CHAPTER 22

GRAMMATICALIZATION AND LANGUAGE CONTACT

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1. CONTACT-INDUCED INTERNAL CHANGE

Language contact and bilingualism are potential triggers of language change at various levels. These include changes that are internal to the language under scrutiny, in the sense that they involve an adaptation to the function, meaning, or distribution of an inherited structure. At the same time, they are triggered by replication of a model that is external to the language under scrutiny, one that is found in a contact language.

Consider Romani, the Indo-Aryan language of the Rom or ‘Gypsies’, which was brought to Europe in all likelihood sometime between the ninth and eleventh centuries CE. Romani has preposed definite articles that agree with the nouns they determine in gender, number, and case:

(1) Romani (Lovari/Kelderăș dialect)

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\begin{align*}
\text{e} & \quad \text{dej} & \quad \text{akhar-d-as} & \quad \text{la} & \quad \text{rakl-j-a} \\
\text{DEF.F.SG.NOM} & \quad \text{mother.NOM} & \quad \text{call-PAST-3SG} & \quad \text{DEF.F.SG.OBL} & \quad \text{girl.OBL} \\
\text{taj} & \quad \text{le} & \quad \text{rakl-\text{es}} \\
\text{and} & \quad \text{DEF.M.SG.OBL} & \quad \text{boy-OBL}
\end{align*}
\]

‘The mother called the girl and the boy’
Since Indo-Aryan languages typically do not have definite articles, nor are definite articles widespread in western Asia (an area through which the ancestors of the contemporary Romani-speaking population will have passed on their way to Europe), we can assume that this construction was acquired in contact with European languages, specifically with Byzantine Greek, which had an overall profound impact on the lexicon, morphology, and morphosyntax of Romani (cf. Matras 2002). In Greek, as in Romani, definite articles are preposed and agree with their head noun in gender, number, and case. Note that Greek is geographically isolated in its formation of definite articles. The Balkan languages to the north and west have.postposed definite articles that appear to have derived from demonstratives (cf. Bulgarian kuče-to ‘the dog’, kotka-ta ‘the cat’), while Serbian to the west and Turkish to the east lack definite articles altogether. This strengthens the assumption that Greek alone served as a model for the Romani article.

As can be seen in (1), some dialects of Romani retain article forms in l- in the oblique as well as in nominative plural forms. Such stems correspond to the oblique and plural nominative stems of Romani 3rd person pronouns (les ‘him’, la ‘her’, le/len ‘them’), as well as to those of the oblique demonstratives (-oles, -ola, -ole/-olen).1 The nominative forms of 3rd person pronouns are typically ov ‘he’, oj ‘she’, and on ‘they’ (with prosthetic segments like j- or v- in some regions). There is therefore a likely historical reconstruction scenario for the Romani definite article (cf. Matras 2002: ch. 5): The Romani anaphoric demonstrative gave rise to both third person pronouns and definite articles. The forms were then subject to various analogies and processes of phonological erosion, so that nominative forms in particular have often been reduced to just single vowel words (o, e, a), while some dialects retain the more conservative, consonantal forms in the oblique and sometimes also in the nominative plural.2 While the paradigm’s inflectional behaviour was carried over from its earlier referential function, its semantics and syntactic formation were modelled on those of the Greek definite article.

For cases like that of the Romani definite article, a theory of language change is called for that can answer the following questions. How and why does the need arise to replicate a construction that is present in a contact language using the inherited linguistic-structural material of the recipient language? How, precisely, does this replication proceed? What governs the choice of available item in the recipient language that is used in order to replicate the model? Which changes does this item undergo in order to replicate the model construction? What are the implications for the linguistic system of the recipient language?

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1 Romani demonstratives typically include a prefixed segment, thus kod-oles, od-oles, ko-les, etc.
2 Oblique forms of the Romani definite article in l- are common in a central European area comprising Transylvania, Slovakia, southern Poland, Hungary, eastern Austria, and the Vojvodina regions. Forms of the plural nominative in l- are found the Romani dialects of central Slovakia. See Romani Morpho-Syntax Database online: http://romani.humanities.manchester.ac.uk/rms/
The notion of ‘contact-driven grammaticalization’ represents an attempt to address these questions within the framework of an overall theory of grammaticalization. In the following I refer to key stages in the development of the discussion on contact-induced grammaticalization and the questions it addresses, as well as some of the gaps that are left unanswered by this discussion.

2. Matter and Pattern Replication

The term ‘borrowing’ is probably the most common way of referring to the history of a structure that has been introduced into a language as a result of language contact. Borrowing presupposes some degree of bilingualism, but this can mean even just shallow exposure to another language, of the kind that brought about the import of words like banana or mango into English. Thomason and Kaufman (1988) and Thomason (2001), for example, speak of a ‘borrowing scale’ on which various types of contact-induced structures are accommodated: from the individual word form and morphs, through to phones and phonemes, and on to a wholesale inventory of syntactic-typological constructions.

But this general notion of ‘borrowing’ blurs an important distinction made in both earlier and contemporary works between the replication of what we might call linguistic matter—roughly defined as phonological word forms along with their meanings—and patterns—the more abstract relationship between a form or sequence of forms and its meaning, or form–function mapping (cf. Matras 2009: ch. 9; Matras and Sakel 2007). Weinreich (1964[1953]) described pattern replication as a change in the function of morphemes in a ‘replica language’, inspired by a ‘model language’, referring to the process as ‘convergent development’ (see also Gołab 1956). The phenomenon is also widely known by Haugen’s (1950) label ‘calque’. Later works refer to change in form–function mapping that is triggered by an external model as ‘pattern transfer’ (Heath 1984), ‘metatypy’ (Ross 1996; 2001), and ‘partial or selective copies’ (Johanson 2002). All these works identified processes of meaning extension, primarily at the lexical level, modelled on structures of a contact language.

3 It is accepted that word–form replication is not always fully in harmony with the source. Changes to phonological form through phonological integration are extremely common (cf. Jordanian Arabic banšer from English puncture), but slight changes to meaning can also be found (cf. Romani tajša ‘tomorrow, yesterday’, from Byzantijnse Greek taixia ‘tomorrow’, replacing the inherited Romani kal- ‘tomorrow, yesterday’; or German beamer ‘projector of digital images’, based on English beamer ‘an electronic device that projects a light’).
Givón (1982) was one of the first works to interpret the emergence of grammatical categories from lexical material in creole languages in terms of grammaticalization processes. Typical creole aspectual markers like ta, bi, go were traced back to English lexical stems stay, be, and go respectively, and argued to have acquired secondary meanings as abstract modifiers of other verbs while at the same time undergoing an erosion of their original independent semantics (‘bleaching’) as well as their phonological form. Creoles were argued to undergo extensive processes of grammaticalization of this kind in order to compensate for the absence of grammatical markers, a state of affairs that was inherited from the simplified pidgin stage (see e.g. Heine 2005). But Keesing (1988; 1991) suggested that the process was not independent of external models. The expansion of complex grammar through grammaticalization in Melanesian Pidgin, he argued, was accelerated by a blueprint for the mapping of grammatical meanings onto word forms. This blueprint was inherited from the substrate languages and applied to the word forms of the lexifier language.

The notion of ‘substrate’ language had not been hitherto unknown, but it was often confined to speculative generalizations such as the viewpoint that attributed similarities among the contemporary languages of the Balkans to an extinct (and hardly documented) substrate language (cf. Solta 1980). Keesing’s suggestion was that an existing model guided the natural tendency toward the formation of new categories in creoles. This and similar hypotheses expressed in connection with the influence of West African languages on the formation of Atlantic creoles (Boretzky 1983) led to the proliferation of substrate analyses in creoles studies (cf. Bruyn 1996; Plag 2002; Kouwenberg and LaCharité 2004; Migge and Winford 2007; and many more).

Creoles, however, remain particular in that there is an undeniable gap in the inventory of canonized grammatical expressions and constructions, one that drives users to seek solutions drawing on available resources. The substrate impact in creoles—the manner in which the model of a background, native language guides the speaker to construct grammatical devices in the new, expanding language—is comparable in many ways to that of the background languages of second language learners. ‘Negative transfer’—in this case the employment of background (substrate) language blueprints by learners as a basis for the production of constructions in a target language—is often considered to be responsible for areal convergence in cases of language shift (Thomason 2001) and for the emergence of ethnolects, such as Chinese-influenced Singapore English (Bao 2005). The kind of mixtures that result from bilingual speakers’ limited access to the full inventory of morphosyntactic constructions in the target language, namely the use of background-language construction templates with target-language lemmas, is well described in various works on bilingual speech and has been termed ‘composite matrix language’ (Jakó and Myers-Scotton 1997; Bolonyai 1998).
3. Beyond Creolization and Second-Language Learning

Languages that already possess a full range of productive grammatical constructions may equally resort to processes of grammaticalization in order to rearrange their inventory of morphosyntactic devices or parts thereof, even in situations that do not involve fossilized learning of a target language. This point was highlighted in a series of works devoted to typological change in contact situations, which might be referred to as the ‘Hamburg School’ (Haase 1992; Matras 1994; 1996; Nau 1995). The shared assumption in these studies is that bilinguals are motivated on the one hand to make optimal use of their full repertoire of linguistic constructions irrespective of the constraints on situational language choice that apply in their multilingual speech community. On the other hand, language loyalty and the wish to comply with listener expectation on the appropriate selection of word forms motivates bilingual speakers to follow the constraints on word form selection. Speakers will therefore act in a creative manner in order to improvise matching constructions across the two languages—constructions that are, at least seemingly, licensed in the respective communication settings of both languages since they draw on word forms that are appropriate choices in the respective settings.

The basis for the creation of a new construction is the availability of a word form in the replica language the meaning of which can be exploited to replicate that carried by a key element in the model construction. Haase (1992) and Nau (1995) note that bilingual speakers wish to have equal constructions at their disposal in each language, but they can only do so if they are able to identify parallel items in the two languages as translation equivalents. This means that the grammaticalization process begins by matching lexemes to one another, and adapting the range of meanings expressed by the lexemes of the replica language to those expressed by the parallel lexemes in the model. The procedure exploits the polysemy of the word in the model, which usually has both a concrete meaning and a more abstract one. The process of grammaticalization therefore proceeds along a hierarchical scale from more concrete, lexical meanings to the more abstract, grammatical functions, a property that has been referred to as the ‘unidirectionality’ of the grammaticalization process.

Matras (1994; 1996) similarly emphasises the functionalization of existing internal meanings. He identifies a twofold process by which the bilingual speaker applies the very same mental processing procedure to matching items in both languages, leading to a transposition of the selected replica item from one functional field into another. Thus in the example in (2), the Macedonian dialect of Turkish exploits the inherited Turkish interrogative ne ‘what’ as an uninflcted relativizer that follows the head noun in a postposed relative clause, replicating the
construction of the contact language Macedonian, where the relative clause is introduced by a relativizer što, which also has the meaning of the interrogative ‘what’. The new construction replaces the inherited preposed gerundial construction found in Modern Standard and in Ottoman Turkish. The grammaticalization path shows a shift from an interrogative, whose semantic-pragmatic meaning is fixed within a certain kind of illocution, to a conjunction/relativizer, which has a syntactic function within a complex clause:

(2) a. Modern Standard and Ottoman Turkish
   gel-en      adam
   come-GER    man

b. Macedonian Turkish
   adam ne geldi
   man REL came

c. Macedonian
   čovek-ot što dojde
   man-DEF REL came

Returning to the Romani definite article discussed above, the inherent meaning that makes the ‘Early Romani’ anaphoric demonstrative/3rd person pronoun a suitable candidate to take on the procedure instigated in the Greek model by the definite article is not polysemy per se (for the Greek definite article lacks pronominal-referential functions), but the referential potential of the Romani form, i.e. its semantic potential to act as determiner. The motivation to extract this abstract potential from the concrete meaning of the anaphoric element is triggered by the need to maintain matching organization procedures for referents in both languages, or in other words to syncretize linguistic–mental planning operations in both languages.

A further example is the development of finite modal complementation (or ‘infinitive loss’) in the Balkan dialects of Turkish, such as the variety spoken in Macedonia:

(3) a. Modern Standard and Ottoman Turkish
   (o) git-mek istiyor
   3SG go-INF want.3SG

b. Macedonian Turkish
   (o) istiyor  git-sin
   3SG want.3SG go-3SG.SUBJ

c. Macedonian
   toj sak-a da  id-e
   3SG want-3SG COMP go-3SG
Macedonian Turkish replicates the Macedonian model construction, replacing the inherited Turkish infinitive and postposed modal verb (*git-mek istiyor*) by a finite, postposed complement clause. Note, however, that the Macedonian and the Macedonian Turkish constructions are not isomorphic: Macedonian makes use of a subjunctive complementizer to introduce the non-factual complement clause, while the finite verb shows no distinction for mood. The Macedonian Turkish construction is based on the historical optative inflection of the verb, with no complementizer. The ‘pivotal’ feature that is replicated is thus the order of constituent clauses—a main matrix clause followed by a complement clause—and the subjunctive marking of the complement clause. The means of achieving this marking are language-specific, and draw on language-specific resources and constraints. The historical change involves an extension of the meaning and environment of the historical, semantically conditioned optative, to serve as a syntactically conditioned subjunctive.

The tendency of languages in multilingual settings to develop similar constructions of this kind has been observed in various areas of the world, and for a variety of types of construction, ranging from lexicosemantic formations to the organization of clauses and even morphology (cf. Bisang 1996; 1998; Enfield 2003; Aikhenvald 2002; Bakker 2006). There is now widespread agreement that the process is not necessarily triggered by second language learners, but that native speakers of a language may equally import constructions into their own language based on a foreign model of imitation; thus, contact-induced grammaticalization can equally lead to a kind of ‘borrowing’, not just to ‘negative transfer’.

Following the proposals made in Haase (1992), Nau (1995), and Matras (1998), Heine and Kuteva (2003; 2005) present a theory of contact-induced change that is intended to be fully reconcilable with grammaticalization theory. In the centre is the notion of a mental comparison between a model and a replica language, as a result of which a construction is identified in the replica with the potential to carry the same meaning as the target construction in the model. The candidate construction is then grammaticalized in order to take on the meaning conveyed in the model. The concrete changes may involve expansion of a construction from minor to major use patterns, including an increase in frequency, extension of its distributional context, extension across categories, and the emergence of new categories. Polysemy-copying is only one of several possible directions that the process of contact-induced grammaticalization may take. The unidirectionality of grammaticalization is manifested in the emergence of novel meanings, semantic bleaching, or blurring of existing meanings as lexemes take on more abstract grammatical functions, loss of morphosyntactic properties that are associated primarily with the content-lexeme (as in the case of nouns that are grammaticalized into location expressions, or interrogatives, that are used as subordinators), and possibly also through an erosion or reduction of phonetic substance.
4. PROBLEMS WITH THE GRAMMATICALIZATION MODEL

The grammaticalization model accounts nicely for such developments as the evolution of the Macedonian Turkish relativizer from an interrogative (blurring of meaning of lexemes, acquisition of polysemy and an extended distribution context), the evolution of a subjunctive mood in Macedonian Turkish embedded clauses from an historical optative (through loss of the semantic-pragmatic properties of the optative and emergence of syntactic dependency), and the evolution of the Romani definite article from anaphoric pronouns (through bleaching of meaning, phonological erosion, and acquisition of a fixed distribution context). Nevertheless, there remain several issues with the grammaticalization model that justify the search for an overriding framework of language convergence, of which contact-induced grammaticalization is merely a sub-category.

Firstly, we have seen already that grammaticalization is only one aspect of the process, which often remains compliant with the morphosyntactic constraints of the replica language. We might refer to this as 'accommodated replication', as in the case of the Macedonian Turkish subjunctive, where an inherited inflection category of the verb is used to mark out modality rather than a non-factual complementizer as in the contact languages (cf. Macedonian da, etc.). Grammaticalization itself is partly constrained by both the word class or functional category and by the availability of other options for contact-induced adjustment of the recipient system. Categories such as personal pronouns, demonstratives, case markers, tense-aspect markers, and definite articles are usually highly resilient and rarely borrowed as word forms, but they are frequently subject to convergent development. We thus find that languages in contact tend to share the position and function of definite articles, the semantic setup of demonstratives or of pronouns (e.g. the presence of inclusive/exclusive distinction), or form-function mapping in the domain of nominal case. Arguably we are dealing in all these cases with highly abstract functional items; but the same can be said of relative pronouns, conjunctions, discourse markers, and modality markers, which in contact situations may undergo either pattern replication (i.e. some form of contact-induced grammaticalization) or matter replication (direct borrowing of word forms). In some societies, strong taboos on the borrowing of word forms is said to motivate the exploitation of inherited structures for new functions (cf. Aikhenvald 2002 on the Amazon and Ross 1996 on Melanesia). In other settings, one or the other procedure may be favoured based on the availability of resources for potential replication. For example, the German (Sinti) dialect of Romani replicates German Aktionsart modifications to the verb (so-called verbal particles). The calque *me kerav pre 'I open', from *ich'mache auf, makes use of the inherited Romani...
preposition *pre 'on*, modelled on the polysemy of German *auf*. But in the case of *me dźav hin* for ‘I am going [there]’ for German *ich gehe hin*, no adequate match is found for the German particle *hin*, which lacks such polysemy, and as a result the original word form of the German particle is replicated directly.

A further challenge facing the grammaticalization model is the fact that unidirectionality is a frequent tendency but not an absolute constraint. For a start, contact-induced change can lead to the loss of categories, such as the disappearance of the definite article in Romani dialects in contact with Polish and Russian, or the blurring of gender distinctions in Romani in contact with English. These developments do not occur as a result of structural erosion. Rather, they are the outcome of speakers taking on a less differentiated form–function mapping principle and applying it internally (i.e. to the replica language). Unidirectionality would normally predict that grammaticalization should lead to the continuous acquisition of greater differentiation within the system. As a further example, Dawkins (1916) reports on the generalization of the Greek *m.sg.gen ending -yu* in the now extinct Anatolian Greek dialect of Fertek, copying the Turkish agglutinating marker *-m*. The historical Greek endings *f.sg.gen yinëk-as* ‘of the wife’ and *f.pl.gen yinëk-on* ‘of the wives’ are thus replaced by *ńek-a-yu* and *ńek-es-yu* respectively, modelled on Turkish *kadın-m*, *kadın-lar-m*. This shift from greater inflectional abstractness to agglutinating transparency can similarly be argued to go against the grammaticalization cline. One would instead expect the product of a grammaticalization process to be the loss of semantic transparency and a fusion of functions within one abstract morph, rather than the replacement of an abstract morph through two semantically ‘regular’ morphs.

Finally—though according to some views this is outside the scope of a model of structural change—others argue that the model needs to cope with speakers’ motivation to initiate change and the conditions under which structural innovations will be propagated across a speech community. Example (4) shows a spontaneous innovation by a German–Hebrew bilingual child. The child is at this age beginning to use German modality particles, a structure for which there is no equivalent in Hebrew. Aiming to make full use of the expressive means in his emerging overall repertoire of linguistic structures, and to avail himself of all expressive means, to an equivalent degree, in each and every conversational context irrespective of the language that is being spoken in that context or setting, the child is taking creative steps in order to improvise a construction in Hebrew that would parallel that of the German modality particle yet at the same time be acknowledged and accepted as a legitimate word form in the Hebrew conversation context. The procedure is, at first glance, similar to that identified above as (replica) grammaticalization. The child draws on the polysemy of German *aber*—which functions both as a conjunction ‘but’ and as a particle of accentuation. He selects the Hebrew equivalent of the conjunction, *aváh*, and inserts it into
an equivalent position, aiming at a meaning that is equivalent to that of the
German modality particle:

(4) Bilingual (German-Hebrew) child
   a. Hebrew utterance
      ze aval yafe!
      this but pretty
   b. German model
      Das ist aber schön!
      this is PART pretty
      ‘How pretty [this is]’!

The directionality of the change remains an issue, as it is arguably less expected for
a conjunction to become a modality modifier. Nonetheless, the child’s creative
engagement merely mirrors the pathway of development of the German word form
itself, which has undergone an identical extension of meaning/function.

The point raised by (4) and numerous examples of comparable data shows that
at the level of the individual speaker, pattern replication is a spontaneous, creative
procedure. The likelihood of the innovative construction in (4b) being propagated
throughout the speech community depends, of course, on the degree of normative
authority exercised by the speech community, the degree of self-confidence of
innovating speakers, and in this particular instance also the degree to which
bilingualism is widespread in the community. In the specific case of (4), the
construction is rather unlikely to gain further dissemination. But in a small
community in which a large proportion of children are bilingual and parents
(and institutions) exercise only lax normative control over speech habits, the
construction would stand a fair chance of wide propagation, leading to language
change.

An overall model of grammaticalization through contact that takes into account
speakers’ cognitive and conversational motivation to engage in creative pattern
replication is presented in Matras (2009) (see Figure 22.1). The point of departure
of the process is the speaker’s aim to pursue a particular communicative goal,
embedded into a particular communicative context. This is transposed into a
concrete linguistic task for which an appropriate task schema (see Green 1998)
needs to be assembled from within the linguistic repertoire. Scanning through the
entire repertoire, the speaker identifies a construction that would serve this partic-
ular task most effectively. We assume that, when scanning the repertoire, the
speaker has the entire repertoire at his or her disposal, and does not ‘block’ or
‘deactivate’ any particular language ‘system’. But the speaker is also conscious of the
need to meet certain expectations of the interlocutor in respect of the choice of
word forms.
Fig. 22.1. Pivot-matching in pattern replication (from Matras 2009: ch. 9)

We assume that the optimal construction that was identified does not have an established structural representation that is appropriate for the present context. The speaker therefore tries to optimize communicative efficiency by combining the selected construction with context-appropriate word forms. In order to do this, the speaker deconstructs the construction by isolating its pivotal features, such as the reliance on a polysemic aber in example (4), or the reliance on finite complementation in example (3). This construction 'pivot' is then matched to the inventory of context-appropriate forms. The outcome is a creative, innovative construction that is both task-effective and, seemingly at least, context-appropriate.

5. Concluding Remarks

Contact-induced change is often regarded as an external factor that motivates change, for it derives from outside the linguistic system that is under scrutiny. The explanation offered here questions this approach. It views change as internal to the individual speaker’s language-processing mechanism, and so lends a
communicative dimension to the process of grammaticalization. Speakers’ engagement in innovating constructions is regarded as a creative process that is motivated by the wish to make full and exhaustive use of the expressive potential of the linguistic repertoire as a whole as well as to facilitate the syncretisation of mental planning operations in two or more languages, while at the same time honouring the principal demarcation among sub-inventories of the repertoire—or ‘languages’—and their association with distinct contextual usage constraints. In this perspective, the fact that unidirectionality is observed with more than chance frequency can be explained by speakers’ tendency to associate word forms most firmly and consistently with one language ‘system’ or another (i.e. with a particular set of communicative settings in which language ‘X’ is spoken). In other words, the kind of structures that can be referred to as linguistic ‘matter’ (as opposed to ‘pattern’) are more easily ‘tagged’ in the speaker’s mental lexicon as belonging to a certain language rather than another; they are more ‘contextually stable’ in that their meaning tends to be more consistent and the extralinguistic conditions under which they are selected (and are therefore deemed to belong to one system rather than another) are more stable.

Pragmatic inferences, on the other hand, are drawn from the immediate conversational situation and the contextual environment. Inferences are the product of a creative process that allows the speaker to treat a form and the meaning associated with it with relative flexibility, and to adapt a meaning to the required context. The process of inferencing—the contextual extension of a form–meaning relationship—is less constrained and more universal than the permanent or stable association of a form with its meaning. Speakers therefore allow themselves to generalize pragmatic inferences across languages with relative ease. It is for this reason that so many instances of pivot-matching effectively result in deriving more subtle and abstract meanings from more concrete and transparent ones, thus resembling the process observed in grammaticalization and leading to the kind of developments identified by Heine and Kuteva (2003; 2005) as context extension, rise in frequency, and category renewal.