Convergence and divergence of communicative norms through language contact in translation

Viktor Becher, Juliane House & Svenja Kranich
Hamburg, University and Research Center on Multilingualism

This contribution addresses the question of whether and how translation as a classic case of language contact can act as a trigger for convergence and divergence phenomena between two languages. We present two studies which indicate that translation-induced convergence does not occur unconditionally: while we found no signs of English-German convergence in the use of modal verbs (study 1), the use of sentence-initial concessive conjunctions in translated and comparable German texts shows convergence with Anglophone usage patterns (study 2). Explaining these disparate results, we hypothesize that divergence occurs when bilinguals perceive profound differences between source and target language (as is the case in English and German lexicogrammatical means for expressing modality), while convergence takes place when bilinguals perceive items as equivalent in form and function (as is the case in English and German concessive conjunctions).

1. Introduction

This paper presents some recent results from the project Covert Translation. The general assumption underlying this project is that the dominant status of the English language in global communication influences and changes communicative norms in other languages through language contact in covert translation and comparable text production. Covert translations (House 1977; 1997) are translations in which the communicative purpose of the original text is upheld via the use of "cultural filtering", i.e. adapting the original text in accordance with conventionalized expectation norms of the target audience. If, however, the influence of global hegemonic English is pervasive enough, it will effectively prevent cultural filtering and instead impose Anglophone norms on texts in other languages. To test this hypothesis we relied on the results of House's (1996; 2006) and Clyne's (1987; 1994) empirical contrastive pragmatic work and its postulation of certain dimensions of communicative preferences along which English and German text production tend to differ. Particularly relevant to the case studies presented in this article are the two dimensions 'directness vs. indirectness' and 'content-orientation vs. addressee-orientation'. In general, English discourse in many genres tends to be more indirect and oriented towards the addressee, while German discourse may be described as more direct and oriented towards content (House 1996; 2006). Given the absence of comparable contrastive pragmatic research using different language pairs, we concentrated in this project on the language pair English and German.

To test the project hypothesis of global English influence on textual norms we constructed a multilingual diachronic corpus of texts in two genres which we assumed were particularly prone to global Anglophone influence: popular science and economic texts. The bulk of the corpus consists of English originals, their German translations as well as comparable, i.e. non-translated German texts. For an analysis of the translation relation, source and target texts were manually aligned sentence by sentence, so that an electronic search of the originals automatically retrieves the relevant segments in the translations, and vice versa. The popular science texts which we will examine in the present study were mostly taken from the journal Scientific American and its German daughter publication, Spektrum der Wissenschaft. The total number of words in the popular science part of our corpus is about 500,000. The texts were sampled from two distinct time frames: 1978–1982 and 1999–2002. Given this corpus design, we are in a position to conduct comparative research into language-specific and genre-specific conventions and into the nature of the translation relations. However, in order to make valid statements about whether it is in fact Anglophone texts that have led to variations and changes of German textual norms over the past 25 years and not any independent development of norms in the two languages involved, we also have to draw

1. The project is directed by Juliane House, current research fellows are Viktor Becher and Svenja Kranich, Claudia Böttger, Julia Probst, Nicole Baungarten and Demet Özçetin were members of the research team in previous project phases. The project is part of the Research Center on Multilingualism (Sonderforschungsbereich “Mehrsprachigkeit”) at the University of Hamburg. It has been funded by the German Science Foundation (Deutsche Forschungsgemeinschaft) since 1999. We gratefully acknowledge this ongoing generous support.

2. Of course, the characteristics of English and German discourse summarized here should not be viewed as absolute dichotomies but rather as points on a cline.

3. Additionally, the corpus contains translations in the opposite direction (German → English) as well as translations from English into French and Spanish for validation purposes.
on larger German and English reference corpora like for instance the DWDS-Kerncorpus4 and the British National Corpus.

The methodology used in this project is a combination of qualitative and quantitative methods. The qualitative part of the research consists of detailed contrastive analyses of some 70 texts, the qualitative part combines frequency counts with statistical operations, and the re-contextualized qualitative analysis includes an isolation of occurrences of vulnerable items and manual annotations to locate collocations and co-occurrences with several pragmalinguistic categories. We can thus divide our project work into three phases: in a first qualitative phase, texts were analyzed and compared in their entirety on the basis of House’s systemic-functional (register-theory based) translation evaluation model (1997), such that textual profiles were established reflecting whether and how over time cultural filtering has changed or has indeed been completely abandoned. Results of the analyses in this phase show that changes did indeed occur in the realization of subjectivity and addressee orientation. The concept of subjectivity is related in systemic-functional theory to Stance and captured along the register dimension of Tenor (Halliday & Matthiessen 2004). Similar concepts discussed in the literature are point of view and perspective (Smith 2003), metadiscourse (Crismore & Farnsworth 1990), evaluation (Hunston & Thompson 2000) and emotive prosody (Bublitz 2003). Subjectivity is also clearly related to the function certain linguistic elements have in influencing hearers/writers (intersubjectivity or addressee-orientation). For our quantitative work, the complex and rather fuzzy concepts subjectivity and addressee-orientation were operationalized to include phenomena such as speaker-hearer deixis, mental processes (in the sense of Halliday), commenting parentheticals, and expressions of modality and connectivity. Results of the second, quantitative project phase essentially confirmed the changes over time in regard to the frequency with which functional categories such as speaker-hearer deixis, mental processes (in the sense of Halliday), commenting parentheticals, and expressions of modality and connectivity. Results of the third re-contextualized qualitative project phase, where we focus on the translation relation and isolate complex collocations and co-occurrence patterns, are examined whether equivalent elements occur in the same linguistic environments, and whether they are used for the same communicative functions.

Our findings concerning adaptations of German communicative norms in the areas of subjectivity and addressee orientation suggest that in the space of 25 years there has indeed been an adaptation of popular science and economic texts to Anglophone norms with regard to the use of linguistic means of expressing speaker-hearer deixis (cf. Baumgarten & Probst 2004; Baumgarten & Özcetin 2008; Baumgarten 2008), as well as coherence (cf. Baumgarten’s 2007 detailed study of sentence-initial conjunctions And/Und). What these phenomena have in common is the fact that they constitute formal and functional equivalents in the two languages involved such that a bilingual speaker (or a translator) is capable of “interlingual identification” (Weinreich 1953). Interlingual identification, in turn, facilitates transfer (cf. also Heine & Kuteva 2005: 4, 219–234). Conversely, in cases where there is no clearly discernible formal and functional equivalence in markers of subjectivity and addressee-orientation, Anglophone influence could not be established in our analyses. Cases in point are the use of mental processes (Özcetin 2008), the realization of explicitness in the description of events and states of affairs (House 2008; Baumgarten et al. 2008), and the employment of linking constructions (Bührig & House 2004; 2007). These findings have given rise to a more specific project hypothesis, namely that the impact of English communicative norms on German communicative norms is facilitated in regard to those linguistic expressions where form-function-equivalence can easily be established by the bilingual individual.

In the following, two recent project case studies which further examine this hypothesis will be presented. The first study investigates the use of modal markers – as a case of non-equivalence of form and function in German and English discourse – while the second study investigates the use of sentence-initial concessive conjunctions as a case of formal and functional equivalence. Both case studies were carried out on the popular science part of our corpus described above.

2. The use of epistemic modal markers

2.1 The textual function of epistemic modal markers

Broadly speaking, epistemic modal markers function as “a speaker’s comment on the status of information in a proposition. They can mark certainty (or doubt), actuality, precision, or limitation […]” (Biber et al. 1999: 972). Speakers can use these linguistic elements to “express[…] their lack of confidence in the propositions expressed in these utterances” (Coates 1995: 59). This can be seen in the following examples from our popular science corpus (English original and German translation plus English gloss):

(1) a. Thus some individuals may have a defective natural interferon system.

b. Somit haben wahrscheinlich einige Patienten ein defektes Interferonsystem.

Thus some patients probably have a defective interferon system.

---

4. The DWDS-Kerncorpus is a diachronically balanced corpus of written German covering the entire 20th century, each decade being represented by approximately 10 million words of text (Geyken 2007). The corpus can be queried free of charge at http://www.dwds.de.
In the above examples, the speaker (i.e. the author of the text), makes it clear that he is not one hundred percent certain of the truth of the proposition. In the English Example (1a), *may* indicates a relatively low degree of certainty, while *wahrscheinlich* in the German translation (1b) marks a rather high degree of conviction. That is, in both the English original and the German translation, the speaker modifies the statement, but the modal strength of the epistemic modal element used is different.

Clearly, epistemic elements with high and low modal strength (i.e. marking both high and low certainty as to the truth of the proposition) are found in both the English and the German system. However, in accordance with the typical communicative preferences in English and German texts referred to in Section 1 above, we may assume that epistemic modal markers in general and those of low modal strength in particular will be more commonly used in the English texts, because they contribute to making texts more indirect as well as more addressee-oriented. The use of epistemic modal markers is thus not always motivated by a real lack of conviction in the truth of the proposition, but may also be used as a particular conventionalized communicative strategy. The following example illustrates this:

(2) a. Planetary rings are not only striking, exquisite structures; they *may* be the Rosetta stones to deciphering how planets are born.

One might suppose that the author has more conviction in the correctness of the proposition than the use of *may* betrays, and that he strives to conceal this in order to make the statement less open to criticism. Such a use of an epistemic modal expression as a hedging device may be motivated by a wish to state matters less directly and leave more room for non-face-threatening intervention (such as disagreement) on the part of the addressee. Hyland (1998: 351) notes that "deference, humility, and respect for colleagues' views" are conveyed through the hedging use of epistemic modal markers (cf. also White 2003; Graefen 2007). White and Sano (2006) stress that the use of such devices produces a more 'dialogic' text which allows for alternative positions and voices. They explain that hedging devices such as epistemic modal markers

... signal a recognition that, in the current communicative context, these are contentious matters and thereby [...] signal recognition that those being addressed may query, reject or at least find such propositions novel or otherwise problematic. By this mechanism, the interpersonal cost to any who might advance alternative views is lowered as their position is recognised as a valid one in the current ongoing colloquy. (White & Sano 2006: 194)

Thus we come back to the communicative preferences summarized above: the hedging use of an epistemic modal makes the text more interpersonal, more addressee-oriented, more indirect, and therefore more typical of Anglophone than...
Convergence and divergence through language contact in translation

Here again the test allows us to perceive that the English modal *may* is of low modal strength (*This may or may not be true* is possible), while the German modal element has high modal strength (it is not possible to say *Das ist wohl wahr, oder es ist wohl nicht wahr*). The categories 'same modal strength in translation' and 'lower modal strength in translation' are evidenced by Examples (5) and (6) respectively:

(5) a. Imaging studies over the past decade have indicated which brain regions *might* malfunction in patients with ADHD.
b. Welche Gehirnregionen beteiligt sein könnten, lassen in den letzten zehn Jahren angefertigte Gehirnaufnahmen vermuten. 'Which brain regions *might* be involved is indicated by brain images produced in the last ten years.'

(6) a. Such models *might* then be used to understand in greater detail the coevolution of memes.
b. *Gegebenenfalls könnten* die Modelle helfen, die Koevolution von Memen und Genen gründlicher zu verstehen. 'Possibly the models *might* help to understand the coevolution of memes and genes more thoroughly.'

Finally we find translations where the modally marked proposition is rendered by a particular lexical choice rather than through recourse to a grammatical marker of modality, as in the following example:

(7) a. … because mammary cells grow vigorously at this stage of pregnancy, indicating that they *might* do well in culture.
b. … zu diesem Zeitpunkt wachsen die Zellen des Euters lebhaft, was gute Kultivierbarkeit *verspricht*. '… at this point the cells of the udder grow vigorously, which *promised* good culturability.'

In instances of the last type, the expression of less than full conviction regarding the truth of the proposition via a modal marker in the English original is rendered lexically in German, often in quite creative ways. These cases were very difficult to classify with regard to the modal strength they express, so that they have been put into a category called 'other'. Concerning the four types where the modal strength of the translation choice could be determined, we may consider the types evidenced in (3) and (4) as adaptations to German textual preferences, marking full or higher conviction and thus being more direct and more content-oriented, while translations of the types evidenced in (5) and in (6) remain close to the (more indirect, more addressee-oriented) English original.
The results for the two different time-windows included in the corpus are shown in Figures 1 and 2:

Figure 1. Modal strength in German translations of English modals 1978–1982*

* The absolute numbers for this time-span are as follows: might n = 14, may n = 57, can n = 105, must n = 20. Total n = 196.

Figure 2. Modal strength in German translations of English modals 1999–2002*

* The absolute numbers for this time-span are as follows: might n = 148, may n = 184, can n = 327, must n = 29. Total n = 688. The reason for the elevated numbers compared to the earlier time-span mainly lie in the corpus make-up, which contains 42,500 words of English text for the 1978–1982 time-span, but 122,866 words for the 1999–2002 time-span. This has to do with the fact that for the earlier time-span popular scientific English texts which have covert translations into German are hard to come by, as the genre was only getting established in German.

Already from these two figures it becomes apparent that no drastic diachronic change can be observed between the two time-spans. We may note that, overall, translators seem to choose a ‘freer’, more creative translation (as exemplified in (7) above) more often in the latter time-span. This is, however, not immediately relevant for the present investigation. What seems more interesting in the context of the present study is that apparently, translators use modally unmarked propositions as translations of must more often in the first time-span than in the second one. However, one should note that epistemic uses of must are, overall, not all that frequent in our corpus, having an average frequency of only 5.3 (1978–1982) and

2.6 (1999–2002) occurrences per 10,000 words. Taken individually, the findings do not allow strong generalizations. However, considered together, we can certainly see a general trend, as Figure 3 shows:

Figure 3. Modal strength in German translation of English modals: 1978–1982 vs. 1999–2002

Thus one can say that when translators introduce changes regarding the strength of an assertion, there is a clear tendency to increase the modal force compared to the English expressions containing might, may, can or must, i.e. to use a modal marker with a higher modal strength or translate the proposition using a modally unmarked indicative. Translations with a lower modal strength, on the other hand, are much less frequent. We can regard this as an adaptation of the text to German communicative preferences, i.e. as the use of a cultural filter. Instead of a decreasing use of cultural filtering in the English-German translations due to the prestige associated with the English language, which the project hypothesis would have led us to expect, we find, in fact, an increasing divergence from the English model. We shall now see how this could be explained.

2.3 Possible reasons for increasing divergence

Looking at Figure 3 we could see that quite a remarkable proportion of the translations do not choose an expression of the same modal strength in German. This is true of almost 30% of the translation choices of the four epistemic modals analyzed in the earlier translations, and of a little over 40% of the translation choices in the later translations. We may thus ask why the German texts diverge so commonly from the model present in the English originals. The reasons may lie in a lack of a form-and-function equivalence between English and German in the field of modality. Other studies conducted in our project which have shown significant influence of English communicative styles on German styles in the German translations have dealt with linguistic elements showing a high degree of formal and functional similarity between the two languages (see for instance Baumgarten 2007...
on sentence-initial *And and Und, and Baumgarten & Özcetin 2008 on the use of we and wir in business communication, as well as the following case study on sentence-initial *But and Aber/Doch). These linguistic elements are easily identifiable as equivalents by any bilingual speaker and translator, and they thus provide a gateway for an influence on the frequency and/or functions of these elements. In the field of modality, on the other hand, such obvious equivalents are difficult to find in the language pair English–German.

One of the major differences lies in the kind of categories predominantly recruited for the expression of modal meanings in the two languages. While in present-day English the modals are a clear-cut class of their own (e.g. cf. e.g. Denison 1993), having grammaticalized to a high degree, the German modal verbs still share many more characteristics with ordinary verbs, as is evident for instance in the existence of non-finite forms (Example 8), the ability to take a direct (Example 9) or a prepositional object (Example 10):

(8) a. Maria hat das Gedicht am besten gekonnt.
   b. *Mary has could [past participle] the poem best.
(9) a. Peter darf noch ein paar Kekse.
   b. *Peter may some more cookies.
   b. *Julia must to London.

A further difference, which can be seen as a consequence of a higher degree of grammaticalization, is that in English the modals are the predominant means of expressing modal meaning. In German, however, a variety of linguistic elements are used to this end. Among the grammatical elements expressing epistemic modal meanings, German commonly uses modal adjectives and adverbs (e.g. möglich, wahrscheinlich), as well as modal particles (e.g. wohl), a category not present in the English inventory (cf. Nehls 1989; König 2001; Teich 2003: 111). From the present state of further investigation, in which we compare the use of epistemic modal elements in the English originals, their German translations and the original texts in our corpus, these other categories seem to be clearly preferred over modal verbs in the untranslated, comparable German texts.7

Furthermore, German texts show a certain predilection for lexical expressions rather than grammatical elements. Thus, phrases such as unseres Erachtens (‘in our opinion’) and so weit bisher bekannt (‘as far as it is known so far’) fulfil the same function as epistemic modal markers in that they modify the certainty with which the truth of the proposition is asserted, but they add further information (e.g. the grounds on which it is asserted), thus satisfying the preference for explicitness characteristic of German texts (cf. House 2004a, 2004b). In other words, the linguistic expressions predominantly chosen for the epistemic modification of the proposition are clearly different in the two languages.

The translations of the English modal verbs also reflect these systemic differences. The realization of English might, may, can and must in the translations can be categorized into the following types:

a. zero translation
b. modal verb
c. modal adjective/adverb/particle
d. a combination of several modal elements (e.g. modal verb + modal particle)
e. a creative translation which renders the modal meaning via other means (typically lexical choice)

For reasons of space, we shall just look at the translations of all four modal verbs together. This gives us a good impression of the general tendencies:

![Figure 4. Formal categories of German translations of English modals 1978–1982 vs. 1999–2002](image)

7. The current work in progress compares expressions of epistemic modality in English originals, German translations and German originals, taking the functional side of these expressions as our departure point. In a manual analysis of a subpart of the corpus, all expressions that function as a modification of the speaker’s conviction in the truth of the proposition will therefore be isolated. These expressions are then categorized according to modal strength and linguistic category of the element used. This allows us to gain both a more detailed view of the contrasts between English and German and the potential differences between German translations and German originals in the genre of popular scientific texts. Additionally, further studies of translation relations, comparable to the present one, will be conducted in the field of modal expressions.
Figure 4 shows the following diachronic development: there is a certain rise in the use of modal particles, adverbs or adjectives (c) as well as in the use of combinations of several modal elements (d). Also, the creative choices grouped together here under (e) become more frequent. The rise in categories (c) through (e) happens at the expense of the more straightforward translation of an English modal verb by a German modal verb. As far as the formal properties of the modal expressions are concerned, there is also an increasing divergence from the English original expression.

Summarizing, we can conclude that as far as both the functional and the formal sides are concerned, German translations of popular science texts do not seem to be converging with the English model – on the contrary, they show increasing divergence from it (cf. also Kranich 2009).

3. The use of sentence-initial concessive conjunctions

Sentence-initial concessive conjunctions (SICCs) were chosen for analysis because their different use in English and German is indicative of two interesting contrasts between the two languages. These contrasts account for the fact that SICCs (Engl. *But*, German *Aber* and *Doch,* both meaning ‘But’) are much rarer in German than in English (cf. Table 1 below). Accordingly, in English-German translations it is often the case that a German equivalent of sentence-initial *But* such as *Aber* or *Doch* is avoided. Specifically, English-German differences in the use of SICCs are due to contrasts in terms of (1) word order and (2) textual norms. In the following, the two contrasts will be discussed in turn.

I. Word order. In contrast to the largely grammatically determined word order of the English sentence (SVO), German word order is pragmatically controlled. That is, German observes a stricter organization of the sentence in terms of given and new information than English (Hawkins 1986; Doherty 2001; 2005). And connectives like *but* “compete with the propositional parts for the initial position in a sentence” (Doherty 2001: 223). This is why German prefers to use a sentence-internal connective in many situations where English would use a sentence-initial one. Cf. the following two examples from our corpus.

8. *But, aber and doch* are often called “contrastive” conjunctions. This is somewhat misleading, as only in a minority of cases these conjunctions are actually used to convey a purely contrastive relation. Their default use seems to be the signalling of a concessive relation (Becher 2007; cf. also the following examples, of which only (13) can be analyzed as contrastive).

Figure 4: The following diachronic development: there is a certain rise in the use of modal particles, adverbs or adjectives (c) as well as in the use of combinations of several modal elements (d). Also, the creative choices grouped together here under (e) become more frequent. The rise in categories (c) through (e) happens at the expense of the more straightforward translation of an English modal verb by a German modal verb. As far as the formal properties of the modal expressions are concerned, there is also an increasing divergence from the English original expression.

Summarizing, we can conclude that as far as both the functional and the formal sides are concerned, German translations of popular science texts do not seem to be converging with the English model – on the contrary, they show increasing divergence from it (cf. also Kranich 2009).

In both examples, the respective translator most probably preferred to place *allerdings* and *jedoch* (both are roughly equivalent to ‘however’) sentence-internally in order to leave the first position in the sentence to the subject, which presents given information. In some cases, an English-German translator may even achieve an adequate translation of sentence-initial *But* without using a connective at all:

(13) a. *But* the newfound organism not only appeared to poison fish – it ate them as well.
    b. *Nicht so unser Neuling: Er vergiftet die Fische nicht nur – er frisst sie auch!* 'Not so our newcomer: it not only poisons fish – it eats them as well!'

In (13), the contrast expressed by *But* has been translated into German solely by means of word order. The topicalization of the negated adverb *so* has placed new information at the beginning of the clause. This departure from the default given-new ordering of the German sentence gives rise to a strong implicature of contrast (cf. Büring 1999, 2006). The example shows that in the case of sentence-initial *But*, omission does not necessarily equal non-translation: the information-structural expectations of German readers are so strong that a departure from the canonical given-new ordering of the German sentence will suffice to reproduce the effect of sentence-initial *But*. The use of a direct equivalent like *Aber* or *Doch* is often unnecessary.

II. Textual norms. Another contrast which accounts for the finding that SICCs are more common in English than in German is located in the domain of culturally determined discourse norms: while English (spoken and written) discourse may be characterized as interactional,9 dialogical and addressee-oriented, German discourse has been described as ‘transactional’, monologous and content-oriented (cf. the literature quoted in Section 1 above and Byrnes 1986; Kotthoff 1989; 2006).

9. We follow Thompson and Thetela (1995) in distinguishing interactive from interactional properties of text. While every text is interactive, e.g. in the sense that an author needs to anticipate reader expectations to communicate successfully, a text is only interactional if its interactive quality is explicitly verbalized; for example, possible reader expectations may be ‘hard-wired’ into the text as questions. The term *interactional* as we use it can therefore be paraphrased as ‘overtly interactive’.

2nd proofs
Convergence and divergence through language contact in translation

Viktor Recher, Juliane House & Svenja Kranich

The translator of (14) has decided to retain the question, but has weakened its ‘interactionality’ by reframing from translating the objection marker But. In this way, the translator has shown his or her concern for conforming to German textual norms. The translator of (15) has gone even further; not only has s/he dropped the SICC, but also dispensed with the question of the English original by explicitly verbalizing the lack of knowledge it implies (… is not clear yet). We can say that, in this case, the translator has applied a cultural filter that has completely converted the interactional orientation of the source text into a transactional orientation of the target text.

The following two examples illustrate the use of But in the Question part of a Question–Answer pattern:

(14) a. But what caused these calamities in the first place […]?
   b. Wie kam es zu der erstaunlichen Klima-Instabilität […]?
   ‘How did the astonishing climate instability come about?’

(15) a. But why do these inhibitory events occur during waking in narcoleptics?
   b. Warum die Bewegungshemmung bei Narkoleptikern zur falschen Zeit auftritt, ist noch nicht klar.
   ‘Why the movement inhibition occurs in narcoleptics at the wrong time is not clear yet.’

While it is not made explicit whether the question in (14) and (15) is attributable to the author, the reader or even to both parties, it is clear that this way of introducing a new subtopic evokes the impression of an interaction between author and reader. If we take the view that rhetorical questions are attributable to the ‘reader-in-the-target’ (Thompson & ‘Thetela 1995; Thompson 2001) – which need not be identical with any real reader – the use of sentence-initial But makes sense here, as it makes the question seem like an objection to what was said before and thus even heightens the interactional appearance of the text. Another effect of But is that it signals the beginning of the Question–Answer pattern. (The Answer part of the pattern is omitted in (14) and (15).) Finally, the use of sentence-initial (or rather: utterance-initial) But in this context is strongly reminiscent of face-to-face conversation, where it occurs more frequently than in written texts (Biber et al. 1999: 84).

10. Note that the use of SICCs is not invariably interactional. Rather, it appears that SICCs are put to use very differently in different registers. For example, Bell (2007) finds sentence-initial But in academic writing predominantly used as “a tool which allows speakers to subtract unintended meanings away from an existing meaning” (Bell 2007: 197). On the other hand, he quotes an example from his corpus where But appears as part of a Question–Answer pattern (no. 28, Bell 2007: 196). A comparative study of the use of sentence-initial But in academic and popular scientific texts seems worthwhile.
which shares the discourse function of *But* as a "turn-getter" (Schlobinski 1992), the translators of (16) and (17) have resorted to sentence-internal connectives.

Independently of the discourse pattern in which sentence-initial *But* occurs, it regularly appears in short and pointed sentences. Such sentences typically occur in spoken rather than written discourse and are thus particularly suitable for creating the illusion of spontaneous and interactional speech:

(18) a. If some singular, unavoidable flaw caused every cell to fail eventually, no animal would escape aging. *But* some do.
   b. Gäbe es ihn, würde kein Tier dem Altern entkommen. Solche Lebewesen existieren *aber*.
      'If [such a flaw] existed, no animal would escape aging. Such creatures exist, *however*.'

   b. Erst 1990 verbot ein neuer peruanischer "Umweltkodex" die Ausrotsungspraxis, *doch* Pestizide beherrschen nach wie vor die Landwirtschaft.
      'Not until 1990 did a new Peruvian "environmental code" forbid the eradication practice, *but* pesticides are still pervasive in agriculture.'

(20) a. Scientists' search for life beyond Earth has been less thorough than commonly thought. *But* that is about to change.
   b. Die wissenschaftliche Suche danach ist bislang allerdings auch weniger gründlich gewesen als gemeinhin angenommen. *Doch* das wird sich bald ändern.
      'The scientific search for it has so far however been less thorough than commonly assumed. *But* that will soon change.'

Of the three Examples, (19) is especially interesting. The translator has merged the two short sentences of the English original into a single sentence, in this way abandoning the colloquial and incremental style of the English original in favor of a more formal and content-oriented style of exposition. (Cf. Fabricius-Hansen 1998, who suggests that English texts tend to 'build up' the discourse in an incremental manner while German generally favors a hierarchical and syntactically more compressed mode of writing.)

Summing up, the discussion of the above examples has shown that the use of SICCs in German texts is generally dispreferred for (1) information-structural and (2) stylistic reasons. We do not want to overstate the case, though: as examples 3 and 20 indicate, German *aber* and *doch* do occur sentence-initially. However, this happens less frequently than in English texts, and usually entails a strong rhetorical effect. The examples discussed above show that an adequate translation of sentence-initial *But* into German often means its omission (*But* → (null)) or its replacement by a sentence-internal connective (*But* → *aber*, *doch*, *jedochn*, or the like).

In line with our project hypothesis, it is hypothesized that

1. sentence-initial *Aber* and *Doch* occur more frequently in the English-German translations than in the non-translated comparable German texts of our popular science corpus (cf. Section 1),
2. this over-use of SICCs in the English-German translations is due to an interference of the English source texts and
3. the comparable, i.e. non-translated German texts 'inherit' over time the more frequent use of SICCs from the translations.
4. It is further hypothesized that the driving force behind these changes is the adoption of the interaction-oriented textual norms of English, i.e. English-German translators and German authors start using SICCs more frequently in order to imitate the author-reader interaction characteristic of (prestigious) English popular science texts.

The remainder of this section will present some evidence in support of these hypotheses.

#### 3.1 Quantitative findings

Table 1 shows the frequency of sentence-initial *But* and *Aber/Doch* respectively in the English source texts, their German translations and the non-translated comparable German texts of the popular science corpus. Since the number of sentences—and hence the number of opportunities to use a SICC—differs between the individual subcorpora, the frequency counts given in the table are normalized on the basis of 1000 sentences.

and has subsequently stayed on this low level until the end of the 20th century. (On the other hand, *Doch* shows no comparable development.) It would be an interesting topic for further study to assess whether this rather abrupt decline in the use of *Aber* is part of a more extensive change in German communicative norms around the middle of the 20th century or whether it is an isolated phenomenon (e.g. induced by an emergence of certain prescriptive norms).
Table 1. Frequency of sentence-initial \textit{But} in English texts and \textit{Aber}/\textit{Doch} in their German translations and comparable German texts (per 1000 sentences; \( n = 621 \))

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>English source texts (\textit{But})</td>
<td>32.6</td>
<td>32.6</td>
<td>–</td>
</tr>
<tr>
<td>English-German translations (\textit{Aber}/\textit{Doch})</td>
<td>22.7</td>
<td>30.1</td>
<td>+32.5%</td>
</tr>
<tr>
<td>Non-translated German texts (\textit{Aber}/\textit{Doch})</td>
<td>9.0</td>
<td>19.8</td>
<td>+119.8%</td>
</tr>
</tbody>
</table>

Let us first consider only the figures for the earlier time-frame (1978–1982). Here, we see that the frequency of \textit{But} in the English texts is indeed considerably higher than the combined frequency of \textit{Aber} and \textit{Doch} in the non-translated German texts (32.6 vs. 9.0 occurrences per 1,000 sentences). The English-German translations are almost exactly in the middle, which could mean that they are (1) affected by a “shining-through” (Teich 2003) of the English source texts and (2) only partly follow the textual conventions of German (at least as far as the use of SICCs is concerned). In any case, hypothesis 1 is supported by the frequency counts.

Taking the later time-frame (1999–2002) into account, we can observe two remarkable diachronic developments. First, the number of SICCs in the English-German translations has risen by 32.5 percent, which indicates that the degree of source language shining-through has increased. Second, the non-translated texts seem to have followed suit: here, the frequency of SICCs has more than doubled (+119.8%), almost reaching the frequency level of the translations in the earlier time-frame.

Summing up the results obtained from the frequency counts, it appears to be the case that the English-German translations have – at least in terms of frequency – aligned their use of \textit{Aber} and \textit{Doch} to the use of \textit{But} in their English source texts. And the non-translated German texts, in turn, appear to have followed the lead of the English-German translations, which indeed seem to function as role models for German popular science texts (cf. hypothesis 4 in the previous section, and cf. also Baumgarten 2008). Thus, the frequency counts presented in Table 1 make an English influence on German textual norms via translation seem very likely. However, two questions must be answered before we can think about accepting this explanation:

1. Is the frequency rise of \textit{Aber} and \textit{Doch} in the English-German translations actually due to an increased shining-through of the English source texts and an accompanying adoption of their textual norms?
2. Do the non-translated German texts in their use of \textit{Aber} and \textit{Doch} actually follow the example of the English-German translations or have they developed idiosyncratic uses of the two conjunctions?

The questions will be answered in the following two subsections.

### 3.2 Translation analysis

Table 2 compares the translational equivalents of sentence-initial \textit{But} chosen by translators in the earlier time-frame to those chosen in the later time-frame.

Table 2. Translations of sentence-initial \textit{But} into German (\( n = 208 \))

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{But} → \textit{Aber}, \textit{Doch}</td>
<td>26.8%</td>
<td>47.4%</td>
<td>+20.6</td>
</tr>
<tr>
<td>\textit{But} → \textit{aber}, (\textit{je})\textit{doch}, \textit{allerdings}</td>
<td>46.4%</td>
<td>36.2%</td>
<td>–10.2</td>
</tr>
<tr>
<td>\textit{But} → (null)</td>
<td>17.9%</td>
<td>7.2%</td>
<td>–10.7</td>
</tr>
<tr>
<td>\textit{But} → (\textit{other})</td>
<td>8.9%</td>
<td>9.2%</td>
<td>+0.3</td>
</tr>
<tr>
<td>total</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

A definite trend is evident: while the number of ‘literal’ translations (\textit{But} → \textit{Aber}, \textit{Doch}) has almost doubled (+20.6 percentage points), the number of ‘free’ translations (\textit{But} → \textit{aber}, (\textit{je})\textit{doch}, \textit{allerdings} and \textit{But} → (null)) has decreased by an equivalent amount (–10.2 and –10.7 percentage points respectively). The results indicate that the first question posed at the end of the last subsection is to be answered affirmatively: the frequency rise of \textit{Aber} and \textit{Doch} in the English-German translations is due to a change in translation behavior. The table shows that over time, translators hesitate less and less to adopt sentence-initial \textit{But} as \textit{Aber} or \textit{Doch}. And as the following examples illustrate, the changed translation behavior seems indeed to result from – quite successful – attempts to imitate the interactional style of the English source texts:

(21) a. Something must have drained away its [sc. the sun’s] angular momentum. \textit{But} what?
   b. Irgendwann muß sie den Drehimpuls verloren haben. \textit{Aber} wie?
   ‘At some point it must have lost the angular momentum. \textit{But} how?’

(22) a. … the entire endeavor of robotics has failed rather completely to live up to the predictions of the 1950s […] \textit{But} it is true that industrial robots have transformed the manufacture of automobiles, among other products. \textit{But} that kind of automation is a far cry from the versatile, mobile, autonomous creations that so many scientists and engineers have hoped for.

12. Occurrences of \textit{But} in citations and in sentences that were left out in the German translation were excluded from the analysis (cf. Note 5).
b. Gewiß, Industrieroboter spielen in der Produktion von Autos und anderen Gütern inzwischen eine wesentliche Rolle. Aber die sind weit entfernt von dem, was so viele Forscher und Ingenieure sich ertäuscht hatten.

‘Certainly, industrial robots play an essential role by now in the production of cars and other goods. But they are far away removed what so many researchers and engineers have dreamed of.’

In (21) the short, elliptical question prefaced by the objection marker But gives rise to a high degree of interactionality and author-reader involvement. The author creates the illusion of following a train of thought together with the reader. It is interesting to note that the translator did not mechanically transfer the two sentences into German: he has changed the subject of the first sentence (something → sie [the sun]) and found an equivalent metaphor for expressing the event described (drained away → verloren). This shows that the retention of But as Aber is the result of a conscious decision, namely not to apply a cultural filter.

(22) exemplifies what Antaki and Wetherell have aptly described as “making a show of conceding” (1999: 7). The author pretends to concede a possible objection (Claim) by the reader, even emphasizing its truth (It is true that …). In the immediately following Response (introduced by But), however, the author completely marginalizes the ‘conceded’ objection by showing that it is not at all relevant to her argument that “the entire endeavor of robotics has failed rather completely to live up to the predictions of the 1950s”. What we observe here is thus a hardly concealed attempt to persuade the reader, who is pictured as (possibly) objecting to the argument of the author. As in (21), the translator apparently does not feel the need to mitigate the overtly expressed author-reader-interaction and almost literally renders both It is true that … (as gewiß ‘certainly’) and the objection marker But (as Aber) in German.

3.3 Qualitative analysis of non-translated German texts

The question that remains to be answered is whether the frequency increase of Aber and Doch in the non-translated German popular science texts in fact results from an adoption of textual norms introduced by the English-German translations. A qualitative analysis of all occurrences of sentence-initial Aber and Doch in the non-translated texts indicates that this is indeed the case. The following examples are representative of the findings.

(23) Gewiss sind unter den Lockstoffen für bestäubende Insekten auch Monoterpene. Aber das kann nur ein Nebeneffekt sein…

‘Certainly, among the attractants of pollinating insects are also monoterpenes. But that can only be a side-effect…’

(24) Keine Region auf unserem Planeten ist so entlegen und fern jeder menschlichen Zivilisation wie die Polargebiete. Nirgendwo sonst sollte also die Luft so rein und der Himmel so klar sein. Doch weit gefehlt!

‘No region on our planet is as remote and far from every human civilization as the pole areas. Nowhere else should the air be so clean and the sky so clear. But far from it!’

(25) … eine Folge von sehr vielen Einzelanweisungen […] Erst deren Ausführung in ihrer Gesamtheit erweckt den geschilderten Eindruck. Aber wer ist es, der diese Einzelanweisungen ausführt?

‘… a sequence of very many single orders. Only their execution in their entirety gives rise to the described impression. But who is it that carries out these single orders?’

Like (22) above, (23) and (24) may be described as ‘show concessions’ following a Claim–Response pattern. Note that the use of gewiß (‘certainly’) is exactly parallel to the use of the adverb in the translation of (22). This is remarkable because gewiß in this function is extremely rare in contemporary German, as a search for this adverb in the 1990–2000 time-frame of the DWDS-Kerncorpus confirms. (24) is a particularly interesting case of a show concession. The author makes use of the discourse pattern Hypothetical–Real (Winter 1994), a variant of the Claim–Response pattern (Hoey 2001: 179, 188): he deliberately leads the reader up the garden path by incrementally drawing the false picture of unpolluted pole areas. The short, elliptical Doch-sentence then destroys this illusion. Finally, (25) features Aber as an objection marker prefacing a rhetorical question (cf. Examples 14, 15 and 21 above).

The interactional (and incremental) mode of presenting information achieved by means of sentence-initial Aber and Doch evidenced in Examples 23 through 25 is (or used to be?) highly atypical of German texts. The findings of the qualitative analysis point to an influence of English-German translations on original German popular science texts. We can thus argue that the increase in frequency of Aber and Doch in these texts is the result of an adoption of Anglophone communicative norms, which have been introduced to the genre of popular science via translations from English.

4. Conclusion

Both case studies presented in this paper confirm the findings of previous contrastive pragmatic studies regarding different communicative preferences in English and German texts by House (cf. e.g. 1996; 1997; 2006). The use of epistemic modal
markers, particularly those of low modal strength, which can be associated with less direct and more addressee-oriented rather than content-oriented discourse styles, was shown to be more typical of English than of German popular scientific texts: German translators tend to omit these markers or replace expressions of low modal strength with markers of high modal strength. And the use of the SICCs *But, Aber* and *Doch*, which serve to make a text more interactional, was also shown to be originally more associated with English textual conventions.

However, as regards our hypothesis that English text conventions have an increasing influence on German communicative preferences, the results of the two case studies presented here differ greatly. In the case of modal markers, the German covert translations show a continuous adaptation to German communicative preferences: epistemic modal markers are left out so that unmodified propositions can take the place of modified ones, and markers of low modal strength (which make the text more indirect and least content-oriented) are frequently replaced by modal markers of higher strength. And both these tendencies are apparent in both time-spans, 1978–1982 and 1999–2002, without any clear indication of changing preferences.

In regard to the SICCs investigated in the present study, on the other hand, we found a clear trend towards a decreasing application of a cultural filter. In the second time-span, the German translations of sentence-initial *But* quite commonly also employ a SICC (*Aber* and *Doch*), while translations in which adaptations to German communicative preferences, such as the rendering of the contrast through word order inversions, were undertaken, are used much less frequently compared to the earlier time-span. Thus, we were able to establish an increasing convergence of German covert translations towards the model represented by the (prestigious) English source texts. Moreover, we found that the Anglophone text conventions introduced by the English-German translations are also adopted by authors of originally German texts. Anglophone text norms were thus shown to find their way into the German genre of popular scientific writing.

Other studies carried out within the project 'Covert Translation' have pointed to similar convergence phenomena, as pointed out in the introduction. For instance, in the use of the personal pronouns *we*, *we*, *And*–*Und*, *Doch* and the epistemic modal verbs, where we found no signs of increasing convergence, lies in the different degrees of perceivable form-function equivalence.

While in regard to the former linguistic elements, bilingual speakers, and thus also translators, can easily establish the elements as equivalents of each other, the fundamental differences in the linguistic inventory of expressions of epistemic modality in the two languages effectively block such a process in this domain. We could see that English mainly uses a set of highly grammaticalized modals, while German tends to mark epistemic modality with a variety of different elements, some of which (the modal particles) do not exist in English at all. One can therefore assume that no clear one-to-one equivalence relations are apparent to the bilingual speaker/translator. Such a lack of a transparent equivalence relation can be assumed to prevent convergence towards source language conventions. This would confirm Teich's (2003: 211–218) findings that typological characteristics of the languages involved have a clear impact on the kind and degree of source-language induced interference phenomena in translations. Of course, this general hypothesis will profit from further investigations into the question of convergence and divergence of textual conventions in translation.

Acknowledgements

This paper has profited from many stimulating discussions we had with Volker Gast while he was visiting scholar at our research centre. Furthermore, we would like to thank the two anonymous reviewers for their helpful comments.

References

Convergence and divergence through language contact in translation

Byrnes, H. 1986. Interactional style in German and English conversations.


Hawkins, J. 1986. Cohesion in spoken and written discourse: darüber hinaus

darüber hinaus

R. van der Sandt (eds), 142–165. Cambridge: CUP.


