13. Borrowing

1. Definitions

The term 'borrowing' has been widely used in linguistic literature since the works of Haugen (1950) and Weinreich (1953) to refer to the adoption of a structure from one language within the framework of another. The language that is the source of the structure is usually referred to as the 'donor', while the language that has adopted it is referred to as the 'recipient'.

Borrowing is initiated when speakers of the recipient language come into contact with speakers of the donor language. Such contact can be superficial and limited to just a small group of users who are the importers of new terms, as in the case of English words like *tomahawk* or *sugar*, or it can be the property of an entire bilingual community. When users are bilingual and fluent in both the donor and recipient languages, the challenge is to identify lasting structural changes and to distinguish them from ad hoc language mixing or code-switching.

Poplack, Sankoff, and Miller (1988) argue that borrowing and code-switching are distinct phenomena. They defined 'borrowings' as structures that are formally integrated and show higher corpus frequency. These criteria are necessarily case-specific, since languages in contact may show structural similarities (such as phonological convergence) that can make it difficult to determine the degree of integration, and since setting a threshold for frequency is inevitably random to some extent. By contrast, Myers-Scotton (1993) treats all cases of language mixing as part of the same phenomenon, governed invariably by a hierarchical arrangement between a Matrix and an Embedded language.

A further dilemma concerns the status of Mixed Languages, where substantial structural components of two language systems have intertwined into one. Thomason and Kaufman (1988) characterize Mixed Languages as cases of 'broken transmission', arguing that there is no system continuity between the two source languages and the mixed outcome (see also Bakker and Matras 2003). This means that it is not possible to make a distinction between a donor and a recipient language. However, in later work, Thomason (2015: 40–41) and Thomason and Everett (2001) cite cases of Mixed Languages as examples of borrowing (of inflectional morphology, and of pronouns, respectively), thus assuming that we can, in fact, identify the donor and the recipient (see also Thomason and Kaufman's [1988: 103] characterization of Angloromani as a case of gradual, wholesale borrowing of English grammar into Romani, contrasting with the account offered in Matras [2010] of a historical shift from Romani to English, with selective retention of Romani lexicon as a stylistic device). This is of course crucial to our definition of 'borrowing': if Mixed Languages deserve their title as a category of cases that are fundamentally distinct from incremental, contact-induced language change, where items from a donor system are integrated into a recipient system, then they must remain outside the scope of a cross-linguistic corpus of borrowing examples, with implications for our

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universal evaluation of borrowing, and the constraints that impact on it. I shall return to this point below.

Borrowing is most difficult to discern from code-switching in cases where active bilinguals alternate among meaning-equivalent structures in two (or more) languages. Conversely, the most unambiguous form of borrowing is the use of structures derived from another source language by an entire speech community, following a gradual process of propagation. The distinction between borrowing and code-switching is therefore best captured as a continuum: the more obvious case of borrowing is the default use of a structure for its inherent meaning (rather than for conversational effect), on a regular basis (rather than ad hoc), and by speakers who do not have active command of the language that is the historical-etymological source of the structure in question (Matras 2009: 110–114, 146–149).

2. Types of borrowing

A variety of concepts have been used to capture different forms of cross-language replication of structures, and I will mention just some of these. A distinction can be made between replication of linguistic material in the form of a phonological shape with associated meaning, and that in the form of a structural configuration in which the position and order of elements, and the relations among them, convey a certain meaning. Haugen (1950) and Weinreich (1953) use the term 'borrowing' to refer to the former, while the latter was labelled 'calque' or 'convergence'. The difference can be illustrated by the example of Sinti Romani (spoken in Germany and neighboring regions), where *aktionsart* modifiers to the verb replicate a German model. The phrase *me kerau pre*, literally 'I make up', replicates German *ich mache auf* meaning 'I open'. It draws on the inflected Romani verb *ker* 'to do' and the preposition *pre* 'up', and replicates the meaningful alignment of the corresponding structures in the German construction *mache* 'I do' and *auf* 'up, on', exploiting the polysemy of German *auf*, which is also an adjective meaning 'open'. By contrast, German *ich gehe hin* 'I am going (to an aforementioned destination)' is replicated in Sinti Romani as *me džau hin*. Here, the Romani verb *džau* 'I go' is accompanied by the German borrowing *hin* 'towards'.

Strictly configurational features such as word order are by necessity candidates only for calquing, convergence, or 'pattern' replication. But as the Sinti Romani example demonstrates, in lexicon and morphology both borrowing (replication of linguistic 'matter') and calquing (replication of 'pattern') are in principle possible. There are, however, some tendencies that point to a preference among certain categories, though these are not strict constraints: case and agreement morphemes, for example, are rarely borrowed as matter-forms, but the meaning and distribution of case markers can be the subject of convergence among languages, with one replicating the system of another by drawing on inherited forms (Tenser 2016). Definite articles, too, are often subject to convergence. Romani replicates Byzantine Greek preposed articles, deriving them from its inherited inventory of demonstrative pronouns (Matras 2002: 96), and the Sorani Kurdish definite article *eke* is regarded as a replica of the article of contiguous Semitic languages (notably Syriac or Aramaic), while the very same suffixed article is then borrowed from Kurdish in its matter-form into modern Aramaic (Khan 2007).

Another distinction relates to the diffusion of a borrowing within the receiving system. English replicates the Latin inflectional distinction between singular and plural in *fungus* versus *fungi*, but it remains unproductive and limited to a small number of Latin nouns, diffusing neither 'backwards' to inherited English words, nor 'forwards' to other loanwords or new vocabulary. By contrast, Yiddish borrows the Hebrew plural marker with Hebrew loans such as *xavéjrim* 'friends', which diffuses forwards to some European loans such as *doktójrim* 'doctors'. Kurdish borrows the pharyngeal phoneme /ḥ/ in Arabic loans such as *ḥeywan* 'animal', which diffuses backwards into inherited Kurdish words like *ḥeft* 'seven' (< *heft*), substituting for an original glottal.

Borrowing may involve the adoption or replication of a single feature, or of a set of features, with potential implications for the typological arrangement of the receiving system. Phonetic and phonological features can accompany individual loanwords, but may also, as in the above example, become part of the inherited inventory, with implications for the recipient language's sound system as a whole. In Romani, Modern Greek affricates /dz/ and /ts/ are largely limited to borrowed words, while in Kurdish, as mentioned above, pharyngeal sounds, which originally only accompanied Arabic loans, can appear in inherited words. Borrowing can also entail a loss of features, in which case the notion of replication can only be applied to the system as a whole and not to individual structures: Russian Romani has lost the historical Romani definite article by replicating the Russian system with no overt marking of definiteness.

Replication of configurational patterns can also have implications for the typology of the system as a whole. Rumelian Turkish shows finite adverbial subordinations, and finite complement and relative clauses, as well as a formal distinction between factual and non-factual complements, consistently matching the structures of neighboring languages in the Balkans (Bulgarian-Macedonian, Albanian, Greek; Matras and Tufan 2007). Here one can speak of overall convergence among the languages, as it is difficult to identify precisely which contact language was the source of a particular construction, or indeed whether the similarities might be due to a generalization of finite constructions that had been inherited from Oghuz Turkish and had existed alongside nominal-participial constructions (these became the norm in Ottoman Turkish). While the classic concept of 'borrowing' pertains, as noted above, to an identifiable structure with identifiable etymology, diachronic analyses often need to adopt a broader interpretation that would include the possibility of a contact-induced preference to select a particular structure among inherited options, or even just to accelerate internal change and alter the distribution of a construction. Heine and Kuteva (2005) therefore speak of contact-induced grammaticalization as a driver of morpho-syntactic change in contact situations. They propose that general notions of grammaticalization theory such as semantic extension, expansion of distribution, and increased frequency, can account for and help frame processes of convergence. The issues of 'belonging' to an original donor system and 'employment' in the receiving system are dealt with by identifying one of the language-specific constructions as a 'model', and the other as a 'replica'.

Another way of approaching the question of borrowing in cases of morpho-syntactic convergence is the notion of 'pivot-matching' (Matras 2009: 240–242). This is compatible in principle both with the idea of contact-induced grammaticalization, and with that of a replication of constructions (a topic dealt with in several of the contributions to Wiemer, Wälchli, and Hansen [2012]), but is not constrained by the directionality condition of the grammaticalization model. This allows us to account both for the loss of

categories as a result of contact and for the acquisition of new ones, and it can offer a local account of the actual construction components that are affected by cross-language replication. Consider the following examples from Khuzistani Arabic (Matras and Shabibi 2007):

(1) Khuzistani Arabic:
a. *walad č-čibīr*
boy DEF-big
'the big boy'

b. *walad l-modīr*
boy DEF-director
'the director's son'

Attributive constructions involving adjectives (1a) and modifying nouns (1b) follow essentially the same pattern, with the historical Arabic definite article *(a)l* (which assimilates to dental/palatal consonants, resulting in consonant germination in [1a]) functioning as a nominal attributive marker taking on a proclitic position with the attribute. This replicates the Persian system, with which Khuzistani Arabic is in contact, where the nominal attributive ending *e* serves the same function in the same position in the noun phrase:

(2) Persian:
a. *pesar-e bozorg*
boy-ATT big
'the big boy'

b. *pesar-e modīr*
boy-ATT director
'the director's son'

By contrast, Classical Arabic, Modern Standard Arabic, and all other contemporary Arabic dialects distinguish between adjectival attribution, where noun and adjective agree in definiteness, and nominal attribution, where the definite article links the NP with its possessor-modifier:

(3) Arabic (general):
a. *l-walad l-kabīr*
DEF-boy DEF-big
'the big boy'

b. *walad l-mudīr*
boy DEF-director
'the director's son'

What is 'borrowed' from Persian into Khuzistani Arabic is the absence of a contrast between the two constructions. At the core of the process lies an interpretation of the pivotal feature of the Arabic attributive constructions − the mediating definite article in

the position between head and modifier − as matching, in scope and function, the pivotal feature of the corresponding Persian construction − the attributive (ezafe) marker *e*.

The notion of 'heavy borrowing', introduced by Thomason and Kaufman (1988) and often cited in specialized literature, presupposes either an agreed-upon threshold for borrowing (which is not available), or the borrowing of categories that are less prone to cross-linguistic replication (which in turn would suggest a hierarchical understanding of borrowing, a point to which I return below). The following example from Palestinian Domari offers an uncontroversial example of heavy borrowing:

(4) Palestinian Domari:
kān ʕumrom yimkin sitte snīn sabʕa snīn
was.3SG.M age1SG maybe six years seven years
'I was maybe six or seven years old'.

Here, all items except for the 1SG possessive ending *om* in the word *ʕumrom* 'my age' are derived from and shared with the contemporary contact language, Palestinian Arabic (Matras 2012). This includes the nouns 'age' and 'year' (along with the latter's plural marking), the modal particle 'maybe', the numerals, and, most exceptionally for borrowing, the auxiliary verb 'to be' along with its Arabic inflection. If this Domari utterance might be considered a yardstick for heavy borrowing, then it would be the borrowing of particular categories, most notably the numerals and the inflected auxiliary, rather than the random density of Arabic-derived structures in one particular utterance, that would constitute a measure of the degree of borrowing and its impact on the receiving system, and would thus in this case qualify as 'heavy'. But the overall density of Arabic loans in this utterance does provide an illustration of just how far-reaching the structural implications of borrowing can be.

3. Motivations for borrowing

Two frequently cited motivations for borrowing are 'gaps' in the recipient system, and the 'prestige' of the donor system. Gaps of course explain the borrowing of terms for new artefacts, products, and cultural innovations (such as English *banana*, *sushi*, or *parliament*), including social and ideological concepts (such as English *majesty* or *redemption*). Comparative data on loanwords in a sample of languages (Haspelmath and Tadmor 2009; see also World Loanword Database: http://wold.clld.org/) shows some clear hierarchical trends, with semantic categories, such as modern world artefacts, leading in proneness to borrowing, followed by religion and belief, clothing and grooming, household items, and the law. Prestige, by contrast, is a vague notion. It tends to refer to the dominant status of a language within a particular domain of social interaction. Thus, domain-specific borrowings, such as English *beef*, *mouton*, *poultry*, and *pork*, which complement inherited terms, like *ox*, *sheep*, *chicken*, and *pig*, might be explained as reflecting the role of French as a preferred language of the medieval English elite and a source of imitation in connection with culinary customs. Similarly, the English slang expressions *pal* 'friend', *kushty* 'good', *chavy* 'guy', and *minge* 'vagina' from Romani

reflect the association of Romani in eighteenth and nineteenth century England with defiance of the authority of the establishment.

The motivation behind such borrowings is thus invariably connected to the specialized roles of languages in different social interaction domains. Thus, Khuzistani Arabic has *bāṣ* 'bus', a pan-Arabic loan from (colonial) English, in the singular, but *otobushā* 'busses', from Persian (which in turn borrows the singular form from French), in the plural, reflecting the contemporary dominance of Persian in the domain of formal-institutional communication, where busses are more likely to be referred to in the plural. Hebrew, by contrast, has the European loanword *oto* 'car' in the singular but the neologism *mexoniyot* 'cars' in the plural, a reflection of the impact of language-engineering and revivalist ideologies on formal-institutional communication domains.

Neither gaps nor prestige, however, explain borrowings that replace inherited items, or the apparent hierarchical nature of borrowing in some cases. For example, borrowed terms are more likely to target more remote kin (English *uncle*, *aunt*, *grandparents*, *niece*, *nephew*, from French; Maltese *nannu* 'grandfather, *ziju* 'uncle', *kuġin* 'cousin', *neputi* 'nephew' from Italian/Sicilian) than proximate kin words for parents, siblings, and direct offspring; and languages that borrow numerals, such as Swahili and Palestinian Domari (both from Arabic) and Romani (from Greek) are more likely to borrow numerals above '5' than under. There are thus, in addition to the effect of diglossia, also cognitive factors in operation, whereby everyday concepts that are simple, close, intimate, and more frequently used tend to resist borrowing, whereas their paradigm counterparts that indicate complexity, remoteness, formality, and tightly-regulated routines are more borrowing-prone. From this one might draw the conclusion that borrowing can serve, in its incipient stage, as a meaningful way of marking asymmetry between paradigm values (Elšík and Matras 2006: 385).

The question arises in particular in relation to the borrowing of functionally equivalent (or near-equivalent) structures in grammar. Poplack (1980) argues that the frequent insertion of English discourse markers into the Spanish discourse of semi-bilingual Puerto Ricans in New York City serves to flag the prestige of being bilingual. But for fluent bilinguals, the tendency to replace such items with those derived from the language that dominates in formal interaction contexts (the prestige language) can be seen as an effort to reduce cognitive processing load; this is evidenced both through bilingual speech production errors that are in effect 'counter-prestigious', and through the hierarchical nature of historical borrowing that shows items that challenge presuppositions at the top of the susceptibility scale (Matras 1998, 2000). An attempt to provide a more holistic approach is Myers-Scotton's (2002) '4M-model', which postulates a stratification of morphemes in the speech production process and links it to their likelihood to be affected by language mixing. One can certainly assume that factors such as 'executive control' (Green 1998) over the selection of items in the repertoire will have a differentiated impact on grammatical categories, in effect making it more or less of a challenge for bilingual speakers to maintain system separation around particular categories, thereby influencing the likelihood of longer-term generalization across the repertoire of just one construction, and the subsequent propagation of that construction throughout the speech community, leading to long-term borrowing (Matras 1998).

4. Structural integration

According to some definitions (e.g. Poplack, Sankoff, and Miller 1988), borrowings are always structurally integrated into the recipient system, meaning that they are phonologically and morphologically adapted, or that they take on the 'system morphemes' and linear order rules of the receiving, or 'matrix', language (Myers-Scotton 1993, 2002). Yet the reality is more complex. Phonological adaptation may be characteristic, as in Japanese *pikunikku* 'picnic', but the retention of the Arabic pharyngeal in Kurdish *ḥeywan* 'animal' (an Arabic loanword) shows that borrowed words can also be a conduit for borrowed phones and phonemes. Morpheme boundaries in the donor language are not always analyzable in the process of morphological integration, as seen in Spanish *aceite* 'oil' from Arabic *az-zēt* '(the) oil', where the original definite article is interpreted as part of the noun's generic meaning, or conversely, Swahili *kitabu* 'book', *vitabu* 'books', where the initial syllable in the Arabic word *kitāb* is reinterpreted as a Swahili nominal classifier *ki*. Some languages show morphological compartmentalization, with borrowed lexical items taking borrowed morphology. In Romani, Greek-derived verbs, like *jir(iz)* 'to return' and *xa(s)* 'to lose', retain their Greek-derived aspectual endings, which are also generalized to all subsequent (post-Byzantine) loan verbs, as in Turkish-derived *anladiz* 'understand' and Slavic-derived *končis* 'to complete' (Matras 2002: 128), while in some Romani dialects, Turkish loan verbs retain their complete Turkish inflection, as in Kalburdžu Romani (Sindel, eastern Bulgaria) *mangav* 'I want' (inherited Indic), but *konušuim* 'I speak' (borrowed, Turkish). In Palestinian Domari, modal and auxiliary verbs retain their complete Arabic inflection, as in *ṣār* 'he began', *ṣirt* 'I began' (borrowed, Arabic), but *šarda* 'he said', *šardom* 'I said' (inherited, Indic).

Borrowed verbs are an interesting case. Structural integration patterns range from no particular marking, as in English *demand*, to historical changes in adaptation patterns, as in German *telefonieren* 'to telephone', *protestieren* 'to protest', borrowed from French in the nineteenth century, but *parken* 'to park', *downloaden* 'to download', borrowed from English since the late twentieth century. Many languages use particular devices such as: a distinct verb inflection class, as in the Romani examples cited above; an inflection class that conveys causativity, intensitivity, or iterativity, as in Hebrew *tilfen* 'to telephone' and *kitleg* 'to catalogue', akin to *kirev* 'to draw closer', *šiber* 'to break into pieces', and *šitek* 'to paralyse'; or explicit verbalization by means of adding a light verb, as in Turkish *teşekkür etmek* 'to thank' (from Arabic/Persian *tašakkur* + *etmek* 'to do'). The typology of verb borrowing thus shows a range of options that indicate a continuum in the extent to which a lexical item's 'verbness' is taken for granted based on its meaning, or requires explicit flagging through either inflection or composition. This in turn can be taken to reflect the cognitive complexity of verbs as carriers of meaning, deictic and presupposition features (tense, modality), internal event structures (aspect), and argument structures (Matras 2009: 175; Wohlgemuth 2009).

5. Constraints on borrowing

A common view in contact linguistics is that borrowing is conditioned by the structural congruency of the specific languages in contact, and by the sociolinguistic relations

among them. Yet not every instance of borrowing is predictable, even in cases where we have identical prerequisites in these two areas. For example, Jordanian Domari borrows the Arabic (feminine) plural ending *āt* and uses it with inherited Indic nouns (backwards-diffusion), irrespective of grammatical gender, as in *putrāt* 'children', while Palestinian Domari only shows the ending with (feminine) Arabic loans and retains inherited plural formation with inherited nouns, as in *putre* 'children'. Both varieties have an identical history of contact with surrounding languages, under the same sociolinguistic conditions, and are structurally the same language with only very minor dialect differences.

In searching for predictions and identifying constraints on borrowing, we can be guided instead by two theoretical considerations: the postulation of meaningful implicational hierarchies of borrowing, and the rareness of borrowing around certain functional or structural categories. These are perhaps the most fascinating and rewarding, but also the most controversial, and empirically most challenging, areas of research on borrowing.

Notional implicational hierarchies were proposed by Moravcsik (1978) in relation to specific pairs of typological categories, such as lexical > non-lexical, nouns > non-nouns, free morphemes > bound morphemes, and derivation > inflection, rendering the overall theme of semantic transparency a facilitator for borrowing (or non-transparency a restriction); and by Thomason and Kaufman (1988) in the form of a gradient of likelihood of borrowing, in which, however, some categories such as 'function words' or 'typological features' remain rather vague and undifferentiated, while the overall theme merely suggests that prolonged and intensive contact between languages is likely to yield more extensive borrowing. More specific results have since been obtained through targeted, cross-linguistic sampling (Elšík and Matras 2006; Matras 1998; Matras and Sakel 2007; Stolz and Stolz 1997). This work points to a connection between susceptibility to borrowing, and the truth- or presupposition value assigned by a category to propositional content. A good example is the borrowability hierarchy of connectives 'but > or > and' (Matras 1998) (where 'greater than' indicates greater likelihood of borrowing, and the order is implicational), a hierarchy that has been widely attested across different samples. Here, contrast − the unexpected that is beyond the speaker's control and therefore associated with interactional tension, as it puts the speaker's assertive authority potentially in jeopardy − is more prone to borrowing than addition, which conveys a continuous and expected inferential chain. Similar hierarchies have been identified for other functions, such as indefinites, comparatives, tense and modality, and more (Matras 2007, 2009: 218). Such hierarchies are difficult to explain, especially from a cross-linguistic perspective, with reference to either formal-structural features, or merely to sociolinguistic conditions and prestige. Rather, they capture an interactional dimension, whereby those categories that clash with, or cannot be firmly derived from, presuppositions are more prone to borrowing. This suggests that the speaker's management and control of the interaction is linked to the speaker's executive control of repertoire components, and that in turn the diachronic process of borrowing is linked to the processing of language in conversation in bilingual settings.

Identifying cross-linguistic borrowing universals is an empirical challenge, not least because of the need to have information about the etymology of structures and items, as well as about the history of contacts, information that is not available for most languages of the world. Even where documentation of contact phenomena exists, it is often incomplete, and selective reading of isolated observations can easily lead to misinterpretations. For example, the mention, in a first-hand source, that a Turkic language borrowed the

Iranian comparative suffix *tar*, does not imply that it is only the comparative, and not the superlative, that is borrowed (*pace* Seifart 2017), and in fact, Iranian *tar* serves as both comparative and superlative. When such errors of interpretation infiltrate a statistical analysis that is based on a rather small sample, then they risk invalidating the conclusions.

It is also empirically difficult (or even impossible) to rule out that some items or categories can be borrowed, or to claim with certainty that they cannot. Yet the extensive documentation that is available on borrowing does show that there are some significant differences in frequency among borrowed categories, both in absolute terms, and in relation to the borrowing of other categories in the same language contact setting. Attestations of borrowed pronominal forms, for example, or of bound person morphemes, are relatively rare. Thomason and Everett (2001) try to challenge the assumption that pronouns are rarely borrowed. However, as examples they cite Mixed Languages. This undermines the very definition of Mixed Languages as examples of 'broken transmission' (see above). Following Wallace (1983), they also cite cases from Southeast Asia. However, Wallace himself had identified these cases as functionally and typologically distinct from Indo-European pronouns, in that they essentially convey lexical meaning, and are thus more akin to expressions such as 'Your Majesty' or 'Your Honor', rather than constituting deictic or anaphoric elements. Indeed, Thomason (2015) mentions the ambiguity of Mixed Languages as examples of the borrowability of inflectional morphemes, for which attestation is equally rare.

The view put forward by Thomason (2015), and recently reiterated by Seifart (2017), that there are no strict constraints on borrowing, might be seen as representing a rejection of an epistemology according to which the purpose of investigating borrowing, and indeed of any scientific investigation, is to venture beyond the mere listing of facts and to attempt instead to offer an explanatory account of those facts. For its part, the search for constraints on borrowing, and for the factors that facilitate borrowing, rests on an epistemology which identifies overwhelming trends as worthy of attention (even if isolated exceptions exist), which purports to be able to derive explanatory models from trends, and which indeed sees the purpose of the cross-linguistic examination of borrowing as an ambition to be able to formulate an explanatory model. It operates on the assumption that borrowing is not random, but that it is conditioned in some way by human behavior, and that it reflects the dimensions of human communication and the processing of information and knowledge that are encoded in the structural categories of language. In this respect, the study of borrowing hierarchies has the potential to provide an important window into a better understanding of the layered structure of the language faculty itself, and possibly even of key aspects of the evolution of human language.

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