlands), and W. Edwards (1990: black Detroit speakers). Labov and his colleagues in their Philadelphia neighborhood studies also used the network concept at the fieldwork stage (Labov & Harris 1986). So there is little disagreement on the practical usefulness of a network-based methodology.

It has sometimes been suggested that close-knit types of community network tend to be rural and that they are nowadays marginal to urban life. This is suggested by, for example, the large sociological literature on “the stranger,” the marginal individual who is often seen as typical of the modern city dweller. Harman (1988) reviewed and evaluated much of this work. In the same vein, Wirth, an influential member of the Chicago school of urban so-

ciologists, proposed that urban conditions give rise to impersonality and social distance (Wirth 1938). This fits in with the arguments we present shortly on the role of *weak* ties in urban communities, but it does not tell the whole story about urban life. For example, recent comparative research in Europe and the United States has suggested that although the personal networks of socially and geographically mobile persons are more geographically dispersed and less kin-based than the traditional type of close-knit network, they are also larger, more supportive and more affectively satisfying (Cochran et al. 1990). Furthermore, as Fischer (1982) also emphasized, highly educated and mobile individuals are more able to be selective in their choice of contacts than the individual embedded in the localized solidary network, which can be oppressive as well as supportive. Classic examples of such localized solidary networks are the Italian American "urban villagers" described by Gans (1962) or the close-knit Yorkshire mining communities described by Dennis, Henriques, and Slaughter (1957).

These traditional close-knit (often indigenous) urban communities are less salient in American and British cities than they once were, but they are apparently being replaced by similar types of community created by newer immigrants. More importantly perhaps, as Giddens (1989) pointed out, neighborhoods involving close kinship and personal ties seem to be actually *created* by city life, and Fischer (1984) suggested that whereas small towns do not permit cultural diversity, cities do. For example, those who form part of urban ethnic communities gravitate to form ties with, and often to live with, others from a similar linguistic or ethnic background. These ethnic groups seem to use the close-knit network as a means of protecting their interests while the community develops the resources to integrate more fully into urban life. For example, differences in the network structure of members of the Chinese community in Newcastle upon Tyne correlate both with different patterns of language choice and with different levels of integration into non-Chinese domains of urban life (Milroy & Li 1991). Bortoni-Ricardo (1985) made a similar point with regard to rural migrants to Brasilia. Therefore, the type of close-knit community most easily conceptualized in network terms is likely to be a product of modern city life rather than a residue of an earlier type of social organization.

Such groups are important in providing a focal point for stigmatized urban vernaculars and other nonlegitimized linguistic norms, and so need to be accounted for in any sociolinguistic theory. That is why some form of network analysis that examines the relationship between the individual and the primary group is so important. But the observable indicators of *network strength*, a measure of integration into a close-knit group, will vary in kind with community organization. For example, membership in a religious group might be irrelevant in a contemporary northern English coal-mining commu-

nity, but highly relevant in an English Midlands black community (Edwards 1986).

The Philadelphia neighborhood studies are relevant to this point. Labov and Harris (1986:21) suggested that although social network is useful as a methodological tool, it has little explanatory value in itself and must be supplemented at the interpretative stage by what they call the "social history" of speakers: "the kinds of social experience they have had in dealing with members of other groups, the way they have used language in their life." At many points in their article they appeared to represent social network and social history as alternative and possibly contradictory modes of analysis, with social history being a more powerful explanatory category than network. But there is in fact no contradiction here. The wider social interactions (outside of the ingroup) that they describe as social history are themselves describable and interpretable in terms of a network model. In that Labov and his colleagues are examining the nature of the tie between group and individual, they are carrying out no more and no less than a network analysis, employing indicators of network structure that relate to duration and content of tie (cf. Surra 1988; see also Cross 1990, for an illuminating account of the relationship between network structure and ethnicity). Still, they reject social network at the interpretative phase of their work and use explanations that fall back on a rather vague notion of "prestige," which is related ultimately to a primarily consensual concept of social class. However, much of the Philadelphia data, as reported by Ash and Myhill (1986), is also open to an explicitly network-based interpretation. This interpretation has the advantage of avoiding prior modeling of the behavior of individuals in terms of social class, power, or dominance, and we comment further on this later. In general, it seems preferable to carry out an initial analysis of small-scale communities in terms of a notion such as network, which is designed for this level of social organization, prior to working out an appropriate model of class that relates to the macrolevel of analysis.

An important finding of the Philadelphia studies (Labov & Harris 1986) is that the speech of black and white ethnic groups is diverging in certain ways, and it is this divergence that the investigators chose to emphasize. They expressed this finding in terms of participation in linguistic changes: Certain changes in progress in the white community are not in progress in the black community. However, it can also be expressed in terms of the model we are developing here, which would focus on the conflict between the two groups: The two communities do not agree on norms of usage, and so in this respect we can say that the sociolinguistic situation is one of conflicting norms rather than consensus. It is also likely that the links between black and white communities are on the whole relatively weak, in the sense that cross-ethnic networks tend not to be dense, multiplex, or territorially based (Cross 1990). It



is this notion of weak ties to which we now turn, before examining its application to the Philadelphia communities.

## STRONG AND WEAK NETWORK TIES

One important corollary to the link between language maintenance and a close-knit network structure is that outside innovation and influence will be associated with the weakening of such a structure. This accounts for our finding in inner-city Belfast that speakers whose ties to the localized network are weakest are those who approximate least closely to vernacular norms. Such speakers are most exposed to external, often standardizing, pressures (Milroy & Milroy 1985). There is, however, a general methodological problem associated with network analysis. Although it can be readily operationalized to study speakers whose networks are of a relatively close-knit type, it cannot so readily handle socially and geographically mobile speakers whose personal network ties are not predominantly dense or multiplex. So we cannot easily demonstrate the effects of weak ties by the quantitative methods that are used to demonstrate the effects of strong ties, as in inner-city Belfast, for example. Fortunately, however, a large amount of linguistic evidence is available that enables us to follow the sociolinguistic implications of the line of reasoning developed by Granovetter (1973, 1982) in his examination of the social function of weak network links. Granovetter argued that although strong ties (of the sort associated with close-knit networks) facilitate local cohesion, they lead to overall social fragmentation. This seems to be the kind of interclass and intercommunity fragmentation that we described in Belfast and that Labov pointed to in Philadelphia with respect to black and white groups. However, Granovetter argued that it is the (often numerous) weak ties *between* relatively close-knit groups through which innovation and influence flow and that lead to an overall social cohesion capable of balancing the fragmentation and conflict associated with strong ties. It is important here to keep in mind Granovetter's insistence on the paradox that weak ties can be described as strong in that they "provide links to a community beyond the immediate social circle, information about education and employment opportunities . . . and access to diverse ideas and perspectives" (Cochran 1990:289). Persons who contract mainly strong, localized, and often kin-based ties are denied parallel access to these resources, and, as we have noted, strong ties of this kind can be norm-enforcing and oppressive.

Following Granovetter's closely argued article, we have proposed not only that groups linked internally mainly by relatively weak ties are susceptible to innovation, but also that innovations between groups are generally transmitted by means of weak rather than strong network ties (e.g., through casual acquaintances rather than kin, close friends, or workmates). Weak ties

are, of course, likely to be much more numerous than strong ties. This argument runs somewhat counter to the general assumption that diffusion of linguistic change is encouraged by relatively open channels of communication and discouraged by boundaries or weaknesses in lines of communication. However, as we argued in some detail (Milroy & Milroy 1985), there are many well-known patterns of change that are difficult to explain in this apparently common-sense way. Some of these involve large-scale and long-term changes over considerable distances, as discussed by Trudgill (1983, 1986). Examples are the spread of uvular [r] across national boundaries to affect many northern European cities, the spread of certain London features to Norwich, and the appearance of similar developments in unrelated or distantly related languages (e.g., *preaspiration* of voiceless stops in Icelandic and Scottish Gaelic). It is very hard to see how the relevant populations in such cases could be linked by strong ties. Other examples are at a more detailed community level, such as the social configuration of the spread of [a] backing from protestant East Belfast into the Clonard – a West Belfast Catholic community. This spread, which we look at in a little detail, needs to be described within a wider historical, social, and linguistic context.

We studied the variables (a) and (e) very intensively both in the inner-city communities of Clonard, Hammer, and Ballymacarrett and in the slightly higher status communities of Andersonstown and Braniel. We also established a broad social class distribution by means of a doorstep survey carried out on randomly sampled households in Belfast (J. Milroy 1991, 1992; L. Milroy 1987b:82). The vowel /a/ (as in *man*, *grass*) shows variation across a wide phonetic continuum between long, backed, rounded realizations and shorter front and front-raised realizations. The vowel /e/ (as in *went*, *question*) varies between long, mid realizations and short, lower realizations (see J. Milroy 1981, for an analysis of the phonological complexities). Realizations of both variables are strongly affected by sex, network structure, and social class of the speaker. The extensive quantitative analysis reported in detail elsewhere (most relevantly for this argument: J. Milroy 1992; L. Milroy 1987a; Milroy & Milroy 1985) shows that raised, lengthened variants of /e/ are associated principally with women and middle-class speakers, and backed variants of /a/ with men and working-class speakers.

It is clear from the historical and dialectological data presented by Patterson (1860), Staples (1898), Williams (1903), and Gregg (1972) that /a/ backing and /e/ raising are both relatively recent phenomena in Belfast but are characteristic of modern Scots and originate in the Ulster-Scots-speaking dialect area of Down and Antrim (as distinct from the Mid- and West-Ulster non-Scots hinterland). As Figure 1 shows, East Belfast adjoins the Ulster-Scots region of North Down, whereas West Belfast points southwest down the Lagan Valley, the speech of which is Mid-Ulster, with less Scots influence. Furthermore, immigration to West Belfast is recent and is largely from

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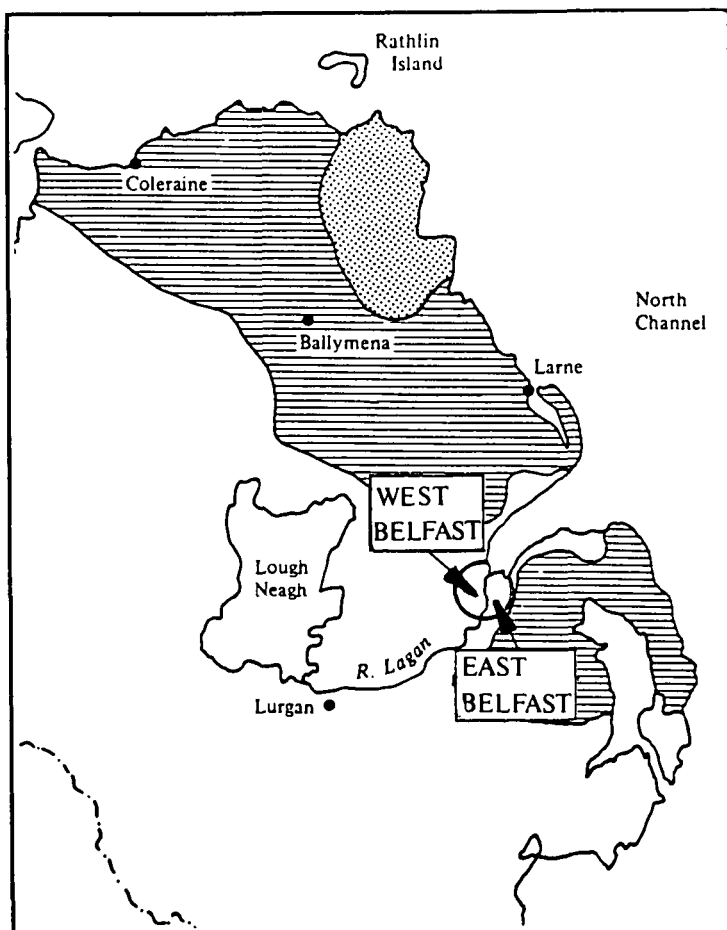


FIGURE 1: Map showing the Ulster Scots area (shaded) in relation to East and West Belfast.

a Mid- and West-Ulster hinterland. Present-day sociolinguistic evidence suggests that the incoming variants of (e) and (a) are diffusing from east to west of the city; scores for /a/ backing are higher for East Belfast working-class men than for any other group studied, whereas East Belfast working-class women use the low, conservative variants of (e) less than any other inner-city group. The higher status Andersonstown and Braniel speakers exhibit a similar pattern of sex differentiation but, as one might predict from the information presented so far, use the incoming variants of (e) more frequently, and the incoming variants of (a) less frequently, than inner-city speakers.

TABLE 1. *Contrasting patterns of distribution of two vowels involved in change, according to social class and sex of speaker, relative frequency of innovatory variants, and level of correlation with network strength*

	Change led by	High correlation with network strength
(a)	Males (working-class variant)	Females
(e)	Females (middle-class variant)	Males

In summary (and this general distribution is confirmed by a doorstep survey), raised variants of (e) are in the inner-city associated particularly with women (and, we might add, with careful speech styles). They are also associated generally with slightly more prestigious outer-city speech. Incoming variants of (a) show an almost perfectly converse pattern of social distribution, being associated with male, vernacular inner-city speech. Taking this evidence together with the historical and geographical data outlined earlier, we note that although incoming variants of both vowels appear to have originated in the same hinterland Scots dialect, each has assumed a diametrically opposed *social* value in its relatively new urban setting.

The relationship between speaker choice of variant and individual network structure adds a further complexity to this pattern, and it is the overall relationship among social class, sex, and network structures of speaker that is of particular relevance here. Extensive statistical analysis of the relationship between language variation and social network has shown that whereas choice of variant correlates with network structure among some inner-city subgroups, these sociolinguistic patterns are quite different for each vowel. Although (a) is generally sensitive to network structure, choice of variant is *more closely correlated* with network structure for women than for men; this is despite the fact that women (like middle-class speakers generally) use incoming backed variants much *less frequently* than men. The converse is true of (e); whereas men use incoming raised variants much less than women, the correlation between choice of variant and network structure is higher for men. We argued on the basis of these data that (e) functions particularly clearly for men and (a) for women as a network marker and noted that in each case *it is the group for whom the vowel has less significance as a network marker that seems to be leading the linguistic change*. The complex relationship among class and sex of speaker, network structure, and language use is summarized in Table 1, and the data upon which this discussion is based are reported in Milroy and Milroy (1985), L. Milroy (1987a), and J. Milroy (1992).

We are now in a position to relate these patterns to the general argument outlined earlier, namely that a close-knit network functions as a conservative force, resisting pressures for change originating from outside the network. Those whose ties are weakest approximate least closely to vernacular norms and are most exposed to external pressures for change. The analysis presented here suggests that the vernacular speakers associated most strongly with the innovation are in each case those for whom the vowel functions least prominently as a network marker. It is as if a strong relationship between the network structure of a given group and choice of phonetic realization of a particular vowel disqualifies that group from fulfilling the role of innovators with respect to that vowel. Conversely, the weakening of the language/network relationship with respect to a group of speakers may be a necessary precondition of that group fulfilling the role of linguistic innovators.

These observations provide further evidence to support the contention that a weakening of network links is implicated in social processes of linguistic change. Furthermore, some innovations seem to have crossed the sectarian boundary in working-class Belfast to produce an intercommunity consensus on norms among the generation of speakers who were most rigidly segregated from each other. The problem of explaining how a linguistic change such as (a) backing could possibly diffuse under such conditions dissolves if we accept Granovetter's principle that it is the multiple weak ties of casual interaction (example for these speakers might be ties contracted in shops and social security offices) through which innovation is routinely transmitted rather than strong neighborhood ties of close association.

The Philadelphia data presented by Labov and Harris (1986) and Ash and Myhill (1986) appear also to be amenable to an interpretation in terms of weak ties, even though the researchers have preferred to account for the patterns revealed by their analysis in terms of prestige and dominance. Labov and Harris (1986:20-21) mentioned the prestige of the localized innovator and spoke of the dominant dialect as opposed to the dominated. This contrast of dominance was used by Ash and Myhill in interpreting their findings with respect to four groups of speakers: a core white group, a core black group, and two marginal groups – a group of blacks who have considerable contact with whites (henceforth WBs) and a group of whites who have considerable contact with blacks (BWGs). It is these marginal groups that interest us here.

Ash and Myhill interpreted the pattern in Figure 2 as evidence that WBs converge toward white morphosyntactic norms more markedly than BWGs converge toward black norms, and this is explained as the result of the dominance of the white dialect. However, we do not need to invoke a macro notion such as dominance in interpreting data at this community level. Two patterns are particularly noticeable in the language of these two contact groups (white-oriented blacks and black-oriented whites). First, on morpho-

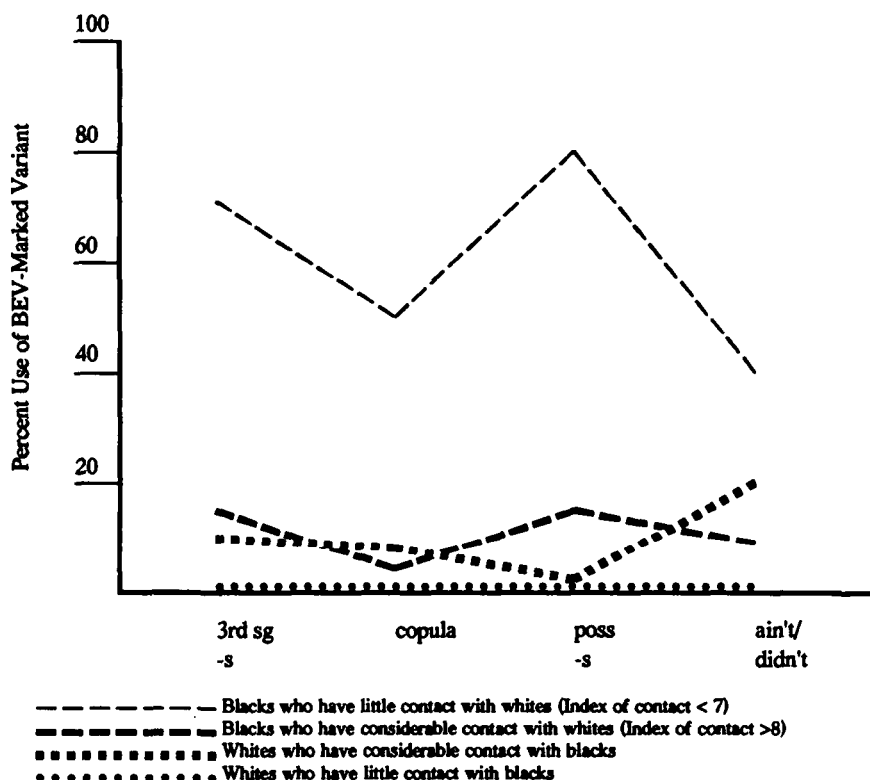


FIGURE 2: Average percentage use of black English vernacular-marked morphosyntactic variants by four groups of Philadelphia speakers (adapted from Ash & Myhill 1986:39).

syntactic variation their scores average about the same, and on copula deletion and *ain't* for *didn't*, the whites actually outperform the blacks on "black" variants. Second, whereas the core black group uses these features quite variably (presumably also using the "white" variants), the core white group does not use the black variants at all. So in their convergence pattern, the BWs and the WBs have different starting points. In ethnic group terms, the white group starts much further back on the black English dimension than the black group on the white dimension. And it follows from Figure 2 that the core black vernacular incorporates a resource not available to mainstream white speakers – the capacity to alternate between black and white morphosyntactic variants according to occasion of use. To this extent, these speakers resemble the inner-city Belfast speakers, who also have at their disposal alternating forms that carry different symbolic functions according to

occasion of use. Typically, one of these alternants has in-group functions and belongs to the vernacular, whereas the other has out-group functions and is more standardlike. We have discussed them in various places, most recently in J. Milroy (1991, 1992).

From this perspective, the convergence of WBs toward white norms is not so remarkable – as these white norms are already available to them within an existing pattern of core black vernacular variation. The reason why the white-oriented blacks use the white norms *more often* than other blacks is accessible through a theory of weak ties, as it is clear from the authors' descriptions of these speakers that their contacts with whites are of a classic weak-tie type. They are described as con men, hustlers, and political activists, and it is hardly plausible that con men (for example) could successfully practice on persons with whom they had contracted strong (dense and multiplex) ties. The degree to which these speakers use the white norms is increased by the range and number of situations in which they have weak-tie contacts outside their core community, and for them the adoption of more white usage is functional in their weak-tie contacts. The suggestion by Ash and Myhill (1986:41) that prestige is the explanation for this shift toward white norms seems to be quite a weak explanation, which simply begs the question of what is meant by prestige in such a context (for a discussion of prestige-based arguments, see J. Milroy 1987).

The convergence of black-oriented white speakers to black norms is in a sense more remarkable, as the core white dialect does *not* possess the new variants (copula deletion, etc.) that they adopt (to a certain extent) in carrying out what must presumably be an act of linguistic accommodation. These outside variants have to be acquired, and so some affirmatory effort is involved. Although the researchers do not give precise information as to the strength of these speakers' participation in black culture, the model of linguistic diffusion and change we have outlined in this section would predict that their ties with both communities are likely to be relatively weak. On the basis of the information provided by Ash and Myhill, we assume that it is this group, and not the WB group, who most resemble the peripheral characters who Rogers and Shoemaker (1971) argued are typical of the innovating individual. Cross's (1990) comparison of the friendship networks of black and white families offers further interesting perspectives on interethnic situations such as this.

It seems therefore that despite the fact that Labov and his colleagues explicitly rejected social network as an interpretative concept, some of their findings are open to interpretations based on a network analysis that distinguishes between the social functions of strong and weak ties. Furthermore, it also seems that this type of interpretation begs fewer questions than one that appeals to assumptions about the wider social structure, as implied in concepts such as prestige and dominance, and that we can best lay the

groundwork for an integrated theory by following through the implications of the weak-tie model that we have outlined in this section.

#### THEORETICAL IMPLICATIONS OF A WEAK-TIES MODEL

Speakers whose ties to a localized network are weakest, who approximate least closely to the norms of their local community, and who are most exposed to external pressures are frequently found in the middle-class or upper-working-class areas of cities. However, in the previous section we alluded to the practical difficulties in carrying out empirical investigations of loose-knit network structures, which characterize residents of Andersonstown and Braniel. Others have encountered the same problems, for example, in the prosperous Berlin suburb of Zehlendorf (Labrie 1988; see also L. Milroy 1987b:198). But as many people (particularly city dwellers, as Wirth suggested) contract weak ties, we need to take such ties into account in our description of sociolinguistic structure. And despite the empirical difficulties in handling weak ties, an extension of network analysis that focuses on their properties provides a crucial link with more abstract social theories of class. It is clear that class-specific network structures are not arbitrarily constituted but emerge from large-scale social and economic processes that themselves give rise to (for example) the social and residential mobility associated with loose-knit networks.

The relationship between the variables of class and network have been considered in some depth by Fischer (1982) in San Francisco and by Cochran et al. (1990) in Germany, Sweden, Wales, and the United States. Investigators have generally emphasized the effects of education and affluence in affording access to a socially and geographically wider range of contacts and in enhancing the ability to maintain those contacts. Generally speaking, middle-class networks (consisting largely of weak ties in Granovetter's sense) are larger, less kin- and territory-oriented and perceived as more supportive. Mewett (1982) examined the relationship between class and network from a different perspective, arguing that *class* differences in small communities begin to emerge over time as the proportion of *multiplex* relationships declines. Observations such as this suggest a route for constructing a two-level sociolinguistic theory, linking small-scale structures such as networks, in which individuals are embedded and act purposively in their daily lives, with larger scale and more abstract social structures (classes) that determine relationships of power at the institutional level.

From the point of view of the sociolinguist, it is smaller scale close-knit networks that renew and maintain local systems of norms and values within which discourse processes of the kind analyzed by Gumperz (1982) are understood and enacted. And it is network structures that link the interactional level with the political and economic, where diverse local responses of lin-



guistic groups are constructed "to material and cultural domination" (Gal 1988). We need such a dual level of analysis if we are to understand the frequently negative self-evaluations of speakers of urban vernaculars, who nevertheless continue to use them in their daily lives. In this section, we use the weak-tie concept to link systematically a network and a class-based analysis.

We have argued that weak ties *between* groups regularly provide bridges through which information and influence flow and are more likely than strong ties, which are by definition concentrated *within* groups, to fulfill this function. Thus, whereas strong ties give rise to a *local* cohesion of the kind described in inner-city Belfast, they lead, as we have noted, to overall fragmentation. Indeed, it is this potential for explaining both patterns – local stability and cohesion versus overall fragmentation and conflict – that allows us to relate a network analysis to a model of social structure at the macro-level. This is an important point, as some of the comments made in recent years about network models in sociolinguistics by, for example, Labov (1986) and Guy (1988) assume that their application is limited to strong ties in close-knit communities; and indeed they have been used chiefly in such communities (but see Bortoni-Ricardo 1985). Guy's remark that network is a microsociological concept, whereas class is macroscopic, seems reasonable if we limit network analysis to close-knit networks. But an analysis that takes into account the function of weak ties allows us not only to link the two levels in a principled way, but to develop a clearer idea of which type of social class model is appropriate. The analysis so far suggests an urban community that consists of clusters of individuals connected internally by differing proportions of weak and strong ties, which in turn are connected to other clusters by predominantly weak ties. Middle-class groups will tend to be internally connected with a higher proportion of weak ties than working-class groups.

This conclusion is entirely consistent with Labov's finding that innovating groups are located centrally in the class structure, characterized by him as upper-working or lower-middle class (Kroch 1978; Labov 1980:254). For, in British and American society at least, close-knit, territorially based, kin-oriented networks are located most clearly in the lowest classes, but upper-class networks are in some respects structurally similar, being relatively dense, small, close-knit and kin-oriented. Consider Mills's (1956) description of the American power elite, and the close ties among British upper-class speakers acquired at a limited number of private schools and universities and subsequently maintained for life. The majority of social and geographically mobile speakers fall between these two points. Thus, if we extend a network analysis to include an examination of loose-knit network types, which are susceptible to outside (frequently standardizing) influences, it is evident that network-based and class-based analyses are not contradictory as is sometimes suggested; rather, they complement each other. Moreover, a network analysis can give us an idea of the interpersonal mechanisms giving rise to the ob-

servable language/class correlations that are such a prominent feature of research in the quantitative paradigm.

#### AN INTEGRATED MODEL?

At this point, we have a picture of various ethnic and class groups as *both* internally structured *and* connected to each other with varying proportions and numbers of strong and weak ties. For example, ethnic sub-groups in Britain such as the black speakers studied by V. Edwards (1986) have a predominantly strong-tie internal structure but seem to be linked by relatively few weak ties to white working-class groups. These white groups in turn might have a similar internal network structure but have *more* weak tie links with other white working-class groups. Vertical links to middle-class groups might be fewer (this seemed to be the case in Belfast) and moreover to be frequently institutional to such persons as doctors, lawyers, teachers, welfare personnel, and the like. Middle-class groups for their part – professional, neighborhood, and friendship groups – are characterized by a higher proportion of weak ties *internally* than working-class groups; hence the problems of studying them systematically in network terms in Zehlendorf and in outer-city Belfast. But however we interpret the concept of class and however we model these localized networks, Granovetter's concept of the weak tie can be used to link close-knit community level groupings to more abstract institutional structures.

Such an analysis attributes the behavior of speakers to the constraining effects of the network or to the diminution of those effects that enables the legitimized language to permeate networks, rather than by any direct effect of prestige as defined by the perceived attributes of speakers who are seen to "belong" to different status groups. Social class is not conceived of here as a graded series of pigeonholes within which individuals may be placed. Following the analysis of the Danish Marxist anthropologist Thomas Højrup (1983), a view of social class more consistent with network analysis conceives of it as a large-scale and ultimately economically driven *process* that splits populations into subgroups. The groups sharing certain social and economic characteristics and lifestyles that emerge from this split may loosely be described as classes, but as we shall see Højrup offered a more explicitly motivated description in terms of *life-mode*. The attraction of this analysis from our point of view is that different types of network structure emerge from the conditions associated with the life-modes of these subgroups, and local and individual social behavior is seen as mediated through these smaller scale structures rather than directly related to class.

Whereas network analysis of the kind we have outlined so far can delineate various economic, political, and subcultural groupings in society, it cannot say anything about the varying potentials of such networks to exercise

the economic and political power that is the source of conflict and inequality in society. In linguistic terms, this means that powerful networks have the capacity to impose their linguistic and cultural norms on others, whereas powerless ones do not but can merely use the resources of the network to maintain and at best renew their own linguistic and cultural norms. Therefore, to supplement network analysis we need a social theory such as Højrup's, which can explicitly link a network analysis of subgroups within society to an analysis of social structure at the political, institutional, and economic levels.

Højrup's analysis is based on ethnographic work in Denmark and extensive analysis of social and economic structure in other western European countries. Although it begs as many questions as it offers solutions (see, e.g., Pedersen 1991, who questioned its applicability to women), it is particularly suggestive in helping to construct a model of sociolinguistic structure that integrates the variables of social class and social network. With specific reference to western Europe, he proposed a division of populations into subgroups that are described in terms of three life-modes. These life-modes are seen as necessary and inevitable constituents of the social structure as a whole. His conception of this larger social structure is Marxist, and the initial analysis is in terms of modes of production and consumption. Thus, crucially, these subgroups are not seen as socially or culturally arbitrary but as the effect of "fundamental societal structures which split the population into fundamentally different life-modes" (Højrup 1983:47). Class is thus seen as a dynamic process that gives rise to these life-modes. Højrup's analysis is particularly helpful in suggesting a further integration of the concepts of network and class, because the different types of network structure that we distinguished in the previous section can be seen to a considerable extent as springing from differences in the life-modes of different individuals. Although the argumentation supporting his analysis is lengthy and complex, Højrup used a limited number of straightforward concepts to distinguish the three life-modes. Life-mode 1 is the life-mode of the self-employed, Life-modes 2 and 3 of two different types of wage earner. Of critical importance is the ideological orientation of the three groups to work, leisure, and family. We focus a brief description of each of them on evident points of contact with our network analysis.

### *Life-mode 1*

This is the life-mode of the self-employed, of which a close-knit family-centered network with little distinction between work and leisure activities and a strong solidarity ideology is particularly characteristic. The family-owned business might be in agriculture or fishing, a corner shop, or a restaurant. In this life-mode, social relationships in the form of family ties or cooperative relations among colleagues bind the producers into a cohesive

production unit. The primary concern is to keep the production rolling, and all the family and other affiliated producers are involved in this. The purpose of the enterprise is to be able to remain self-employed, a means that is its own end. The concept of "free time" has little meaning in this life-mode, because the producer is not put to work but puts himself or herself to work to gain independence. Thus, the concepts of "leisure" and "work" have a totally different meaning from that which they assume for wage earners, and it is clear why a close-knit type of network structure and a solidarity ethic will be associated with this life-mode, which itself follows from the type of economic activity in which the producers engage. Højrup did not see this kind of life-mode as a relic of an earlier period (cf. the pervasiveness of close-knit networks in modern cities noted earlier) but as highly efficient and competitive, given its flexibility of operation and the commitment of the producers.

### *Life-mode 2*

Wage earners are different from Life-mode 1 commodity producers in that they are incorporated in a long and complex process of production that they do not own or control. Life-mode 2 is that of the ordinary wage earner, the purpose of whose work according to Højrup, is to provide an income that enables a meaningful life during the worker's free time. The family differs from Life-mode 1 families in being separate from the wage earner's work activities and is the framework within which nonproductive leisure activity takes place. The Life-mode 2 worker lacks the commitment to work characteristic of Life-mode 1, being prepared to sell his or her labor thereby becoming mobile and severing existing close-knit network ties where there is an adequate inducement to do so. If wages are low however, the wage earner has to demand enough to survive. Hence, the solidarity that arises among workers who earn little – a solidarity reflected at the institutional level in the establishment of trade unions. At a neighborhood level, this solidarity is embodied in the close-knit networks of the traditional working-class society of the kind investigated in Belfast. Following Højrup's analysis, we surmise that the solidarity ethic would collapse and network ties become weaker if economic and political conditions allowed workers to feel secure in their future prospects, if they earned enough to become mobile, to buy better houses and cars, to take holidays abroad, and so on. There do in fact appear to be differences of this kind in behavior between different groups of wage earner, as we noted in our analysis of the outer-city versus inner-city areas in Belfast. Moreover, as nation states vary with respect to the wages and conditions offered to workers, close-knit networks will be associated with Life-mode 2 workers in some countries more than in others. Cochran et al. (1990) discussed in considerable detail in several chapters the effect of a

whole range of political, economic, social, and cultural factors on social network structure.

Lockwood's (1989) classic investigation of class consciousness and images of class structure in Britain fits in broadly with such an analysis, particularly in its distinction between the outlooks described respectively as *proletarian traditionalism* and *privatized worker* (see also Giddens 1989:224). Privatized workers, exemplified by the Luton car workers studied by Goldthorpe et al. (1968-69), live apart from traditional working-class areas in the suburbs and see work as a way of achieving a satisfactory lifestyle for themselves and their families. They apparently reject the traditional working-class solidarity ethic, but Lockwood stressed that a certain level of grievance tends to recreate this ethic as does the us/them, insider/outsider imagery characteristic of close-knit communities and of the traditional proletarian ideology. The persistence and renewal of this imagery (and its associated network structures) seem to spring fairly directly from changes in economic and power structures in society.

### *Life-mode 3*

Whereas the Life-mode 2 wage earner performs the routine tasks of the work force at a given daily or hourly rate, the Life-mode 3 wage earner is a higher professional or managerial employee with a high level of skill. This skill is itself a saleable commodity, and the wage earner is paid to arrange, monitor, and control the production process. Typically, the concept of work and leisure and the role of the family are in sharp contrast to those of Life-mode 2. This is because the Life-mode 3 goal is to rise up through the hierarchy, obtaining control through managerial and professional roles so as to exercise progressively more power and ultimately to escape from the control of others so as to control resources and exercise power on one's own account. This process demands an immersion of the individual in work, a competitive attitude to colleagues, and a blurring of the boundaries between work and leisure. The family and its way of life fulfills a supportive role in relation to the career. Work therefore *is* life to a high degree, and the concept of freedom is not one of free time but is associated with the work situation and the career perspective.

Just as different types of network structure emerge from the economic conditions associated with Life-modes 1 and 2, so a certain type of personal network structure is likely to follow from Life-mode 3. These wage earners will be socially and geographically mobile as they pursue their careers, forming many loose ties, particularly of a professional kind, through which innovations and influence may be transmitted. However, they will also form relatively close-knit clusters and coalitions within their personal networks through which they may control considerable resources. This seems to fit in

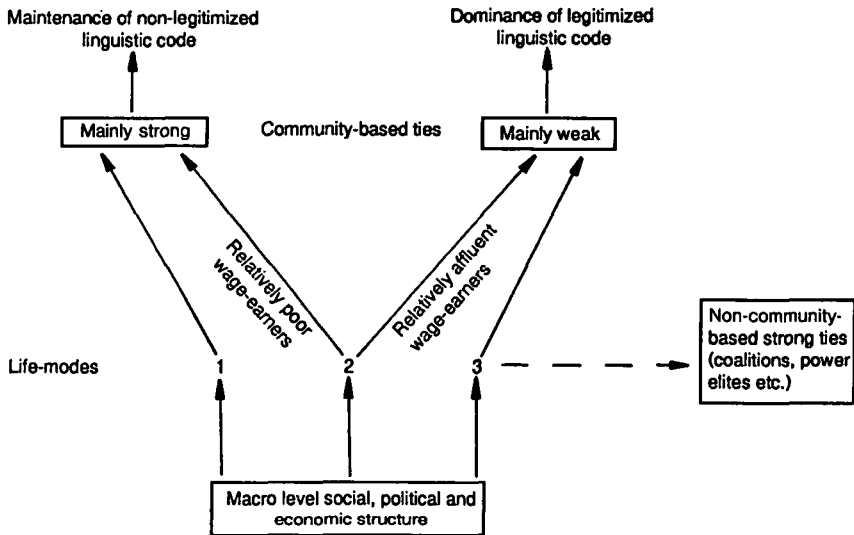


FIGURE 3: Macro- and microlevels of sociolinguistic structure.

with our general characterization of the differing role of loose-knit and close-knit network ties. The primarily loose-knit network of the Life-mode 3 individual ensures that the dominant linguistic market – as embodied in some form of legitimized or standard language – holds sway without hindrance from (in Woolard's terms) alternative vernacular markets. Figure 3 is a schematic representation of the relation of social network structure to these three life-modes.

It is important to emphasize that the concept of life-mode, like that of network, is a structural one, in that the ideological and cultural characteristics of a particular life-mode are determined by its contrast to the other life-modes in the social formation. The interrelationships among the three life-modes and the cultural practices associated with each one will therefore take different forms in, for example, Denmark, Ireland, England, and Germany. In each of these countries, the three fundamental modes of production that the life-modes reflect "will appear in different variants and in different combinations of opposition and independence" (Højrup 1983:47). One consequence of this chain of dependence running from political and socioeconomic structures through life-modes to network structure and ultimately to sociolinguistic structure (see Figure 3) is, as we have already suggested, that close-knit networks will be associated with Life-mode 2 individuals in some nation states more than in others. This seems to be the case if, for example, we com-

pare Belfast with Copenhagen. In Copenhagen, these wage earners are apparently more mobile and prosperous and less inclined to live and work together in close-knit groups of the kind described in Belfast (Gregersen & Pedersen 1991). This in turn will give rise to sociolinguistic patterns that depend on varying local contingencies and hence to urban vernaculars varying in their degree of focusing and vitality.

## CONCLUSION

The purpose of this article has been to work toward an integrated model of sociolinguistic structure that links in an explicit way the social variables of socioeconomic class and social network. Although these variables are often presented as unrelated or even contradictory, we have tried to demonstrate that, although they are at different orders of generality, it is useful to propose an interpretation of sociolinguistic space that conceives of them as interrelated. They are, of course, related in reality also. Particular configurations of network structure do not emerge accidentally for no particular reason – the form they take is dependent on the large-scale social, political, and economic structures that sociolinguists generally access in terms of socioeconomic class. Thus, an attempt to integrate class and network as interpretative categories is well motivated.

However, the model of social class to which we have appealed here is not the stratificational consensus-based model that has been generally favored by Western sociolinguists. Whereas Labov's view of speech community has emphasized shared norms throughout the community and is thus related to a consensus model of social class, we have preferred to emphasize the conflicts and inequalities in society that are symbolized by opposing linguistic norms. This analysis emphasizes the basis of personal social networks in consensus, whereas class differences involve not consensus but conflict. The weak-tie model of Granovetter suggests a means of linking network and class, as strong-tie situations predict agreement on norms, whereas weak-tie situations favor change and hence conflict of norms.

The analysis of higher level social structure that we have found most useful here treats social and cultural divisions as emerging ultimately from the economic inequalities produced by social class. Højrup (1983) assumed such a framework in his process-based model of life-mode, which we have used in conjunction with network analysis to develop an integrated model of sociolinguistic structure. By emphasizing in particular the importance of distinguishing between relatively strong and relatively weak network ties, we have suggested how these economically determined life-modes give rise not only to the social and cultural differences described by Højrup, but to different kinds of network structure. This will further enable us to specify the

conditions in which the linguistic norms of the groups are likely to be focused or diffuse, and the conditions in which they are open to, or resistant to, change.

# NOTE

1. Versions of this article were given at the Sociolinguistics Symposium at Roehampton in April 1990 and at the International Colloquium "Des Langues et des Villes," organized by CLAD, at L'Université Cheik Anta Diop, Dakar, Senegal, in December 1990. Our thanks to colleagues who commented and gave advice at these meetings. Particular thanks to Pádraig Ó Riagáin, Sally Boyd, and Dell Hymes for their useful comments; to Inge-Lise Pedersen, University of Copenhagen, who drew our attention to Højrup's work on life-modes; and to Marina Beale for assistance with the background literature in sociology.

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