CHAPTER 27

LANGUAGE CONTACT AND LANGUAGE ATTRITION

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27.1 WHERE DOES LANGUAGE CONTACT TAKE PLACE?

The term language contact refers to the mutual and bidirectional influence of languages. The crucial question, however, is where language contact actually takes place. In his pioneering work on language contact, Uriel Weinreich gave the following definition: ‘two or more languages will be said to be in CONTACT if they are used alternately by the same persons. The language-using individuals are thus the locus of the contact’ (Weinreich, 1953, p. 1; emphasis in original). This approach is psycholinguistic in nature and means that the proper place of language contact is the brain of the bilingual speaker (Riehl, 2013, p. 390). A different, sociolinguistic approach to language contact originated in the 1970s, focusing on societies or social groups. In this framework language contact is ‘the use of more than one language in the same place at the same time’ (Thomason, 2001, p. 1). Against this background, language contact is considered a long-term process that leads to language change and has an impact on the inner coherence of language systems (cf. Thomason & Kaufman, 1988; Winford, 2003; Hickey, 2010). While the main focus of language contact research is still on historical linguistic and typological aspects, more recent approaches include language contact in immigrant settings (e.g. Clyne, 2003; Matras, 2009; Riehl, 2014).

Some approaches (Myers-Scotton, 2002; Clyne, 2003; Winford, 2003; Matras, 2009) try to integrate the individual and societal perspectives by assuming that language contact starts at the level of the individual speaker and in course of time is spread throughout the speech community. Whether a specific contact phenomenon is accepted as a norm in a particular language community depends on a variety of factors, e.g. how linguistically economic, frequent, or illustrative a certain item is (cf. Riehl, 2015). There are, however, particular elements in specific language contact constellations that seem to be especially prone to be transferred and emerge in different speakers and in different groups independently. As will be demonstrated in the following sections, this also holds for language attrition settings.
27.2 Language Contact in Attrition Processes

The frameworks of language attrition and language contact (in a synchronic perspective) have in common that they investigate the impact of a second language (L2) on the first (L1). The difference is that both approaches generally focus on different speaker populations. Whereas typical attrition research analyses first generation migrants in an L2 environment, language contact research focuses more on the use of languages in multilingual speech communities. However, the linguistic features found in individual attrition and typical language contact settings are similar. In both constellations it is difficult to determine whether a certain phenomenon is used only at a particular point, or on a regular basis as a synonym of an L1 item, or whether the item has already replaced the corresponding L1 item. Usually—and this holds both for individual speakers and for bilingual speech communities—L1 and L2 items are used either alternately or with different functions or in different contexts.

In this sense, language contact has to be considered as a bilingual practice: it reflects the processing and use of language in the bilingual speaker’s repertoire (Matras, 2009, p. 5). However, a distinction has to be made between speakers who have mainly shifted to their L2 in the new environment and have no or very limited contact with their L1, and speakers who have continuous contact with a bilingual community in the recipient country where they use both L1 and L2 alternately and in a bilingual language mode. This means that bilinguals communicate differently when they are with bilinguals who share their languages. Whereas they avoid using their other language with monolinguals, they may call upon it when interacting with bilinguals, either by changing over completely to the other language (= code-switching) or by bringing elements of the other language into the language they are speaking (= transfer) (Grosjean, 2008, p. 40). This may lead to a form of mixed speech and conventionalized language contact phenomena in this particular community. Immigrants who raise their children bilingually in the recipient country may also be affected by this practice. Second-generation speakers, who often acquire the system of their parents’ language incompletely (Montrul, 2008), are more prone to transfer items or structures from their dominant language into the home language and they are also more prone to feed back contact-induced changes to their parents’ speech.

The routine use of a language in a bilingual context (i.e., with other migrants in the same setting or with L2 speakers of the language) causes changes in the language system (see also Köpke, 2004c). This, however, implies that the emerging contact-induced variety is a fully functioning language variety and can be utilized in a number of domains. Typical phenomena of attrition which are caused by lack of usage such as hesitation phenomena and disfluency markers will not occur when this contact-induced variety is used, but only when the speakers are forced to speak in a monolingual language mode in their L1 (for a discussion see Riehl, 2015).

Thus, contact-induced changes in a language have to be discerned from other internal processes of language change which are also common in language attrition and language shift—that is, simplification processes of the grammatical system. The difference between these two phenomena can best be illustrated by an observation that was made by Zürrer
(2009) in a German language enclave in Valle d’Aosta (Northern Italy). In the first step, the German variety adopted the type of compound personal pronouns from Italian (noialtri lit. ‘we-other’ > wirendri lit. ‘we-other’). In the second step, this new pronoun was fully integrated into the system of the German variety, as it was case-marked according to German case marking patterns (wirendri (NOM), ündschendru (GEN), ündschendre (DAT), ündschendri (ACC)). In the third step, it underwent a reduction process—that is, the cases were no longer marked (for a discussion, see Riehl, 2015).

27.3 **Key Terms: Borrowing, Transference, Convergence**

Generally, in language contact studies a distinction had been made between two categories of contact-induced changes: *borrowing*, which has been defined as ‘incorporation of foreign features into a group’s native language’ (Thomason & Kaufman, 1988, p. 37), and *interference*, which refers to the influence of an L1 on the L2 (for a discussion, see Hickey, 2010; Matras, 2010).1 Some approaches in both second language acquisition (SLA) research and contact linguistics use the cover term *transfer* for both types of bringing over an item from one language to the other. In this context, Clyne (1991, p. 60) introduced the notion of *transference*, which he defines as follows:

> Transference is employed for the process of bringing over any items, features or rules from one language to another, and for the results of this process. Any instance of transference is a transfer.  
> (Clyne, 1991, p. 60)

According to this definition transference means taking over elements from one language to the other on different levels of the language system (lexical, phonological, morphological, syntactic, and pragmatic) without defining the direction of this process.2 In doing so, concrete material or structural patterns can be transferred from language B and integrated into the language system of language A or vice versa. This viewpoint is also in line with more recent approaches to multilingualism such as the multi-competence perspective (Cook, 2003b; Jarvis & Pavlenko, 2008), which considers the different languages a person speaks as one connected system, rather than each language as a separate system. This, in turn, means that in the bilingual or multilingual mind there is always mutual influence between the L1 and the L2 (or the third language (L3)).

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1 Another classification was suggested by Van Coetsem (2000), who distinguished between *borrowing* and *imposition*. In this framework, the direction of transfer is always the same—that is, from a SL to a RL; what differs is the agent of transfer. In the case of borrowing the RL speaker is the agent and transfers material from the SL to the RL (e.g. an English speaker using French words while speaking English); in the case of imposition the SL speaker is the agent (e.g. a French speaker using French articulation while speaking English).

2 SLA researchers also make a distinction between forward transfer (influence of L1 on L2/L3) and reverse transfer (influence of L2/L3 on L1) as well as lateral and bidirectional transfer (for an overview, see Jarvis & Pavlenko, 2008, p. 14).
From a structural perspective some scholars (e.g. Heine & Kuteva, 2005; Matras, 2009) distinguish between borrowing in a narrower sense as a transfer of forms and in a broader sense as a transfer of structural patterns (meanings, grammatical functions, and syntactic relations). In this context, Matras (2009) introduced the terms matter borrowing for instances where the phonological shape and the morphological form is taken over from one language to another, and pattern replication for those cases where the function of the linguistic feature is taken over and imposed on an indigenous structure. In the latter case, there is no transfer of new elements that have to be integrated into the L1 system, but a transfer of functions or meanings of single words or constructions and a re-analysis of an L1 item on the basis of the rules of an L2 item. When meanings of grammatical or lexical items are transferred some scholars also apply the term restructuring, which refers to the ‘partial modification of already existing language-mediated conceptual categories’ (Jarvis & Pavlenko, 2008, p. 160).

Another process that differs from transference, although the underlying cognitive processes might be similar, is convergence. It is defined as an increase of similarity between two languages at any level (lexical, morphological, phonological, etc.) (see Matras, 2010, p. 68). The term is, however, more often used with reference to linguistic patterns (i.e., mapping relation of meaning to form) rather than to lexical items (Matras, 2010, p. 68). To explain the difference between syntactic convergence and syntactic transference, Clyne (2003, p. 80) provides an illustrative example:

(1) Wir haben zu Schule gegangen in Tarrington
we aux + have to school go+ PAST.PT in Tarrington

(2) Wir haben gegangen zu Schule in Tarrington
we have gone to school in Tarrington

While (2) is a morpheme-to-morpheme transfer from English, example (1) partially retains the so-called brace construction (auxiliary and participle embracing the adverbial phrase zur Schule ‘to school’) which is typical for German, but is already diverging from Standard German Wir sind in Tarrington zur Schule gegangen, where the auxiliary sein (‘to be’) is used instead of haben (‘to have’) and where both adverbial phrases are included in the brace construction. Thus, this construction is halfway between the SL and the RL.

27.4 Phenomena of language contact: types of transference and convergence

Typological studies indicate that there is nothing in the structure of a language, be it a single form or a grammatical feature, that is completely ‘borrowing-proof’ (Aikhenvald, 2008, p. 2). Given sufficient duration and intensity of language contact, even subsystems such as core morphology may be affected (see Hickey, 2010, p. 14). However, there are linguistic units that are integrated into another language more easily than others. This usually refers to elements that do not require a high degree of restructuring in the system of
The borrowing language. Thus, a hierarchy of borrowability such as that shown in Figure 27.1 following can be assumed (cf. Field, 2002).

The indicated hierarchy encompasses both quantity (content items are borrowed in a higher quantity than functional words, etc.), and progression (content words are borrowed earlier in contact history than the other items). This can be explained by the stability of the grammatical system, which means that bound morphemes are usually more resistant to transfer than unbound morphemes. Moreover, content words as an open class are a primary source of borrowing. Typological distance between the languages in contact only plays a role in the speed of transfer in the sense that the typological closeness of languages can accelerate the transfer processes. Furthermore, external factors are also to be taken into consideration (Van Coetsem, 2000). Different language contact patterns are found in different kind of registers here, and language contact on the grammatical level is generally more advanced in informal speech. In bilingual communities, speakers of the younger generation usually display more instances of language contact phenomena and use them more frequently than the older generation. This means, as already mentioned, that in immigrant communities, contact phenomena are more frequent in speakers of the second and third generation than in canonical first-generation attriters. In the following, examples are typically taken from first-generation attriters. Due to the lack of first-generation corpora for some language pairs or specific contact phenomena, in some examples second-generation utterances are quoted.\(^3\)

\footnote{This will be marked in brackets after the example.}

\textbf{27.4.1 Lexical transference}

As indicated by the hierarchy of borrowability (see Figure 27.1), most instances of transfer occur at the lexical level. The borrowing of lexical items is a frequent phenomenon even in monolingual societies that integrate loans from other languages into their system in order to label new cultural or technical achievements. Immigrants who encounter a new flora and fauna and a new sociocultural environment adopt expressions for natural phenomena, institutions, organizations, etc., from the L2 even at the very beginning of language contact (cf. Pavlenko & Jarvis, 2002). Some examples include: \textit{creek}, \textit{gum-tree}, \textit{highschool}, \textit{assembly}, \textit{milk bar}, and \textit{chemist} in immigrant languages in Australia (cf. Clyne, 2003, p. 112); and \textit{Hauptbahnhof} ‘central station’, \textit{Arbeitsamt} ‘job agency’ in immigrant languages in Germany (cf. Riehl, 2014, p. 97). This does not necessarily mean that translation equivalents are not available in the L1, but often they have a different connotation. In the course of L2 acquisition and shift in language dominance, a wide range of other words is transferred. This applies especially for technological developments that did not exist at the time of emigration from the

![Figure 27.1. Borrowability hierarchy](image-url)
country of origin (e.g. TV, dish-washer, mobile phone). While concrete concepts that have easily perceivable properties are the easiest to transfer, more abstract concepts (such as privacy, frustration) can be integrated into the other language, too (cf. Jarvis & Pavlenko, 2008, pp. 156–60). Moreover, for domains that have been encountered for the first time in the new country, a whole repertoire of expressions can be borrowed. Most German immigrants in Australia who immigrated in their early 20s had never been confronted with building and furnishing a house; they encountered this domain only in Australia and acquired the respective vocabulary together with the construction process, e.g. brick-veneer (Germ. Ziegel vorblendung), plasterboard (Germ. Gipskartonwand), plumbing (Germ. Installation), scraping-board (Germ. Fußleiste). This does not only apply for technical terms, but also affects everyday vocabulary such as tiles (instead of Fliesen), blinds (instead of Rollos). 4

While the transfer of nouns is often motivated by denotative needs, verbs are also borrowed for structural reasons; Croatian and German speakers in Australia integrate English verbs, which replace more complex phrasal units in L1:

(3) [. . .] nismo imali telefon da ringamo, nismo imali. (2nd gen., Hlavac, 2003, p. 78) (‘. . . we didn’t have at telephone to ring, we didn’t have. . .’, instead of da se javimo)

(4) Das Auto habe ich gestern erst servicen lassen (MH, AGC) (‘I had my car serviced only yesterday’, instead of eine Inspektion für das Auto machen lassen) 5

(5) dass der D. propeset hat, weißt du ja (MH, AGC). (‘that D. proposed, you know of course’, instead of einen Heiratsantrag machen)

In all three examples the utterances inherits the argument structure of English, which is less complex than the equivalent in the L1. In (3), the English to ring can be used intransitively and transitively, and is preferred to the equivalent Croatian construction that contains a reflexive particle, se, with the object in dative case—that is, javiti se + DAT. In (4) the verb servicen substitutes the phrase eine Inspektion machen lassen (lit. ‘to have an inspection made’). In (5) the possibility that in English the indirect object (‘to whom he has proposed’) can be eliminated is used; in German this would be unusual. So the transferred verb not only replaces a more complex phrasal unit (einen Heiratsantrag machen, lit. ‘to make a proposal of marriage’), but also reduces the valence of the verb. As these examples illustrate, lexical transfer can also have an impact on constructional patterns.

The borrowing process is, however, not only influenced by external factors—such as cultural necessity or integration of new domains—but also by properties of the language system. It can be observed that German attriters in an English-speaking environment adopt adjectives such as happy, beautiful, annoying, but only in a predicative use: da war er happy

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4 Schmid (2011a, pp. 24–6) also mentions borrowings in the area of health. The fact that the attriters under investigation are usually comparatively old brings about health issues that can be attributed to age and that have also been experienced by the speakers in the new country. Since L1 equivalents might not have been used for a long time, L2 terms are more familiar and can be activated much easier. Schmid also suggests that the L2 terms—since they are attributed to one’s personal situation—may also acquire a higher emotional component compared to more distant L1 words which had been used in reference to other people.

5 Most examples from German–English language contact are taken from my corpus of German immigrants in Australia (= AGC). The corpus contains spoken data from free narrative interviews (mean length one hour) from fifteen German-origin immigrants (mean age = 65, age of arrival = 12 to 32, length of residence = 20 to 58 years) and participant observation in bilingual networks.
the meal is beautiful, this was so annoying, the phonematic structure of these adjectives is different from the German one and thus the adjective cannot be fully integrated into the inflectional system (cf. Riehl, 2014, p. 102).

The same applies for verbs in specific language contact settings. German or Russian are able to integrate other-language verbs quite easily into their language system, in German using -en, or -ieren (e.g. exprir-en, farmer-Ieren), in Russian using the suffixes of the respective verb classes (and aspectual prefixes) (e.g. zakenci1it ‘to cancel’, çadžit ‘to charge’, zaloginis1a ‘to log in’, kliknyt ‘to klick’; cf. Isurin, 2007, p. 366). In other languages (e.g. Turkish, Greek, Indian languages) the morphological integration of verbs is not as easy; in German-Turkish language contact, German verbs are integrated into Turkish using a passepartout verb yapmak ‘to do’, which is inflected, and the German loan appears in the infinitive, e.g. tauschen yapman (‘I do not swap’) (cf. Riehl, 2014, p. 102). This phenomenon also appears in Turkish-Dutch, Turkish-English, and Turkish-Norwegian constellations (see Clyne, 2003, p. 151).

These observations indicate that obviously similar phonotactic rules or syllable structures facilitate morphological integration into another language system, whereas different phonotactic structures might impede this—unless the form of the transferred item undergoes a major phonological change (see Matras, 2009, p. 149).6

27.4.2 Semantic transference/conceptual restructuring

Another vital type of language contact is the transfer of meaning. This is what Matras (2009) subsumes under the term pattern replication and in some other publications is called conceptual restructuring (Pavlenko, 2004; Schmid, 2011a). In this case no other-language material is taken over, but existing material gets an additional or different meaning by using it in the other-language context. Semantic transference occurs mainly with cognates (etymologically related words in different languages) or otherwise homophonous lexemes. That is why semantic transfer is most frequent in etymologically related languages such as English, Dutch, and German, e.g.:

(6) Das Krankenhaus wird jetzt als Business ge1annt. (AGC, MW) (‘The hospital is now run as a business’; to run a business = Germ. ‘e1 ein Geschäft betreiben’)

(7) da bin ich dann zu einem Reifenplatz gefahren (AGC, MH) (‘then I drove to a tyre place’; Germ. Platz is generally not used in the sense of ‘location’)

(8) Siehst du gerade einen Film? Geht der jetzt weiter und du vermisst was? (AGC, MH) (‘Are you just watching a film? Is it going on and you are missing something’, Germ. vermissen = ‘to notice that sb./sth. is lacking (often regretfully’) )

6 Some examples: topagahai as a replication of the English ‘tape-recorder’ in Pirahã, an indigenous language in Brazil, or banšer, a Palestinian Arabic adoption of the English ‘puncture’. For examples of the integration into native morphophonology of English loans in Japanese, see Winford (2010, p. 174).
(9) of course it is easy to overdrive (Dutch overdrijven ‘exaggerate’; example from Sharwood Smith, 1983b, in Schmid, 2011a, p. 32)

These semantic extensions entail the use of L1 lexemes with a broader meaning of the L2 equivalents. Some of these examples are idiosyncratic (e.g. (6)), but there is a considerable number of occurrences that are widespread in the community (such as (7) and (8)) and even occur in other German-English contact settings (e.g. in Texas German and German in Namibia, see Riehl, 2014, pp. 103–4).

Conceptual restructuring also occurs in typologically more distant language pairs, but here mainly with loanwords, e.g. aplikacionnye formy ‘application forms’ in American Russian attriters (Russ. aplikacija ‘ornamental work in which fabric is cut out and attached to the surface of another fabric’; cf. Isurin, 2007, p. 364). Krefeld (2004, p. 73) observes the tendency in Italian-speaking immigrants in Germany to adopt the meaning of L2 for similar sounding words (sometimes with completely different roots) in Italian: They use regalo (Ital. ‘gift’) adopting the meaning of German Regal (‘shelf’), rosino (Ital. ‘little rose’) with the meaning of German Rosine (‘raisin’) or mappa (Ital. ‘map’) taking over the meaning of German Mappe (‘folder’). The same applies for Spanish in Anglophone countries, e.g. Spanish parientes (‘relatives’) acquires the meaning ‘parents’, and carpeta (‘tablecloth, folder’) the meaning ‘carpet’ (Silva-Corvalán, 1994, p. 171). These examples support the assumption that phonologically similar words are interconnected in the mental lexicon independently of the language subset they belong to (cf. Riehl, 2010, 2013).

Semantic transfer between cognates is not only confined to content words but also occurs at the level of function words. Here, again, the German-English language contact is of particular interest as both languages share conjunctions and prepositions with different meanings but the same lexical roots:

(10) Der Hase und ich werden jetzt nicht hingucken, weil Nikolas die Karten vermischen wird. (2nd gen., AGC) (STG während; ‘The rabbit and I will not watch now, while Nikolas is shuffling the cards’; Germ. weil = ‘because’)

(11) Wenn ich ein ganz junges Kind war [. . . ]. (Clyne, 1994, p. 14) (STG als; ‘When I was a very young child’, Engl. when = Germ. wenn, als)

(12) Das war bei Gesetz verboten. (AGC, MW) (STG per Gesetz; ‘This was forbidden by law.’)

The adoption of an additional meaning also occurs with translation equivalents that are not etymologically related. Accordingly, it often occurs also in etymologically not related languages, as in the following examples:

(13) also die zwei haben eine sehr schöne Verbindung. (AGC, MW) (STG Beziehung; ‘Well, those two have a very nice relationship’, in German, the noun Verbindung is only employed in the sense of ‘connection’)

(14) [. . . ] ne volim ništa što je predebelo. (2nd gen., Hlavac, 2000, p. 433) (Standard Croatian premasno, ‘I don’t like anything that is too fatty’, in Croatian, predebelo (‘too obese’) can refer to animate referents only, and not to the nutritional content of food.)

Pavlenko (2010, p. 60) also observes instances of semantic restructuring in motion verbs with Russian immigrants in the USA, e.g. that the verb pair iditi/chodit’ (‘to walk’) and its derivatives begin to function in the manner of generic verbs to go, to get, and to come.
27.4.3 Lexico-syntactic transference

A phenomenon that also occurs frequently in language contact situations is the so-called morpheme-to-morpheme transference of idiomatic expressions or collocations (Clyne, 2003, p. 78). This often affects collocations with passepartout verbs that have undergone semantic bleaching, e.g. to take in expressions such as to take a photo/the opportunity/an interview/a shower, etc. German immigrants in Anglophone countries render these expressions word for word in German: ein Foto nehmen, die Gelegenheit nehmen, ein Interview nehmen, eine Dusche nehmen (instead of ein Foto machen, lit. ‘to make a photo’, die Gelegenheit ergreifen, lit. ‘to capture the opportunity’, ein Interview machen, lit. ‘to make an interview’, sich duschen, lit. ‘to shower oneself’). In this case, the same constructions are not only transferred by different speakers independently, but also in different immigrant settings in the USA and Australia (see Schmid, 2011a, pp. 28–9; Riehl, 2014, p. 105). Additionally, similar instances are reported from language contact of typologically distant languages, such as English and Finnish (Jarvis, 2003), e.g. ottaa saippua (lit. ‘take a shower’) instead of mennä saippuun (lit. ‘go by a shower’), and ottaa bussi (lit. ‘take a bus’) instead of mennä bussilla (lit. ‘go by bus’).

27.4.4 Syntactic transference and convergence

27.4.4.1 Syntactic transference

Syntactic transference in the definition of Clyne (2003, p. 77) means the transference of syntactic rules. As mentioned above (see Section 27.3) this phenomenon differs from syntactic convergence (see Section 27.4.4.2). A typical instance of syntactic transference is the replacement of V2 in subordinate clauses by the English SVO construction in German or Dutch language attriters:

(15) Ich war ja an und für sich sehr froh, dass wir nicht mussten in ein Camp. (AGC, GZ) (STG . . . dass wir nicht in ein Camp mussten, ‘I was actually very glad that we didn’t have to go to a camp.’)

(16) Maar als wij praaten in het Hollands [. . .] (Clyne, 2003, p. 78) (Homeland Dutch: maar als wij in het Hollands praaten ‘but as we speak in Dutch’)

It is difficult to discern whether examples such as in (15) and (16) are instances of transference from L2 English or rather reflect a simplification process. In the latter case, the word order of declarative main clauses in German or Dutch (V2) would be applied to subordinate clauses, thus reducing the processing load of the speaker, who has to differentiate between two types of word order (see also Riehl, 2014, pp. 119–20).

There are also some occurrences in contact situations of English and Germanic languages where German V2 in declarative sentences is replaced by English SOV. Compare the following examples from Norwegian (17), Icelandic (18), and German (19):

(17) I skolen vi snakte bare engelsk (2nd gen., Johannessen, 2015, p. 60) (Homeland Norwegian I skolen snakte vi bare engelsk ‘At school we only spoke English’)

(18) Dolly stundum talar íslensku (2nd gen., Arnbjörnsdóttir, 2015, p. 89) (Homeland Icelandic Dolly talar stundum íslensku ‘Dolly sometimes speaks Icelandic’)


(19) also in meinem Alter ich muss nehmen was sich mir anbietet (BH, AGZ) (STG also in meinem Alter muss ich nehmen, was sich mir anbietet 'well, at my age I have to take what I get offered')

As mentioned above, these instances only occur in first-generation attriters occasionally, but become more frequent in the next generations (see Riehl, 2010, 2014). Another example of syntactic transference is the use of overt subject pronouns in pro-drop languages in contact with languages where the use of subject pronouns is obligatory:

(20) Había una chica que vivía con su mama y ella va a visitar a su abuela (2nd gen., Montrul, 2004a, p. 134) ('There was a girl who lived with her mother and she goes to visit her grandmother')

(21) Ök tudták hogy önek rossz kedve volt (Tóth, 2007, p. 169) ('They knew that he was in a bad mood')

(22) vdrug on č uvsytvet čto on pojmal ogromnuju rybu (Isurin & Ivanova-Sullivan, 2008, p. 72) ('suddenly he feels that he caught an enormous fish')

In (20)–(23), the pronouns ella ('she'), ök ('they'), and on ('he') would be omitted in the respective languages (Spanish, Hungarian, and Russian), but not in the contact language English (the same applies to Turkish, cf. Gürel & Yılmaz, 2013).7

27.4.4.2 Convergence/pivot matching

As discussed above (see Section 27.3), convergence can be considered a compromise strategy. In this case the speaker is incorporating in their speech components from the different subsets of their linguistic repertoire. These combinations are usually instances of creative usage in a particular situation, but nevertheless they are of the same nature as those processes that lead to contact-induced language change if they are repeatedly used by a collective of speakers and over a long period of time (cf. Riehl 2015). Matras (2009, 2010), however, maintains that the patterns of replication do not render a source language (SL) construction in a morpheme-to-morpheme translation (see Section 27.4.3), but are usually a blend; speakers make use of one or more key features of the model construction and map it to the recipient language (RL) by using various rules of morphosyntax of the RL and also by using exclusively recipient words. Matras calls this pivot matching; in this framework the speaker deconstructs a certain construction by isolating its 'pivotal features' (Matras, 2009, pp. 241–3). The construction pivot is then matched to context-appropriate word forms and their formation and combination rules in L2. In doing so, speakers enrich the inventory of constructions they have at their disposal in a given context of interaction (which means a subset of

7 According to Dubinina & Polinsky (2013) this phenomenon could also be considered an instance of simplification. The overt expression of the pronoun requires less effort to establish its co-reference with the previous antecedent.
a given ‘language’). Compare the following examples from German (24), Russian (25), and Croatian (26) attriters:

(23) a. *er ist eigentlich australisch geboren* (AGC, CH) (‘he is actually Australian born’)
(24) b. *printsessa v lubvi s* (Laleko, 2007, p. 108) (‘the princess was in love with’)
(25) c. *pričati s mamom i tatom i—ili kako su njihovi dani bili* (2nd gen., Hlavac, 2000: 434) ‘chat with mum and dad and—or how their days were’

Lattey & Tracy (2005) also observed a range of instances of this type of construction—which they called *crossover* in their corpus of German postwar migrants in the USA.

### 27.4.5 Phonological transference and convergence

Phonological transferences—that is, the addition or deletion of phonemes under the influence of the phonemic structure of the contact language—usually only occur in second- or third-generation speakers. There is, however, evidence of phonological convergence in first-generation immigrants, concerning the quality of vowels (Waas, 1996, pp. 159–60) or voice onset time (VOT) of voiceless stops (/p/, /t/, /k/). As it turns out, VOTs appear to be predominantly affected by cross-linguistic transfer. In a study on bilingual L1 speakers of English (L2 French) and L1 speakers of French (L2 English), Flege (1987) investigated the VOT of L1 voiceless stops in both groups and found a change towards the values of the other language in both their L1 and their L2. Speakers, however, did not reach the values of the respective monolingual baseline. Similar effects have been attested for attriters of L1 English in American immigrants to Brazil (Major, 1992). In a recent case study on VOT in immigrant Russians in Germany, Brehmer & Kurbangulova (2017) also observed a tendency towards a longer duration of fortis stops in word-initial and intervocalic positions under the influence of L2 German in the first generation, which is extended in the second generation.

Recent investigations on VOT and the structure of the vowel space in English-Dutch speakers (Mayr et al., 2012) and the lateral phoneme /l/ in the L1 and L2 of long-term German migrants in the Vancouver area (de Leeuw, 2009) give evidence of an assimilation to the L2 system. Similar effects were documented for the sounds /æ/ and /l/ in the study by Bergmann et al. (2016) on attriters of German in North America. All the studies, however, also found a great deal of variation between speakers and in one and the same speaker.

Influence of L2 has also been reported in intonation patterns in first language attriters (Waas, 1996, p. 160; Clyne, 2003, p. 79). These anecdotal impressions have now been empirically proven in a study by de Leeuw et al. (2012), who found a merged alignment of the prenuclear rising accent in German and English in German-English late bilinguals.

### 27.4.6 Morphological transference

As morphological transference usually affects bound morphemes that come late in the borrowing hierarchy (see Figure 27.1), it is much less likely to occur in first-generation language attriters. Indeed, language contact studies (e.g. Thomason & Kaufman, 1988)
demonstrate that intense contact with the SL and high cultural pressure is needed to borrow grammatical morphemes and integrate them into the L1 system. However, there are casual occurrences of morphemic transfer, especially the transfer of plural markers in individual words, first-generation attrition settings, too. Clyne (2003, p. 77) reports the generalization of the s-plural in Dutch-speaking immigrants in Australia in the following lexemes: *klant-s for* klanten 'clients', *stams for stammen 'stems', hoofleidings for hoofleidening 'mains'.

### 27.4.7 Pragmatic transference and convergence

A different type of transference is the copying of linguistic behaviour in the SL to the behaviour in the RL. Pragmatic patterns include forms of address, the use of reflex responses, discourse markers, and back channel behaviour as well as the use of speech act patterns. It is a typical observation with attriters in English-speaking countries that they extend the use of first name and informal pronouns (German *du*, Italian *tu*, French *tu*, etc.) to formal contexts or to conversations with a stranger where the formal address pronoun (*Sie, lei, and vouz* respectively) would be the norm (cf. Waas, 1996, pp. 142–5; Clyne, 2003, pp. 216–17; and personal observation).

Another phenomenon of pragmatic transference is the use of other-language discourse markers and related operators. In this context, Matras (1998) introduced the notion of *utterance modifiers* to describe the different types of lexical items or phrasal units that are responsible for monitoring and directing the hearer’s processing activities. This definition, however, captures only one function of these items. Another explanation also includes the speaker’s monitoring activities—that is, commenting on language processing and bridging gaps in utterance planning (such as *well, you know*), which are used to guide the hearer but also to gain time for utterance planning, cf.:

(26) a. *ik vind het ook niet leuk, you know*? (Clyne, 2003, p. 230) (‘I don’t like it either, you know?’)

(27) CMR: Und dann hast du trotzdem schon mit dem Baby angefangen zu unterrichten?
RB: *Well, zuerst hab ich die Kinderkrippe geleitet und hab ihn mitgenommen.* (AGC, RB) (‘And you started teaching, although you had the baby? Well, first I managed the nursery school, and I took him with me.’)

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8 The non-target-like case use or reduction of case marking in languages which have a rich case-marking system (e.g. in Russian-English (Schmitt, 2008), in Hungarian-English (Fenyvesi, 1996) or German-English (Schmid, 2002) is not a typical contact phenomenon but an instance of simplification (see Section 27.2). This becomes particularly evident when considering settings where both languages in contact have a case marking system (e.g. Russian-German or Hungarian-German, see Riehl, 2014).

9 In a narrower definition (e.g. Schiffrin, 1987), the term discourse marker includes adversative and other coordinating conjunctions and sentence particles, such as *well, so, anyway*. A broader definition also encompasses focus and modal particles, interjections, speech act enhancers, and phrasal adverbs (such as *already, no longer*). For a discussion see Matras (1998, 2009, pp. 136–7).
Most studies on language contact emphasize the frequency of L₂ insertion of this type of lexical items. Their borrowability is supported by the 'detachability' from the core grammar of the language. 'Grammatical elements that organize the speech event are perceived as gesture-like, situation-bound devices and are therefore detachable from the content message of the utterance.' (Matras, 1998, p. 309). Therefore, as suggested by Dik (1997), Kaltenböck et al. (2011), and Heine et al. (2013), a distinction should be made between sentence grammar and discourse grammar, which serves functions such as interaction management, attitude specification, discourse organization, and execution. Another distinction was suggested in Riehl (2009), who assumes a tripartite system of utterance processing: the content-related level (Darstellungsebene), which refers to the content of the utterance; the evaluation-related level (Bewertungsebene), which refers to the level on which the speaker evaluates the content of the utterance; and the interaction-related level (Interaktionsebene), where the speaker organizes the speaking activities and monitors language processing. Accordingly, speakers can resort to the repertoire of different languages at the different levels. Speaking Italian as a first-generation immigrant in Australia, the speaker can use Italian grammar in her utterances, but English discourse to manage the interaction (28), or even switch into the English language to comment on her utterances (29):

(28) ma well and sperava d’andare prima dei trent’anni (Clyne, 2003, p. 227) ('Well, there is hope but well and there has been hope of going for thirty years')

(29) Siamo ritornati a Roma e poi l’abbiamo lasciato. It was just amazing. Era proprio perfetto. (Riehl, 2014, p. 27) ('We returned to Rome and afterwards we left it. It was really perfect.')

In this context, the comparison of different language contact situations gives particular insights into language pragmatics; it becomes evident that the most frequently transferred discourse markers are particles with the meaning of English well, followed by connectors such as but (Clyne, 2003, pp. 226–30; Matras, 2009, pp. 137–43). This is illustrated by the following examples of occurrences of well in different language constellations of immigrants in Australia:

(30) Well je kunt haast zeggen, ieder kind op de school ken ik (Dutch, Clyne, 2003, p. 227) ('Well, you can almost say I know every child in the school')

(31) Well, meine Mutter war schon tot. (German, ACG, RB) ('Well, my mother had already died.')

(32) Well si spera ma well and sperava d’andare prima dei trent’anni (Italian, see (28))

As Matras (1998) assumes (see above), in managing interaction utterance modifiers adopt a gesture-like function. Those items whose lexical meaning is opaque (such as Engl. well, Russ. esto, Germ. also, Hung. Hát, all meaning 'well') are more gesture-like and are therefore transferred more easily than items with a full lexical meaning such as really. This finding, however, can be explained not only by the structural properties of the items but also by the pragmatic function of the respective units. While particles such as well or connectors such as but have the function of organizing the interaction, particles such as really have an evaluating
function. Therefore, they operate at different levels of the utterance processing system (Interaktionsebene versus Evaluationsebene). In this case, the level of interaction is more often expressed in the more dominant language (Riehl, 2013, p. 287).

27.5 External factors: Language awareness and norm orientation in bilingual communities

As demonstrated in the previous sections, language contact phenomena may be idiosyncratic in different types of attriters. But there are also transferences that appear, in similar contexts, in the utterances of different speakers. Thus, the question arises whether speakers have initiated this type of transference by themselves or whether they have adopted the item from the speech of other speakers in the bilingual community. Indeed, as Matras (2010) points out, the interlocutors’ reactions are crucial to the effectiveness of a new item or construction. It has a major effect on whether the new element is accepted, used by the speaker again, and in turn replicated by others—which in the long run could lead to language change. This language change works in the same way as language change in monolingual settings. In immigrant communities, however, there is less normative control, which allows spontaneous innovations or norm-deviant use. Most of the norm-deviant forms go unnoticed by the speaker and/or their respective communication partner. If noticed, the utterance is not evaluated negatively and therefore not corrected. Consequently, there is also a certain plurality of different variants in the input delivered to the next generation (cf. Rosenberg, 2005; Riehl, 2015).

As mentioned in Section 27.2, both of the processes ‘attrition’ at the individual level and ‘language change’ at the community level are closely intertwined. If the first generation uses a high number of transferred items in their L1, the next generation acquires a contact-induced variety with a high number of variants. This in turn may lead to more instances of transference in the next generation, due to the fact that the younger speakers are only able to express themselves in limited domains (i.e., in the family). Examples of these types of processes can be found in established bilingual language communities, e.g. in language enclaves (cf. Riehl, 2015).

It has also become evident that in a monolingual language mode, speakers usually avoid inserting other language material (matter borrowing), as they are usually conscious of other-language items. Here, the amount of inserted material from L2 depends to a large extent on the metalinguistic awareness of individual speakers. Nevertheless, speakers display instances of transference that slip through their monitoring processes. These types of transferences typically occur in different speakers and different communities independently. As has been illustrated above, among those are:

- phonologically-related lexemes adopting L2 meaning
- constructions using rules of morphosyntax and lexical material from L1, but following L2 patterns (pivot matching)
• types of restructuring such as mapping collocations (e.g. Foto nehmen, Dusche nehmen) which do not provide a more precise meaning
• monosyllabic gesture-like units without a lexical meaning (turn-related discourse markers)

Whether in the end an instance of transference is integrated into a speaker’s L1 system or not depends on a variety of external factors such as language awareness and attitude, size of the bilingual community and amount of contact to native speakers in the country of origin (cf. Riehl, 2014, 2015).