A study of the English of British schoolchildren of South Asian extraction looks at ways of examining the relationship between their English and two ethnic processes, called "interactive" and "reactive". The way in which Network Analysis permits investigation of the interactive process is outlined, and the use of Identity Structure Analysis for examining the reactive process is considered. When the two methods of analysis are used together, they operationalize important components in Le Page's sociolinguistic hypothesis and riders and accommodate parameters fundamental to any neighborhood sociolinguistic survey. (MSE)
A METHODOLOGY FOR DESCRIBING SOCIO-LINGUISTIC VARIABILITY WITHIN MULTI-LINGUAL SETTINGS IN GENERAL, AND 'INTERACTIVE' AND 'REACTIVE' ETHNIC PROCESSES IN LANGUAGE IN PARTICULAR

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Abstract

After mentioning the social context where I am conducting my research (and where the ideas outlined below have yet to be put to the test), this paper briefly refers to work on the English of British schoolchildren of South Asian extraction. It then speculates on the relationship between their English and two ethnic processes - what Gumperz calls the 'interactive' and the 'reactive'. The way in which Network Analysis (as used by Gal and L Milroy) permits an investigation of the first of these is outlined, and then consideration is given to a means of examining the second (the 'reactive'). This is Identity Structure Analysis (ISA), developed by P Weinreich, which in addition provides a systematic method for discovering what it feels like inside a network. The paper ends with a bolder claim for this combination of Network Analysis with ISA. Together, they give empirical and economical realisation to several important components in Le Page's sociolinguistic hypothesis and riders. Depending on the adequacy and status of this theory, the methodology described here covers parameters that are really the most fundamental to any (neighbourhood) sociolinguistic survey (whose main focus is on the language of the individual speaker). 1,2

The social context of this study

(Since this study does not entail any large scale survey, my account of this is very brief and imprecise.) Bedford is a town of about 90,000 inhabitants and it has a large ethnic minority population. Since the war, migrants from over 50 countries have settled in the town and in 1970, according to Brown, ethnic minorities formed 20 per cent of the population, a quarter of the children in schools, and a third of all births. The largest groupings are, in order of settlement, Poles, Italians, West Indians, Indians, Pakistanis and Bangladeshis.

My study is based in just one area of the town where there is a relatively high ethnic concentration and where a
number of languages are spoken: for example, varieties of Italian, Punjabi, Bengali, Creole and English. And its main but not exclusive interest is in second and third generation 12 to 16 year olds of Indian and Pakistani descent whose parents at least, speak a variety of Punjabi. How and why is it that if, for example, you stand in a school dinner queue listening to children behind you talking to one another in English, you can very often (though not infallibly) distinguish children of Asian extraction from children of West Indian and English extraction before you look round? 3

Studies of Asian children's English in Britain and an unresolved issue: which type of ethnic process is involved?

Several studies of the English of Indian and Pakistani children have been produced for educational consumption, but on the whole their emphasis has been normative. The implication has been that where Asian children's English did not conform to the Standard, this was due to the failure of individuals to learn the language properly and what was needed was more and better ESL teaching. Until fairly recently, the possibility that these children's English might represent some kind of collective response to the social environment was ignored (cf Rampton 1983).

There has so far to my knowledge been only one properly sociolinguistic study of Asian children's spoken English and this was carried out by R K Agnihotri under Professor Le Page's supervision. This contains a good deal of discussion of Le Page's acts of identity theory, 4 and it gives the theory empirical exploration most fully in an analysis of code mixing. 5 When it develops a correlational analysis of the English spoken by Sikh children in Leeds, however, Le Page's hypothesis and riders recede somewhat, becoming only a theoretical backdrop at some remove from the study's main empirical thrust. The social variables that Agnihotri selects are length of residence in Leeds, place of origin, residential isolation, sex and socio-economic status. Some interesting patterns emerge: for example, Kenyan Sikhs retain Indian English features longer than Indian Sikhs; likewise boys retain them longer than girls. But the reasons for such patterns can only be speculated about - do Kenyan and male Sikhs have less contact with white children than Indian and female Sikhs? Do they have a stronger sense of identity, or what? The use of fairly macro-level variables like SES, sex etc. cannot really start to answer questions such as these, and this is a pity since particularly in the discussion of ethnic culture, the distinction is repeatedly made between, on the one hand, the inheritance and maintenance of cultural forms through close ingroup networks, and on the other, the selection, development and use of cultural forms to symbolise group identity in settings of intergroup contact. (Parson's tradition vs contract (1975); Wallman's interface vs identity (1978); Barth on the
morphological study of culture vs the structural functional study of ethnic boundaries (1969); Gumperz (1982) on old interactive vs new reactive ethnicities). The English of Asian children might be influenced by either of these ethnic processes. Jack Richards (1972) notes:

'In the case of non-standard immigrant English we are presumably dealing with ... contexts in which ... there are few informal or friendship contacts with speakers of standard English ...'

He goes on: where

'bilinguals interact and communicate with each other, using both languages far more frequently than they interact and communicate with members of the ... mono-lingual community, ... speakers generate their own bilingual norms of correctness which may differ from the mono-lingual norms.' (repr 1974: 67 & 69)

He also adds that this 'may also become part of the expression of ethnic pride'.

There is no doubt that these two ethnic processes can overlap and interact, and that a single cultural form can both be the product of inheritance and reflect active symbolic identification with the ingroup. But equally, they need not and indeed the theoretical and educational implications of a variety of English which predominantly reflects closed network interaction, are very different from those of a variety in which the group-symbolic function is strong: in fact the implications are so different that it seems worth trying to get an estimate of the importance of each ethnic process in the English of some of the Asian children in Bedford.

The value of Network Analysis

SES, area, sex etc are then variables ill-suited to illuminating quite a basic question that one would like to ask about the language used by an ethnic minority. Indeed, it may be that groups differentiated in terms of 'macro-variables' like these are not the best units with which to explore the relation of these two ethnic processes to speech. The first task should be to explore the extent to which they affect individuals within the group, and the first comparisons should be inter-individual (cf Hudson 1980: 71-72; 166-167; also McEntegart and Le Page 1982: 107, 123). So what social variables are appropriate?

Network analysis provides one starting point. In drawing attention to the two types of ethnic process I have described, Gumperz juxtaposes to the new 'reactive' ethnicity an account of the old interactive ethnicity which he describes as being 'supported both regionally and interpersonally through reinforced social networks which
joined people through clusters of occupational, neighbourhood, familial and political ties'. (1982: 5)

Network analysis is one means of assessing this, and indeed the ways in which it is used by both Gal and Milroy are complementary. Gal's work involves differentiating individuals in terms of the content or social composition of their personal networks—she describes the extent to which their contacts over a given time involve people of peasant or worker status. Milroy's work produces a more complex picture of the structure of each individual's network—people are differentiated in terms of how embedded they are within their networks. The way to combine these two approaches would be first to identify different segments of an individual's network in terms of the ethnicity (and possibly age) of their associates, and then to estimate the density and multiplexity of each. Thus one might first divide a person's network into coethnic adults, coethnic peers and then other-ethnics; next one could assess each of these 'sectors' in terms of network criteria such as size, density, multiplexity or frequency; and then the final step would be to produce a set of indirect indices which estimated how far involvement with each sector penetrated and permeated an individual's experience of life in the community as a whole. For example, using data collected in a pilot run, I devised the indices of adult kin and other-ethnic network involvement shown below:

Two Provisional Indirect Indices of Network Involvement

**Adult kin network involvement**

1. Living in the same area as at least two other kin households.
   (Kin know each other -> density; area + kin co-memberships -> multiplexity)

2. Regular participation in leisure activities with adult kin such as trips, outings + visits
   (-> multiplexity, if multiplexity is defined in terms of types of activity shared)

3. Regular participation in religious activity with adult kin
   (active religious co-membership -> increased multiplexity)

4. .......... 

**Other-ethnic network involvement**

1. Having other-ethnic kin
   (kinship -> multiplexity)

2. Having an other-ethnic peer who is spoken to at least
every day or most days
(-> frequency)

3. Seeing them in more than one type of setting - for example at school and in the park/at home
(-> multiplexity)

4. Having a relationship with more than two people in categories (2) and (3)
(-> size)

5. Seeing the people in (4) in the same settings.
(-> density).

These indices are of course not unproblematical, but they do represent a way in which the sensitivity of Milroy's study of mono-cultural groups can be adapted to a bicultural setting like Gal's. In this manner, I think, the extent of a person's involvement with two different norm-enforcing groups can be estimated.

The value of Peter Weinreich's Identity Structure Analysis

It must of course be admitted that, even in its most effective forms, network analysis leaves a lot of gaps. As Milroy herself admits, the network scores she produces do not 'reflect an individual's personal affinities and attitudes to the vernacular culture in any consistent or reliable way' (1980: 200). Neither Milroy's nor Gal's use of network analysis produces any picture of what it looks or feels like inside a network, they say nothing about group self-consciousness and they give no indication of the climate of social relations with outgroups. A comprehensive, flexible and explicit method for approaching this task is however provided, in my view, by Peter Weinreich's work on Identity Structure Analysis. Weinreich's approach is too complex to be outlined in detail here, though it is worth describing some of its essentials.

It derives in part from Personal Construct Psychology, and the method begins by exploring each individual's view of their social environment by means of a semi-structured interview. This produces a list of influential people and groupings (called entities) and a set of constructs representing the ways in which these people and groupings are perceived. Included among these 'entities' are various selves - for example 'me as I am now', 'me as I would like to be', 'me as I used to be', 'me as (others) see me', etc - and together these entities are given ratings with regard to each of these constructs. (See the Appendix for examples.) All this then forms the input to the IDEX computer programme devised by Weinreich which then produces a variety of indices, indicating among other things, how far a person sees himself as being similar to various people and groupings at present ( = current
identification), how far they would like to resemble various people and groupings ideally (= idealistic identification), how far they would like to be different (= contra identification), and how far they currently see themselves as similar in spite of aspiring to be different (= identification conflict). The programme becomes more complex than this and produces indices whose meaning is less simply explained, and anyhow whose relation to sociolinguistic hypotheses becomes more obscure. But it is worth stressing the value of the approach. First of all it uses each respondent's own categories for interpreting themselves and their social worlds, and secondly, in spite of this, the programme produces indices that can be compared across individuals.

Relating this back to the discussion of social networks, it becomes clear that people and groupings selected from inside and outside each person's network can serve as entities in this procedure, and then after each respondent has rated them on a variety of constructs, an index can be produced to show, e.g., how much they currently identify with clear groupings or with particular teachers, Anglo or West Indian kids within their networks; or with teachers, West Indians or English kids in general. Finally, individuals can be differentiated in terms of their identification with categories they have in common. The complementarity of these analyses of Network and Identity Structure are summarised schematically below:

<table>
<thead>
<tr>
<th>The Variables Given</th>
<th>Network Analysis</th>
<th>Identity Structure Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of regular associate</td>
<td>√ (Gal)</td>
<td>X</td>
</tr>
<tr>
<td>Familiarity of associates with one another</td>
<td>√ (Milroy's density)</td>
<td>X</td>
</tr>
<tr>
<td>Number of ways a person is linked to their associates</td>
<td>√ (Milroy's multiplexity)</td>
<td>X</td>
</tr>
<tr>
<td>Attitudes towards individuals</td>
<td>X</td>
<td>√</td>
</tr>
<tr>
<td>Attitudes towards ingroups and outgroups perceived in the environment</td>
<td>X</td>
<td>√</td>
</tr>
</tbody>
</table>

The relationship of this combination to language variation

There is of course little point in emphasising the complementarity of these two approaches if they simply
replicate one another in terms of their linguistic implications. Below I shall argue that this is not the case, but before doing so, it is necessary to emphasise that this combination of Network and Identity Structure Analysis is not directly appropriate to any delicate analysis of stylistic variation - it is geared to a grosser, more abstract appraisal of people's productive behaviour in English, and perhaps to making rough guesses about the linguistic systems we assume to derive from and underlie interactional performance (cf Le Page 1980: 124). In order to deal properly with stylistic variation, fairly delicate analysis is necessary of the statuses and co-memparships actually or potentially present in the process of interaction. Network indices take within their view a large number of separate social relationships, comprising a variety of affective and role relationships which are only very crudely distinguished (Gal), if at all (Milroy). ISA tries to give a comparatively general idea of the individuals and groups with whom an individual identifies or counter-identities, but it permits relatively little discussion of the projection of identity within interaction (cf e.g Brown and Levinson 1979; Giles and Johnson 1981). So in the ensuing discussion of the linguistic implications of NA and ISA, it is necessary to bear in mind that the conception of I involved is fairly gross, focussing more on the items comprising a chunk of a person's productive repertoire, than on their use of those items in ongoing social interactions.

Having said that, it is possible to differentiate the socio-linguistic processes covered by Network and Identity Structure analyses as follows. From Milroy we may infer that network structure affects:

(a) the L items that a person is intensively exposed to and the language items that, as a result, they have the chance to adopt; 8

(b) the extent to which a person is subject to pressure from his associates to conform to their linguistic norms.

Identity structure analysis on the other hand may start to give an idea of a person's psychological susceptibility to the speech models perceived around him, and an idea of the speakers from whom he may wish to diverge. ISA can be seen as giving a clue to what social categories are most important and how far a kind of psychological filter may have operated in picking up or screening out the linguistic data they provide.

Of course if one is going to accept Milroy's assertion that network structure is an explanatory factor in language variation, one has to recognise that she is also covertly implicating some of the psychological variables covered within ISA. There would be no point in talking about
group conformity pressures being an important link between people's language and their network structure if the psychological susceptibility of individuals was not also a factor. The point obviously is however, that ISA makes a factor like this explicit and that it allows one to start to explore the relationship between on the one hand, a person's position in the external world - the cultural and linguistic models available to them and the pressures put on them - and on the other, the way in which this is represented and evaluated within their own minds.

Let me give some examples of how Network Analysis and ISA can be combined in practice.

Their combination could first of all inform the analysis of linguistic variables. Holding age, sex and ethnicity constant and taking a linguistic variable like dark it should be possible to see for example whether a retroflex realisation correlates with lack of close contact with West Indian and English people, whether close involvement with Punjabi-speaking network sectors is critical, whether the main factor seems to be strong ingroup identification, or conversely strong outgroup counter-identification. Alternatively, is the vocalic realisation connected with involvement in multi-ethnic network clusters, is it associated with idealistic identification with Anglos etc etc?

It may be that, in most cases, patterns of psychological identification correspond quite strongly with network structure - close network involvement with co-ethnics associating with strong ingroup identification and so forth. However, there may well be some cases where a person's 'structural' position and their identification diverge, and the combination of ISA and network analysis should provide a rigorous and systematic basis for examining these, together with the way in which particular language variables are involved. Of the linguistic variables, we might, for example, ask: where there is strong identification without close network involvement, do the correlated linguistic variables tend to be Labovian stereotypes, which have limited or idiosyncratic ramifications within the linguistic system? Conversely, is the systematcry of variables primarily related to strong network ties more extensive and more socially shared? (cf footnote 8; also e.g Bell's discussion of 'outgroup referee design', 1984: 190) Furthermore, and more speculatively, the scope for case studies using ISA is presumably quite extensive: for example, one might ask whether individuals who indicate that their identifications have changed - whose past identification with one group have become current identifications with another - bear traces of this in their speech? and so forth.

On a broader level, what ISA and Network Analysis together provide is a clue to the extent and manner in
which Gumperz's old interactive ethnic processes, and his new reactive ones account for ethnically distinct L use. I have described his 'interactive ethnicity' in relation to Network Analysis - in contrast Gumperz defines the new reactive ethnicity as depending:

'less upon geographic proximity and shared occupations and more upon the highlighting of key differences separating one group from another' (1982)

Language is here serving in the demarcation of ethnic boundaries and it is this that ISA can illuminate: are there groups from which people wish to be differentiated, which are they and how strong is this desire?

**A stronger claim for this methodology**

I would tentatively like to make a stronger claim for the approach I have outlined and argue for its relevance beyond discussion of ethnicity. I have already suggested that ISA can give an idea of what network structure looks like from the inside, and in doing so, may help explicate some of the patterns of variability that network structure can't cope with; I would also however like to refer to Le Page's hypothesis and riders (see note 4) and first suggest that the methodology just described can be effectively used to assess the main components in this theory.

In the first place, ISA is geared to a dynamic theory that looks fairly similarly to Le Page's underlying ideas. Growth, for example, is seen in terms of changing patterns of identification. Weinreich quotes Erikson: "children at different stages of their development identify with those aspects of people by which they themselves are most immediately affected" (1979b: 158). The main task of adolescence is to "resynthesise all childhood identifications in some unique way and yet in concordance with the roles offered by some wider section of society" (1979b: 157; cf Le Page 1978: 2). The identifications entailed in this process are often incompatible: "in broadening" your "set of identifications, there will necessarily be an element of rejection of certain features of other people who form the wider net of those" you identify with (1979b: 160). We are clearly in Le Page's terrain, where people are seen as changing the group, or groups with which they wish to be identified, and where, we are warned, "motivation is always complex" (1975: 138).

Having said that about their theoretical compatibility, ISA in fact provides a way of exploring these matters in a more empirical and economical way than Le Page's (and indeed others') approach affords. According to McEntegart and Le Page (1982), the hypothesis demands that all social and psychological factors be taken into account at once (1982: 123) and indeed data is
collected on a larger number of factors such as location, age, sex, religion, political activism, wealth, self-reported ethnicity etc (1982: 118). The next stage is identifying correlations between these and speech and it is after that that the theoretically crucial operation takes place, which involves deriving hypotheses and suggestions about people's aspirations and identifications from the emerging correlations. What matters most to Le Page is not so much the 'objective' facts of an individual's relative social position, as the way in which they represent this to themselves cognitively. Without requiring a great deal of prior sociological analysis of the environment, ISA goes to the perceived reality directly, and it explores this empirically. Rather than a person's aspirations and identifications being the subject of the researcher's suggestions and inferences, the informant in ISA is afforded a chance to express these himself in some detail. Weinreich's method then proceeds to produce quantified indices which do not involve a choice between statistically comparable but dehumanised answers, and linguistically and socially informative conversations (Le Page and McEntegart 1982: 115). It no longer seems true that:

'a high level of statistical sophistication seems to militate against anything except rather superficial observations' (1982: 115)

and indices are provided that form a basis for exploring some of the fluidity, complexity and ambiguity involved in patterns of identification (e.g., indices of identity conflict, identity diffusion, and self-esteem).

The contribution of network analysis to the greater economy and empiricism of my approach to Le Page's theory does not seem to be quite so clear. A case for its economy would relate to Milroy's (speculative) argument that network structure is at a lower level of abstraction and is more concretely related to language than macro-variables like SES - indeed she extends this to speculation that network structure is also an intervening variable between language and age and sex (1980: 194). If one accepts this, then by addressing oneself to NS directly, one can again claim to be getting closer to the crucial mechanisms and cutting down on the levels of inference, i.e., being more direct. Even if one doesn't, a case can still be made that Network Analysis offers a better (though still crude) empirical metric of two factors in Le Page's hypothesis than he has used, namely (a) the access an individual has to other groups, and (b) the extent to which society provides him with feedback indicating what chance he has of success in his proposed identity (close networks presumably deter people more strongly from adopting outgroup identities than open ones - cf the norm-enforcing mechanism).
If this methodology really does operationalise important factors in Le Page's theory and the theory is itself to be believed, then a stronger claim might be made, namely that the parameters covered here are really the most fundamental to any socio-linguistic survey whose main focus of interest is the language of the individual speaker.\(^\text{10}\) This is because in contrast to SES, location, length of residence, religion etc the variables identified here by ISA (and to a lesser extent Network Analysis) are said and logically seem to be in some sense causal (McEntegart and Le Page 1982: 122). If one believes this, one may expect as a result, that the methodology I've described is able to make sense of more social variation in speech than many other approaches (e.g. Labov's, Le Page's, Agnihotri's, Milroy's use of Network Analysis on its own, \(\ldots\)). This methodology should provide plenty to say about socio-linguistic patterning amongst a group of co-ethnic male teenagers, before it is necessary to draw 'in their sisters and resort to a more conventional, less delicate socio-linguistic design.'

If it does not work out as I hope, in spite of my operationalisation of its components having been satisfactory, perhaps a question arises about the status of Le Page's theory. Does it suggest empirical parameters that can be usefully handled in a neighbourhood survey or does it entail a set of socio-psychological variables that are really too delicate for quantificational analysis? Is its value exclusively conceptual/philosophical? Certainly with regard to the analysis of interaction, rather than being too delicate, the formulation of the theory may be too general.\(^\text{11}\) There can be little doubt that Le Page's theory is important in providing a framework for much productive socio-linguistic discussion of a general nature. Whether its formulation is such that it serves as a reliable and comprehensive guide for empirical exploration remains to be seen.

**FOOTNOTES**

1 I am grateful to R A Hudson and Peter Skehan for comments on an earlier draft. The mistakes are mine. The work described here is being undertaken with the benefit of an ESRC studentship.

2 The frame of reference in this paper is sociolinguistic: the methodology could however be extended to studies of L2 Acquisition. One would need to take into account a variety of additional variables (such as aptitude, age, type of instruction, L distance etc etc) but even so, the ground covered here is not dissimilar to the kind of thing e.g Giles and Byrne (1982) discuss.
I should emphasise that in referring to an ethnically distinct speech variety (here and elsewhere), I am largely talking about pronunciation. Grammatically, the speakers I am dealing with are fairly similar to their Anglo peers, and none of the items I'm interested in is very likely to interfere in writing, or to affect formal educational assessment.

Le Page's theory is as follows:

'Each individual creates systems for his verbal behaviour so that they shall resemble those of the groups with which from time to time he may wish to be identified, to the extent that
(a) he can identify the group;
(b) he has both opportunity and ability to analyse their behavioural systems;
(c) his motivation is sufficiently strong to impel him to choose, and to adapt his behaviour accordingly;
(d) he is still able to adapt his behaviour.'

(1975)

One of the corollaries of Le Page's theory is that people's linguistic competence and their linguistic behaviour are a good deal more fragmentary, unsystematic and unpredictable than linguists have often assumed. What Agnihotri does, in accordance with this, is to falsify some of the rules for Indian-English code alternation formulated by Kachru and Gupta.

Educational implications:

If accented English reflected closed network interaction and was not felt to be a badge of ethnic pride, one might, if the speaker wanted to assimilate, teach pronunciation (or 'elocution'). However, one presumably wouldn't try this if it consciously carried an ethnic identifiication function. Whether an item reflected lack of contact with native models or ethnic group self-differentiation would influence whether one wanted to deal with that item pedagogically or not, and if so, the manner in which one approached it.

Theoretical implications:

(These are too many and too complex to go into here, though e.g. Tajfel, and Paulston and Paulston provide terms in which it is useful to think about this.) If Asian English appeared largely to reflect exclusively coethnic interaction, and not identification with the ingroup, one might suppose it to be relatively transitional, perhaps reflecting processes of assimilation. In this context, Asian English might be a source of linguistic insecurity, or at best the object of tacit unarticulated prestige. The identity marking function might be preserved in the Mother Tongue, with the two languages being fairly distinct
in their roles. On the other hand, if Asian English did appear to develop as an ethnic marker, the question one would then need to ask would be 'what kind of ethnic identification does it represent?' What are its goals and what perceptions of intergroup status relations does it derive from (this question might be fruitfully posed in terms of Tajfel's perceived stability and legitimacy - c f, e g Tajfel 1978)? Does it represent rejection of the dominant group, conflict, competition, aspirations for structural incorporation but cultural autonomy or what? How are each of these related to language: does the Mother Tongue still retain its identity marking function? What are the prospects for Asian English? What kind of prestige does it carry - overt prestige articulated in terms close to the dominant value system, or an overt prestige defined in oppositional terms? Can we see a process by which previously negatively defined characteristics are being revalued? - etc etc.

7 But in their defence, I would say that indeed Milroy's indirect index is not without its problems. For example, the notion of multiplexity essentially relates to the number of emically discerned major components comprising a relationship. None of Milroy's indicators properly cater for this: Milroy assumes aprioristically that different settings entail different types of co-membership but she does not verify it. As I see it, network analysis involves improvisation: in the case of Milroy at least, we can see the notion of setting being used in a manner that has neither the coherent rigour involved in the discussion of 'domain', nor the ethnographic rigour involved in the definition of 'scene'. (Fishman 1965; Hymes 1972).

8 Milroy (1980: 196), and Milroy and Milroy (1984: 38) refer to network structure affecting the linguistic items a person is exposed to, but they do not explicate precisely what they mean by exposure and in what ways network structure counts. On the face of it, any claim that network analysis can indicate the linguistic items to which people are exposed, seems rather inadequate for two reasons. (a) We live in an electronic age. Even the people most enmeshed within a network probably have access to TVs and radios, and through these they will be exposed to a large number of language varieties. Indeed, if they recognise them, then these varieties must be said to form part of their receptive repertoires (at least).

(b) There cannot be very many people whose social ties are exclusively dense and multiplex. Milroy and Milroy (1984: 44) have to admit that even the most closely involved members of the social networks they
study sometimes go shopping in town etc., and thereby have plenty of chances to come across new linguistic items.

So what is the validity of the claim that network structure influences the linguistic forms a person is exposed to? In fact, there are two ways of making sense of it. The first is to say that it really relates to rather complex linguistic rules: unless you have the sustained and close contact with someone that fairly strong network ties bring, you cannot properly appreciate e.g. the variable constraints governing the uses of a particular variable, or maybe their precise ordering (as per Chambers and Trudgill, 1980: 153, 154, 160; more generally, cf Le Page's rider (b)).

The other way of justifying this claim that network structure influences the items a person is exposed to, is — as I've tried — to amplify this notion of 'exposure' so that it encompasses the process by which a new item passes from the receptive to the productive repertory (it is, after all, on the basis of the production that the sociolinguist usually decides whether a person 'has' the item or not). It is the passing from (vague) receptive recognition to successful productive use that network structure influences: to be able to use a new rule (depending of course to some extent on the rule involved), you need a lot of opportunities to try it out and practice it in interactional settings with plenty of positive feedback — neither TV nor shop assistants can provide this.

Of course social psychological factors will also play a role in the extent to which an L item passes into a person's productive repertoire (they will influence how far a person dares use it etc, as well as which L items are selected). There's obviously no such thing as quantity without quality of contact. But the case can still be made, that fairly extensive social contact may often be an indispensable component in the mechanics of successfully hypothesising, testing and then auto-matising (Faerch and Kasper, 1983: 53) a linguistic item. Thus, reverting to my argument in the main text and focusing on this contact/exposure issue, the relationships of Network Analysis and ISA to socio-linguistic processes can still be seen to be partially separable in principle. Though it never allows one to separate out quantity of contact per se, network analysis does entail a quantity-of-contact factor that ISA omits (Equally ISA allows a view of the psychological impact of distant people + groups which Network Analysis can't give.) Indeed, following the logic above it might turn out that empirically they each tend to correlate with different types of linguistic variable - ISA tending to be
linked with Labovian stereotypes which have limited or idiosyncratic ramifications with the L system, and network analysis relating to (more covert?) variables whose systematicity is more extensive and more socially shared.

9 ISA in fact affords a way of operationalising the second of these, in such a way that one could get an idea of a person's own estimate of his chances of gaining acceptance in new identities.

10 Which is primarily interested in the question "how and why do individual grammars differ?" or alternatively "how and why do individual grammars agree with each other?" (Hudson, 1980: 189).

11 Acts of identity, for example, arguably are not conceived in a way that is sufficiently sensitive to the constraints placed on speakers in interaction: they aren't suited to coping with the pressures of different audience roles (Bell, 1984: 201), they do not give adequate attention to status relations within interaction or to people enacting role-appropriate behaviour, and thereby tend towards a barrage-of-signals view of social marking (Hewitt, 1983; Brown and Levinson, 1979). Also they are not geared to people reproducing speech associated with particular registers rather than individuals or groups (though see McEntegart and Le Page, 1982: 113; Le Page, 1980: 131). Even so the caveat that 'motivation is always complex' (Le Page, 1975: 138) is attached to the theory, which implies a recognition that modifications such as these may be necessary.

REFERENCES


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APPENDIX

An example of the constructs used with one 14 year old boy.

Elicited

can’t trust them - can trust them
ooisy - quiet and peaceful
not friendly and kind - friendly and kind
has a hard life - doesn’t have a hard life
doesn’t have respect - has respect
gives you something if you ask for it - won’t give you something if you ask for it
moves out of the way of trouble - gets in trouble
will tell your family if you do wrong - won’t tell your family if you do wrong
ask you to their house - don’t ask you to their house
jealous - not jealous
likes England more than Pakistan - likes Pakistan more than England
has freedom - don’t have freedom
gets angry - keeps calm

Supplied

seems very Pakistani - doesn’t seem very Pakistani
different from me - similar to me
has language problems - doesn’t have language problems
### His entities and a rating sheet

<table>
<thead>
<tr>
<th>Entity</th>
<th>Noisy</th>
<th>Quiet and peaceful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me as I am now</td>
<td>0</td>
<td>01</td>
</tr>
<tr>
<td>Me as I would like to be</td>
<td>6</td>
<td>02</td>
</tr>
<tr>
<td>My dad and mum</td>
<td>0</td>
<td>03</td>
</tr>
<tr>
<td>My brothers and sisters</td>
<td>0</td>
<td>04</td>
</tr>
<tr>
<td>Me when I'm at school</td>
<td>0</td>
<td>05</td>
</tr>
<tr>
<td>Me with my family and relatives</td>
<td>0</td>
<td>06</td>
</tr>
<tr>
<td>Jamaican kids</td>
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<td>07</td>
</tr>
<tr>
<td>Teachers</td>
<td>0</td>
<td>08</td>
</tr>
<tr>
<td>My uncles and aunts in England</td>
<td>0</td>
<td>09</td>
</tr>
<tr>
<td>My cousins</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>A good person</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>A bad person</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>My best friends in England (Tahir, Mohammed and them)</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>My friends in Pakistan</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Me when I'm speaking English</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Me when I'm speaking Punjabi</td>
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</tr>
<tr>
<td>My English friends</td>
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<td>17</td>
</tr>
<tr>
<td>Other English kids</td>
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<td>18</td>
</tr>
<tr>
<td>Pakistani people</td>
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<td>19</td>
</tr>
<tr>
<td>English people</td>
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<tr>
<td>Indian people</td>
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