



Introduction: Contact Among Genetically Related Languages

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The study of language contact has blossomed in the last several decades, especially since the publication of Uriel Weinreich's ground-breaking *Languages in Contact* 60 years ago (Weinreich, 1953). Linguists have come to see contact as one of the most important mechanisms of language change, with some going so far as to suggest that contact is the principal catalyst for change (e.g., Dixon, 1997).

While the extent to which language contact should be given primacy in models of language change is debated (see, e.g., Bowerman, 2010 for discussion), there is no question that the effects of contact are of critical importance to our understanding of language change and relationship, and that they provide intriguing insights into past interactions among peoples. The relevance of contact has been recognized by linguists for well over a century—the German linguist Hugo Schuchardt famously declared in the 1880s that there is no language completely free of foreign influence (Schuchardt, 1884).¹ However, the scientific study of language contact gained its most solid foundation considerably later, with the publication of Weinreich's (1953) seminal book; this work treated contact-induced change systematically according to the grammatical categories involved (lexicon, phonology, morphology, syntax, etc.) and the probability of transference within them, i.e., movement of features

¹ “Mit mehr Recht als Max Müller gesagt hat: ‘es gibt keine Mischsprache’, werden wir sagen können: ‘es gibt keine völlig ungemischte Sprache’. Wenn überall bei innigem Verkehr verschiedensprachiger Menschengruppen auch die Sprachen aufeinander wirken, so wird umgekehrt da wo eine physische Kreuzung, die ja den allerinnigsten Verkehr voraussetzt, nachgewiesen ist, auch eine Kreuzung der Sprachen sich vermuthen lassen.” (Schuchardt, 1884: 5)

from one language to another. Thomason and Kaufman's (1988) publication was a second major contribution, and brought the relevance of social factors into focus. Over the last few decades, a remarkable flow of studies has been published, new case studies have come to light, and new theories have been proposed and examined. Conferences probing the topic from various aspects are conducted regularly and with impressive attendance.

The most important shift in this field has been the attempt to identify and isolate what motivates and facilitates the transfer of linguistic features in the languages or speaker populations involved. One of the major issues discussed in the context of contact is the question of linguistic structure and what influence typological and structural similarity has on the extent of borrowing. The assumption that similar structure is an essential factor in borrowability (i.e., a 'structural compatibility requirement'), which was common early on (Weinreich, 1953; Moravcsik, 1978), has been largely abandoned (see Thomason and Kaufman, 1988); however, recent studies suggest that there is some correlation between structural similarity and structural changes, although this may hold only as a tendency (e.g., Haig, 2001).

Additionally, sociolinguistic factors have been recognized as essential to the understanding of the dynamics of transfer in contact situations. Myers-Scotton (2002) has shown that the level of speaker proficiency in two (or more languages) has crucial relevance to the degree of transfer of linguistic features. Others argue that a complex interplay between linguistic constraints and social constraints shapes the results of contact (Sankoff, 2001). Thomason, however, has argued in a number of publications (most recently Thomason, 2008) that social factors are more predictive than linguistic factors in contact-driven change. She has shown that there are no absolute linguistic constraints on language change, and while not every change is equally probable, any change seems to be possible (and, in fact, attested).

These considerations highlight the two-fold problem raised by the issue of contact among genetically related languages: on the one hand, how are we to distinguish between the outcomes of inheritance and contact; on the other, how might the dynamics of contact-induced change actually vary according to the degree of language relationship? In fact, if we trace language relationships far enough back in time, we find that the distinction between internally and externally motivated change essentially disappears. The spread of innovations is carried out via individual speakers, and the dynamics of spread—whether this occurs within or across speech communities—are shaped by these speakers' social affiliations and practices. Work by Milroy and Milroy (1985), Milroy (1992), Trudgill (2011, *inter alia*), Ross (1997), Rampton (1995), and others explores many of these fine-grained, speaker-to-speaker interactions and their relevance to language change.

Nevertheless, the field has seen something of a disconnect between such focused studies of sociolinguistic variation and the investigation of change and relationship among distinct languages. While the study of contact and inheritance among genetically related languages suggests a logical bridge between these two approaches, most investigations of language contact phenomena to date have focused on languages of different, or only distantly related, families. In such languages, if any similarity exists prior to contact, it is likely typological, rather than genetic—and thus change is relatively easy to categorize as either external (i.e., contact-driven) or internal. Most of the theoretical works on language contact pay little attention to genetically related languages, and seem to imply that the situation there is no different than when contact occurs among unrelated languages (e.g., Thomason, 2001; 2008; Myers-Scotton, 2002). Thus, for example, the debate over the primacy of social or linguistic factors pays little attention to the most common reason for structural similarity and population contact, namely, close genetic relation. The linguistic map of the world indicates that recently split languages tend to be located in the same geographical area, which means that their speakers may, therefore, continue to be in constant contact. Such situations may be an extreme point on a continuum, as Thomason (2008: 47) suggests, but they may have profound implications for the dynamics of the contact situation, both socially and linguistically. Social attitudes toward close relatives and neighbors may both mitigate and exacerbate speakers' perception of the differences that pertain among the groups, which can foster different kinds and degrees of linguistic exchange. Likewise, structural similarity between related languages can include both functional identity and etymological resemblance, which may facilitate transfer. Among other considerations, it may be harder for speakers to identify what is foreign and what is original; for example, the Biblical Hebrew and the Aramaic masculine plural noun endings, *-im* and *-in*, respectively, are interchangeable in some forms of post-Biblical Hebrew, whose speakers are bilingual. The extent to which such similarities—both linguistic and social—may facilitate the exchange of linguistic material is not yet well understood.

The issue of contact among genetically related languages also presents significant problems for historical linguistics, with profound implications for determining subgrouping among related languages, reconstructing protolanguages, and understanding the histories of their speakers (see, for example, Harrison, 2008). In the past, historical linguists often worked under the assumption that languages split cleanly from a common language (proto-language) and developed independently thereafter. Though most historical linguists today are aware that this scenario is not accurate for most language families, such an 'uncontaminated' situation remains a convenient

starting point for certain types of historical models, particularly those that assume a normalized, treelike pattern of linguistic splits. Nevertheless, this assumption has proved largely untenable, or at least difficult to maintain. In fact, in many cases sister-languages and dialects continue to reside side-by-side, allowing regular contact and transference among their speakers. This is the case in many communities in modern Europe and elsewhere in the world, such as among the East Tukanoan languages of the Amazonian Vaupés (e.g., Stenzel and Gomez-Imbert, 2009; Chacon, forthcoming; Epps, this volume). It is also known to have taken place in antiquity (Woodard, 1997; Watkins, 2001; Adams, Janse and Swain, 2003); in the Ancient Near East, for example, speakers of Akkadian, Aramaic, Canaanite and Ugaritic were in various degrees of contact with each other for centuries (e.g., Kaufman, 1974; Malbran-Labat, 1996; Watson, 2001; Khan, 2004). While the concept of the ‘linguistic area’ (*Sprachbund*) is well known and studied, the effects of areal diffusion on genetically related languages are rarely investigated in detail.

Contact among related languages may have fundamentally different implications for historical analysis than those involving contact among unrelated languages. The effects of contact among related languages may lead to erroneous family trees, in which languages are assigned to incorrect subgroup nodes on the basis of borrowed similarities. This kind of error is notoriously common in approaches relying on lexicostatistics (where only similar vocabulary is considered), but also may result when languages have shared phonological and grammatical features, and even sound changes (which are frequently treated as a primary diagnostic for subgrouping, but may also be borrowed; see, e.g., Campbell, 2004). Furthermore, contact among dialects at an early stage of differentiation may result in a lack of clear binary splits, as has been argued for the Karnic branch of Pama-Nyungan (Bower, 2006). Similarly, the subgrouping of Arabic dialects is a perennial problem, with scholars unable to agree on details beyond general splits because of migrations within the Arabic-speaking continuum, long-standing contact among some dialects, and a process of urbanization that blurred the traditional difference between nomadic and sedentary dialects (Al-Jallad, 2009; Magidow, 2013). Even contact among dialects after a period of separation may exhibit linguistic conversions that are hard to distinguish from evolutionary developments. One such example is the intense contact situation and transference of linguistic features in contemporary Jerusalem between speakers of Hasidic Yiddish, a Central Yiddish dialect, and Jerusalemite Yiddish, a North-Eastern Yiddish dialect. These dialects are varieties of Eastern Yiddish, a Germanic language, which were spoken in different parts of Europe. Their speakers subsequently left Europe at different

times² and found themselves inhabiting the same neighborhoods in the second half of the 20th century (Assouline, 2010). This diffusion of various features at different points in a language's history, sometimes in its prehistory, can go so far as to create languages of mixed genetic character, and can render straightforward categorization and subgrouping difficult or even untenable (Harrison, 2008).

Clearly, the greatest challenge to our understanding of the relationship between borrowing and inheritance lies in teasing them apart, since both give rise to linguistic similarity. The general lack of detailed investigation of contact among related languages, as discussed here, is unquestionably a result of this difficulty. In contrast, the differences between unrelated or distantly related linguistic systems make identifying borrowing of various kinds—from direct borrowing of forms to calquing to the copying of phonemic distinctions or grammatical constructions—a relatively uncomplicated endeavor. Even when borrowings have been modified to fit the receiving system, their foreign features may still be obvious. For example, Indo-European loans (e.g., telephone) into Semitic languages are analyzed as root-based forms (e.g., t-l-p-n), in accordance with the morphological system of these languages. Once a root has been extracted, speakers can create new verbs (e.g., Hebrew *tilpen* 'he placed a call') and nominal formations (e.g., Hebrew *talpaniya* 'switchboard'); however, four-consonant roots are rare in these languages and their existence, while possible, is felt as an aberration. On the other hand, loanwords borrowed from other Semitic languages are based on three-consonant roots and typically reflect the same type of phonological restrictions in the receiving language. Internal borrowing is therefore much easier to adapt and may intertwine seamlessly with existing paradigms.

Yet despite these challenges, detailed investigation that traces historical developments closely and weighs different features according to their relative borrowability can make progress toward untangling these complex linguistic relationships. Establishing the methodological best practices and most common pitfalls in distinguishing contact from genetic inheritance remains an outstanding challenge in historical linguistics. While studies have been conducted on contact between genetically related languages (e.g., Hebrew and Aramaic, Scandinavian languages), their results have yet to significantly inform the theoretical discourse.

² Speakers of Jerusalemite Yiddish left Lithuania in the 19th century and settled in two centers in today's Israel, while speakers of Hasidic Yiddish settled in Israel in several waves following the two world wars.

This issue of the *Journal of Language Contact* considers a range of questions that arise in investigating contact between related languages. We highlight the following, in view of the articles assembled here:

1. What kinds of problems are unique to dealing with contact among closely related languages? Is it possible to conclude that some contact-induced changes are more likely to take place in related languages? Well-grounded hierarchies of borrowability rank morphology as a particularly resistant category to borrowing (e.g., Thomason, 2001). It seems, however, that in closely related languages restrictions on morphological borrowing are far less stringent (Mithun, Al-Jallad, Law).
2. What insights may be provided by case studies of particular contact situations involving related languages? Can these insights serve to inform our theoretical understanding of contact in general, or should contact between genetically related languages be treated as a different type? As noted by several contributors to this volume, studies of contact among dialects have typically been considered to be primarily within the purview of dialectologists, and have rarely been taken up by scholars interested in language contact more generally—although the distinction between dialect and sister-language is far from clear-cut. Several studies in this collection consider the effects of contact among dialects, as well as more distinct languages (Al-Jallad, Beaulieu, Law).
3. What are the implications of contact effects among related languages for reconstruction? What criteria should we use to distinguish evolutionary changes from contact-induced changes, when contact has occurred? Many historical linguists consider the current methodological toolkit essentially adequate for dealing with contact effects and for separating them from internal changes, and focus on exploring how these tools should be applied for best results (Bowerman, Melchert, Pat-El). Other approaches consider new ways of representing contact as more closely integrated with genealogy, rather than simply alongside it (Drinka).
4. To what extent can we predict the relative borrowability of different types of linguistic features, and how these apply in different sociolinguistic circumstances (language shift, long-term bilingualism, etc.)? To what extent is our sociolinguistic typology applicable in cases of contact among related languages? Is it, for example, meaningful to call speakers of very closely related languages bilingual?
5. What are the linguistic and analytical implications of contact among more and less closely related languages? Are related languages more likely to

become mixed, or to the contrary, more likely to be kept separate by speakers who consciously avoid borrowing? Where inherited changes can be identified, how can these be used in distinguishing contact-driven changes? (Mithun, Bower, Epps, Law).

6. To what extent, and by what criteria, can subgrouping be reliably determined when contact has taken place? How can we efficiently distinguish between contact-induced change and internal changes? Al-Jallad suggests the use of micro areas to deal with some of the challenges contact poses for subgrouping.
7. With regard to the on-going debate about typological similarity as a factor in borrowability, how does typologically based similarity relate to genetically based similarity? Thomason and Kaufman (1988) argue that sociological factors are more important in predicting contact, but several contributors point to structural similarity as an important factor as well (Beaulieu, Melchert, Mithun).

The papers brought together here consider these questions from empirical and theoretical perspectives, and draw on languages from a wide range of regions and language families. The majority of the contributions bring focused case studies to bear on the particular theoretical problems they explore, while the final two papers take a broader, more programmatic approach to the questions raised here, and propose some avenues for future research.

Ahmad Al-Jallad discusses the problems of distinguishing shared features from borrowed features in Arabia. He suggests that there is evidence to treat several closely related languages in that geographic region as part of a ‘micro linguistic area’, which includes areal linguistic hybrids. While the idea of hybridization or mixing is often used in reference to the amalgamation of two unrelated languages, Al-Jallad argues that it is applicable in the case of certain Arabic dialects (e.g., Riġāl Alma¹). He suggests that, at least for some dialects, there were two separate stages of hybridization, culminating in dialects that are impossible to easily assign to any of the regional language varieties; i.e., they have mixed so much that they defy attempts to subgroup. This process accounts for not only the adoption of innovations, but also the adoption of archaic features that had previously been lost in the receiving language (i.e., the reversal of an earlier change).

Marianne Mithun addresses morphological transfer in a group of related languages with highly polysynthetic and fusional morphology. She focuses on Tuscarora, the most genetically distinct member of the Northern Iroquoian group, which has experienced some three centuries of contact with its Northern Iroquoian sisters, particularly Oneida and Onondaga. Mithun

considers patterns of borrowing in complex forms, in which Tuscarora speakers have been able to combine borrowed and native morphemes within single complex stems and other constructions. Although most morphemes in these languages do not occur as separate words and thus are relatively inaccessible to conscious manipulation, Mithun argues that speakers are nevertheless able to isolate and accurately replace morphemes, facilitated by the languages' structural similarity. She therefore suggests that linguistic relatedness can provide certain favorable circumstances for transfer, even where this involves considerable morphological complexity.

Danny Law likewise considers how systematic similarities deriving from genetic relationship may play a role in facilitating contact-induced transfer. In a detailed study of over a dozen Lowland Mayan languages, he examines how structural overlap must have led to speakers' conflation of linguistic boundaries, and facilitated the borrowing of bound forms via the interchangeability of paradigmatically associated elements among languages. He also argues for the role of further contact-induced drift, where contact-driven changes set the stage for further, more independent developments. The Mayan case, like that of Iroquoian, suggests that qualitative differences in contact-driven change may indeed pertain between related and unrelated languages.

H. Craig Melchert reviews a test case of a possible borrowing of adverbial morphemes between Luvian and Hittite, both of the Anatolian branch of the Indo-European family. Both languages resided in close proximity to each other through prehistory, but also exhibit a remarkable structural similarity due to their common inheritance. Melchert examines whether the adverb *ARHA* 'away' is a borrowing from Hittite into Luvian, although most borrowing between the two occurred in the opposite direction. While Melchert argues that some of the form's peculiarities in Luvian can be explained by it being a loan, there are still good reasons to suggest that the grammaticalization of the adverb from a noun meaning 'boundary' is a case of parallel development. However, given the strong structural similarity between the Luvian and Hittite examples of this adverb, Melchert concludes that if the form indeed arose to some degree independently, the shaping of its function in Luvian must still have been aided by contact with Hittite.

Na'ama Pat-El looks for indicators to help in determining whether a certain feature is a borrowing or an internal development. Informed by two test cases from the Semitic languages, she suggests two criteria primarily on the basis of syntax. The first considers whether one language shows traces of development while the other shows only the final pattern; no attestation of development is more likely to indicate a borrowing. The second addresses whether the pattern is restricted in one language but widespread in another; unrestricted distribution is not likely to indicate borrowing.

Patience Epps investigates the challenge of distinguishing borrowing, inheritance, and parallel innovation in morphologically complex forms (principally compounds and other derivations). The reconstruction of such forms has long been recognized as particularly problematic because, while they may be assembled from cognate parts, the constructions themselves may be attributable to calquing or native processes of word formation. Illustrating with numeral terms and other data from northwest Amazonian languages, Epps argues that while tracing the histories of morphologically complex forms presents particular challenges, it is nonetheless possible, especially where geographic and typological considerations may be brought to bear.

Paul-Alain Beaulieu considers the linguistic interaction between Aramaic and the Neo-Babylonian dialect of Akkadian as the former replaced the latter as the language of everyday speech in southern Mesopotamia (Iraq) over several centuries in the first millennium BC. Aramaic loanwords in Neo-Babylonian have long been noted, but Beaulieu examines likely or possible influence in the pronominal system, in a verbal prefix marking person, and in the use of a preterite verb form as a jussive. He shows that the prolonged contact between these two languages led to significant mutual influence, particularly involving Babylonian convergence to its sister-language Aramaic. Beaulieu also argues that these languages' shared genetic profile helped to structure the transfer of both grammatical and lexical features.

Bridget Drinka's contribution explores the problem of representing language relationship. She considers the degree to which we can accurately visually model a fuller history of language families like Indo-European, as opposed to simply representing our understanding of inheritance by means of a family tree. While the question of how language relationship might be best represented is almost as old as the discipline of historical linguistics itself—having been raised by Schuchardt himself ([1870] 1900)—the evolution of technological tools offers new possibilities for representing language history. Drinka reviews various approaches to modeling change, and proposes a new kind of three-dimensional representation that provides information about both time and space, and addresses aspects of contact and inheritance simultaneously.

Claire Bovern draws on a range of examples to argue that the diffusability cline cannot and indeed should not be applied without giving due regard to linguistic boundaries. Phylogenetic relatedness between two languages is not independent of other factors that facilitate contact. Relatedness and structural similarity are, for example, likely to overlap in closely related languages. Additionally, closely related languages, i.e., languages that have recently split from each other, are more likely to stay in the same geographical area and thus facilitate contact between populations. It is therefore difficult to isolate one of these issues as a determining factor regardless of the other(s). However,

contact takes place between speakers, not languages, and this is where attention should be directed. In this sense, language relatedness is immaterial. In generalizing across multiple case studies, Bownern's paper offers a wide-scoped view of the issues raised in this compilation, and identifies a set of common concerns and avenues for future research.

The papers in the present issue of the *Journal of Language Contact* were first presented at a symposium at the University of Texas at Austin, on April 21–22, 2012. They represent different approaches and inevitably offer different solutions to some of the questions posed above. We are grateful to the participants for accepting our invitation to present at the symposium, for their stimulating papers and lively discussion during the workshop of both theoretical issues and points of detail, and for delivering their final papers in such a timely fashion. We also wish to thank the many other scholars who gave their time to review the papers in this issue and for their very helpful comments and suggestions. Finally, we want especially to thank the editor of *JLC*, Robert Nicolai, for inviting us to serve as guest editors of this issue and for his enthusiastic participation and help in all stages of the process.

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