6

Translation, contact linguistics and cognition

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6.1 Introduction

This chapter provides a sketch of the interdisciplinary interface between translation and contact linguistics, an area of research concerned with translation as a type of language contact. The chapter places particular emphasis on the (socio-)cognitive dimensions of translation and language contact. Kranich (2014, p. 97) explains the central focus of what she terms language contact through translation (LCTT) as follows:

While translating a text from a source language (SL) to a target language (TL), the bilingual individual must activate his/her competence in both these languages. The product of this process can exhibit an impact of features of the SL on the target text (TT). This impact has been discussed under the label “interference” (Toury, 1995) as well as under the name of “shining-through” (Teich, 2003) in Translation Studies. If the same type of shining-through phenomenon occurs repeatedly in translations, it might spread to monolingual text production, that is to non-translated texts produced by TL authors.

This description clearly spells out one self-evident cognitive dimension of language contact: the bilingual language processing of the text producer (in this case, the translator), which demonstrates particular linguistic features as a consequence of the co-activation of two languages, most pertinently cross-linguistic influence (CLI). However, a second cognitive dimension of language contact is left implicit: The mechanisms by means of which contact-influenced features that occur in translations can “spread to” monolingual text production must, by definition, also involve cognitive processes. More specifically, these cognitive processes involve readers’ exposure to and processing of LCTT-influenced linguistic features, under conditions that allow these features to become sufficiently cognitively entrenched in the linguistic repertoires of these readers that they themselves will re-use such features when they subsequently produce language. This iterative production–reception cycle is key to an understanding of (a) translation as a language-contact event that results in a contact-influenced language product and (b) the role of translations as a potential factor in contact-induced language change.

While both these processes clearly take place at the level of individual language processing, they also have an aggregate social dimension. It is only when contact-influenced forms are
produced at a sufficiently high frequency to affect the linguistic representations of users who are exposed to these forms in the texts they read that contact-influenced forms gain a foothold to find their way into non-translational usage. The processes by means of which this may come about are constrained by a range of cognitive, linguistic and social factors (see also Muysken, 2013). These factors, and the way in which they influence both processes, are interwoven in complex ways, and form the focus of this chapter.

While there has been a growing interest in the interface between Translation Studies and contact linguistics, research in this area has been limited by a number of factors. First, the interdisciplinary relationship between Translation Studies and contact linguistics has been largely unidirectional: Translation Studies researchers have drawn more on ideas from contact linguistics than vice versa (see Kranich, 2014). Second, a coherent theoretical framework that is consonant with what is known about contact as a factor in language variation and change more generally has been lacking in studies of translation as a form of language contact (see Malamatidou, 2016; Redelinghuys, 2019). Third, in the interdisciplinary conversation between Translation Studies and contact linguistics, the cognitive dimension of translation as a form of language contact and a factor in contact-induced linguistic change, has received little attention. Lastly, existing empirical research in this area has been restricted to a fairly limited number of language pairs, time periods and text types, with a focus on short-term rather than long-term change. This raises not only reservations about the generalizability of findings but also foundational questions about the meaning of the concept “language change” in this area of research.

Against this background, this chapter outlines the state of the art at the interface between Translation Studies and contact linguistics. The chapter is structured around the notion that any translation event is constituted by two cognitive processes (simultaneously embedded in, and cognitively representing, social processes and systems): The production process as well as the reception process (Kruger & Kruger, 2017). Section 6.2 focuses on translation production as an individual contact-influenced language processing event that creates the translated text. This section considers how cognitive and socio-cognitive factors shape the realization of the translated text as the product of a language-contact event, focusing first on the most obvious consequence of language contact, namely CLI, but also on other linguistic features that may be ascribed to bilingualism-influenced communication or contact effects. This section surveys existing research that has attempted to link the bilingual linguistic processing in translation to bilingual or contact-influenced text production more generally, including research that has argued that translation is a kind of contact variety that demonstrates similarities with other varieties of language characterized by language contact.

Section 6.3 takes as a starting point the cognitive processing of readers who are reading the text. It specifically considers how, and under what conditions, contact-influenced linguistic input from translation may find its way into multiple readers’ cognitive representations of linguistic constructions, and how this exposure to contact-influenced constructions may, in favourable social conditions, potentially lead to language change in the target language. This section outlines some theorizations of contact-induced language change through translation, and briefly surveys existing empirical work in the field. Section 6.4 concludes with an overview of the methodological and conceptual challenges in studying translation as a type of language contact.

### 6.2 Making the translated text: Individual language processing and the effects of language contact

Contact linguistics focuses on the linguistic outcomes that result from people using more than one language in a substantive, sustained and non-trivial way in a particular shared context,
leading to the influence of one language on another (Thomason, 2001, pp. 1–2). These shared contexts may be of vastly different kinds, but they all presuppose some form of bi- or multilingualism. Contact linguistics highlights the complex interplay between individual and societal bi- and multilingualism (see Matras, 2009; Thomason & Kaufman, 1988). Against the background of the recognition of this complexity, Matras (2009), along with Weinreich (1953), argues that language contact should not, in the first instance, be considered as contact between language “systems”. Instead, “the relevant locus of contact is the language processing apparatus of the individual multilingual speaker and the employment of this apparatus in communicative interaction” (Matras, 2009, p. 3).

This section therefore considers the language processing “apparatus” of the translator as an individual multilingual user, who is employing this apparatus in a very particular kind of communicative interaction. It raises the question of how translated texts reflect the traces of the translation process as a cognitive language-contact event. One important dimension of this is how the language processing apparatus of translators and their use of this apparatus in producing written texts are the same as or different from the language apparatus of other bilingual users using it to produce written texts. In other words: How are language producers socio-cognitively constrained when communicating under conditions of language contact? And are these constraints the same or different for translators and other writers producing texts under the influence of language contact?

This line of argumentation aligns with a strand of research in Translation Studies proposing that the recurrent linguistic features of translated language are not unique to translated language, but typify a broader set of varieties characterized by particular socio-cognitive constraints. Among these proposed constraints, language contact or bi- or multilingual discourse production is particularly prominent (see, for example, Bisiada, 2017; Chesterman, 2004; Gaspari & Bernardini, 2010; Granger, 2018; Kolehmainen et al., 2014; Kruger, 2012; Kruger & De Sutter, 2018; Kruger & Van Rooy, 2016a, 2016b; Lanstyák & Heltai, 2012; Ožbot, 2014; Shlesinger & Ordan, 2012; Steiner, 2008). In brief, many of these scholars argue that the regularities of translated language are really regularities of contact-influenced language varieties more generally. Thus, the features that typify translated language are also evident in other written forms of contact-influenced varieties, such as contact-influenced first-language varieties of English, learner or second-language writing, indigenized second-language varieties of English (L2 varieties or New Englishes) and bilingualism-influenced communication more generally, since these varieties are constrained by similar cognitive and social factors associated with written communication in settings of language contact.

The following section focuses first on the most self-evident effect of contact-influenced language production, CLI. It considers the nature and proposed causes of CLI, and different types of CLI, integrating perspectives from contact linguistics and psycholinguistics. Subsequently it provides an overview of some studies of CLI in translation, specifically those emphasizing the cognitive dimension of language contact and the similarities between translations and other contact-influenced varieties.

### 6.2.1 Cross-linguistic influence (CLI)

#### 6.2.1.1 The nature and causes of CLI

The most obvious consequence of language production under conditions of contact is CLI, defined as “the influence of a person’s knowledge of one language on that person’s knowledge or use of another language” (Jarvis & Pavlenko, 2008, p. 1), leading to a deviation from the conventions of either language in bilingual language production (Weinreich, 1953, p. 1).
It occurs when bilinguals move form-function units, word forms, patterns and schemas from one language to another during a communicative event (Matras, 2009, p. 99). CLI involves a complex set of interrelated phenomena occurring at various levels of language, discussed under rubrics such as borrowing, transfer, interference, calquing, code-switching, code-mixing, code-meshing, interlanguage, translanguaging and (at the most extreme end) creolization and pidginization. A full discussion of the relation among these phenomena falls outside the scope of this chapter; sufficient here is to note the existence of these phenomena and their general relation to CLI.

A key question in this respect is how bilinguals’ languages are cognitively organized: whether they are separate or interlinked; at what levels linking exists; how they are controlled; and under what conditions one language may affect production in the other. Several models of bilingual language representation and processing have been proposed (see Kroll & Tokowicz, 2005; Matras, 2009 for overviews; Diamond & Shreve, 2010 for reflections on translation specifically), and are widely debated. The discussion that follows does not focus in detail on the nature of bilingual or multilingual language representation, as such. Instead, it focuses only on research demonstrating that, irrespective of how the cognitive organization of bilinguals’ languages is modelled, the linguistic usage of bilinguals demonstrates the transfer of linguistic forms or patterns from one language to another.

From a psycholinguistic perspective, depending on the particular communicative situation, bilinguals’ languages are cognitively activated to varying degrees, ranging from a fully monolingual mode (when the other language is largely inhibited or non-active) to a fully bilingual mode (when the two languages are both strongly activated) (Grosjean, 2008). When activation is more strongly towards the bilingual end of the scale, CLI becomes more likely. Taking a more functionalist approach, Matras (2009, p. 99) argues that bilinguals’ linguistic knowledge is a complex repertoire of not only linguistic schemas, forms and constructions but also context-sensitive information about social conventions for the appropriate selection of these forms. This information is used, in part, for maintaining “demarcation boundaries” between languages, based on social expectations and communicative conventions. While there may be strong normative incentives in some communicative contexts to maintain the demarcation between languages very strictly, in some situations, control of these boundaries may be relaxed either inadvertently or on purpose.

CLI is a complex phenomenon that may occur for various (socio-cognitive) reasons. First, the effects of cross-linguistic cognitive priming at both lexical and structural levels are well documented in both corpus and psycholinguistic studies: when a second language is cognitively activated, regardless of whether this is in L2 communication, bilingual communication or translation, patterns from that language influence the patterns of the TL in often subtle ways that lead to the relative over- or under-representation of linguistic features in comparison to monolingual language production (see Bangalore et al., 2016; Gries & Kootstra, 2017; Hartsuiker et al., 2004; Hoey, 2011; Kootstra & Muysken, 2017; Loebell & Bock, 2003; Maier et al., 2017; Paradis, 1993; Pickering & Ferreira, 2008). At the psycholinguistic level, cross-linguistic priming is clear evidence of the co-activation of languages, and, as Kootstra and Muysken (2017, p. 215) point out, these psycholinguistic processes have real-world consequences for second-language acquisition, code-switching, code-mixing and contact-induced language change.

More generally, bilingualism research demonstrates that due to taxing processes of selection, switching and inhibitory control in a cognitive environment where languages are in competition, bilingual language processing is a more effortful cognitive environment, inducing higher processing costs (Costa & Sebastián-Gallés, 2014). This cognitively effortful processing environment may lead to a reduced level of control over the “demarcation boundaries” between
different languages, leading to control lapses at particular communicatively sensitive junctures and allowing CLI (Matras, 2012, p. 41).

Another proposed reason for CLI effects is termed interlingual identification (Croft, 2000; Weinreich, 1953) or pivot matching (Matras & Sakel, 2007). This involves bilinguals’ ability to create mental connections between linguistic units in their two languages that they perceive as corresponding, based on formal or functional properties (Croft, 2000, p. 145). This alleviates processing strain, since similar processing operations and selection procedures can be used for equivalent linguistic elements in both languages (Matras, 2009, p. 151; Matras & Sakel, 2007, p. 835). Interlingual identification is thus a kind of processing shortcut, but the consequence is that the cognitive representations of the two languages syncretize and converge, becoming less representationally distinct. In the context of Translation Studies, direct transfer or literal translation (based on parallel bilingual processing where direct links between cross-linguistic units exist) is often seen as a default strategy for reducing cognitive load and minimizing demands on working memory (see Carl & Dragsted, 2012; Schaeffer & Carl, 2013; Tirkkonen-Condit, 2005).

Lastly, CLI effects may be a consequence of a conscious, strategic, pragmatic choice by the language producer (in this case, the translator) to exploit some communicative advantage offered by transferring elements from the other language. In translation, this kind of deliberate socio-pragmatically motivated drawing on the resources of the SL may be intended to fill a lexical gap in the TL or, alternatively, to foreground the linguistic and cultural otherness of the source text in translation, as part of a foreignizing strategy or a conscious choice in favour of a source-text-oriented overt translation (see also Kranich, 2014).

While most research on CLI focuses on spoken language, the same principles are likely to apply to written translation, but with different constraints modulating the effects of CLI. As Kruger and Van Rooy (2016a, p. 29) point out, written translation operates at the extreme end of the bilingual activation mode, involving a rapid shuttling between two languages that is cognitively and pragmatically constrained by an existing text in the SL, thus theoretically creating a fertile ground for CLI. At the same time, other factors mitigate and constrain the effects of CLI in professional translation. The high degree of linguistic proficiency, biliteracy, task expertise and professional training of translators may lead them to be particularly aware of CLI and develop conscious strategies to avoid such effects (Kruger & Van Rooy 2016b, p. 121; see also Shreve & Lacruz, 2017 for an overview of research from psycholinguistics and cognitive science that demonstrates how factors like task schemas interact with bilingual language production in the context of translation). In written translation, it is likely that the incentive towards maintaining boundaries between languages and meeting the conventions of the target language is strong due to normative pressures and constraints on translation that have been internalized by translators, forming part of cognitive scripts for appropriate translational behaviour.

These socio-cognitive factors thus act as a powerful “brake” that keeps CLI in written translation in check. The degree to which translators choose to conform to the linguistic norms of the target culture depends on various factors, including whether they choose a source- or target-oriented approach to translation; a choice which is, in itself, shaped by translators’ cognitive construal or framing of factors like text type, register, reader expectations and the function of the translation in the recipient system. Other factors may also play a role, such as the prestige of the languages involved and the degree of standardization of the TL. As argued by Toury (2012, p. 314), tolerance of CLI increases in situations where translations are done from a language with higher prestige into languages of lower prestige, or where the TL is not strongly standardized. Lastly, it should be emphasized that whether CLI effects appear in published translations also depends on other gatekeepers in the publishing industry, including editors and proofreaders.
6.2.1.2 Types of CLI

CLI may take various forms, usually designated as a distinction between lexical borrowing (also called matter replication or global code-copying) and structural or grammatical borrowing (also called pattern replication or selective code-copying) (see, for example, Fischer, 2013; Johanson, 2002; Matras, 2009; Sakel, 2007; Thomason, 2001).

Since lexical borrowing entails the direct replication of linguistic material, that is, morphemes and word forms, Matras (2009) uses the term “matter replication” rather than “borrowing”. Matter replication appears to be strongly influenced by linguistic and socio-cultural factors. Gaps in the lexical inventory of the target language are an obvious motivation for matter replication; however, the prestige associated with the SL no doubt plays a crucial role: linguistic choices, including borrowings, are not just “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” (Haspelmath, 2009, p. 48). This provides the socio-cognitive rationale for Toury’s (2012) claim that tolerance of interference is typical of situations where translation is done from a language with higher prestige to one with lower prestige. Matras (2009, p. 149) argues that matter replication is subject to stringent selection and inhibition control, since it is strongly marked, and Backus and Verschik (2012) ascribe matter replication primarily to the semantic “attractiveness” of the word in question, which yields some communicative advantage. In the context of translation, matter replication is therefore more likely to be the result of a conscious decision-making process on the part of the translator.

Pattern replication, or structural transfer, does not involve the importation of linguistic matter from the SL to the TL. Instead, the use of linguistic material already present in the TL is changed in some way: “it is the patterns of distribution, of grammatical and semantic meaning, and of formal-syntactic arrangement at various levels […] that are modelled on an external source” (Matras & Sakel, 2007, pp. 829–830). Backus and Verschik (2012) argue that whereas matter replication is governed by semantic factors that prompt conscious decision making, unconscious cognitive factors like frequency and entrenchment play a more important role in structural transfer. Linguistic patterns that belong to both languages are cognitively entrenched in the linguistic representation of bilinguals (Backus et al., 2011, p. 739). Where the degree of entrenchment of the source structure is stronger than that of the target structure, pattern replication may occur when the source pattern is transferred to the TL text (Backus & Verschik, 2012, p. 143), or where the influence of the SL pattern leads to a target-language structure undergoing an increase (or decrease) in frequency of use.

A further distinction that can be drawn is between overt transfer and covert transfer, adapted from Mougeon et al. (2005) but also raised in Heine and Kuteva (2005). In the case of overt transfer, the two languages in question differ in some respect in the inventories of linguistic constructions or patterns available to users. For a variety of reasons (strategic, or as a consequence of processing constraints), the SL construction is transferred across the two languages in the form of an innovative formal pattern or innovative functional use in the TL. This type of transfer is a qualitative change in usage, in the sense that it introduces a construction that did not exist prior to the contact event. It is comparatively rare, however (Backus, 2014, p. 96).

Much more common is covert transfer, which is a quantitative development only. In its most straightforward form, covert transfer involves a situation where contact causes individuals to start using a TL construction more frequently than they otherwise would have, under the influence of a similar SL construction which primes or activates the TL construction, and at the cost of other options in the TL. This may lead to the over-representation of particular word forms or syntactic constructions under the influence of the SL, or the replacement of more conventional syntactic-semantic constructions or collocations in the TL with less conventional constructions.
In the context of Translation Studies, a kind of “inverse” form of covert transfer is the unique items hypothesis (Tirkkonen-Condit, 2004), which posits that where there are mismatches between the lexical or syntactic inventories of the SL and TL, the activation of the SL may inhibit the selection of TL constructions that do not have a direct match or easy interlingual identification in the SL, leading to an under-representation of these linguistic items in translation.

Matter replication is, by definition, overt in nature. Pattern replication, however, may be overt or covert in nature—and is more often covert, taking complex shapes in the over- or under-representation of particular structural patterns under the influence of contact. If multiple linguistic features are affected by these patterns of over- and under-representation in translation, these frequency and distributional differences under the influence of contact may lead to overall stylistic, genre or register differences between translated and non-translated texts (see Baumgarten & Özçetin, 2008; Hansen-Schirra, 2011; Kruger & Van Rooy, 2018; Neumann, 2013, 2014).

6.2.1.3 Studies of CLI in translation: Towards a cognitive perspective

CLI has been widely investigated in the framework of corpus-based Translation Studies interested in the interplay between ST transfer “shining through” effects and target-oriented normalization effects in translation (see Hansen-Schirra, 2011; Lefer & Vogeleer, 2013; Teich, 2003). The majority of these studies focus on covert structural pattern replication (or structural transfer), demonstrating how the frequencies and distributional patterns of particular constructions in the TT are affected by CLI. The range of work in this area precludes a full discussion, and therefore the following brief discussion is not exhaustive but, rather, highlights some exemplary studies of CLI effects in translation.

Dai and Xiao (2011) demonstrate that passive constructions in Chinese translated from English are much more frequent than passive constructions in non-translated Chinese. The increased frequency of passives in translational Chinese is the consequence of CLI effects from English, which uses passive constructions more frequently than Chinese does. Cappelle and Loock (2013) focus on existential constructions in English and French, against the background that these constructions are much more frequent in the former than the latter language. They find that English translated from French contains many fewer existential constructions than original English; whereas French translated from English contains many more existential constructions than original French. They interpret these findings as strong evidence of CLI, clearly functioning at the covert, structural level. Cappelle (2012) and Cappelle and Loock (2017) investigate manner of motion verbs and phrasal verbs, respectively, in English translations from various SLs, and find that the typological differences between languages lead to different frequency patterns for the features in question in the English translations, yet again providing evidence in favour of CLI effects, also framed in terms of the unique items hypothesis. Baumgarten and Özçetin (2008) focus on speaker (first-person) pronouns in English and German translated and non-translated business communication. English and German have distinct stylistic preferences for personal pronoun use in this register, and through CLI, the English source texts introduce variation in the stylistic preferences of German.

These studies provide clear evidence of CLI effects, but as they investigate single features (and often registers), they provide a somewhat unidimensional picture. Other researchers, including Hansen-Schirra (2011) and Neumann (2013, 2014), have taken a broader approach, showing how sets of linguistic features demonstrate complex patterns of over- and under-representation in translations compared with original texts, reflecting both CLI and (over-)adjustment to TL norms. This has the effect of altering the register profile of some translated registers compared...
with non-translated registers in the same language as a consequence of CLI. Van Oost et al. (2016) investigate another important dimension of CLI variability, namely the effect of SL status. Focusing on prepositional phrase placement, they show that there are strong shining-through effects in Dutch texts translated from German, and strong normalization in German texts translated from Dutch. They conclude: “These results confirm Toury’s hypothesis that a less prestigious language such as Dutch is more tolerant towards higher frequencies of linguistic features which are typical of highly prestigious source languages such as German than the other way around” (Van Oost et al., 2016, p. 7).

These corpus-based studies clearly demonstrate the existence of CLI effects in translation, and its complexity. However, very few studies explore in any empirical depth how CLI works as a cognitive language-contact phenomenon. A particularly important kind of evidence in this respect is how CLI in translation is similar to or different from the kinds of CLI evident in other contact varieties, which illuminates how different socio-cognitive constraints shape different contact varieties. This notion has been explored theoretically by Kolehmainen et al. (2014), who focus on interlingual reduction (a general term for the under-representation of unique items) in translation, second-language acquisition and language-contact situations. Kruger and Van Rooy (2016b) is one of only a few studies that explicitly set out to empirically investigate translated English along with other contact-influenced forms of English, to determine how CLI plays out across different contact varieties and how different socio-cognitive factors promote and constrain the effects of CLI in varieties produced under different conditions of contact.

6.2.2 Other features of contact-influenced varieties: Increased explicitness, reduced complexity and conventionalization

While CLI effects are the most obvious consequence of communicative events occurring under conditions of language contact, a variety of other consequences have been identified, ascribed to various factors. The cognitive complexity of and effort involved in communicating under conditions of bilingual language activation may reduce working memory and increase the use of cognitive strategies to reduce cognitive load. Some of the proposed features of translated language, like increased explicitness of lexicogrammatical encoding, reduced lexicogrammatical complexity, and stylistic homogenization, have all been interpreted as collateral effects of the cognitive effort involved in translation, specifically—and are also evidenced across other forms of communication involving bilingual language activation.

For example, increased explicitness (also referred to as anti-deletion, hyperclarity or analyticity) is associated with translated language as well as various forms of bilingualism-influenced communication (such as L2 varieties of English) (see Hansen-Schirra et al., 2007; Kruger & De Sutter, 2018; Mesthrie, 2006; Szmrecsanyi & Kortmann, 2009). This increased explicitness is often explained by invoking findings that language processing contexts involving high cognitive demand (as is the case for language production under conditions of bilingual activation) are associated with the selection of more explicit and more analytical linguistic options (Mondorf, 2014; Rohdenburg, 1996). Following theories of processing efficiency (see Hawkins, 2003, 2004, 2014), explicit marking of dependency relationships of various kinds is regarded as a more efficient processing mechanism in contexts of high cognitive demand, since it reduces the processing effort of parsing syntactic and discourse relationships in linguistic production (see Kruger & De Sutter, 2018; Kruger & Van Rooy, 2016b).

However, increased explicitness, like reduced complexity and yet another familiar feature of translated language, conservatism or normalization, have also all been explained as a result of socio-cognitive factors: the translator’s prioritization of the needs of the reader; her awareness
of the “gap” between the source and the target text; and the risk-averse behaviour of translators. As opposed to the “pure” cognitive/psycholinguistic factors outlined earlier, these factors are socio-cognitive factors that are closely tied to two related concepts, those of cooperation and norms, which together form a script or a cognitive frame for translators’ behaviour.

Pym (2015) argues that many of the features of translated language can be ascribed to translators’ prioritization of principles of cooperation and their conscious or routinized avoidance of translation decisions and choices that increase the risk of miscommunication. Intersubjective coordination and cooperation is a key force that shapes language use and language structure (see Tomasello, 2008; Verhagen, 2005), and viewing translation as a special case of “talking to strangers” (Wray & Grace, 2007) across cultural and linguistic divides may well account for features like the avoidance of complexity and increased explicitness.

The concept of norms has been very influential in Translation Studies (see Schäffner, 1999; Toury, 2012); however, the cognitive aspect of norms has not been extensively theorized in this area of research. Linguistic norms are multidimensional. They have both an individual cognitive and a collective social dimension (Backus & Spotti, 2012; Harder, 2012). They can be both conscious (or explicit) and unconscious (or implicit) (Labov, 1972). They can be both overtly codified and sanctioned by top-down prescriptivist processes, and covertly emergent or bolstered by bottom-up processes (see Cameron, 1995; Curzan, 2014).

Backus and Spotti (2012) emphasize the relationship between the individual and social dimensions of a norm. They distinguish an individual internal norm, which refers to the way in which an individual habitually uses language. Where the overlaps in individuals’ internal norms are considerable, it stimulates “their reification as a self-contained body of shared norms: a recognizable language or variety” (Backus & Spotti, 2012, p. 187). The aggregation of individual internal cognitive norms across groups of speakers leads to a cumulative internal norm, which is a view of internal norms as a social phenomenon (Backus & Spotti, 2012, p. 187). The relationship between individual and cumulative internal norms is complex and mutually reinforcing, driven by bottom-up and top-down accommodation processes, intersubjective alignment, frequency effects and social sanctioning. Norms are psychological constructs or socio-cognitive processing mechanisms, but they are operational in the sense that they “have the causal power to regulate community practices” (Harder, 2012, p. 297) while at the same time arising from and being shaped by such community practices. In addition to this “internal” view of norms, norms also, of course, have a codified, prescriptive dimension, which is “usually the result of explicit institutional agreement on how language either should or should not be used in a given linguistic interaction” (Backus & Spotti, 2012, p. 188). For many people, and particularly for some groups of people, such as professional translators, prescriptive guidelines on usage form a salient part of their internal norms.

In contexts of contact-influenced communication, cooperation and normativity may combine in unique ways to impose certain socio-cognitive constraints on language production, leading to the avoidance of complexity, increased explicitness, and hyperstandardization or conservatism, in order to ensure effective communication or to avoid normative sanction in conditions of communicative uncertainty. An important point is that features like increased explicitness, the avoidance of complexity and an over-adjustment to conventional norms do not just occur in translation but also in other varieties characterized by language contact. This argument is set out in some detail by Kruger and Van Rooy (2016a, 2018), who compare English translations and other varieties of English influenced by language contact in respect of the degree of explicitness, complexity and normativity. Their findings broadly find support for these shared effects of communication in contact situations, thus corroborating the argument set out in Lanstyák and Heltai (2012) that these features of translated language may well be seen as
features of contact-influenced communication more generally, arising from a combination of psycholinguistic and socio-pragmatic factors.4

6.3 From the translated text to readers—and into new texts: Translation as a factor in language change?

As set out in Section 6.1, the translated text is constituted by two sets of cognitive processes: those of the people involved in the creation of the translated text, and those involved in receiving it. This latter group, of course, are also text producers, and the question is how their reception of contact-influenced features in translated texts influences their subsequent language production, if at all. This section explores this process, particularly to explain how the way in which people are exposed to translations may potentially play a role in processes of language variation and change more generally.

Numerous contributions in Translation Studies have used (diachronic) corpus methods to investigate the role of translation in language change (see, for example, Amouzadeh & House, 2010; Becher et al., 2009; Bisiada, 2013, 2016; Dai, 2016; House, 2011; Kolehmainen & Rionheimo, 2016; Kranich, 2014; Kranich et al., 2011; Kranich et al., 2012; Malamatidou, 2016, 2017; Neumann, 2011; Redelinghuys, 2019; Wurm, 2011). This research area has developed despite doubts about the role of translation in contact-induced language change. The reasons for these doubts are numerous. First, most language-contact studies assign primary importance to contact through direct, face-to-face conversational interaction between language users in close proximity (Kranich et al., 2011, pp. 11–12; Neumann, 2011, p. 236). In comparison, the role of written communication in contexts of language change (particularly through contact) has received much less attention, and major theoretical frameworks on language contact hardly reference translation (or, indeed, written communication) (Kranich, 2014). Also, the mechanisms and principles of translation-induced change are not well understood, and it is particularly difficult to distinguish translation effects from other types of contact-induced effects (Neumann, 2011). These concerns are at the root of the opinions of scholars like Hoey (2011, p. 164), who argues that “if we stay with accepted theories of language, we must conclude that [translation] is not responsible for more than a modicum of language change”.

Despite these misgivings, several translation scholars have set out proposals for how translation may play a role in contact-induced language change. The following section briefly discusses some theoretical considerations outlined by Neumann (2011), Kranich (2014), Malamatidou (2016, 2017), and Redelinghuys (2019).

6.3.1 Theorizations of the role of translation in contact-induced language change

The discussion in Section 6.2 has clearly indicated that CLI occurs to a greater or lesser extent in translations, and that translations also may carry some other traces of language contact. However, it is more difficult to explain how it may come about that these contact-influenced features do not remain restricted to translated texts but might diffuse to monolingual text production. In other words, what requires explanation are the cognitive and social processes that would lead writers of original texts to adopt themselves the expressions they encounter in translation (Bisiada, 2013, p. 3) to such a degree that the linguistic conventions of the TL may be altered over time.

Earlier theorizations of LCTT focus on setting out the factors influencing LCTT, methodological requirements for testing the role of translation in language change, and hypotheses about language change through translation. For example, Neumann (2011) and Kranich (2014) set
out some desiderata for theoretical and methodological approaches to language change through translation. Neumann (2011, p. 240) proposes that a methodology to test the hypothesis that translations play a role in language change should:

1. provide the means to determine a change in the properties of TL features (such as frequency) that could potentially be interpreted as adaptations to the properties of contrastively different SL features
2. allow the researcher to determine if evidence has been found for equivalent properties of the same features in translation into the TL, which mediates between properties of the SL and TL
3. be able to identify causal relationships between changes in the TL originals and the translations
4. assess and eliminate alternative explanations for changes in the TL originals.

Against the background of these stringent methodological demands, Kranich (2014, pp. 98–100) proposes ten hypotheses regarding LCTT, in line with what is generally known from studies of contact-induced linguistic change. Some of the hypotheses relate to the kind of borrowings associated with translation. She posits that while LCTT can involve all linguistic domains, lexical borrowing is more prominent than structural borrowing, and structural borrowing is restricted to syntactic borrowing. She also argues that structural borrowing relies on typological proximity, since it requires the establishment of functional analogies between the SL and the TL, which users can construe as equivalence relations. A further set of hypotheses relate to the kind of factors that influence the degree of CLI in translation and the uptake of CLI-influenced features by other users. In terms of the former, she highlights the importance of the degree of overtness of the translation strategy. In terms of the latter, she points out that the same factors that play a role in contact-induced change generally also play a role in LCTT (intensity and length of contact, socio-political dominance, prestige), but that LCTT influence is particularly strong in TL contexts where norms for written language and genre conventions are not well established.

While contributions like these connect well-known principles of contact-induced language change to translation, there is little systematic theorization of exactly how SL-influenced features propagate from translations to other texts. Malamatidou (2016) presents one possible theorization of language change through translation, adapting the Code-Copying Framework of Johanson (2002 and elsewhere) to translation as a case of language contact. In this model, CLI is referred to as “code-copying”, and a distinction is made between global and selective code-copying. Global code-copying roughly corresponds to Matras’s (2009) concept of matter replication, whereas selective code-copying corresponds to pattern replication (see Section 6.2.1). Various properties of the linguistic code can be copied, ranging across material, semantic, combinatorial and frequential properties (Malamatidou, 2016, p. 402).

The theory then attempts to explain how code-copying may diffuse from being single occurrences to being more widely used. Initially, a copy may be ephemeral (called a “momentary copy”) but subsequently may become more widely used in a (bilingual) community, becoming a “habitualized copy”. Once the copy becomes fully accepted in a speech community, it is a “conventionalized copy”, and in a last step, it may start being used by monolingual speakers, at which point it is termed a “monolingual copy” (see Malamatidou, 2016, p. 404 for further discussion).

Malamatidou (2016) proceeds to apply these notions to translation, pointing out that in translation both kinds of copying may take place, although selective code-copying is more common, and frequential copying is particularly influential, which “results in a change in the frequency
patterns of an existing lexical or morphosyntactic unit” (Malamatidou, 2016, p. 405). She suggests that these translation-influenced features may diffuse to non-translated texts—but still does not explain in detail how this might happen.

The gap in explaining how copies may “jump” the divide between translated texts and monolingual text production is a major shortcoming in existing theorizations of language change through translation, and is in part the consequence of limited consideration of the cognitive processes that are involved in language change through contact, and specifically translation. In response to this limitation, Redelinghuys (2019) outlines a broadly usage-based view (see Bybee, 2006, 2010) of language change through translation that integrates the cognitive and social dimensions of the contact-influenced translation event and the processes leading to the diffusion of translation-influenced forms to monolingual text production. Some principles and implications of a usage-based view of this kind are briefly elaborated in the remainder of this section.

There are two mechanisms that need accounting for in language change: the start of a linguistic change (innovation) and its spread through a linguistic community (propagation) (Brinton & Traugott, 2005). Innovation may refer to the creation of new linguistic forms or the development of new functions, but it may also refer to changes in distributional patterns and frequencies of existing forms, all of which generate variation in a linguistic system (Croft, 2000). Propagation refers to the diffusion of these innovative forms or usage patterns among individuals, groups and societies. Croft (2000) argues that innovation is individual and functional in nature because individuals produce innovative forms or unusual patterns in their attempts to bring about successful communication. This can happen in two ways: an individual may use an innovative form or pattern in a particular way on purpose, for some kind of communicative aim or effect; or the innovative form or pattern may be an “accidental” collateral effect of the general pursuit of communicative effectiveness (e.g. minimization of cognitive effort in communication; interpersonal alignment). Propagation, on the other hand, is social in nature because it arises from the structure of language communities.

Translations may first introduce innovative constructions, or changed frequency distributions for constructions, through overt or covert CLI effects. This may be done consciously, for strategic purposes, by translators, but is more likely to be an unconscious consequence of the bilingual language processing involved in translation. If a social environment exists in which a user is frequently exposed to contact-influenced constructions from translations (e.g. news translation; translation on the Internet; software localization, etc.), contact-influenced constructions may become increasingly cognitively entrenched in the linguistic repertoire of the user, either introducing a new linguistic construction or changing the strength of representation for competing constructions, making a construction that was previously less entrenched more strongly entrenched, and reducing the entrenchment of other, competing constructions. If a social environment exists in which enough users experience this kind of exposure, and these users subsequently interact with one another in spoken and written media, propagation and conventionalization of the contact-influenced construction are possible (see Backus, 2014). General processes of intersubjective alignment, coordination, cooperation and communication accommodation may drive propagation, interacting with frequency effects: As people accommodate their linguistic behaviour to that of other speakers, or to perceived norms for written text production, in the pursuit of communicative success, the frequency of particular forms or patterns of use increases. In this way, a feedback cycle of usage, frequency and entrenchment may be set in motion at both individual and social levels. These contact-influenced features or usage patterns may, in this way, be gradually integrated in the receiving language’s repertoire or in a specific genre, register or domain (Kranich et al., 2011, p. 11).
Any potential for translation to play a role in language change is extremely tightly constrained by the social context of language contact. First, translation needs to be in widespread use. The kinds of innovative constructions or usage patterns cannot be normatively strongly proscribed, as this will short-circuit the feedback cycle (the same principles regarding norms discussed in Section 6.2.2 as applying to translators also apply to other language users). The social environment must be quite bi- or multilingual, with interactions between L1 and L2 users and interactions among L2 users too. Concomitant with this is the absence of language purism. The power relationships between the languages involved need to facilitate an openness to CLI effects.

Frequential changes under the influence of LCTT are by far the most common kind of change observed in studies of translation as a factor in language contact. Translation very infrequently introduces new structural patterns to a language—conventionalizing forces tend to resist such radical changes (see also Malamatidou, 2017). Language change associated with translation is thus most commonly associated with changes in communicative preferences in the TL under the influence of preferences from the SL, leading to stylistic convergence between the two languages, or register changes. These are the kinds of changes typically identified in existing studies of language contact through translation, briefly discussed in the following section.

6.3.2 Empirical studies of the role of translation in contact-induced language change

Kranich (2014) surveys a number of empirical studies of LCTT across various language pairs and across ancient, early modern and present-day contact situations. She finds that across all time periods, lexical items are introduced to the target language through translation. Derivational morphology likewise is affected across all periods, but inflectional morphology is not affected by contact-induced changes in early modern and present-day contact environments. Contact-influenced syntactic changes are common, but in modern-day contact settings, these are restricted to frequency effects (Kranich, 2014, p. 103), meaning that translations do not introduce new syntactic patterns into the TL but only contribute to a change in preferences for particular constructions under the influence of the SL. She highlights that this does not, strictly speaking, constitute syntactic change but, rather, reflects pragmatic or stylistic change—as also suggested earlier.

This is also the kind of change consistently found in one of the most extensive studies of LCTT to date, the Covert Translation project (1999–2011) (see, for example, Baumgarten & Özçetin, 2009; Becher et al., 2009; House, 2006, 2011; Kranich, 2014; Kranich et al., 2011; Kranich et al., 2012). The project is based on the assumption that European languages, specifically German, are influenced to a greater or lesser extent by the omnipresence of Anglo-American linguistic and cultural norms (House, 2011, p. 189). The fundamental research question that guides the Covert Translation project is whether textual or cultural conventions of the target audience are disregarded in translation, with the result that source and target norms converge (Becher et al., 2009). The findings of the project are inconclusive, however, finding both convergence and divergence of communicative norms. Nevertheless, it does appear as though pragmatic features (like personal pronouns and modal markers) show CLI effects in English to German translations, particularly pronounced in more recent texts.

Beyond this project, others have extended the diachronic approach to investigate, for example, the role of translation in changes in preferences for hypotaxis versus parataxis, and the use of sentence-initial conjunctions in translated and non-translated German business articles (Bisiada, 2013, 2016); and the use of passive voice reporting verbs, and cleft- and pseudo-cleft constructions,
in translated and non-translated Greek popular science articles (Malamatidou, 2016, 2018). Dai (2016) is an extensive study of the influence of English on Chinese, investigating the effects of translational “hybridity” or contact effects on changes in Chinese over a period of 70 years, focusing on a range of lexicogrammatical features. Redelinghuys (2019) investigates the role of translation in contact-influenced changes in South African English and Afrikaans over a period of a century, analysing the genitive alternation and modal auxiliary verbs. While she finds clear contact-related changes over time, she finds limited evidence that translation is responsible for either introducing these changes or propagating them. These studies investigate the relationship between language change, as evidenced in translation, and processes of change more generally evident in the target language, finding complex effects: translation may introduce CLI-influenced frequential changes that subsequently appear to disseminate to monolingual texts, but it may also exaggerate a change in progress (under the influence of more general contact effects), or it may hold it back, as a consequence of translators’ normative awareness.

6.4 Concluding remarks: Methodological and theoretical challenges in investigating translation and language contact

Methodologically speaking, much of the research on contact effects arising from the individual translation event has relied on corpus methods. This method, while offering several advantages, also has limitations. A corpus allows researchers to statistically identify patterns based on “aggregate data that pools the productions of many speakers and writers” (Arppe et al., 2010, p. 3)—and translators. At the same time, it is also important not to lose sight of the effects of variation between individuals, and the mediated nature of the text: translations, like other written texts, are subject to editorial changes by a number of people other than the original writer or translator. Despite the fact that careful corpus designs and advanced multifactorial statistical methods can go some way towards separating out cognitive and social factors in language (and translation) production (see Kruger & De Sutter, 2018), a combination of corpus methods with experimental or quasi-experimental methods allowing us to understand language processing under more (or less) controlled conditions is essential in order to understand how communication under conditions of bilingual language activation affects language production in similar and different ways across different contact settings.

Current diachronic corpus-based research on the role of translation in contact-induced change remains inconclusive. All in all, it appears that under some (very limited) socio-linguistic conditions, in particular registers, the widespread use of translation may influence frequential patterns, leading to changes in pragmatic, stylistic or register preferences. Translations may also introduce lexical forms to a language. A major methodological challenge to this kind of research is to separate the effects of language contact through translation and language contact more generally (Neumann, 2011). Translation is, particularly in a contemporary globalized world, one among many gateways of language contact, and disentangling the effects of different sources of contact may well prove an intractable problem.

Other limitations of existing research include the relatively short timespans investigated (most studies of the modern period focus on spans of no more than 30 years), the focus on single registers, and limitations in the contact situations investigated (see Dai, 2016; Redelinghuys, 2019 for exceptions). More studies focusing on multiple registers, more diverse contact situations, and longer timeframes are needed to more definitively investigate the role of translation in contact-induced change.

Moving beyond corpora, a further crucial extension of this research is the application of process-type or experimental methods to understand both the production of the translated
text as a contact-influenced event and the propagation of contact-influenced linguistic features from translations to monolingual text production. Taking the methods of iterative learning and agent-based modelling of language interaction, competition, change and evolution (e.g. Steels, 2011) into this area of research constitutes a frontier for studies of LCTT (see Fernández et al., 2017 for experimental evidence of the psycholinguistics of language change). The combination of corpus-based and experimental work will further assist in disentangling the complex web of social and cognitive factors that influence translation as a type of language contact.

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Notes

1 As represented in, for example, wide-ranging work by Johanson (2002), Heine and Kuteva (2005), Thomason and Kaufmann (1988), Thomason (2001), Van Coetsem (2000), and Weinreich (1953).

2 In contact linguistics, a range of terms are used for the two languages involved in the contact situation. For ease of understanding, and to ensure consistency, this chapter avoids using these terms, and instead uses terms familiar to readers from Translation Studies: source language (SL) and target language (TL).

3 Bilingual language activation or discourse production is not the only constraint raised, however; the constraints introduced by reproducing or relaying an existing message are also often cited in this work.

4 It should be pointed out, however, that there are also differences between various contact-influenced varieties (e.g. L2 varieties) and translation, which can be ascribed to different conditions of contact, or different communication situations. For more detail, see Kruger and Van Rooy (2016a).

Further reading


A theoretical proposal for the integration of usage-based theories with theories of language change, with a particular focus on language contact.


An overview of theoretical and methodological issues in viewing translations as a possible factor in language change, and an outline of some key findings.


An outline of relevant factors affecting translation-induced language change.


A case study of cross-linguistic influence in different contact varieties, proposing a set of constraints that play a role in different forms of language contact, including translation.


A theoretical proposal for viewing translation as a form of language contact, accompanied by an empirical study.

A proposal for integrating the psycholinguistics of bilingualism with language-contact outcomes.


An outline of methodological considerations for studying language contact and change through translation.

### References


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