25 Linguistic Outcomes of Language Contact

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In virtually every country in the world at the inception of the twenty-first century, linguistic minorities can be found. These have arisen both through immigration and through the adoption – or often, but not always, the imposition – of languages not previously spoken by local populations. Though this has led in hundreds of cases to language loss and to a reduction of linguistic diversity (as documented in the Wolfram chapter in this volume), language contact is part of the social fabric of everyday life for hundreds of millions of people the world over.

To what extent have these different historical and contemporary social processes produced different linguistic outcomes? The crucial point here, almost too obvious perhaps to merit stating, is that languages spoken by bilinguals are often altered such that ensuing changes differ from the results of internal processes of change within monolingual speech communities. In other words, languages spoken by bilinguals influence each other in various ways. The goal of this chapter is to review work in sociolinguistics devoted to understanding what has happened to languages "in contact", i.e. spoken by bilinguals (Weinreich 1968). The other chapters in this section (by Britain on diffusion and Kerswill on koineization) deal with contact among speech varieties that are more closely related. However, some of the same processes involved in these cases will also be seen to operate across language boundaries – the diffusion of uvular (r) in a number of European languages is one well-known example (Trudgill 1974b; see also Tristram 1995).

In this review, I will concentrate on research that, following Weinreich, (1) takes the speech community, rather than the individual, as its angle of vision; (2) focuses on the linguistic results of contact; and (3) and seeks to elucidate the social structuring of diversity internal to the speech community. This last criterion stems from the demonstration of Weinreich et al. (1968) that synchronic and diachronic linguistics can be reconciled within a perspective that recognizes the relationship between synchronic variation and ongoing change.[1]

1   Sociolinguistics and Second Language Acquisition

The working title of this chapter was "interlanguage," a term that emerged in the early 1970s in studies of second language acquisition (henceforth, SLA), in work by, e.g., Selinker (1972), Richards (1972), and Schumann (1974). Earlier, *interference* was introduced by Weinreich as a neutral term: "those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language, i.e. as a result of language contact" (1968: 1). However, SLA researchers had come to feel that *interference* reflected critically on the bilingual individual, in that individuals' inability to keep their languages entirely separate could be seen as a flaw or a failure. The concept of *transfer* began to replace *interference* in this work, and the term *interlanguage* was also introduced in an effort to conceptualize the linguistic system of the second language learner as rule-governed and orderly, rather than an error-ridden version of the target language.[2] In this respect, the concept of *interlanguage* in SLA parallels to some extent the notion of the *vernacular* in sociolinguistics. Pointing out this and other parallels between the two fields, a number of sociolinguists worked towards a rapprochement with SLA, and have been successful in establishing a tradition of "variationist" or "sociolinguistic" work within SLA (Dickerson 1975, Adamson 1988, Tarone 1988, Young 1988, Preston 1989, Bayley and Preston 1996, Major 1998).

The variationist current aside, most research in SLA is markedly distinct from an approach to language contact grounded in sociolinguistics. SLA as a field has its roots in psycholinguistics, where different themes tend to dominate. First, there is a focus on the individual, rather than on the speech community. Second is a methodological practice that stems from this focus: subjects tend to be sampled according to their characteristics as individual learners, rather than as community members. Many studies are geared to evaluating instructional methods in the classroom, and subjects are drawn from the student population in academic settings. Third, the idea of acquisition is central: the learners studied are generally regarded as instantiating way-stations in a process that is incomplete (this despite some classic cases of individuals whose progress toward acquisition has been somehow arrested, e.g. Schumann 1975). Fourth, there seems to be an overarching, dominant concern with model- and theory-building as the higher goals of the enterprise, rather than on establishing the nature of the linguistic systems that have emerged from language contact.[3]

In contrast, sociolinguistics, as developed over the past four decades, is anchored in a research paradigm that has had great success in the study of majority language speech communities. Many of the classic studies (e.g. Labov 1966, Cedergren 1973, Trudgill 1974a, Milroy 1980) were devoted to investigating, if not entirely monolingual speech communities, at least the majority language spoken by natives of the city in question, usually defined as either

native-born or having arrived prior to school age. Our own study of Montreal French, for example, set aside the question of language contact in Montreal (Sankoff and Sankoff 1973). We dealt explicitly with the 65 percent of Montrealers who were native speakers of French as reported in the 1971 census, and who unquestionably form a speech community. Like the Philadelphians described in Labov (1989), these Montreal French speakers share an invariant structural base that anchors the sociolinguistic variability we observe.

And yet, from the beginning of modern sociolinguistics, a major goal has also been the study of speech communities characterized by language contact (Weinreich 1951, Ferguson and Gumperz 1960, Gumperz 1964). Far from conceiving of language contact as an individual enterprise, these authors recognized that language contact is always the historical product of social forces. Their goal, as ours remains today, was to understand the linguistic outcomes. Although the dominant trend in language contact studies has been SLA, and the dominant trend in sociolinguistics has been the study of monolingual speech communities, sociolinguists have continued to study language contact, and it is this community- and historically-oriented body of work that will be reviewed here. This research has been difficult to assimilate into the mainstream of sociolinguistics partly because the variability found in bi- and multilingual speech communities is more extensive than that found in monolingual and majority-language communities (Mougeon and Nadasdi 1998). Members do not share the invariant structural base typical of the communities described above, and speakers vary across continua of proficiency. Thus description of a bilingual community involves more social parameters, more daunting inter-individual variation and major sampling and other methodological problems.

The linguistic outcomes of language contact are determined in large part by the history of social relations among populations, including economic, political, and demographic factors. Although a more extensive discussion of the speech community is to be found in the "Speech Community" chapter by Patrick, it is important to situate any discussion of the results of language contact within a sociohistorical perspective that considers the historical forces that have led to language contact. Such a perspective is central to the important and influential work of Thomason and Kaufman (1988) (henceforward, T&K), who attribute to these sociohistorical factors a unique causal weight in determining language contact outcomes. Lacking a quantitative perspective, however, T&K are forced to deny the importance of internal linguistic factors. Devoting a major chapter to "The failure of linguistic constraints on interference," they argue that: "linguistic constraints on linguistic interference . . . are based ultimately on the premise that the structure of a language determines what can happen to it as a result of outside influence. And they all fail" (1988: 14–15).

The burden of T&K's argument is that, given enough social pressure, *anything* can happen language-internally, and they adduce examples in which suggested internal, structural constraints have been overridden. Sociolinguists have, understandably, been largely approving of the pride of place T&K attribute to social constraints. However, in rejecting the contribution of internal linguistic

structure, T&K have thrown out the baby with the bathwater. The cumulative weight of sociolinguistic research on language contact suggests that although it may be true that "anything can happen" given enough social pressure, T&K are very far from the truth in their blanket rejection of internal constraints. In this chapter, I will review literature from a quantitative sociolinguistic perspective, in which internal constraints have been shown to act jointly with external constraints in shaping language contact outcomes.

2   The Sociohistorical Context

Language contacts have, historically, taken place in large part under conditions of social inequality resulting from wars, conquests, colonialism, slavery, and migrations – forced and otherwise. Relatively benign contacts involving urbanization or trade as a contact motivation are also documented, as are some situations of relative equality (Sorensen 1967, Sankoff 1980). Language contacts have in some times and places been short-lived, with language loss and assimilation a relatively short-term result, whereas other historical situations have produced relative long-term stability and acceptance by the bi- or multilingual population.

The question for the linguist interested in understanding the relationship between social forces and linguistic outcomes is, to what extent do these kinds of social differences result in different linguistic outcomes? T&K distill out from the potential morass of social parameters only two dimensions: the first is the directionality of the influence, characterized in terms of speakers' native language. They envision two alternative directions in which language contact can go, resulting in two distinct linguistic processes: *borrowing* and *substratum interference*. T&K reserve the term *borrowing* to refer only to "the incorporation of foreign elements into the speakers' native language" (1988: 21). When the influence goes the other way, and native language structures influence the second language, they speak of *substratum interference*. Having made this distinction, their second dimension brings back the social factors by setting up a scale of *relative pressure* of one group (one language) on the other. This schema neatly brings together the macro-level of the language and the micro-level of the individual speaker. Its tacit assumptions are that (a) individual speakers can be characterized in terms of native and second languages, and (b) that groups or communities, as collectivities of such individual speakers, are relatively homogeneous in this regard – or at least, that one can abstract away from differences internal to the speech community. Although there are situations in which these conditions hold perhaps only tenuously – individuals whose life experience leads them to feel that, psychologically, their two languages are on an equal footing, and communities in which subgroups vary in terms of language dominance – T&K's distinction between substratum influence and borrowing is a useful heuristic in reviewing the individual cases.

From a sociolinguistic perspective, I believe that we can go farther than T&K in exploring types of sociohistorical situations that have given rise to different linguistic outcomes. Moreover, a good deal of light can be shed on the nature of linguistic outcomes in language contact by systematically considering internal variability, both inter-individual within bilingual communities, and by the quantitative analysis of linguistic constraints on language contact outcomes.

Broadly speaking, two major social processes have given rise to contact situations of interest to linguists: conquest and immigration. The imposition of a language of wider communication has occurred both as a result of conquest per se,[4] and in the establishment of standard languages via institutions like universal elementary education, where local populations have been transformed into linguistic minorities in a broader political unit. In the case of a local linguistic group that has been conquered or surrounded by a larger group, slow language shift may mean many generations of bilinguals, providing ample opportunity for substratum influence to become established in the language towards which the community is shifting. Historically, many conquered or colonized peoples, or those who have found themselves newly incorporated into a nationstate, have felt the linguistic effects of these social changes only very slowly, giving rise to language contacts that have endured over decades, generations, or even centuries. These situations of stable bilingualism are perhaps the most likely of all to lead to what Weinreich called "integration": the acceptance of structures due to interference as part of the receiving language, and even to structural convergence and the Sprachbund phenomenon recognized in many parts of the world (Gumperz and Wilson 1971, Trudgill 1976, Sridhar 1978, Moral 1997).

On the other hand, the kind of population movements usually described as immigration, where newcomers fit themselves into an existing polity rather than establishing a new one, has often led to rapid linguistic assimilation of newcomers. Although there are exceptions (cases where immigrants have populated previously unsettled, relatively isolated territories, and have thus consituted new language isolates or relatively stable bilingual communities), immigration has usually resulted in rapid linguistic assimilation. Short duration of contact has often led to borrowing into the immigrant languages (Haugen 1955, 1970), and more extensive structural changes have been documented in those that have survived for several generations (cf. Clausing 1986 on German and Icelandic in the USA). However, in so far as such immigrant varieties have been relatively short-lived, the long-term effects have been modest. On the other hand, the influence of immigrant languages on the language to which immigrants have shifted has also tended to be rather restricted, unless descendants of particular immigrant groups have been numerically dominant, or in a position such that their speech patterns influence those of the wider community rather than the reverse. A major variable here would seem to be the duration of contact: whether linguistic assimilation is relatively rapid (often only one generation) or relatively slow, possibly over many generations.

In dealing with the particular linguistic phenomena that students of languages in contact have described, we will see many cases that lead us to nuance the broad characterization of social differences in the preceding paragraphs. Though scholars may differ as to whether or to what extent different aspects of linguistic structure are affected by language contact, there is broad agreement, following Weinreich, that the locus of language contact is the bilingual speaker, and that the process of "interlingual identification" is at the heart of ensuing language change.

3   Linguistic Outcomes of Contact

This section, which consitutes the heart of the chapter, discusses the linguistic outcomes of language contact in terms of four major domains. The first two of these constitute a privileged window of linguistic inter-influence: the phonetic/phonological level (section 3.1), and the lexical level (section 3.2). These are the two corridors which, in my view, constitute the major "gateways" to all of the other aspects of contact-influenced change. When a common second language is learned and used by a group of people – whether immigrants or by virtue of the introduction of a new language to a resident population – they often find themselves introducing second-language lexical items into conversation with fellow bilinguals in their original first language. Such items, referred to by Weinreich as nonce borrowings (Weinreich 1968: 47) seem to constitute the thin end of the wedge in various types of subsequent linguistic change. First, nonce borrowings are clearly the route for the later adoption or integration of these lexical items as loan-words in the immigrant or minority language (Poplack and Sankoff 1984). Along with numerous lexical borrowings there usually ensue phonological changes in the recipient language: almost all the studies reviewed in section 3.1 indicate *both* alterations in the phonology of the borrowed words, *and* subsequent adjustments in the phonology of the recipient language. Such alterations may include processes that apply only to the foreign-origin vocabulary, but may also spread to native vocabulary. Phonological change is also almost universally characteristic of adult L2 speakers, but for social reasons, the "substratum potential" such speakers have is usually very limited. When they do constitute an important segment of the speech community, they may have a very strong influence in bringing about phonological changes that can have far-reaching influences in morphology and syntax as well. The introduction of foreign lexical material carries not only phonological baggage, but often may carry morphological and syntactic baggage as well. As we shall see, the case frames and other morphological trappings from the foreign languages may also be the source of syntactic change (section 3.3) in the recipient language. Pragmatics and discourse will be dealt with in the same section, because of the intimate

relations between interlingual identification at the discourse level in bilingual linguistic usage, and subsequent developments in syntax. Finally, section 3.4 will deal with morphological and semantic consequences of language contact. Semantics is included in this latter section because most of the work with a semantic focus in the languages-in-contact literature has dealt with the question of grammatical categories, a topic intimately related to morphology.

3.1   *Phonology*

What happens when a group of speakers begins learning another language is well documented in the SLA literature. Phonological interference or transfer is overwhelmingly observed (Major 1988, Ioup and Weinberger 1987, Nagy et al. 1996, Archibald 1998). It would appear likely, then, that farther along in the contact history, in the process of acquiring bilingual competence, the version of the second language spoken by such people would still contain many phonological features derivable from their native language, i.e. substratum phonological influence. However, such a development constitutes a long-term linguistic influence only in so far as the descendants of these people have acquired and carried forward the substratum-influenced version of their parents, perhaps even transmitting it, or some of its features, to descendants of the native speakers.

    In an independent development, Van Coetsem (1988) enunciated a general theory of loan phonology based on a binary distinction consonant with the one proposed in the same year by T&K. Like T&K, Van Coetsem distinguishes between the "source language" and the "recipient language," and regards the factor of agency as primary. His term "phonological borrowing" is quite parallel to "borrowing" in T&K, as he restricts this process to "recipient language agentivity" (1988: 10), i.e. native speakers of the recipient language import into their language something from another, source language. The obverse of this, analogous to T&K's notion of substratum interference, is called "imposition" (1988: 11) – which occurs when foreign language speakers *impose* their own first language phonological habits on their own use of the second language. Van Coetsem notes that "in our usage the term imposition does not carry negative connotations; it simply denotes an agent other than the recipient language speaker" (1988: 11). He carefully distinguishes these acts of individual speakers from the acceptance, spread, or integration of such innovations (whether "phonological borrowings" or "phonological impositions") by the recipient language as a whole. Because few subsequent authors seem to have adopted the term "imposition" (Guy 1990 and Ross 1991 being the two exceptions known to me), I have not used this term in what follows. However, the general distinction between recipient and source language agency seems crucial in the study of language contact, and Van Coetsem's thoughtful discussion of several interesting cases (including Afrikaans–English contact) has informed our thinking on phonological issues.

3.1.1   *Substratum influence*

3.1.1.1   *Immigration*

Sociolinguistic studies that have examined the transition between the first contact generation and subsequent generations have tended to find the expected phonological interference among adults acquiring the second language. For example, Lee (2000) found only partial acquisition of the American English flapping rule among Korean immigrants to Philadelphia who had arrived as adults. McDonald's (1996) data from two groups of Cuban American high school students living in Miami's "Little Havana" revealed that "the degree and nature of Spanish-influenced phonology correlated with the age at which English acquisition began." Adamson and Regan (1991) found that in the Vietnamese and Cambodian immigrant community in Philadelphia, variation in the unstressed (-ing) suffix of English showed partial acquisition of majority community stylistic variation, as well as nonnative patterns.

If rapid language shift occurs, the contact situation obviously does not continue and thus there is no long-term substratum effect of immigrant language phonology. Both Lee's and McDonald's studies indicated that immigrant language influences tended to disappear in subsequent generations, as immigrant languages were lost and immigrants' descendants became monolingual speakers of the majority language. Lee's research showed that even immigrants who arrived as children were indistinguishable in terms of flapping from the native-born.

Two studies of contemporary immigrant groups, however, document some continuing substrate influence of original immigrant languages on the speech of their monolingual (or "new country language"-dominant) descendants. Santa Ana's (1996) quantitative study of (t,d) deletion among 45 English-speaking Chicanos in Los Angeles indicated that this population differs from other English speakers in several ways. He found sonority effects of adjacent preceding and following syllables, and also established that syllable stress does not influence deletion. Fought (1999), also working in Los Angeles, found that only some of the second-generation adolescents from the Mexican American community participate in the u-fronting typical of the Anglo community.[5] Those with strong Mexican American peer group ties were likely to prefer the more backed [u] that is more readily identified with the Spanish high back vowel. Sociolinguistic studies of third and fourth generation descendants of immigrants have shown remarkably few effects in any way attributable to the history of language shift among their parents and grandparents. Labov (1994), however, reported that Philadelphians of Italian ethnicity showed a strong conservative tendency with respect to the /o/-fronting that is typical of the city as a whole, a result that parallels Fought's report on Mexican American Angelenos. Lastly, Laferriere (1979) showed differences among Boston Irish, Jewish, and Italian ethnic groups in the treatment of the low back vowels. (On ethnicity, see the chapter by Fought.)

With such substrate-influenced phonological features so rare even among direct descendants of immigrants, it is even more exceptional to find regional

features where language shift constitues a putative source for difference. The exceptions tend to be cases in which the immigrant group and its descendants have become a local majority population, often geographically isolated.[6] Lance (1993) suggests that the northern dialect phonology found in a 10-county area of eastern Missouri that is otherwise in the South Midland dialect region is a result of heavy German settlement. He corroborates the influence of German phonology through interviews with elderly speakers who are assumed to represent the last generation of bilinguals in the area. Herold (1997) attributes the emergence of the *cot/caught* merger in the former coal mining towns of eastern Pennsylvania to the large numbers of Polish and other non-German immigrants to the area at the beginning of the twentieth century. A final case documented on the basis of the historical record concerns five sound changes in Czech that occurred in the fourteenth century, subsequent to a significant immigration of German speakers to urban and peripheral Bohemia (Boretzky 1991).

3.1.1.2   *Local groups bilingual in languages imported from outside*

Sociolinguistically, these situations are the obverse of those just discussed. Here a later-arriving group, rather than assimilating to the language already spoken in the area, imports a new language that is subsequently spoken by those already living there. In so far as ensuing bilingualism (and possibly, language shift) is often a very slow process, substratum influence may flourish under such conditions. To mention a few well-known historical examples, Latin displaced the languages in the western part of the Roman Empire (though it did not displace Koine Greek in the east); Anglo-Saxon largely displaced the preexisting Celtic languages in the British Isles (although the Danes and then the Norman French, conquerors whose languages survived for long periods of time, did not in the end impose their languages).

In modern times, standard languages have made incursions into areas where they were not previously spoken. The Cajun French population of Louisiana has been in contact with English since the mid-nineteenth century, and bilingualism there is longstanding, with massive language shift over the past several decades. Dubois and Horvath (1998) document stops (attributable to the French substrate) as frequent phonetic variants of interdental fricatives in Cajun English. Native speakers of Québec French, also with a long history of English contact, are described as hypercorrecting in their use of initial-h words in English (Auger and Janda 1992). In contrast, Bayley's (1994) study of t/d deletion in Tejano English in San Antonio, Texas, showed no effect attributable to Spanish among adult speakers (for example, as with speakers of mainstream English dialects, retention was categorical after r). However, his sample of 25 young people aged 14–21 was similar to the Los Angeles population of Santa Ana's study in the absence of a stress effect.[7]

A similar result has occurred in postcolonial situations where many speakers of local languages also speak languages of wider communication. One example is Muthwii (1994), who documents a case of trilingual Kenyans transferring

vowel harmony, stress and pitch patterns from their native Kalenjin into Kiswahili and English.

3.1.2 Borrowing

Adhering to both Van Coetsem's and T&K's concept of borrowing as, by definition, involving speakers' importing features from other languages into their native language, it is not surprising to find many studies that document the influence of native phonological patterns on foreign lexical items borrowed into the language. One example is Pereira (1977), who discusses numerous such processes in a study of the phonological adaptation of 300 English loan words into Brazilian Portuguese.

Sometimes phonological changes appear to be introduced despite the existence of more similar segments across donor and borrowing languages. Naim (1998) reports that although non-pharyngealized consonants occur in Beirut Arabic, consonants in Italian and French loan words are pharyngealized when they occur preceding long low vowels, apparently due to an identification speakers make between the vowels in these foreign words and the local allophone of Arabic /a/ that occurs after pharyngeals.

If it were the case that no speakers from the borrowing language ever became fluent in the language being borrowed from, this pattern might be more universal.[8] Nevertheless, most studies report that phonological adaptation of loan words is not total. Some foreign pronunciations are retained, and indeed have often been a source of phonological innovation in the receiving language. This is recently documented in the case of 1,500 English loan words in Italian (Socanac 1996). Davidson and Noyer (1997) discuss borrowings from Spanish into the Penutian language Huave that violate Huave stress rules, arguing that optimality theory can account for the nativization process by a re-ranking of the constraints that operate in native Huave phonology. Tsuchida (1995), also working in an optimality framework, notes similar results for English loan words in Japanese: native Japanese well-formedness conditions must be modified to account for the phonology of English loans. Penalosa (1990) documents partial phonological assimilation of Spanish loan words in four Mayan languages.

Paradis and Lacharité (1997) studied 545 French loanwords in Fula, spoken in Mauritania and Senegal, both countries that have been influenced by French for more than a century since initial French colonization. They found that the loan words were introduced by bilinguals of varying degrees of bilingualism, who adapted the foreign phonological sequences according to what they call "repair strategies." In Fula, these include breaking up French consonant clusters by either cluster simplification or vowel insertion, and the denasalization of French nasal vowels. Paradis (1995) found similar patterns in French loans in Moroccan Arabic and Kinyarwanda, and English loans in Quebec French. Other studies of English loans into Quebec French (Walker 1982, Picard 1983, Patry 1986, and McLaughlin 1986) show similar results: influence of the receiving language (French) coupled with change imported to that language via the

borrowings). Coetser (1996) reports that Afrikaans names borrowed into Xhosa during several centuries of contact have only been partially assimilated phonologically. Another example of mixed influences, also from the Pacific, concerns English loan words in Hawaiian. Schutz (1976) argues that in addition to the influence of Hawaiian phonetics on the borrowed words, missionaries were successful in "imposing" (in a sense quite different from that of Van Coetsem) a series of English consonants into Hawaiian in order to "preserve the identity" of English loan words. Finally, Stenson (1993), in a study of borrowings from English into Irish, also found only partial adaptation of foreign phonological features. In examining English interdental fricatives, alveolar stops, affricates, voiced sibilants, glides, and velar nasals, she found variability for all features except for the interdental fricatives in which there is overlap between Irish and Hiberno-English pronunciations. Stenson attributed the overall preference for adoption of foreign phonological features (rather than assimilation to Irish patterns) to universal bilingualism in English.

Boberg (1997, 1999) has studied the process of phonological assimilation historically in thousands of English words containing "foreign a." He points out that when English borrows words like *llama, Mazda, pasta, spa,* and *tobacco,* the "foreign a" must be assimilated either to the regular short-a class (like *cat* and *bag*), or to the "broad a" class (like *father* and *calm*). The longer a word has been in English, the more likely it is to have migrated into the "short a" class – a process that is also subject to phonological and dialect influences.

Of the many studies consulted on the phonological assimilation of loanwords, only one was devoted specifically to the lack of assimilation. Oswalt (1985) reports that English words are often used in Kashaya, a Native American language of California. However, they are unassimilated to Kashaya phonology, leading speakers to deny that they are borrowings (in contrast with the phonologically assimilated borrowings from Spanish). Two further studies (Ndiaye 1996, on the assimilation of French words into Wolof, and Shinohara 1996 on French loan phonology in Japanese) did not mention the retention of aspects of source language phonology. Although it is not clear whether such phenomena do not exist in these contact situations, or whether the authors simply chose not to discuss them, two other papers explicitly deny the existence of phonologically unassimilated loans in borrowing. Bergsland (1992) attributes the phonological assimilation of Scandinavian borrowings into Southern Sami (or Lapp), a Finno-Ugric language, to active resistance to outside influences by community members. Yip (1993) argues that Cantonese speakers do not perceive all the distinctions that English speakers do, and subject the nonnative input (English loanwords) to Cantonese well-formedness rules.

3.1.3   Borrowings or substratum influence? Cases of long-term coterritoriality

Studies of populations that have shared a territory for a long time, and where long term bilingualism has been the norm, may be more difficult to categorize.

All the cases discussed in this section appear to fall on the "borrowing" side, but the processes involved are less clearly determinable than in the studies reviewed so far.

Nagy's (1994, 1996) research on Faetar, an isolated dialect of Francoprovençal spoken in an isolated mountain area of southern Italy where its speakers have lived for several centuries, presents such a case. Faetar's geminate consonants, a feature atypical of Francoprovençal, would seem to have been borrowed from Italian by generations of Faetar's bilinguals. The geminates are found in native Faetar words as well as in borrowings from Italian, attesting to a thorough nativization of the phonological process.

In the Semitic language Maltese, the long contact with Sicilian and Italian has resulted in complete phonological integration of the approximately 25 percent of vocabulary from those languages (Krier 1980). However, English loans, numerous though not reaching 25 percent, are reported not to be phonologically assimilated, due to the shorter duration of contact and to lesser knowledge of English among the Maltese population. Nurse (1985) attributes the unusual feature (worldwide and in Bantu languages in general) of a dental, rather than alveolar, obstruent series in three Bantu languages of northeastern Kenya to historic, long-term contact with Cushitic languages.

In parts of the Western Pacific, groups speaking Polynesian languages migrated west from central Polynesia after the original great migrations eastward across the Pacific. Such languages, referred to as "Polynesian outliers" have been in contact for many generations with the Melanesian languages spoken in these islands. Ozanne-Rivierre (1994) reports that the Polynesian Outlier language Fagauvea, spoken on the island of Uvea, has evolved a 9-vowel, 27-consonant system due to contact with the Melanesian language Iaai. She reports that the influence has gone almost uniquely from Iaai (the pre-existing language) to Fagauvea (the immigrant language). The reverse process seems to have occurred in the Philippine language Sama Abaknon which, under the influence of several centuries of domination by Visayan, has reduced its vowel inventory from 6 to 3 (Jakobson and Jakobson 1980).

3.2   *Lexicon*

In discussing lexical aspects of languages in contact, it is overwhelmingly clear that the major process involved is borrowing. In the majority of contact situations, borrowing occurs most extensively on the part of minority language speakers from the language of wider communication into the minority language. On the other hand, one can readily identify words that have become accepted within majority language communities that derive from language shift by various immigrant groups and would thus clearly fall under the definition of "substratum influence." For example, a sampling of words from Yiddish that are known to a majority of the non-Jewish students in classes I teach at the University of Pennsylvania include *shmuck* and *shtick* (whereas familiarity with

other Yiddish-origin words like *meshuggeh*, *goniff*, and *tochas* tend to be known only to students with a Yiddish family background). However, as my search of the literature did not turn up any studies of this phenomenon, only borrowing will be dealt with in this section.

3.2.1   Borrowing

One of the most carefully researched areas in the entire field of languages in contact concerns the status of foreign lexical elements that appear in the everyday discourse of bilinguals. Research into nonce borrowings began as part of the larger study of code switching, in which the grammatical conditioning of switches – both single lexical items and longer strings – have been the focus of attention. It is not possible in this review to do justice to the massive topic of code switching. However, it is necessary to use code switching behavior as a point of departure, since the well-documented ability of bilinguals to draw on lexical items from both their languages can reasonably be considered as the beginning point of lexical borrowing.

Much of the work on the grammatical constraints on code switching for the past 20 years (beginning with Pfaff 1979, Poplack 1980) was devoted to grappling with the problem of how to distinguish single word code switches from borrowings. This seemed all the more pressing in light of two facts. The first is that "[i]n virtually all bilingual corpora empirically studied, mixed discourse is overwhelmingly constituted of lone elements, usually major-class content words, of one language embedded in the syntax of another" (Poplack and Meechan 1998: 127). There has been much debate about the formal linguistic constraints that condition or regulate switching, which grammatical sites accept or constitute barriers to switching, and indeed whether in the formal model of code switching it is useful to postulate a matrix language (Woolford 1983, Joshi 1985, di Sciullo et al. 1986, Myers-Scotton 1993, Mahootian 1994). However, there is a very broad consensus among researchers on the empirical generalization as stated above by Poplack (1980).

The second important fact is that it is clear (from, e.g., Haugen 1950, Poplack et al. 1988, and van Hout and Muysken 1994) that "major-class content words such as nouns, verbs, and adjectives are the most likely to be borrowed" (Poplack and Meechan 1998: 127). This consonance between switching and borrowing made it abundantly clear that switching was the royal road to borrowing, pointed out in Poplack and Sankoff (1984) as well as in work by other scholars (e.g. Heath 1990). However, most researchers were reluctant to go to the extreme of labeling every single-word "switch" they observed as a borrowing, especially in the absence of community-wide ratification or legitimation. Various criteria were invoked in an attempt to separate the legitimate, or legitimated loan words, from the nonce borrowings or switches. These included phonological or morphological integration, as well as attestations of use by a wider community of speakers. All of these criteria were applied in an attempt to identify individual cases or tokens of these single-word elements as

to whether or not they should individually constitute borrowings, and all were unsatisfactory given the variability in the data (e.g., many such words are found to be *partially* phonologically integrated, so that phonological integration cannot constitute a litmus test).

A significant breakthrough in resolving the question of single-word tokens as "code switches" vs. "borrowings" was made in 1998 via the application of quantitative sociolinguistic methodology, crucially including the criterion of accountability, to numerous corpora of spontaneous bilingual discourse. Poplack and her colleagues outline a quantitative methodology that renders operational the clear conceptual distinction between code switching and borrowing (Poplack and Meechan 1998). According to their method, bilingual discourse was analyzed as having five major observable components: (1) unmixed L1; (2) unmixed L2; (3) multiword alternations (readily understood as code switches); (4) attested loanwords; and (5) ambiguous lone items. Of these, only the last, the ambiguous lone items, are problematic. The methodological innovation was to statistically compare the patterning of these items with analogous, identified items in the same corpus. As explained by Adalar and Tagliamonte (1998) with respect to the Turkish Cypriots known as "Londrali" (who have lived for significant periods in England), this consists of comparing the lone noun, in Turkish or in English, "in contexts in which it is surrounded by the other language" (1998: 139) vs. when it appears in a multiword fragment of English or Turkish. In five different language pairs, this technique was applied successfully to resolve the code switching/borrowing question. The clear progression that exists between individual, nonce-borrowed items which testify to the productivity of other-language access for the individual bilingual speaker, and the social ratification of borrowings at the community level, can thus be studied independently of the muddy waters of code switching. In my opinion, this development has for the first time put the study of lexical borrowing on a sound methodological and theoretical footing.

Noteworthy in the sociolinguistic study of lexical borrowing are two other corpus-based studies by authors not employing the Poplack et al. methodology as such. The first is Mougeon and Beniak's (1987) demonstration of the social parameters associated with "core" lexical borrowing from English in the Francophone community of Ontario. Though "non-core" or "cultural" borrowing has long been accepted as a usual concomitant of language contact, the replacement of core L1 vocabulary by other-language lexical items, usually in situations where most minority group members make extensive use of the majority language, has been poorly understood, and the work by Mougeon, Beniak, and associates goes a long way towards filling that gap. The second corpus-based study (Boyd 1993) is important because it compares two groups of bilingual immigrants in the same host speech community: American English speakers and Finns living in and around Göteborg, Sweden. While different patterns of code switching behavior had previously been contrasted across different communities (Poplack 1985), Boyd's is the first to explicitly compare two different minorities in the same community, finding that Swedish

incorporations into Finnish were more readily identifiable as borrowings, whereas those into English more closely resembled code switching.

3.3   Syntax and discourse/pragmatics

Whether or not "grammar" or "syntax" can be borrowed at all is still very much in question. Although the T&K view has its proponents (e.g. Campbell 1993),[9] many students of language contact are convinced that grammatical or syntactic borrowing is impossible or close to it (e.g. Lefebvre 1985, Prince 1988, King 2000). These authors generally see grammatical change subsequent to contact as a consequence of lexical or pragmatic interinfluence, that may then lead to internal syntactic change. It is for this reason that I have chosen to combine syntax and discourse/pragmatics into one section of this review.

Among the varied proposals regarding the chains of events that can lead to contact-induced syntactic change, four lines of explanation have been proposed. The first derives from the type of phonological changes widely attested (and reviewed in section 3.3.1), attributable in the first instance to substratum influence and thus classified in the "substratum influence" section below. The second derives from lexical borrowing (section 3.3.2). The third, variously described as "camouflage" (Spears 1982); "covert interference" (Mougeon and Beniak 1991), and "normative assimilation" (Wald 1996) and also, I believe, related to the equivalence constraint in code switching (Poplack 1980) appears to be a syntax-internal contact process related more to substratum than to borrowing, and thus it will also be discussed in section 3.3.2. Fourth, in a related line of work, several studies have traced a discourse-to-syntax path in bilingual inter-influence, also apparently more characteristic, though not perhaps uniquely so, of substratum influence.

3.3.1   Substratum influence

As in phonology, the study of second-language acquisition in syntax may be of considerable potential interest in helping us to locate potential areas of influence from speakers' L1. Perhaps more than in phonology, however, scholars who have examined L2 acquisition have been less willing to attribute non-target like language to an L1 source, and have also given considerable weight to the influence of universals. Papers on the acquisition of French as a second language (e.g. Hulk 1991, Hawkins 1989, Hawkins et al. 1993) have considered both lines of explanation. One reason that authors may be more cautious in adducing contact sources for syntactic change is that markedness is often less clear in syntax than in phonology, and internally motivated change is often as likely, and more parsimonious, an explanation.

3.3.1.1   Immigration
The consequences of contact-induced phonological change may indeed be far reaching, and extend to morphological and even syntactic domains. As

described in section 3.2.1.1 above, language shift on the part of large numbers of Scandinavian invaders was a major influence in the development of the Northern and East-Midland dialects of Old English. Kroch and Taylor (1997) postulate a train of events beginning with contact-induced phonological change that resulted in the "impoverishment of agreement morphology." This in turn prevented V-to-I movement and led in these dialects to the development of the CP V2 structure typical of the modern Scandinavian languages.

The immigration of large numbers of L1 speakers of Yiddish to the United States in the early years of the twentieth century resulted in language shift that has in turn produced substratum effects in the English of their descendants. Prince (1988) has analyzed the "Yiddish movement" construction[10] not as a syntactic but as a discourse level example of Yiddish influence on English. The syntax of Y-movement is identical to the focus-movement constructions that exist already in English; the change involves a widening of the pragmatic domain in which these constructions can be used to a context in which the moved NP is not previously salient in the discourse (as opposed to the standard English case in which the moved NP must already be salient). Though Prince dubs this process "borrowing," she includes in a prescient footnote: "Intuitively, one may thus call the Yiddish-Movement case an instance of 'interference' rather than borrowing, but I am at a loss to find a principled basis for such a distinction" (Prince 1988: 516). This is exactly the type of case that both van Coetsem and T&K would understand as interference, for the principled social reason that it is a concomitant of language shift, but these arguments were unavailable to Prince since they were published in the same year as her paper.

Sociolinguistic research on contemporary language contact situations has been able to carefully trace the differential usage patterns among bilinguals that apparently provide a path for often subtle contact effects. Mesthrie and Dunne (1990) document a continuum of varieties in English relative clause types in the English of Indians in South Africa, with major influence on second-language speakers but some continuing influences of substratum on English-dominant speakers as well. In a study of reported speech in East Los Angeles English, Wald (1987) observes that when a large, ethnically homogeneous community shifts from one language (L1) to another (L2 for those in the initial stages of the contact), the opportunity arises for substratal influences to survive. He analyzes this process as one in which interlingual identification skews the pattern of grammatical variation to maximize matching with L2 of L1 grammatical structures, as well as resulting in lexical reinterpretation that may then lead to the creation of novel grammatical patterns. Following this line of research, Wald (1996) formulates two principles that govern bilingual usage: (1) "normative assimilation," i.e. not violating the grammatical norms of the socially dominant language (English in this case) and (2) "shortest path", i.e. selecting the norms of the socially dominant language that most closely correspond to those of the prior language, in studying the use of English *would* among Mexican Americans in east Los Angeles. That the general English modal/stative verb interaction operates in this dialect is attributed to the

principle of normative assimilation, but in hypothetical contexts, this interaction is weaker, which Wald attributes to the fact that Spanish provides no basis for the interaction.

3.3.1.2   *Local groups bilingual in externally imposed languages*

As pointed out earlier, local groups bilingual in externally imposed languages, or who have a history of language shift that has taken place over a long period of time, provide perhaps the most fertile ground for features of substratum origin to become established in the speech community as a whole. However, careful studies of such situations have often cautioned against jumping to conclusions about substratum influence, first, because sources other than substratum may turn out to be historically correct, and second, because descriptions of contact varieties may be descriptions of L2 speakers, not of stable bilingual or L1 speech. In a study of eight characteristics that have been widely described as characteristic of "Andean Spanish," i.e. the Spanish of speakers from Quechua and Aymara backgrounds, Escobar (1995) states that many of the features in fact only hold for L1 speakers of Quechua and Aymara who have limited proficiency in Spanish. Distinguishing between these speakers and the truly bilingual, her detailed study of possessive constructions parallels the work of Harris in attributing some construction types common to Andean Spanish as a whole to "older varieties of Spanish" (1995: 62), and, like him, cautions against jumping to conclusions about substratum influence in contact varieties.

In the case of Irish English, Harris (1984) concludes that, with the exception of the "after +Ving" construction, "the nonstandard Hiberno-English 'perfect' forms, far from being Hiberno English innovations with an exclusive background in substratum interference, are actually retentions of older English patterns" (1984: 320).[11] In a follow-up study, however, Harris (1991) cites data from an unpublished 1982 thesis by Markku Filppula that he regards as a convincing demonstration of an Irish Gaelic substrate source for the "informative-presupposition" *it*-clefts[12] in Irish English. Harris notes that "quantitative differences confirm the existence of a post-contact continuum with the most markedly nonstandard varieties displaying a greater degree of substratal input than intermediate varieties which have undergone varying degrees of convergence towards the superstrate"(1991: 201).

Mithun (1992) traces a discourse-to-syntax path in documenting the often subtle influence of Eastern Pomo on several syntactic patterns in the English spoken by members of several communities in northern California, including the use of pronouns and of the definite article, as well as clause-linking strategies.

3.3.2   *Borrowing*

What about the immigrant or minority languages themselves? What are the effects of borrowings brought back into the erstwhile L1 by its speakers who have become bilingual in the dominant or majority language? Here we must come face to face with the question of "structural borrowing." This notion has

been criticized by, e.g., King (2000) for vagueness, lack of precision and/or lack of detailed evidence or analysis in oft-cited but scantily documented cases frequently referred to in the languages-in-contact literature. There is, however, a growing body of research that goes farther than hand-waving or invoking isolated surface parallels.

A detailed study of Prince Edward Island French has documented a variety of French that shows numerous morphological and syntactic differences from other French varieties, including the incorporation of many borrowings from English, the dominant language with which it has been in contact for centuries (King 2000). Based on her analyses of the introduction of English *back* in identification with the French *re-* morpheme, of preposition stranding, and of the borrowing of English wh-words with ensuing changes in relative clauses, King concludes that "the influence of English on PEI French . . . has been essentially lexical," and that these lexical innovations "have triggered particular language-internal changes, resulting in the emergence of a number of structural changes in PEI French" (King 2000: 173). Our own study of French–English contact in Montreal is difficult to categorize because although Anglophones are the minority, English has been in many ways the socially and politically dominant language. Substrate-related linguistic influence could be argued for the dramatically increased use of *comme* "like" as a discourse marker for Anglophone speakers of French, but this appears to be the case for young native speakers as well (Sankoff et al. 1997).

Prince (1988), in a study of the influence of the Slavic focus-presupposition construction on Yiddish, examines the apparent modeling of the Yiddish *dos*-initial sentences on the Slavic *eto*-initial sentences of, e.g., Russian. She concludes that sentences of the type: *Dos shlogst du di puter* (lit. "it beats you the butter" or "It's you who's churning the butter!") constitute a pragmatic, not a syntactic borrowing from Slavic. Prince shows that (1) there was already a syntactic model in the language: the Yiddish *es*-sentences, and (2) the Yiddish V2 syntax was not altered via this language-contact innovation, because in contrast to Slavic, Yiddish can front only subjects, and must have the verb in the second position. This case is of particular interest not only because of Prince's clear and persuasive exposition, but also because it is a case of speakers clearly importing something other than a lexical item into their native language from a second language: but still, according to Prince, not a structural borrowing. As she states, "While the syntax of *dos*-sentences was native to Yiddish, the discourse function associated with them was clearly a Slavic borrowing" (1988: 511).

A final study that links discourse and syntax is Matras (1998), who explains the frequent borrowing of "utterance modifiers" from the pragmatically dominant language by minority group members as being related to the "cognitive pressure" they experience to "use the dominant language's resources for situative discourse regulation."

Although stable, long-term bilingualism is well-documented in many minority language communities all over the world, it is also the case that language shift and language loss has occurred with linguistic minorities as well as in the

case of immigrant communities. The linguistic concomitants of language attrition or obsolescence is not a topic that can be taken up in this review (cf. Dorian 1989). However, some of the literature that documents heavy influence of the majority language in such situations may be reflecting diminished competence in the minority language by younger, majority-language dominant speakers. Kroskrity (1978) on complex syntax in Tewa, and Fortescue (1993) on word-order changes in West Greenlandic Eskimo, both under the influence of English, appear to be examples of minority languages in situations of language shift.

3.4   *Morphology/grammatical categories*

The adoption of bound morphemes has been stated by many authors to be the among the most resistant features of language to contact-induced change. After reviewing the literature, I am more convinced than ever that this is true. Only a few cases came to light, and almost all involved morphemes that are, if not entirely free, not really bound either. The other type of case to be reviewed here concerns grammatical categories.

3.4.1   *Substratum influence*

3.4.1.1   *Immigration*
The Norse invasion of England provides a case in which language shift by newcomers led to morphological change in the receiving language – a rare type of change that seems only to have been possible because of the massive numbers of Scandinavians involved, and the intimacy of their contacts with the pre-existing population. The third person plural pronouns with initial th-forms were borrowed into English at that time, though during the thirteenth century they were in competition with the English h-initial forms (Morse-Gagne 1988).

The massive migration of foreign workers into northern European countries, where most languages have relatively rich inflectional morphology, has led to a fertile field of investigation into the new varieties of these languages as spoken by immigrants and their children. However, it has been less easy to document substrate influences on morphological regularization given that similar results can be explained by, e.g., universal processes of simplification.

3.4.1.2   *Local groups bilingual in externally imposed languages*
Studies of morphological change attributable to language shift or substratum influence seem to be almost nonexistent, prompting this author at least to assume that such changes are also very rare in language contact. A recent paper by Dede (1999) documents the use of an ablative postposition in the Xining dialect of Chinese, which he attributes to the fact that the original inhabitants of the region were speakers of Monguor, a Mongolian language, who shifted to Chinese.

Two further studies would also be potential candidates for a "borrowing" explanation, since they concern changes in minority languages in which L1 minority speakers may have made changes in their usage patterns modeled in some way on the majority language. Both concern reduced use of the subjunctive in Romance languages in contact with English: Silva-Corvalán (1994) on Los Angeles Spanish; and Poplack (1997) on Ontario French. Silva-Corvalán comes to the conclusion that internal tendencies toward a reduction of the use of the subjunctive are strengthened in the language contact situation. Poplack, however, finds that higher levels of bilingual ability, which were associated with upper class speakers, in fact favored the use of the subjunctive. She concludes that when community members regularly use both languages, language loss, language shift, and convergence are not necessary consequences in a minority language situation.

3.4.2   Borrowing

By the definitions we have adopted, any change to the immigrant language that is brought about through the bilingualism of its speakers in the language of their new country is technically a borrowing. However, this is a less obvious process in the case of morphology, said by many authors to be much more resistant to contact-induced change in general, a generalization supported by the relative paucity of documented cases of contact-induced morphological change.

More common, though still a very small number, are situations in which lexical borrowings must be adapted to the morphological categories of the receiving language. The borrowing of nouns into languages with a gender or noun-class system is one type of example in which the borrowing process involves a reconfiguration of the borrowed material into new categories. Barkin (1980) studied the gender assignment of borrowed nouns from English into Spanish, finding that the assimilation of borrowed words requires gender assignment. In Swahili, borrowed words from German were studied by Pasch and Strauch (1998), who discovered animacy to be a major factor in class assignment. Bokamba (1993) shows that in multilingual language contact situations, the transformation of a pre-existing language into a lingua franca may result in morphological simplification even when the participants already have very similar category systems in their native languages. Thus KiTuba, Kinshasa LiNgala, and Shaba KiSwahili deviate from KiKongo, Standard LiNgala, and Standard KiSwahili, respectively, in terms of a simplification of the noun class morphology.

4   The State of the Art

This review has sampled recent work on languages in contact, largely from a sociolinguistic and quantitative perspective, in an attempt to deal with the

major outstanding issues regarding the linguistic consequences of language contact. (I might add that this reviewer has been considerably daunted by the sheer amount of new research on these questions, and considerably impressed by its quality.)

The three major questions I have tried to address are as follows. First, to what extent do social distinctions of the kind made by van Coetsem and by T&K, and elaborated on in this review, constitute a useful angle of vision in differentiating the linguistic phenomena? Second, does the idea of a cline of "borrowability" stand up to scrutiny? Third, what is the relationship between the individual bilingual speaker (central to the concerns of SLA) and the speech community (of primary importance in sociolinguistics)?

4.1   *The social embedding of language contact*

When we look at the varying social circumstances of language contact separately according to the various domains of linguistic structure, it is clear that these circumstances have a differential effect. The distinction between borrowing and substratum interference with language shift, made so forcefully both by van Coetsem and by T&K, holds up very well in general, as does the additional distinction between immigrant communities and linguistic minorities created by political developments in the areas where they have lived for many years. These different social circumstances do not, of course, have a direct effect on language; rather, they lead groups of individuals involved to differentially deploy their linguistic resources, and thus in turn affect developments at the level of linguistic structure.

4.2   *A cline of borrowability?*

Though most language contact situations lead to unidirectional, rather than bidirectional linguistic results, conditioned by the social circumstances, it is also the case that linguistic structure overwhelmingly conditions the linguistic outcomes. Morphology and syntax are clearly the domains of linguistic structure least susceptible to the influence of contact, and this statistical generalization is not vitiated by a few exceptional cases. On the other hand, lexicon is clearly the most readily borrowable element, and borrowing lexicon can lead to structural changes at every level of linguistic structure (cf. Muysken 1985, 1999 in addition to the individual studies discussed above). And phonology is very susceptible to change, both on the part of the individual L2 speakers (see section 4.3 below), and as a result of word borrowing, where most studies document the influence of recipient-language structure on foreign borrowings, as well as long-term influence on the phonology of the recipient language.

4.3 The individual and the community in language contact

Language change presupposes diffusion from individuals or smaller groups to the speech community as a whole, and this applies to language contact every bit as much as to internal linguistic change. This review has not focused directly on this question as regards language contact, but it is clear that individual strategies, individual practices in bilingual discourse, add up to community-level change.[13] To cite Benveniste's dictum: *Nihil est in lingua quod non prius fuerit in oratione* (1966: 131). Thus the massive SLA literature, the question of the critical period (Harley 1986, Scovel 2000), the question of linguistic change across individual life spans and how it interacts with language change in general (Hyltenstam and Obler 1989) – all are relevant to the linguistic outcomes of language contact. To my way of thinking, the reintegration of the individual into the overall matrix of the speech community and the evolving languages, represents the greatest challenge and the greatest scope for advancement in the research of the next decade.

NOTES

1 Given the enormous literature on languages in contact, it was not possible in this review to do justice to the more extreme results of contact in generating new languages or radically different language varieties. Regrettably, I have had to omit consideration of pidgins and creoles (cf. Mufwene 2001), mixed languages (cf. Bakker and Mous 1994), or contact languages per se (cf. Wurm et al. 1996).

2 Tarone (1988), reviewing the history of the development of the concept of interlanguage, sees Richards' critique of the error-analysis paradigm in SLA, as well as the influence of the Chomskian focus on universal grammar, as pivotal in the formulation and early popularity of "interlanguage" as a new way of conceptualizing second-language grammars.

3 A further property of the SLA literature is the idea that acquiring second languages is difficult. Since it focuses on SLA mainly in the educational context, a major goal is to measure relative success in SLA, much the way educators evaluate relative success in other school subjects. It would be foolish to deny that learning second languages has been experienced by millions of people worldwide as a difficult task in which success is often only partial. However, the dominance of this perspective obscures the normalcy of bilingualism elsewhere, and the fact that it can be seen by the bilinguals themselves as relatively unproblematic (Gumperz and Wilson 1971, Sorensen 1967).

4 It is certainly not historically the case that all political conquests have resulted in a shift to the language of the conquerors, and the number of

attested instance of conquerors or their descendants eventually shifting to the language of the conquered is also very numerous. Whichever the *direction* of shift, however, history has generally documented a relatively slow shift that has led in general to similar types of substratum influence.

5 One other surprising result is the study by Flege et al. (1995) that shows that the pronunciation of English consonants by Italian immigrants who arrived in Canada in early childhood can still be reliably distinguished, many decades later, from that of native-born native speakers. This result distinguished those immigrants who speak Italian on a regular basis from those who do not.

6 Such a demographic effect was identified in creole studies by Baker and Corne (1982) in their historical study of the evolution of Mauritian Creole, and later adopted as a key diagnostic in Bickerton's (1984) "bioprogram" theory of creole genesis. Mufwene (1996, 2001) has more recently given great weight to the relative proportions of speakers of languages in contact situations over time, in his articulation of the "founder principle" in creole genesis.

7 In treating the Mexican American young people in Los Angeles who were studied by Santa Ana and by Fought as the descendants of immigrants (section 3.1.1.1), I followed details in their descriptions of their speakers in terms of their families' (almost all very recent) immigration history. Bayley, in contrast, makes the point that a high proportion of the Mexican Americans in the San Antonio area are the descendants of people who were there prior to English speakers,

and so is treated in this, the "contact with languages imported from outside" section of the current paper. I realize that in neither geographical area is the socio-historical distinction hard and fast.

8 It is generally accepted that the longer it has been since a foreign word was introduced into the borrowing language, the more likely the pronunciation is to have been nativized. The idea that it is in initial contact that foreign phonological patterns might seem most foreign may seem to introduce a paradox here. If so, one might expect the converse: words pronounced via native (borrowing language) phonology earlier on, with later familiarization leading to an acceptance of the foreign features. However, the normal path of introduction is for bilinguals (who can pronounce the foreign sounds) to introduce the words to the wider community in which the later-adopting monolinguals progressively impose native phonological patterns.

9 It should be noted that Campbell (1993) nuances his support for this position as follows: "Thus I conclude with Thomason & Kaufman (1988: 14) that 'as far as the strictly linguistic possibilities go, any linguistic feature can be transferred from any language to any other language.' This being the case, it is safer to think of these proposed universals and principles of borrowing as general tendencies, and not as absolute constraints" (1993: 104).

10 An example of Yiddish-Movement from Philip Roth's *Portnoy's Complaint* (Y-moved constituent underlined): "In less than a week it's Rosh Hashana and he thinks I should take a vacation. *Ten people*

I'm having" (cited in Prince 1988: 512).

11   Harris (1984) does attribute an Irish Gaelic substratum source to two other syntactic features of Hiberno-English: the failure of negative attraction (sentences like "anyone wasn't at home," where other English dialects would have "no-one was at home"); and "subordinating *and* with subject pronoun and *ing*-participle" (1984: 305), such as "He fell and him crossing the bridge".

12   Harris (1991) cites the following example from Filppula: "In God's name, what happened to you?" asked the father. "It was Micheal Rua who gave me a beating", said the son (1991: 199).

13   That individual difference in orientation to other language groups are relevant here is evident from Poplack's (1978) early study of how Puerto Rican immigrant children in Philadelphia differentially deploy phonological variants typical of White vs. Black Philadelphians.

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