

# Social Psychology of Language and Language Variation

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In 1980, Gillian Sankoff wrote "To my mind, the most challenging problems in contemporary sociolinguistics involve putting together [language structure, speakers' orientation to the message content, speakers' orientation to other participants, and speakers' orientation to social categories]". In the following chapters of that book, she offered what I believe remains one of the most serious, comprehensive, and well-written attempts to place sociolinguistics firmly in all its social, interpersonal, and linguistic context as anyone has written to date. The problems she identified continue to challenge sociolinguists, as the varied directions in which the field has moved amply illustrate. Language remains the centripetal force holding us together, while we scatter, following the promises held out by methods and theories in many different branches of the academy.<sup>1</sup>

In this paper I propose to focus on *one* context for sociolinguistics. I will discuss some of the contributions that have been made and can continue to be made between the social psychology of language and sociolinguistics. A useful similar exploration can be found in Milroy and Preston (1999). The observations I offer are rather in the spirit of Lesley Milroy's recent exploration of different approaches for bridging the division between "internal" and "external" factors in variation. Milroy has proposed that as an alternative we should consider variation as being "ideologically dependent" or "ideologically independent". This is certainly a useful heuristic, but whereas this largely (but by no means only) focuses our attention on the wider social domain, I think the heuristic I introduce here places the interpersonal more squarely in focus, as well. I will suggest that the need to

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<sup>1</sup> This paper was originally presented in a symposium "Variation Studies in Context" organized by David Herman and Walt Wolfram at the New Ways of Analyzing Variation conference (NWAV30) held at North Carolina State University in October 2001. Given its larger mission, I should probably place what I am about to say about sociolinguistics in its context right from the outset. Only some of what follows can be considered genuinely new ways of analyzing variation; much of what follows has been shaped by my reading and rereading of work by Deborah Cameron, Penny Eckert, Howard Giles, Greg Guy, Ruth King, Bill Labov, John Rickford, John Singler, Walt Wolfram, and perhaps most of all, the work of Gillian Sankoff. They are some of the people who have helped me place sociolinguistics in context over the years. An earlier version of this paper, exploring uncertainty management as a motivation for linguistic variation appeared as Meyerhoff 2001.

manage uncertainty is a salient factor in all communication and that much linguistic variation can be traced back, one way or another, to this need. I will suggest, moreover, that this has been implicit in a lot of sociolinguistic analyses of variation—what I am doing here is trying to make it explicit and push its implications a bit further.

I take (1) and (2) to be uncontentious:

- (1) It is seldom, if ever, true that variation can be accounted for solely in terms of linguistic factors.
- (2) Therefore, any theory of language variation and language change must be equally well-equipped to articulate the effects of social and psychological factors as it is to articulate the effects of linguistic factors.

In support of these assertions, we can consider the distribution of null subjects in conversational Bislama. The nature of the variable is illustrated in 0, and a detailed analysis of the distribution of null subjects in one man's speech is given in Table 1.

- (3) *Mi stap wet long wan mesej blong mi,*  
 1s stay wait on one message of 1s  
*bae Ø i kam.*  
 IRR (3s) AGR come<sup>2</sup>

'I was waiting for a message for me, which should come.'  
 (lit. 'I was waiting for a message for me, should come').

Addressees	Speaker's use of null subjects	
	N = Ø subjects	% all clauses
Extended family	50	71
MM only	40	62
Total	90	67

Table 1. Number of phonetically null subjects as a percentage of all clauses over two accounts of the same story with two different audiences (same speaker). (T-statistic = 14.78 with 1df,  $p = 0.043$ .) (Meyerhoff 2001)

<sup>2</sup> The following abbreviations are used in Bislama glosses: 1=first person; 2=second person; 3=third person; AGR=agreement; excl=exclusive; incl=inclusive; IRR=irrealis; s=singular; SPEC=specificity marker; p=plural; PL=plural determiner

The distribution of null subjects in Bislama is primarily, and it appears increasingly, constrained by morphosyntactic and discourse factors (Meyerhoff 2000), but a not insignificant part of the variation seems to be interpersonal. Table 1 shows how the frequency of one man's use of null subjects varied depending on whether he was telling a story to me, or telling the same story to his extended family (and me) after dinner. A two-tailed t-test rejected the null hypothesis that the difference in mean frequency of phonetically null subjects with the two different types of addressee was due to chance. The results are reminiscent of those found by Bickerton (1980), Rickford & McNair-Knox (1994) and Cukor-Avila & Bailey (2001).

Howard Giles' Accommodation Theory (Giles & Smith 1979, Gallois et al. 1995, Jones et al. 1999) is familiar to sociolinguists and is often invoked to account for variation like this. Indeed, the contribution of CAT to sociolinguistics should not be underestimated: it underpins sociolinguistic theory in a range of areas, for example, Trudgill's gravity model (1974), as well as work on dialect levelling and contact-induced change (e.g. Auer et al. 1998, Kerswill 2001, Kerswill & Williams 2000, Trudgill et al. 2000). But accommodation is only a strategy that is harnessed to satisfy more abstract social psychological needs.

Early formulations of accommodation theory derived directly from the insights of Tajfel and Turner's social identity theory and intergroup theory (Tajfel 1978, Tajfel & Turner 1986, Turner 1999, Turner et al. 1987). These theories conceptualized individuals' self-awareness as an interplay between more or less personal and group identifications, that vary in contextual salience within conversations and that vary developmentally across time. They have a lot more to offer sociolinguists than the notion of accommodation alone. They offer the possibility of a number of other testable hypotheses. For instance: social identity theory posits that strategies of social mobility will only occur when people perceive the distinctions between groups to be either unstable, or illegitimate. This suggests, then, that we will only observe style shifting that mirrors class stratification where speakers feel the boundaries between classes can conceivably be breached, or when they consider their relegation to one class rather than another to be unfair and illegitimate. (Walker 2001 also discusses applications of social identity theory and its usefulness for the analysis of ethnicity and variation.)

I will argue that accommodation is a strategy by which a range of problems are satisfied. These problems arise from speakers' need to manage interactional and interpersonal uncertainty. I believe that using uncertainty as a primitive has a couple of benefits. These are given in (4) and (5):

- (4) Using (un)certainty as an analytical primitive allows us to unify a number of motivations that have been proposed as accounts of language variation.
- (5) Using (un)certainty as an analytical primitive allows us to add to the typology of motivations that sociolinguistics has traditionally worked with.

At this point let me also provide a working definition of what I mean by uncertainty; this is given in (6).

- (6) *Uncertainty refers to*
  - (i) an individual's cognitive state ("resulting from [their] assessment of the number of alternative predictions available for [another's] future ... or past behavior", Bradac 2001)
  - (ii) the degree of situational (in)stability or (in)determinacy (cf. problematic integration theory, Babrow 1992).

I suggested in (4) that it might be possible to unify a number of apparently very different motivations for linguistic variation. I now review some of these motivations under headings that lend themselves to my overall goal of rephrasing them in terms of situational or interpersonal uncertainty.

(7) *Accentuate the positive—A: Speakers are accruing social capital.*

It is commonly assumed that speakers employ a particular variant because it is an index of some other desirable (however 'desirable' is measured) social attribute. Thus, linguistic variation is a strategy by which people can accrue, control or appropriate social capital. This account has perhaps the longest tradition in sociolinguistics. It was central to the notion of hypercorrection and accounts of the lower middle class cross-over effect.

The notion that linguistic variants are metaphorical expressions of other forms of social capital remains important in Penny Eckert's (2000) recent work, though there, without assumptions of upward social mobility.

(8) *Eliminate the negative—B: Speakers are avoiding or minimizing risk.*

However, counter-balancing desires for upward social mobility, there are also desires to move towards "the sacred center of the common values", as expressed above.

Some variation has been accounted for by focusing on how selection of particular variants may minimize a speaker's exposure to social censure or to minimize their chance of being ascribed negative personal attributes. Liz Gordon (1997) has shown that historically in the UK and synchronically in

New Zealand, there is a tendency for people to hear a young woman who uses working class variants in her speech as being a slut (the indirect indexing holds with other socially undesirable traits so she is also perceived to be more likely to be a smoker). When I have reviewed this work with undergraduate classes in Philadelphia and Honolulu, I have found that it seems this indexing is by no means a post-colonial peculiarity. Gordon suggests that women's awareness of this ideology and a desire to distance themselves from such ascriptions might be the motivation for their occasional use of more standard, or more "middle class", variants than men use. Of course this doesn't account for cases where women use variants that are more robust indexes of vernacular culture than men do, but it is hardly surprising that there should be different motivations for different behaviours.

Work in other cultures—for example Bucholtz (1999) and Hachimi (2001)—suggests that in a range of cultures some variation can be accounted for by seeing speakers as avoiding attributes that they consider risky or evaluate negatively.

So where the motivation in (7) focuses on benefits, (8) focuses on costs.

(9) *The Balancing Act*—C. Maximize fit; D: Maintain distinctiveness.

Whereas early work on social identity framed interpersonal and intergroup identities as falling along a bipolar continuum, more recent work has recast social identity as "a process which transforms interpersonal into intergroup behaviour" (Turner 1999:11, my emphasis). That is, personal and social identities are differentiated in terms of degrees of inclusiveness. Turner's self-categorization theory places great weight on the functionality of prototype norms and on the processes of contrast between and within groups based on those norms. Again, it seems to me that empirical data on language variation is directly relevant to this and it might offer a valuable, practical basis on which to test this theory. The process by which the personal is transformed into the social (and the reflexivity of the process, which does not seem to be adequately incorporated into the social psychological approach) is integral to the work of Penny Eckert and of many other people in this audience. It's also something Nancy Niedzielski and I tried to put into a social psychological approach to language in a paper I will return to shortly.

Accommodation strategies (whether convergent or divergent) are often clear instantiations of the motivation to maximize fit or maintain distinctiveness. But since accommodative moves are only strategies and not themselves motives for variation, we find convergence and divergence used strategically under all levels of certainty.

The data and motivations I have discussed up to this point are reasonably familiar and it may be helpful to show how I think they relate to one another in terms of uncertainty so we can see where we are going.

Sociolinguistic phenomena that are motivated by a desire to avoid or attain identification with some other non-linguistic attribute require that there be some perceived uncertainty about the stability of the situation otherwise mobility towards or away from any social target simply would not be a realistic goal. Perceptions of the motility of category membership may be quite wrong of course, but the perception must be there.

On the other hand, the desire to maximize fit and maintain distinctiveness seem to require a greater degree of certainty. They require that people have a reasonably clear and fixed idea about the normative traits of whatever group or individual they are trying to fit with or remain distinct from. I show this in Figure 1.

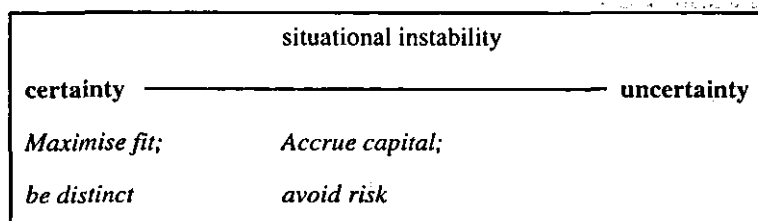


Figure 1. Placement of some social psychological factors motivating linguistic variation in terms of degrees of (internal and external) certainty.

What is clear from Figure 1 is that there is a obvious gap if variation is seen in terms of certainty: what happens when people are maximally *uncertain*? Does this have any relevance to the analysis of language variation?

I suggest that when people are maximally uncertain, they set out to test their best guesses, their hypotheses about the situation and others' likely behaviour, and that this does indeed have reflexes in variation.

(10) *It's a jungle out there—E. Speakers are testing hypotheses about others.* The notion that speakers are always testing hypotheses about their interlocutors and their interlocutors' perceptions about them, is something that Nancy Niedzielski and I tried to capture in a 1994 paper. We noted reports of quite striking divergence by South African Blacks when addressed in Fanagalo and the attitudes they expressed when explaining their divergence. In attempting to understand what exactly was going on in such divergent exchanges, we arrived at a more general model of communication that incorporated some fundamental concepts from social psychology of

language and sociolinguistic fundamentals such as network ties. Part of this model is given in Figure 2.

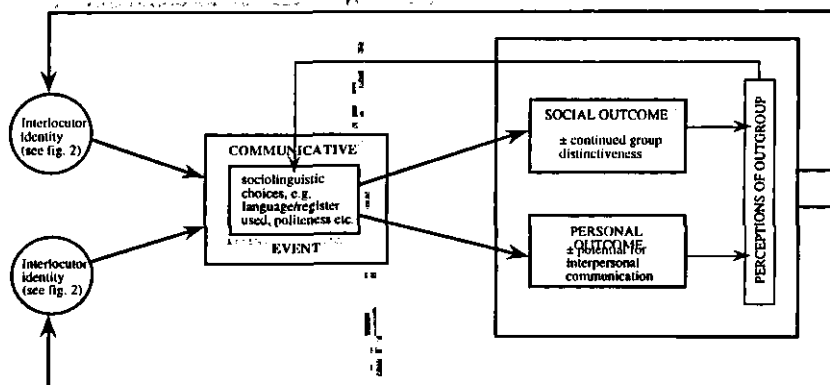


Figure 2. Process analysis of a communicative event emphasizing centrality of sociolinguistic and social psychological dimensions. (Meyerhoff & Niedzielski 1994).

So assuming hypothesis testing is central to communication, where do we see it in action? I offer a brief example.

Bislama, like all languages in the south west Pacific, makes a distinction between a first person plural that is inclusive of the addressee and one that is exclusive. The forms are (respectively) *yumi* and *mifala*, as shown in (11). Their typical uses are given in (12) and (13). In (12), the speaker and addressee are trying to work out when people started smashing up a dance venue; (13) is taken from court testimony (recorded by permission).

- (11) *yumi* 'we' (inclusive of addressee)  
*mifala* 'we' (exclusive of addressee)
- (12) *Hemia se yumi stap ya, i no gat fulap man.*  
 that.one say 1p.incl stay SPEC AGR no get full.up man  
 'Before that, when we (=you and I) were there, there weren't many people.'
- (13) *Sapos hem i no ripotem mifala*  
 suppose 3s AGR no report 1p.excl  
*ating bambae mifala i givim moa yet.*  
 probably IRR 1p.excl AGR give more yet  
 'If he hadn't reported us (= not you), we (= not you) probably would have given him even more.'

There is a nice creative juxtaposition of the inclusive and exclusive in (14), showing how speakers can play with and exploit all the connotations of inclusion and exclusion. Alis is trying to persuade me to come to a formal welcome for some visiting Americans:

- (14) MM: *Mi no wantem stap long saed blong ol*  
 1s no want stay on side of PL  
*manAmerika*  
 manAmerica
- Alis: *No, bae yu kam stap wetem yumi*  
 no, IRR 2s come stay with 1p.incl  
*mifala nomo.*  
 1p.excl only
- MM: 'I don't want to stand with the Americans.'  
 Alis: 'No, you'll just come stand with us.'

*Yumi* is, however, also used to mark inclusiveness that can only be interpreted metaphorically. Its function seems to be to downplay the salience or the notion of co-agency and highlight the salience of some other shared social characteristic. Or its use seems to help instantiate or affirm some desired shared group membership.

I have observed a good deal of variation between use of *yumi* and other pronouns. Often conversational cues indicate what ingroup/outgroup distinctions are salient at that point in the discourse and this can explain the alternation quite neatly. But sometimes the alternation signals that something more is going on. In some cases, there is contextual evidence that the alternation reflects some interpersonal or situational uncertainty as in the alternations between *yumi* and the 2nd p sg. *yu* by Anita in example (15).

- (15) Anita: *Yumi maredem evri moning.*  
 1p.incl marry every morning
- Miriam: *Yu no save livim long ol bi?*  
 2s no can leave to pl bee
- Anita: *No, ... man i mas mekem.*  
 no man AGR must make
- *OK yu girap long eli moning.*  
 OK 2s get.up in early morning
- *Yumi- yu go blong maredem ...*  
 1p.incl 2s go to marry
- Taem yumi maredem long san,*  
 time 1p.incl marry in sun



- hem i i hang  
3s AGR hang
- Miriam: Yu luksave wan man flaoa mo wan  
2s recognise one man flower and one  
woman flaoa o wanem?  
woman flower or what
- Anita: Yu luksave i gat paoda ya...  
2s recognise AGR have powder SPEC
- Anita: We (incl.) pollinate them [vanilla flowers] every morning.  
Miriam: You can't leave it to the bees?  
Anita: No... someone has to do it. So you get up early in the  
morning. We (incl.) - you go to pollinate them... If we  
(incl.) do the pollinating in sunlight, it [the flower] will  
fall.
- Miriam: Do you look for a male and a female flower or what?  
Anita: You find one that has this powder...

This kind of alternation shows up frequently. In cases like this, I have argued elsewhere (Meyerhöff 1998, 2001) that Anita's alternation between the Bislama inclusive and the 2nd singular (which is not necessarily inclusive) reflects uncertainty caused by a mismatch between the identities she and I appear to consider to be most salient at that moment. Her moves to attune to my (English) use of the 2nd person singular suggest that *one* of the functions of accommodation as a sociolinguistic strategy is to reduce instability or situational uncertainty in interactions with others.

Hence, I suggest that Figure 1 can be filled out as in Figure 3:

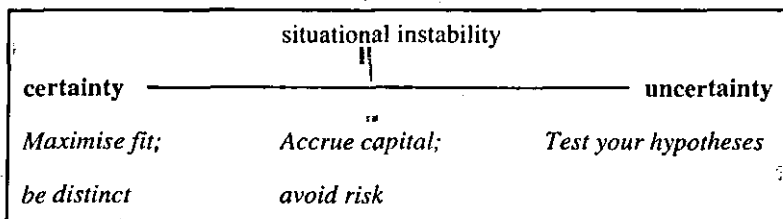


Figure 3. Placement of some social psychological factors motivating linguistic variation in terms of degrees of (internal and external) certainty.

The way I've represented it here might imply that testing hypotheses and maximizing fit are motivations that have less in common with each other than they do with motivations in the middle. Paradoxically, this is not so; the

representation here is a compromise based on the limits of working with the two dimensions of paper. As I have noted, there's overlap between the kinds of strategies employed at both ends of Figure 3.

In conclusion: I've provided the briefest of overviews of connections between a small part of the social psychology of language, and focused on only one part of sociolinguistics, that is the study of variation. It touches not at all on the major mutual contributions made by both fields to the study of language acquisition, language policy, bilingualism, and discourse analysis. It also touches not at all on a major concern of sociolinguistics, namely what properties define a leader of a group? The theoretical and empirical problems associated with answering this question for sociolinguists are articulated most fully in chapters 10-12 of Labov (2001), but again, there is a body of research in social psychology that is also concerned with leadership, the functionality of group norms and the mechanisms by which they are maintained or disrupted (for example, Fielding and Hogg 1997, Haslam et al. 1998). We might all profit if linguists and social psychologists were to take a closer look at the kinds of data and trends each has identified independently.

This paper is not intended to tell everybody working on sociolinguistics that they have been doing it wrong up until now. As a field, the way we have been working has made tremendous contributions to the study of language. For forty years, sociolinguistics has been eclectic in its membership and its methods. In the last ten years, NAW itself has provided a forum for a range of voices and styles, and I believe this to be a real strength. If this paper advocates anything, it is that there be a continuation and a strengthening of that eclecticism. I believe that advocating a narrow paradigm, no matter what that paradigm is, is ultimately disabling because it has the potential to restrict free and open enquiry which may place the study of variation in ever richer theoretical contexts. The vitality of our field depends on a collective resistance to the development of methodological or theoretical orthodoxies.

There may indeed be much uncertainty out there, as I have suggested in this paper, but this last point is one thing I am certain of.

## References

- Auer, Peter, Barden Birgit and Beate Grosskopf 1998. Subjective and objective parameters determining 'salience' in long-term dialect accommodation. *Journal of Sociolinguistics* 2. 163-187.
- Babrow, Austin S. 1992. Communication and problematic integration: Understanding diverging probabilities and value, ambiguity, ambivalence, and impossibility. *Communication Theory* 2. 95-130.

- Bickerton, Derek 1980. What happens when we switch? *York Papers in Linguistics* 9. 41-56.
- Brashers, Dale E., Stephen M. Haas, Renee S. Klinge, and Judith L. Neidig 2000. Collective AIDS activism and individuals' perceived self-advocacy in physician-patient communication. *Human Communication Research* 26. 372-402.
- Bucholtz, Mary 1999. "Why be normal?" Language and identity practices in a community of nerd girls. *Language in Society* 28. 203-223.
- Cukor-Avila, Patricia and Guy Bailey 2001. The effects of the race of the interviewer on sociolinguistic fieldwork. *Journal of Sociolinguistics* 5. 254-270.
- Eckert, Penelope 2000. *Linguistic Variation as Social Practice*. Oxford: Blackwell.
- Fielding, Kelly and Michael A. Hogg 1997. Social identity, self-categorization, and leadership: A field study of small interactive groups. *Group Dynamics* 1. 39-51.
- Gallois, Cynthia, Giles, Howard, Jones, Elizabeth, Cargile, Aaron C. and Ota, Hiroshi (1995) Accommodating intercultural encounters: Elaborations and extensions. In Richard L. Wiseman (ed.) *International and Intercultural Communication Annual, vol 19: Intercultural Communication Theory*. Thousand Oaks, CA: Sage, 115-147.
- Giles, Howard and Smith, Philip 1979. Accommodation theory: Optimal levels of convergence. In Howard Giles, Robert N. St. Clair, Peter Trudgill, William Labov, Ralph Fasold (eds) *Language and Social Psychology*. Baltimore: University Park Press, 45-65.
- Goffman, Erving 1959. *The Presentation of Self in Everyday Life*. New York: Doubleday.
- Goldsmith, Daena J 2001. A normative approach to the study of uncertainty and communication. *Journal of Communication* 51. 514-533.
- Gordon, Elizabeth 1997. Sex, speech, stereotypes: Why women use prestige forms more than men. *Language in Society*. 26:47-64.
- Gudykunst, William B. 1995. Anxiety/uncertainty management (AUM) theory. In Richard L. Wiseman (ed.) *International and Intercultural Communication Annual, vol 19: Intercultural Communication Theory*. Thousand Oaks, CA: Sage, 8-58.
- Hachimi, Atiqa 2001. Shifting sands: Language, gender and change in Moroccan Arabic and Moroccan society. In Marlis Hellinger and Hadumod Bussmann (eds.) *Gender Across Languages: International Perspectives of Language Variation and Change*. Amsterdam: John Benjamins.
- Haslam, S. Alexander, Craig McGarty, Patricia M. Brown, Rachel A. Eggins, Brenda E. Morrison and Katherine J. Reynolds 1998. Inspecting the emperor's clothes: Evidence that random selection of leaders can enhance group performance. *Group Dynamics* 2. 168-184.
- Jones, Elizabeth, Cynthia Gallois, Victor Callan, and Michelle Barker 1999. Strategies of accommodation: Development of a coding system for conversational interaction. *Journal of Language and Social Psychology* 18. 123-152.

- Kerswill, Paul 2001. Koineization and accommodation. In J.K. Chambers, Natalie Schilling-Estes and Peter Trudgill (eds) *Handbook of Language Variation and Change*. Oxford: Blackwell.
- Kerswill, Paul and Ann Williams (In press). 'Salience' as an explanatory factor in language change: Evidence from dialect levelling on urban England. In M.C. Jones and E. Esch (eds) *Language Change: The interplay of external, internal and extra-linguistics factors*. Berlin: Mouton de Gruyter.
- Labov, William 1972. *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, William 2001. *Principles of Linguistic Change: Social factors*. Oxford: Blackwell.
- Meyerhoff, Miriam and Nancy Niedzielski 1994. Resistance to creolization: an interpersonal and intergroup account. *Language and Communication*. 14, 4. 313-330.
- Meyerhoff, Miriam 1998. Accommodating your data: The use and misuse of accommodation theory in sociolinguistics. *Language and Communication*. 18. 205-225.
- Meyerhoff, Miriam 2000. The emergence of creole subject-verb agreement and the licensing of null subjects. *Language Variation and Change*. 12, 2. 203-230.
- Meyerhoff, Miriam 2001. Dynamics of differentiation: On social psychology and cases of language variation. In Nikolas Coupland, Christopher Candlin and Srikant Sarangi (eds) *Sociolinguistics and Social Theory*. London: Longman. 61-87.
- Milroy, Lesley and Dennis R. Preston (eds) 1999. *Journal of Language and Social Psychology* (Special issue: Attitudes, perception and linguistic features). 18, 1.
- Milroy, Lesley 2001. Internally and externally motivated language change: the case of Detroit African American English. Paper presented at 3rd UK Language Variation and Change conference, University of York, July 2001.
- Rickford, John and Faye McNair-Knox 1994. Addressee- and topic-influenced style shift. In Douglas Biber and Edward Finegan (eds) *Sociolinguistic Perspectives on Register*. Oxford/New York: Oxford University Press. 235-276.
- Sankoff, David and Suzanne Laberge 1978. The linguistic market and the statistical explanation of variability. In David Sankoff (ed.) *Linguistic Variation: Models and Methods*. New York: Academic Press. 239-250.
- Sankoff, Gillian 1980. *The Social Life of Language*. Philadelphia: University of Pennsylvania Press.
- Tajfel, Henri (ed.) 1978. *Differentiation between Social Groups: Studies in the social psychology of intergroup relations*. London: Academic Press.
- Tajfel, Henri and Turner, John C. (1986) The social identity theory in intergroup behaviour. In Stephen Worchel and William G Austin (eds) *Psychology of Intergroup Relations*. Chicago: Nelson-Hall, 7-24.
- Turner, John C. 1999. Some current issues in research on social identity and self-categorization theories. In Naomi Ellemers, Russell Spears and Bertjan Doosje (eds) *Social Identity*. Oxford: Blackwell. 6-34.

- Tuner, John C. Michael A. Hogg, Penelope J. Oakes, Steve D. Reicher and Margaret S. Wetherell 1987. *Rediscovering the Social Group: A self-categorization theory*. Oxford: Blackwell.
- Trudgill, Peter 1974. Linguistic change and diffusion: Description and explanation in sociolinguistic dialect geography. *Language in Society* 3, 215-246
- Trudgill, Peter, Elizabeth Gordon, Gillian Lewis and Margaret MacLagan 2000. Determinism in new dialect formation and the genesis of New Zealand English. *Journal of Linguistics*. 36. 299-318.
- Walker, James 2001. Ethnicity as explanation in linguistic variation: Is it really Black and white? Paper presented at Symposium on Ethnicity and Variation Studies, NWAV30, North Carolina State University.

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