18 Theorizing Language Contact: From Synchrony to Diachrony

YARON MATRAS

1 The State of a Metaphor

'Language contact' is a metaphor that captures the use of multiple languages in the repertoire of individuals and communities, and the possible effects of multilingualism on the structural development of the languages involved. The link between individual and community bilingualism and language change was the subject of pioneering research by Weinreich (1953) and Haugen (1950, 1953). Over the past decades this link has been explored within numerous different frameworks including general sociolinguistic methods (Clyne 2003), variationist approaches (Poplack, Sankoff, and Miller 1988; Silva-Corvalán 1994), ethnography of communication (Gumperz 1982), conversation analysis (Auer 1999, Maschler 2000), language ecology (Mufwene 2001, Ansaldo 2009, McWhorter 1997), and more.

Generalizations about the outcomes of language contact have focused on the hierarchical position of structural categories in relation to their susceptibility to contact-induced change (Moravcsik 1978, Campbell 1993, van Hout and Muysken 1994, Stolz and Stolz 1996, Field 2002, Matras 2007), the correlation between contact-induced change and the intensity of cultural contacts (Thomason and Kaufman 1988, Thomason 2001), the way in which universals of grammaticalization facilitate contact-induced change (Heine and Kuteva 2005), and local factors that condition the proneness of structures to cross-language adoption or imposition (Johanson 2002), with recent attention being drawn in particular to the potential outcomes of particular processes such as the borrowing of morphological inflection (Vanhove et al. 2012, Amiridze at al. 2014), and the replicability of constructions and patterns (Wiemer et al. 2012).

The search for an overarching framework through which various contact phenomena can be interpreted has inevitably led to the realization that contact developments are essentially a reflection of the inner properties of the language faculty, and that as such they can provide a lens through which the layered structure of language and

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language processing can be explored (Myers-Scotton 2002). Studies devoted more specifically to bilingual language processing have often favored the view that the separation of languages within an individual's repertoire is an activity rather than a pre-determined state of affairs: speakers engage with an executive control mechanism to discern linguistic structures as belonging to one language rather than another, actively enabling those structures that are compliant with the contextual expectations while actively inhibiting those that are not (Green 1998, Bialystok et al. 2008). Moreover, speakers can opt for a bilingual mode in which the combination of languages, rather than their separation, is the default choice (Grosjean 1998, Meeuwis and Blommaert 1998, Paradis 2004).

Social motivations, combined with users' access to linguistic resources, have been argued to shape new forms of communication, repertoires, and choices in documented colonial and post-colonial settings (e.g., Bakker 1997, Ansaldo 2009, Lüpke and Storch 2013). Present-day super-diverse environments mean that people are exposed to ever-changing sets of communicative resources (sometimes leading to the short-term emergence of new speech varieties; cf. Nortier and Dorleijn 2013). This amplifies the need to adopt a view of language repertoires as cumulative and dynamic processes through which users acquire and employ the structural, mental, and cognitive resources that are involved in communication (cf. Backus and Blommaert 2013). It also means that a comprehensive framework must try to link language change in multilingual settings explicitly with the role speakers play as agents in communicative interaction, in particular the way in which they handle and combine the structural resources at their disposal (see Matras and Sakel 2007a; Matras 2009; as well as Backus, Doğruöz, and Heine 2011).

2 Managing the Repertoire

I propose to move away from the traditional metaphor of 'contact' as involving fully discrete, separate, and self-contained language systems, and instead to embrace a more holistic and usage-based view of the way bilinguals employ their communicative resources. Drawing on the framework presented in Matras (2009), I outline below an approach to language contact that is based on the following principles: (a) It assumes that speakers have access to an integral repertoire of linguistic resources on which they draw in order to communicate, and that boundaries among 'languages' are essentially permeable and subject to users' creativity; (b) It assumes that while not every idiosyncratic innovation in discourse will lead to language change, every structural change is initiated in the form of a local innovation, and so an understanding of the motivations behind diachronic change must therefore rest on an understanding of individuals' usage in actual linguistic interaction; (c) It assumes that innovations (and hence also change) do not affect elements of language in a random way but are linked to the function of structures and structural categories, i.e., to their role in instigating the mental processing tasks that constitute communicative procedures.

Sociolinguistic conditions may be regarded as enabling language change through contact inasmuch as it is the societal conditions that give rise to and sustain multilingualism in the first place, and it is societal norms that allow or constrain the

propagation of innovations. But sociolinguistic conditions cannot, on their own, explain the motivation to innovate around certain structures rather than others. A case in point is the oft-cited borrowing scale presented by Thomason and Kaufman (1988). The link put forward there between duration and intensity of cultural contacts and the likelihood that particular categories will be borrowed is plausible, and for many of the categories it has also been empirically attested. However, duration and intensity of cultural contacts on their own fail to explain why some categories are more contact-prone than others. The key to an explanatory model is users' motivation to alter their communicative habits and to loosen, metaphorically speaking, the demarcation boundaries between the languages within their repertoire. The hierarchical arrangement of structural categories in regard to their susceptibility to such processes indicates that this motivation targets various functions of language selectively. We therefore require an integrated model that places the focus on users' communicative motivations and the particular communicative tasks that are triggered through the use of individual structures; we need, in other words, a functional-communicative theory of contact-induced language change.

Three key factors combine and compete in shaping speakers' choices when communicating in multilingual settings (Figure 18.1). First, language users accommodate to communicative situations by selecting the appropriate procedures from their repertoire of resources. By 'procedures' I mean both the structural resources and the mental processing operations that they set in motion at all the different levels that are part of communicative interaction (including sentence structure, discourse organization, prosody, gestures, and so on). Selecting consistently those resources that are part of a particular set that is socially constructed as a coherent 'language' is just one of many options; it is the one that we associate most closely with communication in strictly monolingual and tightly scripted, e.g., institutional, communicative settings. Speakers accommodate not just to settings, but also to contexts (the immediate verbal and presupposition or knowledge-based environment), and contextual choices can change across speech events, turns, or utterances. 'Context' therefore constitutes the more narrowly defined unit of reference for the selection process.

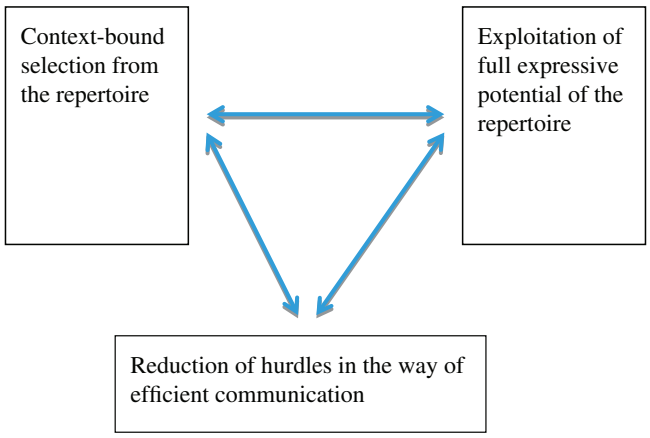

Figure 18.1 The interplay of factors in communication in language contact settings

Next, language users naturally seek to take advantage of the communicative resources that are at their disposal in a way that is exhaustive and comprehensive, and which maximizes expressive potential (see also Weinreich 1953: 59–60). This goal is balanced against the need to respond appropriately and effectively to the interaction context: resources are selected not just on the basis of the expressive potential that they have for the speaker, but also, and indeed primarily so, on the basis of their potential to engage the listener. Consider the following two examples: In (1), a trilingual (German, Hebrew, English) child aged six to seven is engaged in a conversation with his German-speaking mother. The context – in this case, primarily the identity of the interlocutor – conditions the selection of resources that are identified socially to the participants as 'German':

(1) Trilingual child, age 6–7 (Matras 2009: 35)
Da war ich noch in *year one*
DEIC was.1SG I still in
'I was still in *year one* then.'

The child is referring to a past event, and as a point of reference he is drawing on the particular expressive potential of the English phrase *year one*. While the German translation equivalent is available to him, it would not convey precisely the same meaning as the English expression, which represents a time segment that is associated with the specific institutional setting of the child's schooling in England and therefore with the child's personal and particular biography. If we were to imagine the child recounting the same event in another context, say with his grandparents in Germany, who are not English speakers and are not familiar with the institutional setting of the English school, it is conceivable that the child would have accommodated and opted for a German translation equivalent. In the interaction with the mother, however, who is familiar with the concept and fluent in English, full use of the intricate expressive potential is permissible and does not violate the constraint on context-bound selection. The child thus navigates the intricacies of a wholesale repertoire, balancing one factor against another.

Example (2) is an excerpt from a conversation among Kuwaiti girls who attend an English-medium secondary school in Kuwait (Mahsain 2014). The language of choice within the peer group is English, including in casual conversation, but they all share Arabic as a language of the family and the principal language of the surrounding society, including institutions other than school:

(2) Kuwaiti schoolgirl (Mahsain 2014: 69–97):
It's better, *bas yaʕni* [=but I-mean] there are disadvantages, *yaʕni* [=I-mean], *ḥarām*, [=shame] they're too young, and it's true, there will be more accidents, like there's no focus, and *yaʕni* [=I-mean] the boys [H laughs] they are sixteen and what they do, and there are still, like, younger kids that do drive and their parents don't know *yaʕni*, [=I-mean] what if something happens in the road?

As Mahsain describes, the choice of Arabic discourse markers at the boundaries of utterances grounds the narrative in the participants' shared environment of cultural values and so it serves to reiterate a shared cultural perspective. To put it bluntly, the Arabic discourse markers convey a meaning that English translation equivalents

could not convey. They do this as a set, by separating the content of the message from its interpersonal and interactional management structure; and they do this as individual expressions, each triggering its association with Arabic discourse contexts. In the particular in the case of *ḥarām*, which means 'shame' but also 'religious prohibition,' the choice of Arabic captures explicitly a culture-specific value system. Here too, then, use of the full expressive potential of the repertoire is balanced against the wish to respond to the anticipations of a particular interaction context.

Both examples show how speakers cross language lines in actual conversational interaction. Both illustrate how lines are not crossed at random, but in a way that is functionally motivated. At the same time the very effect of drawing on the repertoire's full expressive potential is enabled in both examples by the participants' appreciation that there are certain norms on context-bound selection, which create a meaningful juxtaposition of languages in the first place (cf. Gumperz 1982). Context-bound selection and full exploitation are thus both competing and complementary processes. They rest simultaneously on the appreciation that the selection of resources must be vetted to comply with contextual expectations, and on the notion that in principle speakers have their entire repertoire at their disposal at all times.

The third dimension in managing the repertoire of linguistic resources pertains to the need to ease the burden on the selection and inhibition mechanism through which the user monitors and discerns which structures may be functionally purposeful but not contextually appropriate (and hence ineffective). We assume that engaging the selection and inhibition mechanism involves work and places a burden on the user. The smooth operation of the mechanism remains invisible in terms of concrete and identifiable evidence; we are only able to identify the mechanism overtly when it fails or falls out of operation. Instantaneous failures appear in the form of resources that are functionally purposeful but not contextually permissible, and which fail to be suppressed during the production of an utterance:

(3) German television interviewee (Matras 2009: 92):
Well jus/ just the way ə ə the m/ the weapons ə brought ə/ I/ I have brought to London, *nə*, *und* I/ I have told them the truth, *nə*, that they were brought by car, *nə* and/ and ə…

In (3), a native speaker of German who is also a fluent speaker of English is being interviewed on British television. While his English sentences are generally grammatically well formed (with minor interference in the choice of tense-aspect categories), two elements of his speech are clearly not appropriately selected in relation to the context. The first is the German tag *nə*. Arguably, the speaker's failure to inhibit this particular form is connected to its non-lexical status and hence to its treatment as more of a communicative gesture than a lexical item. As the gesture-tag is, nonetheless, language-particular (in the sense that it is not expected, and remains meaningless, in the English context), it is still significant that the speaker fails to exclude it from the present context. Even if we were to relate this to the speaker's level of awareness rather than the effectiveness of his self-monitoring, then the question arises as to why certain resources are more difficult to identify as belonging to certain contexts and not to others. The other item that escapes the inhibition mechanism is the conjunction *und* 'and.' Here there can be no doubt that the speaker is aware that this is

not an English word, and that there is no active license to 'cross the language boundary' and no benefit in opting for a German form. Rather, the German conjunction simply escapes the speaker's control due to a lapse of convenience in applying the inhibition and selection mechanism.

(4) Polish-German bilingual in England (Matras 2009: 97):
… bis auf/ bis auf die Tischdecken, *because*/ eh weil sie …
'…except/ except for the tablecloth, because/ uh because it …'

In example (4), the speaker is a Polish native speaker residing in Germany. She is speaking German to two friends with whom she is meeting up in London, during her stay there on a three-week language course. The selection of English *because* during a portion of German conversation targets the language toward which the speaker has been directing her uppermost intellectual attention during the past weeks. Once again, we are dealing with an argumentative connector, one that is inserted in order to intervene with and influence the hearer's course of processing propositions and deriving conclusions from them, and at the same time a connector that operates at the interactional level, announcing the speaker's justification of a preceding statement; thus, *because* captures the speaker in a position of potential vulnerability on the interaction plane. Here too, the failure of the inhibition mechanism is not intentional, but a form of 'interference.' It is noteworthy that it is not the speaker's stronger language that interferes, but the one that commands her effort and attention at a given instant or period in time, in a particular setting.

Examples (3)–(4) thus show us that while speakers can acquire and maintain the ability to separate 'languages,' this is by no means an effortless procedure, and that there is no mechanism that allows speakers to simply switch off a language on a wholesale basis for the duration of a communicative event. Control of the repertoire requires instead a continuous effort. We also see that this effort can target certain mental processing tasks more effectively than others. In (3)–(4), the gesture-like tags remain outside of the speaker's conscious effort to accommodate to the context, while the one-off insertions of conjunctions indicate local failures or lapses of the inhibition mechanism. In both cases, it is the monitoring and directing apparatus (cf. Matras 1998) that escapes the speaker's control more easily than other functions of language. We can hypothesize that users will tend more strongly toward a reduction of the burden of managing the repertoire for context-bound selection around those gesture-like functions that appear instinctive and therefore universal, and which are therefore less easily subject to analytical scrutiny.

3 From Discourse to Language Change

Three dimensions thus pull users in different directions and exert different kinds of pressures on the choices that they make in communicative interaction. The above examples illustrate how users maintain a balance between them, providing snapshots of synchronic use of language. Shifts in the balance of choices are the seeds of diachronic change. Consistent and strict accommodation to context will guide users to maintain complete and consistent separation of languages. A far-reaching license

to make use of the full expressive potential of the repertoire will by contrast lead to considerable flexibility in the choice of resources. And a far-reaching reduction in the need to navigate the hurdles imposed by the selection and inhibition mechanism will lead to a generalization of particular resources across the repertoire, resulting in a cross-language fusion of functional categories and their structural representation. In this section I discuss the examples of Angloromani and Domari.

'Angloromani' is the term that is widely used in the scholarly literature to refer to the incorporation of a Romani-derived lexicon in the English varieties used by Romani Gypsies in Britain and North America. While its use is mainly confined to in-group interaction, there are few rules that govern the actual distribution of Romani-derived lexicon within in-group conversation, and items belonging to the special group-internal lexical reservoir can be employed at will, though their role is often to downplay the effect of taboo concepts:

(5) Angloromani (Matras 2010: 146):
And me Aunt Alice was crying, she said: "Oh it's *mored* [= killed] me I can't lift me *sherra* [=head] up. Everybody's *rokkerin* [=talking]'" she said "among our *fowki* [=people]."
"Why?" she said.
"Our Debbie" she said, "She's *bori* [=pregnant]."
'bori' means with child.
Yeah, mhm.
She said. "Oh" she said/ she said: "And she can't *pukker* [=tell] me," she said "the *chor* [=poor]," she said, "who's the father of the *tiknas* [baby]." Coz she'd been with that many, she'd had that many different *mushes* [=men]. And me mam used to say: "you know if you take any *izers* [=trousers] off Debbie, *yog* [=burn]'em."

Angloromani clearly does not involve a consistent lexicon-grammar split as its structure has sometimes been portrayed (cf. Thomason and Kaufman 1988). Nor can it be regarded as a form of codeswitching: users have a choice to integrate Romani-derived lexicon into English utterances, but not the other way around. While users sometimes refer to their distinct style of speech as a 'language,' they also describe it as 'broken' or 'not proper.' From an analytical perspective it is hard to view this as anything but a particular conversation-level mode of speaking English, albeit not a form of English that is easily accessible to those who are not group members. The dilemma whether Angloromani is an independent 'language,' a 'hybrid' or 'mixed' language, a form of English that is not accessible to other speakers of English, or indeed a form of Romani that is not accessible to speakers of Romani who are not also fluent in English highlights precisely the limits of conceptualizing repertoires as closed language systems. English Gypsies license themselves to make use of the full expressive potential of their repertoire of resources under certain circumstances, usually defined by the choice of addressee and bystander, and potentially by the choice of topic. They do so while maintaining just a certain degree of compartmentalization within the repertoires, one that pertains to lexicon (and to some minor stylistic conventions) but not to other structures, in other words, they do so without maintaining a strict separation of languages. The outcome of the underlying historical process is

difficult to accommodate within our traditional notion of 'language,' even within our fixed notions of Mixed Languages.

Domari, the Indo-Aryan language of the peripatetic Dom of the Middle East, has absorbed strong influences from the surrounding languages, in particular Arabic. The Jerusalem variety, now moribund, has adopted several structural categories on a wholesale basis from the neighboring majority language Palestinian Arabic, in a setting in which use of Domari has been limited to oral domestic interaction, where all Domari speakers are fully bilingual, and where even the family setting has become largely Arabic-speaking as Domari is now confined to the elderly generation. As a result, individual utterances may appear identical in all but a few features to their Arabic counterparts:

(6) Excerpts from Jerusalem Domari conversation (Matras 2012: 383–384):

a. *aktar* *min* *talātīn* *xamsa* *ū* *talātīn* *sana*
more from thirty five and thirty year
ma lak-ed-om-is
NEG see-PAST-1SG-3SG.OBL
'It has been more than thirty, thirty-five years since I've seen her.'

b. *hāda/* *kān* *ʕumr*-om *yimkin* *sitte* *snīn*
this was.3SG.M age-1SG maybe six years
sabʕa *snīn*
seven years
'This/ I was maybe six- or seven-years-old.'

In both cases, speakers unequivocally identify the utterance as Domari rather than Arabic, and have no alternative structure to express the same utterance in Domari – in other words, none of the Arabic-derived items (italicized in the example) have potential substitutes that are not Arabic-derived or are uniquely or distinctively Domari. In both examples, the element that makes the utterance distinctively Domari is the anchor of the predication: in (a) it is the verb *lak-ed-om-is* 'I saw her,' for which the Arabic equivalent would be *šuf-t-hā* (with identical morpheme sequence as in the gloss above, the final segment being specifically feminine in gender). In (b), a nominal sentence with no verbal predicate, it is an even simpler element, namely the 1SG possessive marker *-om* (for which the Arabic equivalent is *-ī*). In these selected utterances, context-bound separation of languages is thus expressed entirely through the use of a single inflected word, in the first case, and through a single suffix, in the second. Such utterances may not be the only possible pattern in Domari conversation, but they are not at all uncommon. A great part of the resources in the repertoire of Domari speakers can be used indiscriminately regardless of context (in the sense of 'language choice'). Despite this fact, speakers are still able to maintain a separation that can be conceptualized upon reflection as the use of distinct 'languages.'

4 Borrowing Hierarchies

Contact-induced language change is thus a re-organization of the balance of factors that condition the way in which users manage elements of their repertoire of linguistic resources. Examples (5) and (6) nicely illustrate how far-reaching such processes can

be. The two are in a sense the outcome of opposite structural processes: in Angloromani, it is a distinctive lexicon that is retained, historically, from what was until the late nineteenth century a separate Romani language. Reducing the burden of context-bound selection has produced an extreme outcome – language abandonment – while at the same time maintaining the distinct expressive potential of the Romani lexical legacy. In Domari, the separate language is maintained on a thin thread: in some utterances, it is just a handful of inflections and basic lexicon that distinguish Domari from Arabic. Domari has otherwise adopted on a wholesale basis Arabic grammatical categories as well as extensive lexical material, which makes it possible to keep context-bound selection from the repertoire at a minimal processing effort.

In addition to these somewhat exceptional cases, we now also have a large body of attested case studies of structural borrowing in diverse sets of languages, among them research samples that have been designed specifically to compare structural borrowing systematically across different language varieties and settings (cf. Stolz and Stolz 1996, Elšík and Matras 2006, Matras and Sakel 2007b). The challenge of an overall theory of borrowing is to identify general trends in these samples, which may then serve to formulate predictions and to explain the patterns. How does borrowing come about? In the center of our approach is the assumption that it is not languages that borrow structural material, but rather bilingual speakers that license themselves to employ the same or similar sets of structures in different communicative settings, thereby allowing sub-sets of their linguistic repertoire to undergo fusion, i.e., to be generalized irrespective of the choice of 'language' in a given interaction setting. When addressing the question of motivation for borrowing, we are thus seeking an answer to the question: when are bilingual speakers more likely to generalize a single item across the linguistic repertoire in such a fashion, and why?

Two traditional explanations for the motivation behind borrowing include 'gap' and 'prestige': the idea that speakers use elements from one language when speaking in another because it enables them to express a meaning that is missing from the language, in the first case, or to express a social meaning that is associated with a dominant language and its particular interaction routines, in the second. While 'gaps' are typically associated with cultural loans – e.g., technological innovations, new products, and social institutions – the idea of 'prestige' connects even more specifically to a diglossic arrangement between the languages involved. The key to understanding susceptibility to borrowing is the domain specialization of the source language and its association with non-routine tasks. Items that are less subject to routine employment prove more susceptible to new fashions and are more likely to be represented by borrowings that serve as tokens for social accommodation. On other hand, those that are more tightly embedded into routine interaction are protected by the routine, by the intimacy of their meaning, and apparently also by their frequency of occurrence:

(7) Context-bound, routine-based borrowing hierarchies:
   a. unique referents > general/core vocabulary
   b. nouns > non-nouns
   c. numerals in formal contexts > numerals in informal contexts
   d. higher cardinal numerals > lower cardinal numerals
   e. days of week > times of day
   f. peripheral local relations > core local relations
   g. remote kin > close kin

Unique referents (Matras 2009: 14, 107) are lexical words that identify very particular routines or institutions, also known for the specificity (Backus 1996), which are less likely to have translation equivalents. The frequently observed prevalence of nouns over non-nouns on the borrowing scale is firstly the product of the universally greater differentiation among lexical nouns than among other word forms, as well as a reflection of the fact that culture-specific products and routines are more likely to be captured by nouns. Where numerals are borrowed, higher numerals (as well as those associated strictly with formal mathematical routines rather than with everyday counting, namely 'zero' and fractions) are more likely to be associated with non-routine, institutional procedures and transactions and therefore with the language that dominates such routines. Days of the week (as well as the system of expressing calendar dates) are more likely to be part of formalized, institutional routines than times of the day, while peripheral local relations (typically those that involve orientation between two or more points of reference, such as 'between,' 'against,' 'around') are more likely to be associated with formal or specialized descriptions than plain or core relations (such as 'on' or 'at') and less frequently used. Finally, when kin terms are borrowed (as in English 'grandparents,' 'nephew,' 'niece'), they are more likely to relate to those who are more remote, less frequently mentioned, and more likely to be named in the context of formal titles and inventories.

The method of discerning hierarchies exemplified in (7) is thus to identify polar points in a single paradigm of structures, and to then try to make sense of the dimension that conditions the spread of items along the continuum between the two poles. We then try to map the semantic-pragmatic features that define the hierarchical arrangement onto the social relations between the languages in a diglossic setup, which in turn offers insights into the choices that speakers are likely to make when managing their repertoire of resources in communication (Figure 18.1).

We now revisit examples (3)–(4) and the lapses in the application of the selection and inhibition mechanism. It is hypothesized here that this mechanism is, like other aspects of speech production and especially of lexical retrieval, sensitive to a set of factors that we might refer to in a pre-theoretical sense as the speaker's 'state of mind.' They include pathological conditions such as fatigue or impairment, but are also sensitive to moments of high tension at the level of the speech interaction and its management. Specifically, the proper functioning of the selection mechanism might be disturbed by the need to divert attention away from it and onto an increased effort to reassure the listener of the speaker's assertive authority. Examples (3)–(4) showed lapses around structural categories that may be seen as vulnerable to selection malfunctions as a result of the special burden that they impose on the speaker as part of the speaker's effort to monitor and direct the listener's participation (cf. Matras 1998). We might regard these as 'high risk' operations, where the speaker risks assertive authority and the cooperative relation with the listener. To these 'high risk' operations we can add grammatical markers that highlight that the speaker is basing a proposition on a relatively insecure basis of knowledge, thereby relying more strongly on the listener's cooperation and supplementary extension of the presuppositional base to accommodate uncertain assertions. This is reflected in the following borrowability hierarchies:

(8) Borrowing hierarchies that reflect control and the speaker's assertive authority:
   a. contrast > disjunction > addition
   b. modality > aspect/aktionsart > future tense > (other tenses)
   c. obligation > necessity > possibility > ability > desire
   d. concessive, conditional, causal, purpose > other subordinators
   e. factual complementizers > non-factual complementizers
   f. superlative > comparative > (positive)
   g. indefinites > interrogatives > (other) deixis, anaphora

The list under (8) offers a separate dimension of motivations to cross the language boundary (metaphorically speaking) – one that is essentially cognitive and relates to the processing of information and knowledge in discourse rather than to the mapping of social activities onto a map of routines, and social and power relations, as in the list under (7). Thus, different motivations are responsible for borrowing, and they affect various categories in language in different ways. It is noteworthy that those positions that are lower on the hierarchy reflect categories that are less likely to be borrowed, not categories that are categorically exempted from borrowing. In most cases, the implicational nature of the hierarchies can be illustrated as borrowing in the lower positions correlates with borrowing in higher positions. But the motivational, functional interpretation of the hierarchy offers an explanation as to why certain forms are less easily borrowed, and thus it adds insight into what is sometimes regarded as a pure coincidence or gap in documentation. A case in point is the borrowing of pronouns. Wallace (1983) points to the borrowing of personal pronouns in South Asian languages, but in the relevant languages pronouns encode social relations and are more akin to lexical titles (such as 'your honor' or 'your majesty,' both, notably, containing borrowed components in English). Thomason and Everett (2001) add to the list cases of Mixed Languages, though here the point is precisely that the processes that lead to the mixture are distinct and involve speakers' intentional and conscious intervention in re-organizing their repertoire (much like secret languages, which often show camouflage pronouns). The point about genuine deictic and anaphoric forms is that they rely on a harmonious mental referential map that the speaker and listener share, and are thus at the opposite end of the structural cline of 'pronominal' forms listed in (8.g) compared to the contact-prone items where the speaker's proposition ventures potentially into the unknown and unconfirmed.

An additional sub-dimension, also related to the speaker's control over speech production and ability to employ the selection and inhibition mechanism effectively, concerns the use of structures that manage interaction and the organization of discourse, of the type illustrated in examples (3)–(4) above. Particularly prone to borrowing in multilingual settings are discourse markers, focus particles, and phasal adverbs, more so than other function words (cf. Matras 1998); these too process the listener's expectations and thereby potential clashes between contextual inferences and the speaker's intended message, adding tension to the interaction and requiring enhanced effort from the monitoring and control apparatus, which comes at the expense of the efficacy of the selection and inhibition mechanism. Prosody and suprasegmental features, much like discourse markers, are more prone to borrowing than segmental phonology (barring the fact that segmental phonology will often accompany the borrowing of lexical items). This reflects their status as gesture-like

meta-devices that accompany the message content and are less likely to be singled out for control and attention.

In addressing the issue of 'motivation' in a functional-communicative perspective, we are thus dealing with the initiation of change, i.e., with the factors that lead and license users of language to innovate in the immediate interaction context and to redraw norms of selection and inhibition of forms within the overall repertoire of linguistic resources. Long-term diachronic change will depend on the chance that such innovations become conventionalized. This will inevitably be a product of the power relations among the languages and the communities of users: the extent of normative intervention, the degree to which bilingualism is widespread, and the power of bilingual innovators, where applicable, to lead change within a community of monolingual speakers. These societal conditions are of course key to diachronic change, but they do not on their own trigger change. Without the cognitive dimension, and without attention to the vulnerability of structures to lapses and load reductions around the selection and inhibition mechanism, we are unable to understand the factors that trigger change in multilingual settings.

5 Convergence and Linguistic Areas

Attempts to define and account for linguistic areas have variably included numerical constraints on the languages involved and historical interpretations of the type of cultural contacts and acquisition of bilingualism (cf. Campbell 2005). What has attracted researchers' attention to linguistic areas is usually the high density of shared patterns of form-function mapping or constructions that appear with or without a noticeable shared inventory of linguistic matter or word-forms, a process referred to by Weinreich (1953, 1958) as 'replication' and 'convergent development.' Recent discussions have tried to accommodate cross-language convergence into familiar theoretical frameworks of grammaticalization and construction theory (cf. Heine and Kuteva 2005; Wiemer et al. 2012; but see also Matras and Sakel 2007b). To explain pattern replication, once again, we turn to the bilingual's repertoire management strategies:

(9) Trilingual (German, Hebrew, English) child, aged 4–6 (Matras 2009: 26):
ze avál yafe!
this but pretty
'This is very pretty indeed!'

In a Hebrew utterance, addressed to the Hebrew-speaking parent, the trilingual child generates an exclamatory particle *avál*, which does not exist in norm-based, adult monolingual Hebrew. He does this on the basis of the model pattern of German: *Das ist aber schön!* With reference to our model in Figure 18.1, the creative process is motivated by a wish to conform to the expectations of the present context of interaction and select word forms that are licensed for use with the present interlocutor (identified socially as words belonging to 'Hebrew'), while at the same time to exploit the full expressive potential of the repertoire as a whole, which includes the attributive-exclamative particle *aber*. Reconciling the two motivations, the speaker searches

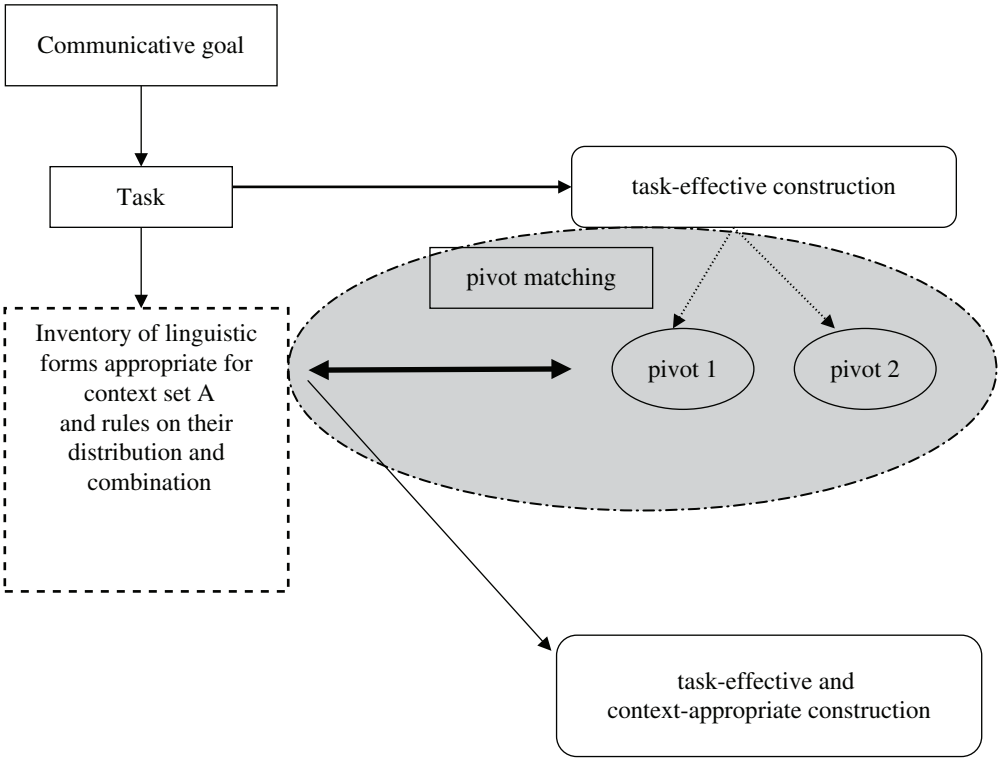

Figure 18.2 Pivot matching in pattern replication

for a word form that would be permissible for selection in the context and would at the same time convey the expressive meaning of *aber*, driven by the awareness that *aber* itself is not licensed for the present interaction context. In the outcome, the speaker identifies the polysemy of *aber*, which is also used in German as an adversative conjunction. That conjunction has a translation equivalent in Hebrew *avál*. The speaker then maps the same polysemy onto the Hebrew equivalent.

The procedure is depicted in Figure 18.2: The point of departure is the pursuit of a communicative goal, which in (9) can be described as offering a commentary on a state of affairs. The goal entails a task, which in (9) is the wish to offer an exclamatory, attributive comment indicating positive surprise. The speaker then embarks on a search for a task-effective construction. It is noteworthy that this search targets the entire repertoire of linguistic resources, not just the portion that is known to be licensed or permissible in the present interaction context ('Hebrew'). The search yields a task-effective construction that is identified as unlicensed in the Hebrew context (practically defined as the context of interaction with the particular interlocutor, the Hebrew-speaking parent). This triggers a creative process by which the speaker seeks to innovate a form that would be both task-effective and licensed for selection. It leads the speaker to single out pivotal features of the model task-effective construction and to match them with features of constructions that are known to be permissible in the set of contexts – referred to in Figure 18.2 as 'context set A' – to which the

present interaction belongs (the 'correct language'). A pivotal feature of the model construction in question is its form-overlap with the adversative conjunction 'but' (German *aber*). On that basis, the pivot is matched with its counterpart in the inventory of linguistic forms that are known to be permissible in the present interaction context. The Hebrew adversative conjunction *avál* is selected on that basis. As a result it acquires the function of a construction that is effective for the new task at hand.

Grammaticalization theory takes an integral view of contact-induced language change that involves the semantic extension of constructions (replica grammaticalization) in which the regular propagation of the construction in its new meaning and syntactic environment is crucial (cf. Heine and Kuteva 2005). This would rule out example (9), which merely testifies to the idiosyncratic creativity of a single speaker in a single instance of communicative interaction, as an example of grammaticalization. When I say that in this instance the Hebrew form *avál* has 'acquired' a new meaning, then of course my intention is to flag the one-off use of the form by this individual speaker, on this particular occasion. And yet without an understanding of the motivation to innovate and the creative process that is involved in the innovation and the discourse-communicative dimensions that guide it, it is not possible to understand what triggers the diachronic process that some scholars accept as grammaticalization only upon proof of successful propagation.

The relationship between the spontaneous innovation in discourse, and diachronic change, can be illustrated by the case of Khuzestani Arabic (Matras and Shabibi 2007). Khuzestani Arabic undergoes a reanalysis of the morphology of its attributive construction – involving both nouns as attributes (genitive construction), and adjectives. In Arabic, adjectival attributes follow the head noun and agree with the head noun in gender, number, and definiteness (10a). Nominal attributes, by contrast, are conjoined by means of the attributive *Iḍāfa*-construction, whereby only the dependent (genitive) noun is overtly marked for definiteness (10b):

(10) Standard Arabic (and other dialects):
   a. l-walad l-kabīr
      DEF-boy DEF-big
      'The big boy'
   b. walad l-mudīr
      boy DEF-director
      'The director's son'

In Persian, the contact language, both types of attributes are treated in the same way: The attribute (whether adjectival or nominal) follows the head, and an attributive particle mediates between the two:

(11) Persian:
   a. pesar-e bozorg
      boy-ATT big
      'The big boy'
   b. pesar-e modīr
      boy-ATT director
      'The director's son'

The pattern in Khuzestani Arabic matches the Persian arrangement (note that, as in other dialects of Arabic, the definite article *l-* assimilates to coronal consonants, resulting in gemination of that consonant):

(12) Khuzestani Arabic:
  a. walad č-čibīr
     boy DEF-big
     'The big boy'
  b. walad l-modīr
     boy DEF-director
     'The director's son'

The key to understanding the change is the function and the position of the definite article in the nominal attribution in Arabic (10b), which resembles the function and the position of the attributive particle in nominative attributions in Persian (11b). The Persian attributive particle *-e* is interpreted as the pivot of the Persian attributive construction, both nominal and adjectival. The Arabic definite article *l-* becomes associated with the Persian attributive particle due to the similarities in their structures in nominal attributions. It is then extended to match the Persian attributive particle in the adjectival attribution, resulting in a loss of the Arabic definiteness agreement in adjectival attributions and in a shift in meaning of the definite article itself. The conflation of the two constructions is an interesting challenge to the unidirectionality hypothesis in grammaticalization theory (Heine and Kuteva 2005), which normally predicts that extension (of meaning or of distribution context) will lead to the emergence of new categories and more differentiation will emerge (see Matras and Sakel 2007a; cf. also Wiemer et al. 2012).

There are, once again, some regularities in the proneness of structural categories to pattern replication:

(13) Some hierarchies of pattern replication:
  a. inferred meanings > attributable meanings
  b. discourse > clause > phrase > word
  c. clause linking > word morphology
  d. possessive construction > attributive construction

Meanings that are contextually derived from particular configurations, rather than fixed and attributable to the individual word-forms and morphs that compose those configurations, are more likely to be treated as flexible and to be generalized throughout the repertoire. This relates to the flexibility of pragmatic inferences and the tendency to regard them as universal rather than bound to particular contexts and settings, and therefore more open to creative and innovative processes. Similarly, the organization of clauses is more susceptible to convergent developments, as speakers seek to reduce the processing burden on organizing entire utterances and at the same time allow themselves greater flexibility in combining words than at the level of individual word configuration, which is more closely associated with tighter context-bound norms. Other features that show greater susceptibility to convergence are related to loose configurations among constituents that are more likely to be stand-alone and independent (and whose combination is thus regarded as more ad hoc).

How does this conceptual framework for convergence help us define what linguistic areas are? Firstly, they help explain how structural features 'jump' the language boundary and spread to neighboring languages, thereby forming cross-language isoglosses. We have seen that convergence can emerge spontaneously in the speech of bilingual speakers. The process that leads to language change necessarily involves propagation of the same innovation among a community of speakers, and the adoption of a license to use it on a regular basis. This in turn requires lax attitudes in relation to the norms of language use. A speech community that is undergoing social changes or that does not attribute too much importance to the organization of linguistic constructions as representations of social identity might be more tolerant of change than a community with strict and stable norms, where pressure is exerted, possibly with the support of institutions, to adhere to a particular norm of usage. At the same time we are looking for speech communities that are keen to maintain the language in question, rather than abandon it.

These conditions must be met for each and every linguistic construction that is to cross the language boundary and become an integral part of the replica language. More widespread bilingualism, or alternatively high prestige of a bilingual elite, more prolonged or intense bilingualism, coupled with overall lax normative control of language use despite a commitment to language maintenance, are likely to allow replication of a larger number of constructions from the model in the replica language. Consequently, a higher density of structural isoglosses will be shared by the two languages. If the process is to repeat itself through further contacts of the languages involved with yet another set of languages, then the same or a partly overlapping density of isoglosses will be found across an entire network of contiguous or partly contiguous languages. Linguistic areas are thus simply cases of convergence that catch our attention because of the density of shared isoglosses in a multiplicity of languages.

REFERENCES

Amiridze, Nino, Peter Arkadiev, Francesco Gardani (eds) (2014). *Borrowed morphology*. Berlin: De Gruyter Mouton.

Ansaldo, Umberto (2009). *Contact languages. Ecology and evolution in Asia*. Cambridge: Cambridge University Press.

Auer, Peter (1999). From codeswitching via language mixing to fused lects: toward a dynamic typology of bilingual speech. *International Journal of Bilingualism* 3, 309–332.

Backus, Ad (1996). *Two in one. Bilingual speech of Turkish immigrants in the Netherlands*. Tilburg: Tilburg University Press.

— and Jan Blommaert (2013). Superdiverse repertoires and the individual. In: de Ingrid de Saint-Georges and Jean-Jacques Weber (eds), *Multilingualism and multimodality. Current challenges for educational studies* (pp. 11–32). Rotterdam: Sense Publishers.

—, A. Seza Doğruöz, and Bernd Heine (2011). Salient stages in contact-induced grammatical change: Evidence from synchronic vs. diachronic contact situations. *Language Sciences* 33 (5), 738–752.

Bakker, Peter (1997). *A language of our own. The genesis of Michif – the mixed Cree-French language of the Canadian Métis*. New York: Oxford University Press.

Bialystok Ellen, Fergus I. M. Craik, and Gigi Luk (2008). Lexical access in bilinguals: Effects of vocabulary size and executive control. *Journal of Neurolinguistics* 21 (6), 522–538.

Campbell, Lyle (1993). On proposed universals of grammatical borrowing. In: Henk Aertsen and Robert J. Jeffers (eds), *Historical linguistics 1989* (pp. 91–109). Amsterdam: John Benjamins.
— (2005). Areal linguistics: A closer scrutiny. In: Yaron Matras, Arpil McMahon, and Nigel Vincent (eds), *Linguistic areas. Convergence in historical and typological perspective* (pp. 1–31). Houndmills: Palgrave.
Clyne, Michael (2003). *Dynamics of language contact*. Cambridge: Cambridge University Press.
Elšík, Viktor and Yaron Matras (2006). *Markedness and language change. The Romani sample*. Berlin: Mouton de Gruter.
Field, Frederic W. (2002). *Linguistic borrowing in bilingual contexts*. Amsterdam: John Benjamins.
Green, David (1998). Mental control of the bilingual lexico-semantic system. *Bilingualism: Language and Cognition* 1 (2), 67–81.
Grosjean, François (1998). Studying bilinguals: Methodological and conceptual issues. *Bilingualism: Language and cognition* 1(2), 131–149.
Gumperz, John (1982). *Discourse strategies*. Cambridge: Cambridge University Press.
Haspelmath, Martin and Uri Tadmor (eds) (2009). *Loanwords in the world's languages. A comparative handbook*. Berlin: Mouton de Gruyter.
Haugen, Einar (1950). The analysis of linguistic borrowing. *Language* 26(2), 210–231.
— (1953/1969). *The Norwegian language in the Americas: A study in bilingual behaviour*. Bloomington: Indiana University Press.
Heine, Bernd and Tania Kuteva (2005). *Language Contact and grammatical change*. Cambridge: Cambridge University Press.
Johanson, Lars (2002). *Structural factors in Turkic language contacts*. Richmond: Curzon.
Lüpke, Friederike and Anne Storch (2013). *Repertoires and choices in African languages*. Berlin: Mouton de Gruyter.
Mahsain, Fatemah (2014). *Motivations behind code-switching among Kuwaiti bilingual schools students*. Doctoral dissertation, University of Manchester.
Maschler, Yael (2000). Towards fused lects: discourse markers in Hebrew-English bilingual conversation twelve years later. *International Journal of Bilingualism* 4 (4), 529–561.
Matras, Yaron (1998). Utterance modifiers and universals of grammatical borrowing. *Linguistics* 36 (2), 281–331.
— (2007). The borrowability of grammatical categories. In: Matras, Y. & Sakel, J. eds. *Grammatical borrowing in cross-linguistic perspective*, 31–74. Berlin: Mouton de Gruyter.
— (2009). *Language contact*. Cambridge: Cambridge University Press.
— (2010). *Romani Britain. The afterlife of a language*. Edinburgh: Edinburgh University Press.
— (2012). *A grammar of Domari*. Berlin: Mouton De Gruyter.
— and Jeanette Sakel (2007a). Investigating the mechanisms of pattern-replication in language convergence. *Studies in Language* 31(4), 829–865.
— and Jeanette Sakel (eds) (2007b) *Grammatical borrowing in cross-linguistic perspective*. Berlin: Mouton de Gruyter.
— and Maryam Shabibi (2007). Grammatical borrowing in Khuzistani Arabic. In: Yaron Matras and Jeanette Sakel (eds), *Grammatical borrowing in cross-linguistic perspective* (pp. 137–149). Berlin: Mouton de Gruyter.
McWhorter, John H. (1997). *Towards a new model of creole genesis*. New York: Peter Lang.
Meeuwis, Michael and Jan Blommaert (1998). A monolectal view of code-switching: Layered code-switching among Zairians in Belgium. In: Peter Auer (ed), *Code-switching in conversation: language, interaction and identity* (pp. 76–99). London: Routledge.
Moravcsik, Edith (1978). Universals of language contact. In: Joseph H. Greenberg (ed), *Universals of human language* (pp. 94–122). Stanford: Stanford University Press.
Mufwene, Salikoko S. (2001). *The ecology of language evolution*. Cambridge: Cambridge University Press.
Myers-Scotton, Caron (2002). *Contact Linguistics*. Oxford: Oxford University Press.