Chapter II

Lexical borrowing: Concepts and issues

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1. Lexical borrowing as a topic for general linguistics

There is a large amount of previous research on loanwords in individual languages, but the Loanword Typology project is the first research project that attempts to shed light on lexical borrowing in general by adopting a typological approach.[1] This chapter defines and discusses some of the basic notions required for such an endeavor, and raises some of the most important issues.

A broadly comparative (and ideally world-wide) perspective is essential if we want to go beyond the descriptive goal of identifying particular loanwords and their histories, towards the goal of explaining (at least partially) why certain words but not other words have been borrowed from one language into another language. To be sure, there are many simple cases of culturally motivated borrowing where a cultural importation is accompanied by a lexical importation in a straightforward way, e.g. Quechua borrowing *plata* 'money' from Spanish, or English borrowing *kosher* from Yiddish. But even in such seemingly unproblematic cases, there is always the question why a borrowing had to take place at all, because all languages have the means to create novel expressions out of their own resources. Instead of borrowing a word, they could simply make up a new word. And of course there are many other cases where it is not at all clear why a language borrowed a word from another language, because a fully equivalent word existed beforehand. Thus, French had no need to borrow *blanc* 'white' from Franconian (because Latin had *albus* 'white'), and English had no need to borrow *window* from Old Norse (because Old English had an equivalent word *eagþyrel*).

Thus, explaining observed loanwords and assessing the likelihood of borrowing particular words is not straightforward. Two main types of factors have been made responsible:

– social and attitudinal factors (prestige of the donor language, puristic attitudes)
– grammatical factors (e.g. the claim that verbs are more difficult to borrow than nouns because they need more grammatical adaptation than nouns).

When we set out on this project, there were many suggestions in the literature (some of which are reviewed in subsequent sections of this introduction), but very

[1] Earlier general work such as Møller (1933) and Deroy (1956) is limited to European languages, and almost all theoretically oriented corpus-based work work (e.g. Poplack & Sankoff 1984, Poplack et al. 1988, van Hout & Muysken 1994) is limited to a single language.

little systematic evidence for them. The best-known generalization about lexical borrowing is the constraint that "core vocabulary" is very rarely (or never) borrowed. This has found its way into many textbooks (e.g. Hock & Joseph 1996: 257, Thomason 2001: 71–72), but a definition of what constitutes this hard-to-borrow "core" or "basic" vocabulary is rarely given. In practical terms, linguists often work with Swadesh's (1955) list of non-cultural vocabulary, which were intended by their author to be his best guesses as to which words are resistant to borrowing. But this list was drawn up by Swadesh on the basis of his personal anecdotal knowledge and intuition, not on the basis of systematic cross-linguistic research. The Loanword Typology project represents some of the research that would have been a prerequisite for Swadesh's word-list-based historical-comparative linguistics.

More generally, better knowledge of lexical borrowability will be important for further progress in historical-comparative linguistics (cf. Haspelmath 2008). Especially in less well-researched languages and language families, and at older stages of history, it is often unclear whether a word is a loanword or a native word that is cognate with its putative source. Often two languages or families showing striking lexical similarities that unambiguously prove a historical relationship, but whether these lexical similarities are due to common inheritance or to borrowing is a matter of dispute. In such disputes, more systematic knowledge of the general patterns of loanword distribution will hopefully be helpful in the future, and the results presented in Tadmor's chapter constitute a beginning.

2.   Defining "loanword"

Loanword (or lexical borrowing) is here defined as a word that at some point in the history of a language entered its lexicon as a result of borrowing (or *transfer*, or *copying*). Fortunately, this definition is uncontroversial, but there are a number of things to note.

First, the term *borrowing* has been used in two different senses: (i) As a general term for all kinds of transfer or copying processes, whether they are due to native speakers adopting elements from other languages into the recipient language, or whether they result from non-native speakers imposing properties of their native language onto a recipient language. This general sense seems to be by far the most prevalent use of the term *borrowing*. But *borrowing* has also been used in a more restricted sense, (ii) "to refer to the incorporation of foreign elements into the speakers' native language" (Thomason & Kaufman 1988:21), i.e. as a synonym of *adoption* (Thomason & Kaufman use the term *substratum interference* for 'imposition', and *interference* as a cover term for 'borrowing/adoption' and 'substratum interference/ imposition').

In this work, we use *borrowing* in the more common, broad sense, and the two types of borrowing, depending on whether the borrowers are native speakers or non-native speakers, are called adoption and imposition (or, equivalently, *retention*) (following Van Coetsem 1988, Winford 2006). Apart from the fact that this

terminology is more in conformity with traditional usage, it is symmetrical, and it gives us additional verbs (*adopt, impose, retain*) that can be used in a precise, technical sense. Of course, the term *borrowing* is based on a strange metaphor (after all, the donor language does not expect to receive its words back), so a term like *transfer* or *transference* (e.g. Clyne 2004) would be preferable. Even better is Johanson's (2002) term *copying*, because the transfer metaphor still suggests that the donor language loses the element in question. However, since *borrowing* is so well-established in linguistics, going back at least to the 18th century, and since the metaphor does not lead to any misunderstandings, we will continue to use it here (alongside its synonyms *transfer(erence)* and *copying*).

The language from which a loanword has been borrowed will be called the donor language, and the language into which it has been borrowed is the recipient language. (Alternative term pairs that one sometimes finds in the literature are *source language/borrowing language*, and *model language/replica language*.) The word that served as a model for the loanword will be called source word.[2]

Loanwords are always *words* (i.e. *lexemes*) in the narrow sense, not lexical phrases, and they are normally *unanalyzable units* in the recipient language. The corresponding source word in the donor language, by contrast, may be complex or even phrasal, but this internal structure is lost when the word enters the recipient language.[3] For example, Russian has the loanword *buterbrod* 'sandwich', borrowed from German *Butter-brot* [butter-bread]. This is a transparent compound in German, but since Russian has no other words with the elements *buter* or *brod*, the Russian word is monomorphemic and not analyzable by native speakers. However, when a language borrows multiple complex words from another language, the elements may recur with a similar meaning, so that the morphological structure may be reconstituted. This is the case with the numerous Japanese loans based on Chinese compounds. For example, Japanese borrowed *kokumin* 国民 'citizen' from Chinese *guó-mín* [country-people] 国民 (cf. Schmidt, Japanese subdatabase), but it also borrowed other words with the element *kok(u)* 'country' (e.g. *kok-ka* 国家 'nation', *koku-ō* 国王 'king') and other words with the element *min* 'people' (e.g. *minshū* 民衆 'population', *jūmin* 住民 'inhabitant'). As a result of these multiple borrowings, many of the original Chinese compounds are again transparent in Japanese, and can be regarded as analyzable. Similarly, in English neoclassical compounds (like *ethnography, ethnocracy, ethnology, gerontology, gerontocracy,*

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[2] Notice that the verb *to borrow* can take either the source word or the loanword as its object: We can say "Portuguese borrowed the Chinese word *chai* 'tea' (as *chá*)", or we can say "Portuguese borrowed *chá* 'tea' from Chinese (*chai*)". The context will make clear which is intended. (Likewise, expressions such as *Portuguese loanword* are ambiguous, referring either to loanwords borrowed from Portuguese, or to Portuguese words which are loanwords.)

[3] Conversely, when a word is analyzable within the recipient language, it can normally not be a loanword, because it was created within the recipient language (even if its members are loanwords: the English compound *train station* is not a loanword, although it consists of two borrowed roots). The Japanese compounds mentioned in the text below are exceptions to this generalization.

crystallography) are often transparent, and the pattern is productive even among speakers who do not know Greek and Latin.

Loanwords are opposed to native words, i.e. words "which we can take back to the earliest known stages of a language" (Lehmann 1962: 212). But given our definition of *loanword* above, we can never exclude that a word is a loanword, i.e. that it has been borrowed at some stage in the history of the language. Thus, the status of native words is always relative to what we know about the history of a language. English *dish* goes back to Old English and has cognates in other Germanic languages (e.g. German *Tisch* 'table'), so in this sense it could be regarded as a native word (contrasting with *disk*, which was borrowed from Latin *discus* in the 17th century). But we know more about the history of English than the attested forms in Old English: Proto-West Germanic **disk* has itself clearly been borrowed from Latin *discus*, so that English *dish* must count as a loanword after all. Even for words that have been reconstructed for a very ancient proto-language, such as English *mother* (from Proto-Indo-European **mātēr*) or ten (from **dekm*), we cannot be sure that they were not borrowed from another language at some earlier stage. Thus, we can identify loanwords, but we cannot identify "non-loanwords" in an absolute sense. A "non-loanword" is simply a word for which we have no knowledge that it was borrowed.[4]

Note, finally, that the term *borrowing* refers to a completed language change, a diachronic process that once started as an individual innovation but has been propagated throughout the speech community (the innovation/propagation contrast will be discussed further in §4). The nominalization *borrowing* can also metonymically refer to a borrowed element (a *borrowing*, or a *loan* 'a borrowed element').[5]

3.   Loanwords in a taxonomy of borrowings

Although in this work we are primarily concerned with loanwords, it will be useful to consider briefly a range of other borrowing phenomena that are more or less closely related to loanwords. A basic distinction that must be made is that between material borrowing and structural borrowing (or *matter borrowing* and *pattern borrowing*, Matras & Sakel 2007). Material borrowing refers to borrowing of sound-meaning pairs (generally lexemes, or more precisely lexeme stems, but sometimes just affixes, and occasionally perhaps entire phrases), while structural borrowing

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[4] Technically, *native word* is equivalent to "non-loanword", but there is a tendency among historical linguists to restrict the term to words which have cognates in related languages and which can be reconstructed to some proto-language. A word such as English *bad*, which did not exist in Old English and which has no known cognates in other Germanic languages, would not normally be called a "native word". In the world-wide perspective of our work, where we deal with many languages about whose prehistory little is known, the term *native word* is not very useful.

[5] The English terminology would be more systematic if we said *borrowing-word* instead of *loan-word*, or *to loan* instead of *to borrow*. Apparently *loanword* was calqued from German *Lehnwort*, while *to borrow* was used much earlier.

refers to the copying of syntactic, morphological or semantic patterns (e.g. word order patterns, case-marking patterns, semantic patterns such as kinship term systems).

Loanwords are the most important type of material borrowing, and loan translations (or calques) are an important type of structural borrowing. A calque (or loan translation) is a complex lexical unit (either a single word or a fixed phrasal expression) that was created by an item-by-item translation of the (complex) source unit. The most frequently cited examples of calques are compounds, such as German *herunter-laden* (calqued from English *down-load*), French *presqu'île* (calqued from Latin *paen-insula* 'almost-island'), or English *loan-word* (calqued from German *Lehn-wort*). But calques may also be morphological derivatives, such as Czech *diva-dlo* 'theatre' (calqued from Greek *thea-tron* (look-PLACE)), or Italian *marcat-ezza* (calqued from English *marked-ness*). And calques may be fixed phrasal expressions, such as English *marriage of convenience* (calqued from French *mariage de convenance*).

Another important type of structural borrowing is loan meaning extension, an extremely common (and often unnoticed) process whereby a polysemy pattern of a donor language word is copied into the recipient language. For example, the English word *head* is used in a technical sense to refer to the main word in a syntactic phrase, and following this usage, the German word *Kopf* 'head' is now also used in this grammatical sense.[6] Since such cases reproduce a semantic pattern, they also fall under structural borrowing. (Loan translations and loan meaning extensions are sometimes grouped together as loanshifts, i.e. lexical innovations created by purely structural borrowing; Haugen 1950: 219.)

Loanblends are hybrid borrowings which consist of partly borrowed material and partly native material (the structural properties are also borrowed). An example given by Haugen (1950: 219) is Pennsylvania German *bockabuch* 'pocketbook', where *bocka-* is a material borrowing (from English *pocket*) that is restricted to this word, and *-buch* is a native German element rendering *-book*. Loanblends are not widely attested. Most hybrid-looking or foreign-looking expressions are in fact not borrowings at all, but loan-based creations, i.e. words created in a language with material that was previously borrowed (e.g. English *desk lamp,* a compound made up of two words that were ultimately borrowed from Greek). Such words are related to loanwords etymologically, but they cannot count as loanwords.

Finally, some authors also include loan creations among borrowings, i.e. formations that were inspired by a foreign concept but whose structure is not patterned on its expression in any way. For example, the German word *Umwelt* (*Um-welt* [around-world]) was coined to render French *milieu* (*mi-lieu* [mid-place]) 'envi-

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[6] Haugen (1950: 214) uses the term *semantic loan* for a rather different concept: He cites the example of Portuguese *humoroso* 'capricious', which acquired the meaning 'humorous' in American Portuguese under the influence of English. A similar example is Old English *dwellan* 'lead astray', which changed its meaning to 'dwell' under the influence of Old Norse *dvelja* 'abide' (Lehmann 1962: 213). In these examples, the two words are recognizably cognate, and this must have facilitated the semantic change. Thus, they are really closer to material borrowing than to structural borrowing.

ronment'. According to Haugen (1950: 220), such words "may ultimately be due to contact with a second culture and its language, but...are not strictly loans at all" (see also Höfler 1981). However, if the meaning of the loan creation is an exact copy of the meaning of the model word, then we are dealing with clear cases of pure semantic borrowing here.

4.   Loanwords and code-switching

Bilingual speakers often alternate between the two languages in the same discourse, sometimes even within the same sentence or the same word. This phenomenon is called code-switching. Although there are some grammatical restrictions on code-switching (Myers-Scotton 1993, Muysken 2000), the alternation between the two languages is not conventionalized in code-switching. Code-switching does not mean that there is a mixed code, but speakers produce mixed utterances including elements from both codes. Thus, code-switching is not a kind of contact-induced language change, but rather a kind of contact-induced speech behavior. In this way, code-switching differs sharply from borrowing.

However, when an utterance consists of just a single word from one language and all other words are from the other language, it may be difficult to decide whether this word is a loanword or a single-word switch. Consider the example in (1).

(1)   Moroccan Arabic (with Dutch)   (Boumans & Caubet 2000: 116)
  ye-ʕṭi-w   n-nas   l-uitkering dyal-hŭm
  3-give-PL   DEF-people   DEF-benefit of-3PL

  'They'll give the people their (social security) benefit.'

(2)   Australian German (with English)   (Myers-Scotton 1993)
  Wir müssen sie report-en zur Polizei.
  'We must report them to the police.'

Are *uitkering* in (1) and *reporten* in (2) single-word switches or loanwords? At an abstract level, the answer is clear: If *reporten* is part of the mental lexicon of the Australian German of the speaker, it is a loanword, otherwise it is a single-word switch. But since we are unable to look directly into the speaker's mental lexicon, other criteria have to be used in practice.

From the point of view of an entire language (not that of a single speaker), a loanword is a word that can conventionally be used as part of the language. In particular, it can be used in situations where no code-switching occurs, e.g. in the speech of monolinguals. This is the simplest and most reliable criterion for distinguishing loanwords from single-word switches.

But it is often the case that the whole speech community is bilingual, so that code-switching may always occur. In such circumstances, the frequency criterion is

useful: If particular concepts are very frequently or regularly expressed by a word originating in another language, while other concepts show a lot of variability, then the first group can be considered loanwords, while the second group are switches (cf. Myers-Scotton 1993: 191–204).[7]

In addition, loanwords typically show various kinds of phonological and morphological adaptation (cf. §5), whereas code-switching by definition does not show any kind of adaptation. Some authors have regarded this as the most important distinguishing feature of borrowings, but it is clear that it does not coincide perfectly with the criterion of conventionalization. In particular, non-conventionalized words taken from another language may be morphologically integrated, and code-switches are often pronounced with a foreign accent, if the speaker speaks one of the two languages non-natively. Such code-switches can hardly be distinguished from phonologically integrated loanwords. For such phonologically and syntactically adapted non-conventional words, the term *nonce borrowing* is often used, contrasting with *established borrowing*, i.e. a regular, conventionalized loanword (e.g. Sankoff et al. 1990).[8] However, this terminology is confusing: Above (in §2) we defined *borrowing* as a completed process of language change, and a *loanword/lexical borrowing* as a particular type of such a change. On this definition of borrowing, borrowings are "established" by definition. Code-switching, by contrast, is defined as the use of an element from another language in speech "for the nonce", so "nonce-borrowings" should be called code-switches.[9]

Of course, all loanwords start out as innovations in speech, like other cases of language change, and the process of propagation of the novel word through the speech community is gradual (cf. Croft 2000 on the distinction between innovation and propagation). It is also conceivable and indeed likely that the process of a word entering the mental lexicon of a speaker is gradual. Thus, there are bound to be intermediate cases between loanwords and single-word code-switches. These could be called "incipient loanwords", "regular switches", or similar, but they should not be called "nonce borrowings", because this term is contradictory.[10]

According to Myers-Scotton (1993: ch. 6), many loanwords start out as singly occurring switches that gradually get conventionalized. This is an intriguing suggestion, but so far there is not much evidence for it. In any event, the occurrence of

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[7] In the chapters of this volume, the authors were given the following instruction for distinguishing between loanwords and code-switching: "Only established, conventionalized loanwords that are felt to be part of the language should be given, not nonce borrowings. This distinction is often hard to make (especially when there are no monolingual speakers), but authors should try as best they can."

[8] Grosjean (1983: 308ff.) makes a similar distinction, using the terms *speech borrowing* and *language borrowing*.

[9] See Myers-Scotton (1993: 181-182) for further arguments against the notion of "nonce borrowing".

[10] Of course, one could decide to define the term *borrowing* more broadly, to encompass also interference in speech. For instance, Haugen (1950: 212) adopts a broad definition: "the attempted reproduction in one language of patterns previously found in another". However, given this definition of *borrowing*, all instances of code-switching fall under "nonce-borrowing". Nobody would nowadays propose such a definition.

code-switching is by no means universal in bilingual situations, and lexical borrowing is not in any way dependent on code-switching.

5.　Adaptation and integration of loanwords

The source words of loanwords often have phonological, orthographic, morphological and syntactic properties in the donor language that do not fit into the system of the recipient language. For example, Russian lacks a front rounded vowel, so that French words like *résumé* [rezyme] 'summary' are problematic; and French words are either masculine or feminine, so that English inanimate genderless nouns are problematic.

In such situations of lack of fit (which are the rule rather than the exception), loanwords often undergo changes to make them fit better into the recipient language. These changes are generally called loanword adaptation (or *loanword integration*;[11] but see below for a possible distinction between adaptation and integration). For example, French [y] becomes [u] (with palatalization of the preceding consonant) in Russian, i.e. *résumé* > Russian *rezjume*; and the English word *weekend* is assigned the default masculine gender in French (*le weekend*).

Loanword adaptation is sometimes indispensable for the word to be usable in the recipient language. In particular, languages with gender and inflection classes need to assign each word to a gender and inflection class, so that it can occur in syntactic patterns which require gender agreement or certain inflected forms. Similarly, loanwords from Arabic have to be adapted orthographically in English because otherwise they would not be readable.

However, in many cases the degree of adaptation varies, depending on the age of a loanword, knowledge of the donor language by recipient language speakers, and their attitude toward the donor language. If the donor language is well-known and/or the loanword is recent, recipient-language speakers may choose not to adapt the word in pronunciation, and they may borrow certain inflected forms from the donor language. In this way, English borrowed plural forms of words from Greek and Latin (*phenomenon/phenomena, fungus/fungi, crisis/crises*), and German even borrowed a few case forms (e.g. the genitive in *das Leben Jesu* 'the life of Jesus'). And orthographic adaptation is not necessary to the extent that readers are familiar with the donor language's writing system (thus, in Japanese and Russian, English words are not always orthographically adapted, because readers can be expected to be familiar with the Latin script). Complete adaptation of non-fitting loanwords may take a very long time, and frequently at least a linguist who is familiar with the language's usual phonotactic patterns will recognize a word as a loanword simply by its unusual shape (see also §6).

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[11] Other equivalent terms are *accommodation*, *assimilation* and *nativization*.

Loanwords that are not adapted to the recipient language's system are typically recognizable as loanwords, and they are sometimes called *foreignisms* (German traditionally makes a distinction between *Fremdwörter* 'foreignisms' and *Lehnwörter* 'adapted/integrated/established loanwords'; von Polenz 1967, Krier 1980). However, recognition of a word as a borrowing by speakers is a complex matter that depends on many different factors, and adaptation is only one of them. Another is mere novelty: If a word entered the language just recently, many older speakers will remember an earlier stage of the language and will thus be aware of the word's young age. Innovating speakers may face criticism by older speakers for using a loanword, and this contributes to the general awareness of the degree to which a word is an accepted and established part of the language. The dimension along which *Fremdwörter* and *Lehnwörter* differ is thus not identical to the degree of adaptation, and we may choose the term degree of integration for it, to keep the two dimensions separate. (However, in practice linguists do not distinguish *adaptation* and *integration* systematically along these lines, and the authors of this book generally use *integration* for 'adaptation'.) The notion of foreignism is evidently close to that of a single-word switch discussed in the previous section. We might say that single-word switches are even less integrated than foreignisms, to the point of not being (clear) members of the language's lexicon. Integration would thus be the degree to which a word is felt to be a full member of the recipient language system.

If a large number of loanwords come from a single donor language, then there is less need for adaptation, and instead the donor language patterns will be imported along with the words. Thus, Japanese borrowed many Chinese words that ended up with long vowels and diphthongs, so that now these phonological patterns are integral parts of the Japanese sound system. However, Sino-Japanese words still form a separate stratum in contemporary Japanese, with grammatical behavior that differs from native Japanese words, and speakers are aware of the distinction (cf. Schmidt, this volume). Similarly, German borrowed the plural suffix *-s* along with words from Low German and English, and now this suffix has become an integral part of the language which is also extended to non-loanwords.

The precise ways in which the adaptation process happens are often complex and a matter of ongoing debate. In phonological adaptation, the respective roles of phonetic constraints and phonological patterns are contentious (e.g. Peperkamp 2005, Yip 2006). In gender assignment to loanwords, a multitude of factors seem to play a role (e.g. Stolz 2009). The role of morphological adaptation in verb borrowing is explored by Wohlgemuth (2009: ch. 5–7). In this volume, loanword adaptation is not the focus of the authors' interests, but most of the language chapters contain a section on adaptation (generally called "Integration of loanwords").

6.   Recognizing loanwords

Linguists identify words as loanwords if they have a shape and meaning that is very similar to the shape and meaning of a word from another language from which it

could have been taken (because a plausible language contact scenario exists), and if the similarities have no plausible alternative explanation. Most importantly, of course, we need to exclude the possibility of descent from a common ancestor, which is a very common reason for word similarities across languages. The Hebrew word for 'head' (*roš*) and the Arabic word for 'head' (*ra's*) are similar, but not because either language borrowed its word for 'head' from the other, but because both inherited it from a common ancestor (Proto-Semitic). Thus, if two languages that cannot be shown to go back to a common ancestor share a word, it is plausible to assume that it is a loanword.[12]

In general, a word can only be recognized with certainty as a loanword if both a plausible source word and a donor language can be identified. In the World Loanword Database, the vast majority of loanwords are associated with a source word (sometimes with several possible source words, because there are a number of languages with similar words that could have been the source). However, in some cases, we can be fairly confident that a word is a loanword even though we have not found a source word. This is the case, in particular, if the word is phonologically aberrant in a way that would be explicable by a borrowing history of the word. For example, Thurgood (1999: 11) notes that many loanwords from Mon-Khmer languages into Chamic languages (of the Austronesian family) can be recognized by their loan phonemes, sounds which occur only in borrowed words (e.g. implosives; thus, Chamic *ɓiaʔ* 'little' seems to have a Mon-Khmer origin, Thurgood 1999: 313). If a word simply has no etymology within its family, this is a less good reason for assuming a borrowing history, but often such inferences have been made. Thus, Vennemann (1984) observes that about a third of the Germanic words have no Indo-European cognates, and he assumes (following many others) that they were borrowed from another (unknown[13]) language. For any individual word, one might object that it could be an inherited word that happened to be lost in other branches of the family, but for the many dozens of Germanic words with no cognates, this is implausible, so the reasoning seems sound.

However, once we have found a pair of similar words in two languages that are not genealogically related and we are certain that borrowing must be involved, it is often sill unclear what the borrowing direction was. For example, Sanskrit has a word *kīlāla-* (referring to some kind of cheese), which has no Indo-European etymology and to judge by its phonological shape seems to be a loanword (see Burrow 1946: 2–3). It could be from Burushaski *kīlāy,* but since Burushaski has borrowed heavily from Indic languages, the borrowing direction may well have been the

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[12] Minor alternative reasons for similarities are onomatopoeia and chance. Thus, if two languages have word such as *titi* or *tili* for 'twitter', this is not strong evidence for either common ancestry or borrowing, because the words could easily have been created independently. And if two languages have a question particle *a*, this is not strong evidence, because many particles consist of a single vowel, and *a* is a very frequent vowel, so this similarity could be due to chance.

[13] But see Vennemann (2000) for further speculation on what kind of language may have been the donor language.

opposite. In this case, we simply do not know whether the Burushaski word or the Sanskrit word was the source of the borrowing.

However, there are a number of criteria available that often give us a clear indication of the borrowing direction. First, if the word is morphologically analyzable in one language but unanalyzable in another one, then it must come from the first language. For instance, German *Grenze* 'border' must have been borrowed from Polish *granica* 'border' rather than the other way round, because *-ica* is a well-recognized suffix in Polish, and the stem *gran-* occurs elsewhere, whereas German *Grenze* is not analyzable in this way. Similarly, Sanskrit *mātaŋga-* 'elephant' must come from a Munda language, because the element *-toŋ* means 'hand' within Munda, but has no meaning in Sanskrit (Burrow 1946: 5).

Second, phonological criteria are often available: If a word shows signs of phonological integration in language A but not in language B, it must come from language B.

Third, if the word is attested in a sister language of language B that cannot have been under the influence of language A, it must come from language B. Thus, Sanskrit *jemati* 'eat' must come from Munda (e.g. Kurku *jome* 'eat'), because the root is also attested in Mon-Khmer languages which were not under Indic influence to the same extent as Munda languages (Burrow 1946: 5).

Fourth, the meaning often helps: Sanskrit *nakra-* 'crocodile' is likely to be a loanword from Dravidian (e.g. Kannada *negar*), because Indo-Aryan speakers coming from northern India would not have brought a word for crocodile with them (Burrow 1946: 9).

However, these criteria do not always give clear results, especially if the words are very old, and if they appear in languages from a number of different families in a particular area. Such words are sometimes called *Wanderwörter*, and Awagana & Wolff and Löhr & Wolff (in this volume, in their chapters on Hausa and Kanuri) call the phenomenon "areal roots".

Even when a loanword is not very old, there may be several different possible donor languages, and it may not be decidable which language the word was borrowed from. This happens, in particular, when several related languages are donor candidates, as in the case of Romance influence on Germanic. The Dutch word *pijp* 'pipe' must have been borrowed from a Romance language, but whether it was French (*pipe*) or Italian (*pipa*) is unclear (van der Sijs, Dutch subdatabase). Thus, in the World Loanword Database, quite a few donor languages are in fact "donor families".[14] In other cases, several different donor languages are given as alternatives, so the relationship between words and donor languages is occasionally a one-to-many relationship. Again, sometimes subtle phonological criteria are available for distinguishing between different donor languages. Thus, Samoan *tapa'a* 'tobacco' was not borrowed directly from English, but via Tongan *tapaka* (because Samoan ' regularly corresponds to Tongan *k*; Mosel 2004: 219).

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[14] A cover term for languages and families is *languoid*, so we sometimes talk about "donor languoids" (= donor languages or "donor families").

7.   Why do languages borrow words?

Explaining why languages change is generally very difficult, and explaining why languages borrow words is no exception. In fact, it is probably more difficult to explain lexical borrowing than most people think. This section will thus limit itself to raising and discussing a number of issues, rather than propose or endorse specific explanations.

A simple dichotomy divides loanwords into cultural borrowings, which designate a new concept coming from outside, and core borrowings, which duplicate meanings for which a native word already exists (Myers-Scotton 2002: 41, Myers-Scotton 2006: §8.3). For example, Imbabura Quechua borrowed *arrusa* 'rice', *riluju* 'clock', and *simana* 'week' from Spanish (Gómez Rendón, subdatabase of the World Loanword Database), all referring to cultural items that did not exist in the Americas before the European invasions. On the other hand, the Austroasiatic language Ceq Wong borrowed *bayaŋ* 'shadow', *batok* 'to cough', and *dalam* 'deep' from Malay (Kruspe, subdatabase of the World Loanword Database), all referring to concepts that must have existed before the Ceq Wong came into contact with Malays.[15]

7.1.   Cultural borrowings

At first glance, explaining cultural loans is straightforward, and such loans have also been called "loanwords by necessity". However, there is nothing necessary about a borrowing process. All languages have sufficient creative resources to make up new words for new concepts. As Brown (1999) documented in great detail, many North American languages do not use loanwords for introduced concepts like 'rice', 'clock', and 'week', but instead make use of their own resources. If a new concept becomes very frequent and the newly created expression becomes too cumbersome, there are always ways of shortening the expression. For example, Witkowski & Brown (1983: 571) report that the word for 'sheep' in Tenejapa Tzeltal (in Chiapas, Mexico) was originally *tunim čih* [cotton deer], but that as sheep became more important to the people in highland Chiapas, the modifier *tunim* was simply omitted, so that *čih* now means simply 'sheep' (to designate a deer, the modifier *teʔtikil* 'wild' has to be added).

This process is quite similar to simple semantic change or extension, another frequently used mechanism for creating words for new concepts. For example, the words *volume, mouse, menu, memory,* and *bookmark* have taken on rather new meanings in recent computer technology, and English has no need for any borrowing

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[15] Tadmor (2007) proposes the following explanation for the borrowing of basic words in this and similar cases: Speakers tried to assimilate to the strongly dominant Malay people, but had very little access to the Malay language, so they borrowed what they could, the basic vocabulary that they knew. Thus we get the unusual result that more basic than non-basic vocabulary is borrowed in some languages.

here. Of course, there is no potential donor language, but similar mechanisms could be used by languages that have donors available.

Thus, in order to explain the widespread use of loanwords for new concepts, one probably needs to appeal to the convenience of using the loanword in situations of reasonably widespread bilingualism. As soon as many people in the Andes had become Quechua/Spanish bilinguals, using Spanish words for new concepts became very convenient, and using native Quechua neologisms or meaning extensions lost out: When many people know a concept by a certain word but not by another word, even if the better-known word belongs to another language, it becomes more efficient to use the better-known word.

This efficiency consideration can be overridden if there is a strong cultural convention in the community to use one's language as a marker of ethnic identity. For example, Aikhenvald (2002) describes the contact situation between the Arawakan language Tariana and the dominant East Tucanoan languages in the Vaupés region of Amazonia. All Tariana speakers are bilingual, and Tariana grammatical patterns have been strongly influenced by East Tucanoan patterns, but due to cultural pressure to preserve the Tariana language, almost no East Tucanoan loanwords have entered Tariana. Neologisms are instead calqued, e.g. *di-tape-dapana* [3SG-medicine-house] 'hospital', calqued on Tucano *ihko-wi'i* [medicine-house] (Aikhenvald 2002: 229). Similarly, while the educated elites of French-speaking countries tend to be bilingual in English, there is a certain cultural pressure to avoid English loanwords (e.g. in the domain of computer technology), and neologisms based on French words are promoted by language-planning bodies and have a good chance of being accepted (e.g. *courriel* for 'e-mail'). In this, French contrasts interestingly with a number of neighboring European languages (Italian, German, Dutch), where the educated elites are more receptive to English loanwords. Cultural resistance to loanwords is called purism.

The problem with such an explanation based on cultural attitudes is that there is a certain danger of circularity, i.e. of inferring puristic attitudes from the avoidance of loanwords. While the amount of loan vocabulary can be readily observed and measured, the speakers' attitudes cannot be easily observed in an objective way. Speakers are not likely to be aware of their attitudes to borrowing, because they rarely have extensive knowledge about other sociolinguistic situations and other possible attitudes. Thus, questions like "Is it OK to borrow words, in your opinion?" will not be very meaningful to most speakers.

However, for languages with a written tradition and a powerful status, purism among the educated elites is often manifested in published recommendations, or even through the existence of language authorities (e.g. national academies) whose recommendations are likely to be followed by teachers, journalists, etc. In such cases, even purification may be successful, i.e. large-scale replacement of loanwords by native formations. This phenomenon is best-known from various central and eastern European languages, from the 18th century through the first half of the 20th century, but another notable example is the purification of Korean of Japanese elements after the liberation in 1945 (Song 2005: 84).

Thus, unless there are significant purist attitudes among the (influential) speakers, new concepts adopted from another culture are the more likely to be expressed by loanwords, the more widely the donor language is known. If only very few people speak the donor language, native neologisms and meaning shifts are more likely to be used for the new concepts. In a very thorough comparative study, Brown (1999) shows that the North American languages whose primary European contact language was English borrowed far fewer words than languages whose primary contact language was Spanish. He attributes this to the fact that the indigenous populations had more access to Spanish (e.g. through missionary schools) than to English during the initial period of European contact.

7.2.   Core borrowings

Explaining core borrowings (loanwords that duplicate or replace existing native words)[16] is more difficult. Why should speakers use a word from another language if they have a perfectly good word for the same concept in their own language? Here it seems that all we can say is that speakers adopt such new words in order to be associated with the prestige of the donor language. Like "puristic attitude", "prestige" is a factor that is very difficult to measure independently, and a danger of circularity exists. However, it seems to me undeniable that prestige is a factor with paramount importance for language change, going far beyond our current topic of loanwords. The way we talk (or write) is not only determined by the ideas we want to get across, but also by the impression we want to convey on others, and by the kind of social identity that we want to be associated with. Other terms such as "cultural pressure" (Thomason & Kaufman 1988: 77) or "loss of vitality (of the recipient language)" (Myers-Scotton 2006: 215) are often found, but these are even more vague and intangible than "prestige".

It is perhaps easiest to understand the adoption of words for already existing concepts in a situation of widespread bilingualism, as is the case in Selice Romani (speakers are bilingual in Hungarian, Elšík this volume) or Tarifiyt Berber (speakers are bilingual in Moroccan Arabic, Kossmann this volume). When (almost) everyone also understands the other language, it does not really matter which words one uses – one will be understood anyway. More surprising is the borrowing of basic words like 'star' and 'turn around' by Ceq Wong (from Malay, see Kruspe this volume), even though bilingualism has not been common until quite recently. See note 15 for a possible explanation of this case.

While the distinction between cultural and core borrowings is useful, it is by no means always clear how to classify a loanword. If all languages had the same lexical meanings that have to be expressed by words, this would be straightforward, but of

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[16] This term is potentially misleading because it suggests that core borrowings concern core vocabulary only. It is retained here for lack of a better alternative, and because it was used prominently by Myers-Scotton (2002, 2006, and elsewhere).

course lexical meanings do not have to fit into predefined slots. For example, one might think that the Sakha word for 'roof', *kɨrɨ:sa* (from Russian *kryša*) must be a core borrowing, because the Sakha had roofs before the Russians arrived in Yakutia. However, as Pakendorf & Novgorodov note in the Sakha subdatabase: "The traditional Sakha winter-house had a covering of earth and cow-dung like the walls, not a separate roof like the modern Russian-style houses." So although the Russians would have called the Sakha-style roof *kryša*, the Sakha may well have decided that the Russian-style roof was a different kind of thing, deserving a special word (thus a cultural borrowing). Another example is the word *mewsʌm* 'weather' in Manange, borrowed from Nepali (in Hildebrandt's subdatabase). Of course Manange speakers talked about the weather before Nepali contact, but they seem to have had no general word for weather. The 'weather' word is new to the language, but we can hardly say that the Manange learned a new cultural concept from the Nepali – this word is thus not easily classifiable as a core or cultural borrowing.[17]

In the World Loanword Database, we categorized the effect of a loanword on the lexical stock of the recipient language as follows: insertion (the word is inserted into the vocabulary as a completely new item), replacement (the word may replace an earlier word with the same meaning that falls out of use, or changes its meaning), or coexistence (the word may coexist with a native word with the same meaning). For each loanword, we asked the contributors to specify the effect in these terms. Obviously, insertion refers to cultural borrowings, while replacement and coexistence refer to core borrowings. Our contributors were often unsure how to fill in these database fields, because the cultural/core distinction is somewhat problematic, as we just saw. Nevertheless, the information from these fields may prove useful. The distribution of these three effect types in our database is as follows:

effect	number of (clear) loanwords
insertion	4823
replacement	1667
coexistence	2542
no information	3443

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[17] The lack of clarity about what a new concept is also means that information about this is not easy to get. Nevertheless, the World Loanword Database has a field ("Environmental salience") that indicates for loanwords whether the phenomenon was present before the contact or not. The overall result is (for clearly borrowed words):

phenomenon present only since contact:	4471
phenomenon present in pre-contact environment:	5524
phenomenon not present:	240
no information/not applicable:	2140

These figures seem to show that a very large (perhaps surprisingly large) part of the loanwords are core borrowings.

7.3.   Therapeutic borrowing

Borrowing of new words along with new concepts (cultural borrowing) and borrowing for reasons of prestige (core borrowing) are the two most important reasons for borrowing, but borrowing has also been said to occur for therapeutic reasons, when the original word became unavailable. Two subcases of this are:

(i)   Borrowing due to word taboo: In some cultures, there are strict word taboo rules, e.g. rules that prohibit a certain word that occurs in a deceased person's name, or a word that occurs in the name of a taboo relative (e.g. in Australian languages, Dixon 2002: 27, 43). In such cases, a language may acquire large parts of another language's basic lexicon, so that its genealogical position is recognizable only from its grammatical morphemes (Comrie 2000).

(ii)   Borrowing for reasons of homonymy avoidance (cf. Rédei 1970: 11): If a word becomes too similar to another word due to sound change, the homonymy clash might be avoided by borrowing. Thus, it has been suggested that the homonymy of earlier English *bread* (from Old English *bræde*) 'roast meat' and *bread* (from Old English *bread*) 'morsel, bread' led to the replacement of the first by a French loan (*roast*, from Old French *rost*) (cf. Burnley 1992: 493). However, English borrowed many other words from French, so whether the homonymy was a major reason for the borrowing here, and whether it is ever an important reason, is questionable (cf. also Weinreich's 1953: 58 cautionary remarks).

7.4.   Adoption vs. imposition

Finally, we should consider the distinction between adoption and imposition that was briefly mentioned in §2 (Van Coetsem 1988, Guy 1990, Winford 2005). For borrowed structural patterns, this distinction is very important: Some borrowed phonological and syntactic patterns are due to native speakers borrowing (= adopting) features from another (dominant) language into their own language, and others are due to non-native speakers unintentionally retaining (= imposing) features of their native language on a language to which they are shifting (thus, imposition is called "interference through shift" by Thomason & Kaufman 1988). Imposed patterns survive only if a large number of speakers acquire a new language and shift to it. Thus, features of Indian languages survive in Indian English, but not in British English, where the number of speakers from India is not large enough to have an impact on the general language. Borrowing by imposition has also been called substrate or superstrate influence.

   It is well-known that in imposition (or substrate/superstrate) situations, the borrowing primarily concerns the phonology and the syntax, whereas in adoption (or adstrate) situations, the borrowing affects the lexicon first, before it extends to other domains of language structure. This is understandable, because second-language speakers cannot avoid phonological and syntactic interference from

their native language, but it is quite easy to avoid using words from one's native language.

But if substrate influence equals imposition (= non-native speakers' agentivity), just as adstrate influence equals adoption (= native speakers' agentivity), we may ask why lexical substrate influence should occur at all. Why are there some Gaulish words in French, some Coptic words in Egyptian Arabic, and some Kikongo words in Saramaccan (cf. Good in this volume)? Why are there Dravidian words in Indo-Aryan, Sumerian words in Akkadian, and Yiddish words in New York English? Is it possible that substrate speakers unintentionally impose or retain words from their original language, just as they unintentionally transfer its phonological and syntactic patterns?

The answer seems to be: No, words are not unintentionally retained,[18] but in a substrate situation, there are other mechanisms for borrowing. First of all, the words may have been borrowed (adopted) before the borrowing language became dominant and before the donor language speakers began to shift. Thus, Akkadian and Sumerian were in contact long before the Akkadians took over, and the invasion of Dravidian territory by Indo-Aryans was presumably a long, gradual process. (This contrasts with the Romans in Gaul and the Arabs in Egypt, where contact basically began with the military invasion.) Second, the dominant group may borrow words for concepts that do not exist in their previous experience, especially animal and plant names and other words for natural phenomena. (Minimally, an invading group is likely to retain place names, as in the case of American English, which adopted many indigenous place names, but little else.) Third, substrate language words may occasionally be retained by substrate speakers as markers of their (somewhat) separate identity. Language shift generally takes place when a group of speakers decides that it wants to merge with a more powerful group in principle, but this is not incompatible with retaining a few emblematic words from the original language. Ross (1991) discusses this case (citing the example of a dialect of the Sissano language of Papua New Guinea) and notes that such emblematic borrowing is really a special case of adoption, rather than imposition. The use of a few Yiddish words in New York English, especially when they mark Jewish identity, may also fall in this category. And finally, words from the language of the shifting speakers may survive if these are a dominant group, as in the case of Franconian words in French, and (Anglo-Norman) French words in English. The latter case is traditionally called *superstrate* (as opposed to *substrate*, i.e. shift by a non-dominant group). Significantly, French has many more words from its Franconian superstrate than from its Gaulish substrate, and English has many more words from its French superstrate than from its Celtic substrate. However, these superstrate words are cases of (prestige-based) adoption by recipient-language speakers before the shift, not of unintentional imposition by the donor-language speakers.

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[18] Uri Tadmor (p.c.) claims that ethnically Javanese speakers of Indonesian commonly use Javanese words when speaking Indonesian to each other, and also to non-Javanese Indonesians, and they do so unintentionally. This would be a counterexample to the above claim (see also Stewart 2004).

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