From Hypotaxis to Parataxis: An Investigation of English–German Syntactic Convergence in Translation

Mario Bisiada

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Abbreviations

TC Translation corpusCC Comparable corpusPC Pre-edited corpus

ST Source text TT Target text

 $\begin{array}{ccc} \mathrm{SL} & \mathrm{Source\ language} \\ \mathrm{TL} & \mathrm{Target\ language} \end{array}$

HBR Harvard Business ReviewHBM Harvard Business Manager

n Absolute frequency
 f Normalised frequency
 p Proportional frequency
 r Relative frequency

R Relative frequency ratio

i/htw Instances per hundred thousand words

pttw Per ten thousand words

pp Percentage points

NP Noun phrase
VP Verb phrase

PP Prepositional phrase

v2 Verb-second

SICC Sentence-initial concessive conjunction

ConAdv Conjunctive adverb
ParaConj Paratactic conjunction
BCE Before the common era

Abstract

Guided by the hypothesis that translation is a language contact situation that can influence language change, this study investigates a frequency shift from hypotactic to paratactic constructions in concessive and causal clauses in German management and business writing. The influence of the English SVO word order is assumed to cause language users of German to prefer verb-second, paratactic constructions to verb-final, hypotactic ones. The hypothesis is tested using a 1 million word diachronic corpus containing German translations and their source texts as well as a corpus of German non-translations. The texts date from 1982–3 and 2008, which allows a diachronic analysis of changes in the way English causal and concessive structures have been translated. The analysis shows that in the translations, parataxis is indeed becoming more frequent at the expense of hypotaxis, a phenomenon that, to some extent, also occurs in the non-translations. Based on a corpus of unedited draft translations, it can be shown that translators rather than editors are responsible for this shift. Most of the evidence, however, suggests that the shift towards parataxis is not predominantly caused by language contact with English. Instead, there seems to be a development towards syntactically simpler constructions in this genre, which is most evident in the strong tendency towards sentence-splitting and an increased use of sentence-initial conjunctions in translations and non-translations. This simplification seems to be compensated for, to some extent, by the establishment of pragmatic distinctions between specific causal and concessive conjunctions.

Declaration

I declare that no portion of the work refe	rred to in the thesis has been submitted
in support of an application for another	r degree or qualification of this or any
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Introduction

"Translation is a customs house through which passes, if the customs officers are not alert, more smuggled goods of foreign idioms than through any other linguistic frontier."

Julio Casares $(1956)^1$

In 1833, Charles Darwin received a letter from his sister, in which she comments on his writing style:

I thought in the first part (of this last journal) that you had, probably from reading so much of Humboldt, got his phraseology & occasionly made use of the kind of flowery french expressions which he uses, instead of your own simple straight forward & far more agreeable style. I have no doubt you have without perceiving it got to embody your ideas in his poetical language & from his being a foreigner it does not sound unnatural in him— Remember, this criticism only applies to parts of your journal, the greatest part I liked exceedingly & could find no fault, & all of it I had the greatest pleasure in reading—

(Darwin 1833)

Darwin had read Helen M. Williams's English translation of Humboldt's Voyage aux regions équinoxiales de nouveau continent (Egerton 1970). Williams's translation perhaps overemphasised the long-winded style of Humboldt's French (Wyhe 2002; for a more recent translation, see Humboldt 1834/1995), but the anecdote shows that a translation can have such an effect that people who read it emulate the style of that translation in their own writing style, in this case even to such an extent that it is immediately noticeable to others who are familiar with that person's style. This study investigates the phenomenon of such

¹(quoted in Nida 1964/2003:3)

linguistic interference through language contact in translation from English to German with a focus on hypotaxis and parataxis, which are essentially degrees of subordination of clauses. In German, they differ in that hypotactic constructions demand a verb-final structure whereas paratactic constructions have a verb-second structure. In English, the structure of sentences is subject-verb-object in both cases.

Becher (2011) found a change in translations of concessive sentences involving conjunctions such as although or even though in German popular science articles, arguing that translators preferred paratactic constructions where they used to prefer hypotactic ones. Given the lack of structural difference between hypotaxis and parataxis in English mentioned above, he interpreted his findings as a case of convergence between English and German. Not only is English the source language of the texts in his study, but it is also very influential as a lingua franca (Taviano 2013). English has 812 million lingua franca speakers, far more than Mandarin Chinese with 178 million and Arabic with 140 million (Ostler 2010:227). Therefore, it is also the language of business and has also become the lingua franca in academia (Bennett 2013).

Consequently, much attention has recently been devoted to the effect of English on other languages (Dayrell 2005; Probst 2009; Bennett 2010; Kranich et al. 2012). This study aims to replicate Becher's (2011) study of concessive clauses in popular science for the genre of business and management writing, and will additionally analyse the environment of causal clauses. Scholars in the field of corpus-based translation studies are calling for 'replication, a conditio sine qua non for any empirical scientific progress' (Sutter et al. 2012:142), and it is clearly the case that the few studies that exist on the relation between translation and language change are mostly unconnected and make little reference to each other. Few efforts have been made at summarising the available studies of language change routinely ignore translation as a language contact phenomenon.

The present study aims to contribute to the field of diachronic corpus studies of language change through translation. It also contributes to what Ulrych & Murphy (2008:149) call 'mediation-driven research' by taking into account the influence of the editing process on the final translation product. My study will address the following questions:

- 1. Do concessive and causal clause complexes in English–German translations of business and management articles show a diachronic change from hypotaxis to parataxis as the preferred structure between 1982–3 and 2008?
- 2. Is this change limited to translators' language use, or are paratactic constructions also preferred
 - a) by editors who work on the text before publication?
 - b) by authors of non-translated German business and management articles?
- 3. Is there evidence that a change from hypotaxis to parataxis in the present corpus of written German represents
 - a) a syntactic convergence of German with the source language English?
 - b) a reduction in the linguistic complexity of German?

These questions will be addressed by an analysis of articles from the American business and management magazine *Harvard Business Review* and its German licensed edition *Harvard Business Manager*, from which three corpora have been built:

- a translation corpus (TC), which consists of English originals and their published German translations,
- a comparable corpus (CC), which consists of German non-translations, and
- a pre-edited corpus (PC), which consists of English originals and their published German translations as well as raw translations that have not undergone the editing process by the publisher.

The mechanism by which the change proposed in question 1 is assumed to proceed is that a construction will first be used more frequently by translators 'as a result of the influence of some model pattern [...] replicating what is conceived of as an equivalent use pattern in another language' (Heine & Kuteva 2005:47). In the concrete case of hypotaxis and parataxis, when faced with a choice between a verb-final and a verb-second construction, it is hypothesised that translators will choose the verb-second variant because they conceive that to be the source text (ST) equivalent. Therefore, I will replicate the two-step diachronic corpus method used by the *Covert Translation* project (House 2013). First, the TC is analysed for differences in the frequency of hypotactic and paratactic constructions between the two time periods of 1982–3 and 2008. Then, the CC is analysed

to test whether any observations on frequency shifts also occur in non-translated language.

In order to address the research questions, it is first necessary to adopt a sociolinguistic framework that can be used to understand language change through language contact in translation. In Chapter 1, I argue that the most common way for translation to affect language use is by altering the frequencies with which certain constructions are used. I outline four factors which determine how likely a given translation situation is to have an effect on language use. I then argue, based on Coetsem (1995, 2000), that translation is a situation of language contact where translators may change the frequencies with which they use the structures under investigation not only unconsciously but also consciously, a possibility that, according to Coetsem (2000), arises because of translators' equal proficiency in both languages involved.

In Chapter 2, I adopt Halliday's (1985/2004) theory of Functional Grammar and introduce the concepts of hypotaxis, parataxis and the clause complex to discuss the structural changes involved in the hypothesised development. In order to assess whether the hypothesised development from hypotaxis to parataxis represents a simplification of German, the chapter also introduces Dahl's (2004) definition of linguistic complexity and the notion of semantic transparency.

Having adopted the necessary theoretical and grammatical frameworks, I present the methodology employed to address the research questions in Chapter 3. In this chapter, I give examples of the English concessive and causal conjunctions that the corpus will be searched for and discuss which of the German equivalent connectives will be considered hypotactic or paratactic and for which additional classifications may be necessary.

Chapter 4 contains the analysis of the TC and addresses the first research question. In the case of the concessive conjunctions, special attention is given to those occurring in sentence-initial position as they were found by Becher et al. (2009) to be a clear case of translation-induced language change. I also analyse the PC with the aim of determining whether diachronic differences were introduced by the translator or whether they may have been introduced at the editing stage. In addition, I analyse the conjunctions that were introduced by the translators. This will help gauge the popularity of the German conjunctions by allowing conclusions as to whether the conjunctions in question change their frequencies only in translation or whether they are also introduced at different

frequencies in environments where the ST does not directly trigger their use. Finally, sentence-splitting is analysed to have an indication of whether ST clause complexes are generally kept intact, which should allow us to detect changes in translators' attitudes towards sentence connection in general.

In Chapter 5, the findings from the TC will be validated by analysing the CC. This chapter will specifically address question 2 and use the CC analysis to make claims as to whether any observed changes in the translated texts are also valid for the non-translated texts. Findings on sentence-initial concessive conjunctions and sentence-splitting will also be verified in this chapter.

Finally, I discuss the results of the study (Chapter 6) and address the two parts of the third research question. The question is split into two subparts because it cannot be assumed that convergence always leads to simplification (see Section 2.3). The first half of the chapter is therefore dedicated to a discussion of whether the changes observed can be considered a case of syntactic convergence with English, and in the second half of the chapter, I deal with the question of whether the observed changes can be construed as a case of simplification of the German syntactic system.

1 Translation and change in language use

In order to accurately portray the original work, the language of translation cannot but deviate from its norms and exhibit unconventional language, thus creating linguistic variation (Schleiermacher 1813/1973:55f). Though speakers reject linguistic items and constructions that prove to be of only temporary value, Schleiermacher held that it cannot be denied that 'viel schönes und kräftiges in der Sprache sich erst durch das Uebersezen theils entwikkelt hat' (1813/ 1973:70). In the second and first century BCE, Roman translators working from Greek into Latin, who made an effort to 'emulate, incorporate and finally replace Greek learning', 'used the Greek tongue as a means to fertilise and gain mastery over their own' (Montgomery 2000:29, 33). Translations of religious texts from Latin from the 8th to the 11th century are said to have had an influence on English and German, languages that in their written form at that point were almost completely products of translation (Koller 1979/2004:61, 1998). Baugh & Cable (1951/2002:216) say that translation 'brings home to the translators the limitations of their medium and tempts them to borrow from other languages the terms whose lack they feel in their own'. Once a writer had mastered Latin, they claim, 'the temptation to transfer and naturalise in English important Latin radicals was particularly great' (1951/2002:216).

Language contact situations need not always involve a meeting of speakers of two different languages; it is in fact much more frequently the case in a language contact situation that two languages are used by one bilingual speaker. It has long been argued that bilingual language users such as translators constitute the most fertile ground for change (Paul 1880/1995:391; Nida 1964/2003:3). A cultural product that originated in a foreign language can be encountered without

¹'much of what is beautiful and strong in language has partly only developed through translation'

direct contact to its speakers. For those who do not have sufficient knowledge to understand a cultural product in its original language, the prime instance of literary contact with another culture is of course translation. It is this literary contact that can lead to the borrowing or calquing of syntactic structures, or at least to the reinforcing of an already present structure (Lass 1997:185). Thus, any change that is assumed to have been influenced by translation is the product of language contact.

Though, as the research cited above shows, translation has long been assumed to play a part in language evolution, studies of the effect of translation on language change have so far been few and seem to emerge from temporary and isolated interests rather than a quest for systematic and comprehensive knowledge. Those that do exist (Ylönen et al. 1988; Musacchio 2005; Baumgarten 2007, 2008; Bennett 2010, 2011) work on many different languages and genres, often making little connection to each other. The first systematic study of translation as a language contact situation was conducted in the *Covert Translation* project (see Section 1.1). The need for a general theory and terminology for the study of the relation between translation and language change has been addressed by Kranich et al. (2011), who provide a first set of generalisations based on previous studies in the fields of language contact and translation studies.

What has unfortunately been missing so far is a comprehensive account of the existing studies in order to find connections between the various results, provide an overview of the research or stimulate a debate on possible methodologies for future studies in this area. This is of course partly due to the small number of studies that have been conducted in this area, but also due to the fact that no attempt has been made to replicate the results from one study in another genre or language. By seeking to replicate the results from research on the same language pair, I hope that the present study can provide a first step towards a set of connected studies which corroborate previous findings in similar settings such as the same genre, variable or language.

Some of the major strands of translation research have focussed on the question of whether a translated text can be recognised by the presence of certain items, mainly referred to by the notion of 'translation universals'. These are features which are said to become 'transferred' in the process of translation and which can make a text recognisable as a translation (Baker 1996; Laviosa 1998), at times producing what has been called 'translationese' (Mauranen 2000; Tirkkonen-

Condit 2002). Irrespective of whether such features are indeed translation universals, as one group of scholars argues, or whether they are rather 'universals of language also applying to translation' (House 2008:11), it seems most likely that, if we accept translation as a language contact situation, it is those transferred features that may stipulate frequency shifts in certain patterns in the target language (TL) or even present alternatives to current communicative norms that the reader of the translation may emulate.

In its investigation of translation as a language contact situation, this study takes into account the multi-authored nature of the articles under analysis and also investigates the influence of the editors on the final text. Without saying so, corpus-based studies of translation usually (and, due to the inaccessibility of 'raw' translation data, mostly necessarily) consider the multi-authored nature of translated text to be part of its definition as a product of discourse, which, like most other texts, is assumed to have undergone stages of mediation. But if we aim to understand the effect of the cognitive act of translation on language change, we should at least be able to analyse separately the influence of editors on the text, not only because editing translations 'can usually be accomplished without referring back to the original text' (Nida 1997:10), but also in cases where the editor revises the translation by reference to the source text, which may imply significant changes to the decisions made by the original translator.

There are grounds, then, to analyse different stages in the creation of the translation product, and scholars increasingly call for research that differentiates what is called the 'mediation process' from the act of 'bilingual language processing', or translation (Ulrych & Murphy 2008; Kruger 2012). Of course, these authors acknowledge that translation itself is sometimes seen as a mediation process by theorists (see, e.g., Lefevere 1992). For clarity purposes, the notion of 'mediation process' is understood here as relating to anything happening to the translated text after it has been authored by the translator. This study will therefore consider separately, where possible, the translator, i.e. the actual author of the translation, and the editor, or any further person involved in the authoring of the text. This will be done by testing any hypotheses against the PC, which gives some indication of whether a development is attributable to language contact in the translator or whether it is introduced in the mediation process.

Of course it is never possible to conclusively show that language contact in

translation has led to a change, and scholars in the discipline usually interpret their results with an appropriate amount of scepticism. Koller, for instance, demands that any study 'attempting to show that certain syntactic changes were influenced by translation' must answer the question of whether translations do not merely reflect historical developments that are ongoing 'due to inner causality' anyway, and that at best occur more frequently in translations (1998:113). Furthermore, there is always the question of whether the change that is observed has been propagated through language users' reading of translations or through their reading of English articles (Neumann 2011:242f; Kranich et al. 2012).

This chapter outlines some basic methodological considerations that are important for the study of language change through language contact in translation. Firstly, it will be argued that the major way for interference in translation to affect language change is not by creating innovations but by altering the frequency with which certain structures are used, by effecting a shift in the use pattern of a structure (Section 1.1). In Section 1.2, I outline four factors that determine the likelihood with which interference may lead to such a use pattern shift. Finally (Section 1.3), I adopt a theory for the mechanism of propagation of a shift in use patterns, which, I argue, is not in all cases unconscious, but can happen as the result of a motivated action to manipulate the language.

1.1 Interference through language contact in translation

So far it has been assumed that there are linguistic features in translation, such as the preference for a given construction, which become 'transferred' to the target text in translation and that it is those features that may be adopted by the recipient in his or her own language use or that may lead to changes in frequency of structural patterns. In this section, I will distinguish the notion of borrowing from that of interference and argue that syntactic change through translation has been convincingly shown in the literature to take place through interference rather than borrowing. The way interference takes effect on language change is by motivating shifts in frequency of previously existing patterns that are in competition with each other.

Research on language contact distinguishes borrowing, where foreign features

are introduced into a language, from 'interference through shift' (Thomason & Kaufman 1988:37). As was argued above, translation as a language contact situation can also be a source of linguistic interference. Based on the observation that 'phenomena pertaining to the make-up of the source text tend to be transferred to the target text', Toury (1995:274f) has proposed the 'law of interference'. A major account of language contact as a motivation for language change through interference comes from Weinreich (1970). He defines interference as a

rearrangement of patterns that results from the introduction of foreign elements into the more highly structured domains of language, such as [...] a large part of the morphology and syntax.

(Weinreich 1970:1)

In Weinreich's view, contact-induced language change must originate with bilingual speakers. Such speakers have inherent relations to both languages, which can affect and constrain interference and which Weinreich calls 'non-structural' factors (1970:3f), a selection of which are

- the speaker's ability to keep two languages apart,
- relative proficiency in each language,
- specialisation in the use of each language by topics and interlocutors,

and, in the case of bilinguals in groups,

• stereotyped attitudes toward each language ('prestige') and the culture of each language community.

The fact that translators score quite highly in most of these factors means that they are especially good transmitters of contact-induced variation and change. Some of these factors represent good indicators of when a language user is likely to use TL-unconventional structures modelled on the source language (SL). A positive attitude towards the SL (or, conversely, a negative attitude towards the TL) seems likely to increase the probability that interference will occur (cf. Coetsem 2000:85), and translators, having chosen to earn a living using the particular second language in question, are quite likely to have a positive attitude

towards it. A high degree of specialisation in the genre in question, which is of course a requirement for any translator, should lead to greater confidence in TL use and thus increase the likelihood to deviate from the TL structural or communicative conventions.

A somewhat more controversial factor is language proficiency. Translators are of course highly proficient users of both languages involved. It would seem likely that the greater the linguistic proficiency of the speakers, the more connections they can create, and the greater the area where interference will occur (Weinreich 1970; Denison 1981:267). However, it seems at least as likely that the greater the speaker's proficiency, the more confident he or she should be in using the language, and the more able, in Weinreich's terms, to 'keep the two languages apart'. Thus, high proficiency both increases the area where interference can occur but should also limit it because the language user is aware of the equivalent structures in each language. I will discuss the issue of proficiency in detail in my discussion of factors constraining interference in Section 1.2; as far as the influence of proficiency on interference is concerned, it is perhaps better to say that interference 'mostly occurs where functional analogies can be established' between the two languages and where 'equivalence relations' (Kranich et al. 2011:14; based on Thomason & Kaufman 1988) are conceived by the speakers (but see below for a criticism of this statement).

We have seen, then, that, based on the non-structural factors listed above, translation seems to be a scenario of language contact that can effect variation in the TL and thus also have an influence on processes of language change. In addition to the non-structural factors discussed above, Weinreich also names some 'structural' ones. These merely govern the 'potential area' where influence takes place, but do not trigger such influence or any change to the language pattern. Weinreich (1970:5f) argues that the higher the number of 'mutually exclusive forms and patterns' in each language, the greater the 'potential area of influence'. Interference, he argues, should be considered a process where structural and social factors interplay and motivate each other, with structural factors largely determining where influence is possible and social factors largely determining how interference takes place (cf. also the social and linguistic filter, proposed by Buccini 1992a:19; see Section 1.3).

The idea that interference takes place in areas where speakers of the language in question perceive a lack of expressiveness, for instance, is certainly powerful and has led to the notion of borrowing, which, as the term implies, refers to the filling of gaps in the inventory of one language by adopting a pattern from another. A strong example for such a case comes from studies of Portuguese academic discourse (Bennett 2010, 2011) which have found that academic writing currently conforms to three discourse models, including a 'traditional' Portuguese discourse model and a 'modern' discourse model based on the English academic discourse (Bennett 2010:29f). These models differ with respect to what Bennett calls 'distinguishing discourse features', among others the use of gerund, verbless sentences and complex syntax: 'very long sentences are common in Portuguese academic writing, usually with complex syntax involving a great deal of subordination' (2010:26). Bennett notes that in this 'power struggle' between those two discourse models, the English style may replace the traditional Portuguese discourse style. The interference that takes place here is that translations from English import the English discourse model into Portuguese and thus serve as an example in the speaker's native language that can be emulated. Encountering a foreign pattern in a foreign language does not challenge readers' notion of their own language, while encountering a foreign pattern in one's own language provides a stimulus to emulate or adopt that pattern.

Innovation in syntax, or syntactic borrowing, is much rarer, as it is harder to transfer an entire structure into a language than, say, a word. A necessary condition for syntactic borrowing is that the receiving language should have certain 'tendencies and possibilities with which the foreign idiom does not clash' (Sørensen 1957:133). A well-known example of this type of innovation is the introduction of the accusative-and-infinitive construction (e.g. 'I want the work to be good') into English through Latin (Fischer 1992:21). Syntactic borrowing can often be observed in learner language and is mostly regarded as erratic behaviour that will disappear with increasing proficiency rather than lead to language change. A similar analysis applies to the issue of 'translationese', which refers to the assumption that there are items that make a translation recognisable as such (Mauranen 2000), though such recognisability could not be verified by research (Tirkkonen-Condit 2002). This term usually implies a quality judgement and its use indicates that a text can be recognised as a translation in a marked way. That makes it unlikely that other language users will copy and propagate it.

Borrowing is the most noticeable type of influence of multilingual text pro-

duction (Thomason & Kaufman 1988:50), manifesting itself most commonly on the lexical level through loan words (Kranich et al. 2011:13) or phrases, e.g. 'Der frühe Vogel fängt den Wurm' from 'the early bird catches the worm' (on anglicisms in German, see Pfalzgraf 2006; on the reception of loan words in German, see Pfalzgraf & Leuschner 2006). Because the term 'borrowing' tends to denote cases where a structure is imported into a language to fill some kind of gap, I will avoid using it in this study and prefer the term 'interference' as defined by Weinreich above. In their proposal of a typology of translation-induced language change, Kranich et al. (2011:14) argue, as mentioned above, that 'structural borrowing mostly occurs where functional analogies can be established' between the two languages involved. However, if a language has a functional analogy, translators would not seem to be likely to borrow one from another language. Instead, I would argue that structural borrowing is more likely in cases where speakers feel that their language is inappropriately equipped to express a given content from the SL. Evidence for this has been found by Malamatidou (forthcoming) in Greek popular science articles. Conducting a diachronic corpus study over the time span of 20 years, she found that translators have borrowed (or 'copied', in the author's terminology) the cleft structure from English.

However, focussing an account of language change through interference in translation on the number of 'mutually exclusive forms and patterns' (Weinreich 1970) in the languages involved would not allow us to study cases where already existing patterns are 'reinforced' by translation. While syntactic interference through translation may well give rise to new patterns, it may have at least as strong an effect where two functionally analogous patterns co-exist in a language. In such cases, a certain phenomenon, which can also be observed in non-translations, occurs significantly more frequently in translated texts under the influence of the source language than in comparable non-translations² (Koller 1998:115, my translation).

The effect of translation would then be to motivate shifts in frequency of a certain construction, as Heine & Kuteva argue, from a 'minor' to a 'major use pattern' on the model of another language (2005:44). Of course, parataxis in German is by no means a 'minor use pattern' in the strict definition that Heine

²'Eine bestimmte Erscheinung, die auch in Originaltexten nachgewiesen werden kann, tritt in Übersetzungstexten unter dem Einfluss der [ausgangssprachlichen] Vorlagen signifikant häufiger auf als in den vergleichbaren Originaltexten.'

& Kuteva (2005:45) provide, i.e. it is not 'restricted to a particular context' and it is not the case that speakers are not aware of it. Rather, the use of minor and major use pattern in this study should be seen as relating to frequency, where a minor use pattern is used less frequently in particular contexts, whereas a major use pattern is seen as 'being regularly associated' (Heine & Kuteva 2005:45) with the expression of causal and concessive relations. On the way from a minor to a major use pattern, a construction will be used increasingly frequently 'as a result of the influence of some model pattern [...] replicating what is conceived of as an equivalent use pattern in another language' (Heine & Kuteva 2005:47). Therefore, what this study will investigate is not strictly speaking language change (Sprachwandel), but change in language use ('Wandel im Sprachgebrauch', Stahlheber 1992:184, see Section 2.3 for a discussion of this issue). Indeed, as the studies discussed in the remainder of this section will show, most research of syntactic change through translation investigates change in language use rather than language change.

Musacchio (2005), for instance, investigates the extent to which 'language contact in translation affect[s] TT production beyond lexical borrowing to take the form of the transfer of syntactic constructs' (2005:73). Her study draws on a synchronic corpus of business and economics articles from *The Economist* and *The World In...*, and their Italian translations in *La Stampa* and *Economy* as well as non-translations from *Corriere della Sera*, *Sole 24* and *Economy*, all dating from 2001 to 2003. As well as lexical borrowing, she finds significant SL influence in translated texts manifesting itself in

the close rendering of syntactic constructs, in repetition, in the higher frequency of cohesive links such as coordinators, subordinators, possessive determiners, and demonstrative pronouns.

(Musacchio 2005:93)

Simple conjunctions which connect phrases loosely, such as ma ('but') and tuttavia ('however', 'yet'), are more frequent in translations than in non-translations. Conjunctions with a higher semantic weight, such as invece ('whereas', 'instead') and dunque ('hence', 'therefore') are more frequent in non-translations (2005:80).

Musacchio (2005:81) interprets these findings as a tendency to introduce cohesion in the translations. In order to satisfy the preference of Italian for long,

hierarchical sentences, translators frequently join individual English phrases by a conjunction. These joinings, she argues, usually employ loosely connecting (or 'paratactic', see Section 2.1) conjunctions because of translators' 'reluctance to introduce linkages between sentences that might lead to an incorrect interpretation' (2005:82). She concludes that 'Italian as used in the economics press is slowly moving away from long sentences and linguistically connected syntactic, grammatical and lexical constructs' (2005:94).

Musacchio's study is of course only partly relevant to what is being argued here. Hers is only a synchronic analysis of the influence of English on the language of Italian in translated texts, though she does say that 'English—Italian translation is slowly but subtly influencing the conventions governing some genres, for instance university manuals for students' (2005:94). Further research of more recent texts would be necessary to investigate whether the patterns used in the Italian translations can also be observed in the non-translations at a later point.

Further evidence that translation can influence shifts from minor to major use patterns has been found for German popular science texts in the course of the *Covert Translation* project. A 500,000 word corpus was built for the project, consisting of English popular science texts from the *Scientific American*, their German translations and non-translated German articles, published in the German sister publication, *Spektrum der Wissenschaft*. The project pioneered a two-step diachronic corpus method, investigating first translations published in 1978 to 1982 and 1999 to 2002 and, in the second step, non-translations from the same time period.

The researchers investigated whether contact with the lingua franca English has led to changes in the discursive conventions of other languages, specifically the influence of Anglo-American linguistic and cultural norms on German translations of English articles and the parallel production of similar texts in the popular science genre (Kranich 2009; Probst 2009; for an overview of other studies, see House 2011a:165f,b; Kranich et al. 2011, 2012) and in business communication (Böttger 2007). The theoretical starting point for this research was House's (1997) 'covert translation' model. Covert translation is defined as 'reproduc[ing] in the target text the function the original has in its frame and discourse world', whereby 'the original may be manipulated at the levels of language/text and register' (House 2001:250). English holds a high prestige as the world lan-

guage, and thus, the covert translation researchers argue, the cultural filters are disappearing from German translations. Source language interference 'may result in profound changes to the target language' when translations become models for non-translations in German (Becher 2009:2). Among other things, the project hypothesised 'a shift in information structure from packing lexical information densely, integratively and hierarchically to presenting information in a more loosely linearised, sentential way' (House 2011b:190).

As part of the Covert Translation project, Becher et al. (2009) investigate the translation of the English sentence-initial concessive conjunction ('SICC') but. They claim that SICCs are 'much rarer in German than in English' because, firstly, 'German observes a stricter organization of the sentence in terms of given and new information than English', so 'German prefers to use a sentence-internal connective in many situations where English would use a sentence-initial one' (2009:137). The following example should demonstrate what they mean. In English, we might say 'I have a house. However, I don't live alone in that house.' The second sentence provides the new information before the given one. In German, on the other hand, it might be more natural to say 'Ich habe ein Haus. In dem Haus lebe ich jedoch nicht alleine.' Here, the second sentence continues the given—new order and uses a sentence-internal conjunction. Secondly, they argue that SICCs are more common in English because it is more 'interactional, dialogous and addressee-oriented' while German discourse is 'transactional, monologous and content-oriented' (2009:138).

Their results show that, over the analysed time span, translations of the English SICC but into German using sentence-initial aber and doch have almost doubled, while the number of 'free' translations has decreased by an equivalent amount (Becher et al. 2009:144). The non-translations also show a strong increase in frequency of sentence-initial aber and doch (2009:143). Based on the occurrence of these conjunctions as sentence-initial 'show concessions' to achieve an 'interactional' style, Becher et al. (2009:145f) argue that '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'.

This section has argued that syntactic change through language contact in translation is more likely to manifest itself by altering the frequency with which patterns are used than by introducing new forms to the language. Musacchio's (2005) and Becher et al.'s (2009) studies provide two examples from the literature where change in language use has been studied. The mechanism of a change in the use of German written syntax is assumed to be such that translators that are affected by interference 'recruit existing structures, redefine them, and create new structures that mirror the word order characterizing the model language' (Heine 2008:56). If language users who are exposed to their translations also use those structures, the structures become more frequent in the language. The term 'use pattern shift' has been introduced for these alterations in the frequency of certain structures, which are ultimately changes in preference for given forms through interference. The next section investigates what constrains interference in translation.

1.2 Some factors constraining interference

In his account of interference in translation, Toury suggests that the extent of SL interference correlates with the prestige of the SL in the target culture:

Tolerance of interference [...] tend[s] to increase when translation is carried out from a 'major' or highly prestigious language/culture, especially if the target language/culture is 'minor', or 'weak' in any other sense.

(Toury 1995:278)

As already mentioned in the discussion of Weinreich's non-structural factors constraining interference (see Section 1.1), a positive attitude of the translator towards the SL greatly increases the chances of that language to influence the translator's use of the TL. A higher appreciation of the foreign culture, i.e. if that language or culture is attributed a higher prestige than one's own, is also a major factor motivating change in language use (Paul 1880/1995:392; Thomason & Kaufman 1988:40f; Kranich et al. 2011:15).

In order to address our research question of whether a shift of parataxis to a major use pattern, if so observed, represents a syntactic convergence of written German with English in this genre, we need to know what makes speakers change their preference from one pattern to another. This section investigates some factors that determine the shift of a given pattern from minor to major use.

Four such factors will be identified from the available literature and discussed with reference to translation.

Most of Weinreich's non-structural factors that constrain interference also constrain whether a language user is likely to use the pattern in other settings. We can perhaps condense the list to contain linguistic proficiency, specialisation by genre and attitude towards the SL. In addition, the degree to which a genre is established and has linguistic norms in a given speech community has been proposed as a factor (Coetsem 2000), and adopted by Kranich et al. (2011:15), who define it as 'the degree of standardisation of a language overall and of the particular genre of the translated texts'.

Out of those four factors, it seems quite intuitive that a positive attitude towards the SL will increase the likelihood with which the language users prefer patterns from that language. That translators are aware of 'socio-cultural differences in shared conventions of behaviour and communication, preferred rhetorical styles and expectation norms in the two speech communities' has been shown by House (2001:251). It should be noted, though, that this factor is not limited to the individual translators' attitudes. While a translator's attitude to the SL (and to the TL, for that matter) of course plays a role, it is hard to elicit, even if asking the translators individually. Studies of language contact, especially in the analysis of historical situations, use the sociopolitical circumstances as guidelines to what the average language user's attitude is like. Consequently, Kranich et al. (2011:28) describe 'the attitude of German native speakers towards English' as 'highly favourable'. I will adopt this view for my study, adding that for the genre of business and management writing, the prestige of English is likely to be at least as high as in popular science, given the leading global position of the US economy in the analysed time span of 1982–3 to 2008.

Also, the role of the 'degree of establishment of the genre in the TL' (Kranich et al. 2011:18) as a factor in a use pattern shift is rather straightforward. If there are few genre conventions in the TL, we would expect the SL conventions to serve as a role model and exert stronger influence as if the genre conventions are clearly defined (Kranich et al. 2011:16). Economic journalism is of course a long-established genre and has been part of many German newspapers since their inception (Hömberg 2002). Today, there are several magazines specialised on business topics, for instance *Handelsblatt* and *Wirtschaftswoche*. However, the *Harvard Business Manager* (*HBM*), the source of the corpus of this study,

considers itself a magazine specialised on management topics, providing researchbased analysis and argument (cf. Section 3.1) and thus not forming part of the remaining magazines that are counted under the heading of economic journalism (Wirtschaftsjournalismus). A case can therefore be made that the HBM has established a new genre in the German media landscape by importing a format from the USA that has been established there for a longer period of time. As the HBM itself has undergone a rather substantial change in structure and layout (see Section 3.1), it can be expected that this lack of establishment of the genre in German is a strong motivator of interference from the SL English.

Linguistic proficiency and specialisation by genre are the other factors proposed above as constraining source language interference. It has already been mentioned above that the high proficiency of a bilingual in both languages presents a kind of paradox because it may both increase the area where interference can occur making the language user see more functional analogies, but it may also decrease the chance that interference will occur by allowing the language user to keep the two languages apart. To address this paradox, a closer look at the role of linguistic proficiency is required.

Coetsem (2000) attributes a pivotal role to linguistic proficiency in contact-induced change. He suggests that the languages involved in contact-induced change can be placed on a scale of agentivity, spanning from 'source language agentivity' to 'recipient language agentivity', depending on the linguistic dominance of each language, which is determined by the speaker's proficiency in each language involved (2000:84). If the source language is the stronger agent, i.e. if the speaker is more proficient in the source language than in the recipient language, van Coetsem calls the change involved a case of 'imposition'; if the recipient language is more agentive, the resulting change is a case of 'borrowing'. As a third possibility, Coetsem (2000:84) discusses situations where the bilingual may reach a 'comparable degree of proficiency' in both languages, which he argues to be the case with translators. In such cases, van Coetsem argues, 'there is no difference in linguistic dominance between the bilingual's languages', and the distinction between borrowing and imposition is 'neutralised' (2000:84).

Unfortunately, van Coetsem's undifferentiated treatment of the notion of bilingualism makes it somewhat difficult to apply his theory to translation studies. He does initially make a distinction between 'coordinate' bilinguals, whom he defines as speakers who 'acquire [their] languages consecutively, one natively and

another as a second language', and 'compound' bilinguals, who 'acquire [their] languages simultaneously and natively in childhood' (2000:83). He states that both types of bilinguals may 'show equal proficiency in their languages', but emphasises that 'the outcome is not the same' as the coordinate bilingual will 'most often speak the subsequently acquired language with an accent', while the compound bilingual will 'generally speak either language without an accent' (2000:83). However, in his subsequent discussion of the effect of comparable proficiency in bilinguals on contact-induced change, the distinction between the two types of bilingualism no longer seems to be made, so that both types of bilinguals appear to be treated the same.

The distinction, however, is important to maintain, as it makes a difference whether translators know both languages natively, thus enabling them to translate bidirectionally using either language as their native language, or whether one language is learned later, which usually means that they retain higher proficiency in their native language, which is also the language they usually translate into. I would argue that neutralisation of agentivity as proposed by Coetsem (2000) can only really come about in the former case where the compound bilingual is concerned.

The type of interference that van Coetsem assigns to neutralisation is 'free transfer', which means that 'any of the two languages of the bilingual' can be the recipient or the source language (2000:85f). In a contact situation where one language dominates, the main factor constraining interference is stability, whereas in the situation of neutralisation, interference is constrained by 'selection' (Coetsem 2000:85f; Buccini 1992a,b). Van Coetsem defines this as the freedom of the bilingual to choose to transfer material between languages and thus consciously manipulate them, though of course 'dependent on a variety of societal and structural factors' (1995, 2000:90). In their discussion of van Coetsem's concept of neutralisation, Kranich et al. (2011:14) argue that 'the kind of outcome of this type of contact is [...] impossible to predict' because neither source language nor the recipient language is dominant, and change is 'not limited to or even predominant in any particular linguistic domain'.

It seems that Kranich et al. (2011) adopt the concept of neutralisation somewhat too uncritically. Arguably, each translation situation provides a situation where one language, usually the SL, is dominant. What is likely to happen in the contact situation of translation depends, among other things, on the language

specialisation of the translator, the specifics of the genre and the subject specialisation of the translator, and therefore, contrary to what Kranich et al. claim, allows us to predict, at least roughly, the kind of change that is most likely to occur and the linguistic domain it should occur in.

While many translators who translate into English work bidirectionally, translating from their mother tongue into English as a lingua franca (House 2013), most translators (and certainly those involved in the translation of the articles comprising the corpus of this study) work into their language (or languages) of specialisation into their mother tongue. This means that while it is theoretically possible and also likely that there is interference from their mother tongue to their working language, this interference happens in a different language use situation to translation, and thus would have to be studied using a different paradigm. Therefore, it seems most likely that, given the unidirectionality from working language to mother tongue in a professional translation situation, interference happens predominantly in that direction, with the mother tongue (the TL) being the recipient language.

Thus, while Coetsem's (2000) concept of neutralisation is interesting as far as it applies to compound bilingual translators that really are comparably proficient in their languages, its undifferentiated view of bilingualism makes it problematic to apply it to cases of translation where one of the (usually coordinate bilingual) translator's languages dominates. This problem can be circumvented by seeing translation as a case of 'specialised use', where the bilingual is equally proficient in both languages but one dominates the other when handling certain subjects (Weinreich 1970:81; see also Coetsem 2000:84), as can be the case with translators, who usually specialise in a set of fields.

While one might think that the dominant language is the mother tongue, I would argue that there are translation situations in which it is in fact the SL which dominates. It seems plausible that the language in which translators read material to maintain subject knowledge in their field is the one that dominates their linguistic knowledge when handling subjects pertaining to this field. This would seem especially likely where terminological precision is not as strong a requirement as in, say, instruction manuals or legal translation. In the case of business and management writing, it is certainly the case that the most prestigious articles are published in the SL English, so that it is not too far-fetched to argue that, at least for some translators, translation is a situation of specialised

use in which English is the dominant language.

The final factor constraining source language interference is specialisation by genre. This is because the linguistic proficiency of the translator will have a greater influence on the language produced in genres where it can be drawn on more extensively. This is more likely to be the case, for instance, in popular science or business writing than, say, in technical translation. In that genre, lexicon and grammar are more tightly constrained and it is customary to enforce controlled language, require the use of terminology through glossaries or forbid certain grammatical constructions (Byrne 2012:142f), so that the language contact situation in the translator is rather constrained.

Specialisation by genre has been argued above to be a factor determining how likely it is that use pattern shifts will occur. The translators who produced the translations for the present study are all educated in and/or specialise in economics and business (see Section 3.1). As a lot of literature in this field is published in English, it is conceivable that at least some of them have greater familiarity with English linguistic conventions in this genre than with German ones, especially considering that, as argued above, the genre of business and management writing is rather new in the German language area. As Neumann (2011:250f) argues, frequent reference to English-language sources in the production of an article means that the SL has a strong influence on the authors (which should include translators, we might add). Specialisation by genre is of course also related to attitude, as a positive attitude towards the SL can increase the degree to which English becomes the language of specialisation in the translator.

This section has described four factors that influence use pattern shifts in language contact through translation. They are linguistic proficiency, specialisation by genre, attitude towards the SL and degree of establishment of the genre in the TL. I have also adopted Coetsem's (2000) concept of neutralisation for cases of language contact where bilingual speakers are highly proficient in both of their languages, but where the SL dominates because it is the translators' language of specialisation. Interference is thus governed by selection, which means that speakers may consciously manipulate their languages by transferring material and patterns between them. The involvement of consciousness in language change is debated in the field; the next section will discuss the issue with regard to use pattern shifts in neutralisation situations such as translation.

1.3 Use pattern shifts as conscious manipulations of language

This section discusses the role of consciousness in change in language use. The mechanism of selection that has been discussed in the previous section is selection, which is defined as a motivated transfer of patterns between the languages involved (Coetsem 2000:94). That implies that, in addition to the 'naturally converging or equalising tendency between the bilingual's languages' which happens 'without clear awareness and motivation or volition' on the part of the speaker (called 'osmotic levelling', see Coetsem 2000:94f), language change can be consciously driven by speakers who decide to use a given structure more commonly at a certain point.

That view is not uncontested among scholars in the field, and the role of consciousness in change has been debated for a long time. Lass (1997:386) argues that 'neither language users nor their internal states ought to be the main focus of attention' in an explanation of change, since 'change itself is a built-in property of the kind of system that a human language happens to be' and thus 'the individual/social perspective is at best complementary to the system perspective'. Lass seems to think that speakers at some point choose to use a given system, details of which they cannot then change. Though it is true that change is inseparable from the nature of language (Paul 1910:369; Steiner 1975/1998:18), the view of language as a system that language users draw on and thereby threaten by undermining its rules is in competition with the view that language is a cultural achievement that speakers actively recreate by using it (Coseriu 1958/1974:59).

A middle way has been proposed by Keller (1990/2003) with his definition of language as a phenomenon of the third kind, which, following Hayek (1967), he defines as the result of human action but not of human design. Keller (1990/2003:32ff) compares the paradox of order in language to the spontaneous order created in a marketplace, when many people try to watch an artist. Even though they do not set out to form a circle, their combined actions invariably lead to a circle being formed around the artist. While the circle is not the creation of any one individual, it is the combined result of each individual's wish to see the artist. Keller suggests three maxims which constrain the actions of each individual in the circle. They choose their position in such a way that they (a) can see as

much as possible, (b) do not expose themselves and (c) allow a number of others to see equally well³ (1990/2003:33, my translation). Adapted to language, this means that maxim (a) would be an act of freedom while maxims (b) and (c) would be acts to maintain stability. It is maxim (a) that shifts the structure of the circle as people try to improve their view of the events. The maxims of stability work to resist too strong a shift in structure. Thus, the circle is stable but can be dissolved at any time by its members. Similarly, language is a stable phenomenon but always prone to be manipulated by its speakers.

Arguing that any explanation of language change must be 'based on acting individuals, not languages, structures, processes, or collectives' (1990/2003:164), Keller's theory attributes a central role to the language user in language change, but denies that language users may at any point influence the process of change consciously. The strictness of this view has been criticised as problematic in the explanation of, for example, neologisms (Cherubim 1983). Cherubim (1983:68f) argues that language change must be conscious to some degree, as it involves changes in the evaluation of language, such as feelings and attitudes towards certain constructions or norms applicable to certain genres and styles. Somewhat more accepting of speaker choice is Croft (2000), who sees the propagation of a variant as a selection process. He defines it as an act where language users interact with each other by selecting one variant over another, though not based on 'linguistic properties' of the construction in question, but rather on the language users' '[identification] with a community or a subset of a community' (Croft 2000:178).

As was discussed in Section 1.1, interference is constrained by social and structural factors, or 'filters' (Buccini 1992a:19), where the social filter is said to consist of demographic strength and social prestige, and the linguistic filter to consist of 'acquirability' and 'integratability' (Buccini 1992a:19). In applying this to translation, it has already been argued that high prestige of the source culture increases the influence of the language of that culture. And, in turn, that prestige also affects the prestige of a text translated from that language and may make readers value it higher than, say, a non-translated text in the recipient language. For this reason, corpus studies of change in language use should take into account information on the background of the publications comprising its cor-

³'(a) möglichst gut sieht, (b) sich nicht exponiert and (c) einer gewissen Anzahl von Menschen ermöglicht, ebenfalls möglichst gut zu sehen.'

pus. Section 3.1 will therefore discuss the translators' and authors' background, as far as they are available, as well as data on the publications from which the corpus is composed, and editorial guidelines that constrain the production of all texts will be included in the analysis as far as they might influence the language users' syntactic choices.

In analogy to the discussion of prestige, a large demography of a given language means that there is a potentially big target audience, so that a magazine addressing that target audience is more likely to establish a regular readership and thus a genre (the *HBR* has ten times the circulation of the *HBM*, see Section 3.1). In addition, and in contradiction to Croft's claim that selection does not happen on the basis of linguistic properties, the literature also suggests that speakers select structures when they recognise that there is a structural need for them (cf. the idea of 'filling gaps in linguistic inventories', Weinreich 1970:5f; see also Buccini 1992b; Coetsem 2000:85). We see, then, that including the possibility of conscious selection in a theory of language contact in translation greatly increases the extent to which we can explain a given use pattern shift, and in what follows, I will discuss some evidence to suggest that linguistic properties may motivate language users to use one pattern more frequently than another.

As discussed in Section 1.1, Becher et al. (2009) claim that translators model their language use on the SL, in this case English, due to its high prestige in the genre of popular science. Explaining this observation with a theory that denies conscious change would mean arguing that translators wish to adopt a given SL structure, but are not aware of how they are doing it. Keller would argue that they did not 'set out' to change German syntax, but instead had other goals, for instance to translate as closely as possible, and that the change in syntactic convention would be a by-product of this. That certainly sounds plausible. But allowing for the idea that use pattern shifts can be determined by selection, we can also argue that translators specifically copy a certain structure because they consider it to have an enriching effect on German. In this, they may or may not be aware of how they know the structure or that it is common in another language. In addition, we can then argue that translators perceive a superiority of the SL pattern and thus use the functionally analogous but minor use TL pattern more frequently. The result in all cases would be a shift of the pattern from a minor to a major use pattern.

One reason why language users might select one structure over another may

be that they consider them simpler than others. A language, after all, is a convention that is 'partly arbitrary' (Clark 1996:71), in that 'other regularities in behaviour would be approximately equally preferable by almost everyone in the community' (Lewis 2002:76; see also Croft 2000:98). As the main aim of the language user is to achieve communicative success, language users are likely to select linguistic structures that they think are most likely to achieve this goal. Becher (2011:199), for instance, argues that German language users in the popular science genre increasingly often select verb-second (paratactic) structures rather than verb-final (hypotactic⁴) structures because these structures are thought to make it easier for the reader to understand their article (for claims to this effect, see Weyerts et al. 2002; see also Hansen-Schirra 2011). It is this claim that will be tested in this study by replicating Becher's (2011) study for the business and management genre.

Becher's (2011) study, conducted as part of the *Covert Translation* project on a diachronic corpus of paratactic and hypotactic sentences, tests the hypothesis that, in written discourse in German, there may be a shift of parataxis from a minor to a major use pattern, and a similar shift of hypotaxis towards a minor use pattern. In his analysis of the translations of the concessive conjunction *although*, he observes that, in 1978–82, 55% of them were hypotactic, whereas in 1999–2002, this figure went down to 19%. Paratactic translations increased in proportional frequency from 27% to 59% over the same time span (Becher 2011:195). The non-translations show a similar increase in parataxis (unfortunately not stated in percentages but in instances pttw) from 48.5 instances pttw in 1978–82 to 70 instances pttw in 1999–2002. Parataxis, it seems, is on the way to becoming a major use pattern in this genre.

In his interpretation of the results, however, Becher argues that hypotaxis has already become a minor use pattern in non-translated language, and that conservative language use by translators means that translations are now merely 'catching up' (Becher 2011:198). This is because hypotactic constructions in the non-translations remain constant at 4.2 and 4.0 instances pttw and occur at a frequency of 4.9 instances pttw in the 1999–2002 translation corpus, so that it seems as though their frequency in the translations may have assimilated to their frequency in the non-translations (Becher 2011:197f). Whether or not

⁴These terms will be explained in depth in Section 2.1.

Becher's interpretation is accurate (see Section 6.1 for a comparative discussion of his results with mine), what his study seems to show is that, in an identical environment (namely translating *although*), translators deliberately choose one linguistic structure over another if they consider that it will achieve their goals better.

Further evidence for the claim that hypotaxis is becoming a minor use pattern in German comes from a study conducted by Fischer (2007). Fischer analyses differences in grammatical complexity between German and English in complex sentences and specifically as regards the marking of case, formal differentiation between and identification of subject and direct object as well as the frequency and semantic interpretation of those. The bidirectional corpus of children's books he draws on consists of (i) the English book Harry Potter and the Philosopher's Stone and its German translation, (ii) the German book Der Herr der Diebe and its English translation, and (iii) a German journalistic article and its English translation to gauge the influence of genre. Based on this translation corpus of 21,935 words, Fischer (2007:397) finds that German translations of English texts often translate hypotactic sentences paratactically. For instance, temporal clauses that are subordinated in the source text by as are often connected to the main clause by the coordinator und in the German translation.

It seems, then, that there is indeed a tendency of parataxis to become a major use pattern and potentially be on the way to replacing hypotaxis in German. Whether this happens because paratactic constructions are simpler will have to be investigated using a theoretical framework that accounts for linguistic complexity. Adopting such a framework will be the aim of Chapter 2.

To summarise, this chapter has argued that interference in translation can affect change in language use. Such interference does not usually produce innovation, but changes language use in altering the frequency with which certain structures are used. These changes in language use take place via shifts of use patterns, where structures may develop from minor use patterns to major use patterns. It has been argued that that process is constrained by four factors, namely linguistic proficiency, specialisation by genre, attitude to the SL and degree of establishment of the genre in the TL.

Translation is a situation of language contact involving highly proficient bilingual language users, neither of whose language dominates the other so that the difference in agentivity between the two languages is neutralised. This means

that either language can in theory be the source and recipient of interference, although it has been argued that, as translation is a situation of specialised use, the SL may be the dominant language in the translator, so that a specific translation direction allows us to predict the kind of interference that will occur, and the analysis in this study will anyway be limited to influence of English on German. Interference in a situation of neutralisation happens in the form of selection, which can be unconscious in a natural process of language convergence, but can also be the product of a motivated act of language manipulation, determined by factors of prestige or structural need.

2 Clause complex interdependency and semantic transparency

The construction of heavily embedded sentences has largely been introduced into German by Latin (Polenz 1977:44f; Koller 1998). From early stages of Germanic to Old High German, the language predominantly featured simple sentences (Reiners 1943/2004:89; Polenz 1999:354). In the Old High German period, early Latin translators such as Notker started making extensive use of hypotaxis, both in attempts to recreate the Latin syntax in the target language, but also in an effort to enrich the target language, which has been an important step in the shaping of German as a scientific language (Polenz 1977:44; see also Sonderegger 2013). Notker has even been shown to use hypotactic structures at a greater frequency and complexity than the ST did (Eilers 2003:52f). Hypotactic sentences were most widespread between the 17th and the 19th century (Polenz 1999:354), and around 1850, a syntactic style strongly geared towards written language¹ reached its peak (Polenz 1999:353, my translation). Since the 19th century, German style, according to tendencies observed in studies of various genres (see Polenz 1999:353f), is moving from a predominantly hypotactic style towards a style favouring nominalisation, i.e. packing information into constituent groups, which are then aligned paratactically.

This trend towards parataxis, which has also been observed by a number of studies discussed in Chapter 1, does not seem to be limited to German. Vennemann (1974:349) argues that there is a cross-linguistic development towards a paratactic verb-second structure, which he considers an 'optimal word order', in all Indo-European languages². The purpose of this chapter is to investigate

^{1&#}x27;stark schreibsprachlich orientierten Satzbaustils'

²Vennemann (1974:351f), perhaps somewhat overeagerly, considers reference to language contact as an explanation 'unnecessary' and attributes the development to a language-inherent 'principle of natural serialisation' (see Heine 2008:34 for counter examples from Western Finnic, Hungarian and Romani; on Anglo-Norse contact, see Townend 2002).

why parataxis may present such an attractive use pattern that it seems to be used increasingly frequently. For reasons of focus, this discussion will be limited to English and German.

In order to investigate whether there is a development from hypotaxis to parataxis in English–German translations of business and management articles, and whether this represents a convergence of English and German syntax, the previous chapter has outlined the theoretical aspects through which the relation between translation and language change in general will be viewed. In this chapter, the focus will be on hypotaxis and parataxis, the linguistic structures whose use pattern will be analysed in the logico-semantic environment of causal and concessive clauses in the present corpus. As such, this chapter has two aims.

First, I introduce the structural concepts of hypotaxis and parataxis as part of the grammatical framework that will be used for the analysis (Section 2.1). Second, the notions of linguistic complexity and semantic transparency will be introduced with the aim of having methods of gauging whether a change in which parataxis replaces hypotaxis as a major use pattern to express concession and causality indeed represents a simplification of the German syntactic system (Section 2.2). Finally, Section 2.3 reconciles the theoretical concepts introduced in Chapters 1 and 2 by arguing that the aim of studying change in language use is primarily a study of system complexity. However, in addressing the question of why the paratactic word order might be an attractive use pattern, I will review some studies of structural complexity in spoken German and argue that an answer to the question might be located in the investigation of structural complexity.

2.1 Hypotaxis and parataxis as structural relations

Qualifying the information given by the verb in a clause can be done in at least two ways. One is the use of an 'adverbial clause', which specifies the information given in the main clause to which it is related (Quirk & Greenbaum 1973:322f). In Hallidayan grammar, causal and concessive clauses are said to have the function of expanding another by 'embellishing around it: qualifying it with some circumstancial feature of [...] cause or condition' (Halliday 1985/2004:377). Example (1) shows one such sentence from the corpus.

(1) Though the company may ultimately endorse this particular approach, this shift is clearly not the only one to consider. (HBR 5/80,143)³

Here, the clause Though the company may ultimately endorse this particular approach specifies the verb is by telling us that there is some kind of condition that limits the validity of what is said in the main clause. In many cases the same effect is achieved by clauses which are not adverbial clauses but main clauses, as seen in example (2). As the conjunction but is the approximate equivalent of although, but can be given a concessive function by connecting two main clauses⁴.

(2) The company may ultimately endorse this particular approach, BUT this shift is clearly not the only one to consider.

Logically, (2) achieves the same effect as (1): we receive qualifying background information on the statement made in the main clause. Syntactically, there is a difference between the sentences in that (1) contains an adverbial clause that cannot stand alone, as evidenced by (1'). For this reason, the adverbial clause is said to be subordinated to the main clause. The sentence in (2) contains two main clauses that could, in theory, stand alone, as (2') shows. These clauses are said to be coordinated.

- (1') *Though the company may ultimately endorse this particular approach. This shift is clearly not the only one to consider.
- (2') The company may ultimately endorse this particular approach. But this shift is clearly not the only one to consider.

As main clauses are independent in the sense that they can stand alone, as well as exchange their position to the left or right of the conjunction, the coordinating conjunction must stand between the clauses it connects and cannot be in the initial position (Lehmann 1991:527; Blühdorn 2008:4). A subordinator, on the other hand, is fixed to its clause so that the subordinate clause can be considered the 'internal argument of the connective' (Pasch et al. 2003:106ff) and can be positioned both medially and initially. The difference between the effects of a subordinator and a coordinator on the clause they occur in is exemplified in (1") and (2").

³For an explanation of the example codes, see Section 3.1.

⁴There are several functions *but* can fulfil; the one this study focusses on is the concessive one, where *but* can be replaced by *yet*. For a detailed explanation see Quirk & Greenbaum (1973:259).

- (1") This shift is clearly not the only one to consider, THOUGH the company may ultimately endorse this particular approach.
- (2") *But this shift is clearly not the only one to consider, the company may ultimately endorse this particular approach.

While the hypotactic conjunction, being part of its clause, can move around with the clause and thus occur initially as well as medially, the paratactic conjunction must stand between the clauses and cannot occur initially. Due to those differences in status between the two conjunctions, (1) and (2) have a different clausal relationship. If it is 'between a dependent element and its dominant, the element on which it is dependent', as in (1), the relationship is called 'hypotactic' (Halliday 1985/2004:373f). A main clause is then connected to a subordinate clause by a conjunction (Eisenberg 1985/1994:316). If, on the other hand, clauses are connected by a coordinator, the relationship is 'between two like elements of equal status, one initiating and the other continuing', as in (2), and is called 'paratactic' (Halliday 1985/2004:373f).

To increase precision in talking about syntactic constructions, I will use the concept of 'clause complex' (Halliday 1985/2004:363). A clause complex is the lexicogrammatical equivalent of what is graphologically realised as a 'sentence', and in an analysis exclusively concerned with written text, the two terms can be used interchangeably (1985/2004:371). However, the distinction between lexicogrammar and graphology is important to maintain, which is true especially with regards to the issue of sentence-splitting (see Sections 4.5, 5.3 and 6.3).

A clause complex is defined as a sequence of clauses which are linked to one another by a 'logico-semantic relation' and, usually, a 'degree of interdependency' which is either hypotactic or paratactic, as outlined above (Halliday 1985/2004:363). A clause complex may also exist without a tactic relationship (see Section 2.2), but having both a logico-semantic and a tactic relation has the effect of a 'tighter integration in meaning', and by making the relation of meaning clearer to the reader, the given information is construed more readily by the reader as a 'sub-sequence' within the whole sequence of themes in the thought process currently pursued by the writer (Halliday 1985/2004:365).

Any hypotactic clause 'nexus', which is a single pair of clauses in a clause complex, consists, syntactically, of a 'primary' and a 'secondary' clause (Halliday 1985/2004:376). Logically, a concessive clause nexus consists of a 'con-

sequence' and a 'concession' (Halliday 1985/2004:411f). In example (1), for instance, the subordinate clause, introduced by the concessive conjunction though, contains the concession, while the main clause contains the consequence. Concession implies a contrast between two circumstances where the consequence is surprising in the light of the concession (Quirk & Greenbaum 1973:324). Typical concessive conjunctions are although, though and even though.

Thus, both (3a) and (3b) have two clause nexuses, one of which (connected by und and and, respectively) is paratactic and the other (connected by Da and As, respectively) is hypotactic. In a causal clause nexus, the clause introduced by the causal conjunction is the cause, and the main clause is called the effect (Halliday 1985/2004:410). Causality gives a reason for an event described in the main clause, 'most commonly introduced by the conjunctions because, as, or since' (Quirk & Greenbaum 1973:327) but also for.

- (3) a. ||| As more people make purchasing decisions exclusively on price [...] || baseline sales eventually decrease || AND lift over baseline increases. (HBR 7/07,104)
 - b. ||| DA mehr Menschen Kaufentscheidungen nur anhand des Preises treffen [...] || verringern sich letztlich die Basisabsätze, || UND der Mehrabsatz bei Rabattaktionen steigt. || (HBM 1/08,40)

This study analyses two logico-semantic relations: firstly, concessive clauses will be analysed in order to replicate Becher's (2011) study (see Section 1.3), and, secondly, causal clauses will be analysed in order to test a claim made by Polenz (1999) in an analysis of Möslein's (1981) study showing a diachronic decrease of hypotactic structures in scientific and technical texts. Polenz (1999:354) argues that concessive clauses decrease in frequency more strongly than causal clauses. This is because, he says, concessive clauses are adverbial clauses which are not constituents of the sentence, whereas causal clauses, though also adverbial clauses, are 'textsemantically more important' and thus more resistant to decline (1999:354). No further reasoning is given as to why causal enhancement should be more important than concessive enhancement, so this argumentation remains debatable. Furthermore, as both concessive and causal clauses are considered to be 'enhancement' clauses (Halliday 1985/2004:410ff), analysing them both will allow us to find out whether diachronic change in these clauses is limited to one type of clause complex or whether it can be verified for the entire logico-semantic relationship group.

Because, as mentioned above, subordinating conjunctions take clauses as their arguments and govern them, they can, in some languages, have a morphosyntactic effect on the verb by, for example, requiring a certain word order or a certain tense or mood form (Pasch et al. 2003:361; Blühdorn 2008:5). Contrary to English, where there is no morphosyntactic effect, the German subordinating conjunction requires a verb-final word order (Burgschmidt & Götz 1974:266f), a difference which contrastive grammarians consider 'a major area of contrast in basic sentence structure' (Hawkins 1986:131) between those two languages. The word order of main and subordinate clauses in English is subject-verb-object (Hawkins 1986:47ff). In German, subordinate clauses are distinguished from main clauses by their verb-final word order instead of verb-second word order of the main clause.

The underlying structure of all clauses in German is the so-called *Satzklammer* ('verbal bracket'⁵, see Pasch et al. 2003:67), which refers to the fact that the verb phrase 'brackets' its complements, the so-called *Mittelfeld* ('central elements', Pasch et al. 2003:92). In addition, each clause has a *Vorfeld* ('initial element'), i.e. a clause where at least one of its non-finite constituents immediately precedes the finite part of the verb phrase⁶ (Pasch et al. 2003:92, my translation). The basic structure of the *Satzklammer* is shown in (4)

(4) Initial element Opening bracket Central element(s) Closing bracket

Depending on the sentence, each of these positions can be unfilled. Example (5)⁷ shows a paratactic causal clause complex where two verb-second main clauses are combined by the coordinating conjunction *denn*. Each clause has a verbal bracket, whose contents are shown by grey boxes. As both clauses are main clauses and thus have a verb-second structure, the finite verbs (marked in bold) in both cases occupy the opening verbal bracket. In the first clause, the closing bracket is empty as the verb is simple, while in the second clause, where there is a non-finite verb, the closing bracket is also filled.

⁵Discussions of the *Satzklammer* and its elements in English use various translations of the terms (e.g. 'sentence brace', 'verbal brace', 'sentence bracket'). For reasons of consistency, I will adopt the translations used by Durrell (1992/2003:262ff).

⁶'Sätze, in denen mindestens eine ihrer infiniten Konstituenten dem Finitum des Verbalkomplexes unmittelbar vorausgeht'

⁷German-language examples in this thesis are provided along with a gloss in order to allow the reader to follow the structure of the German sentence.

(5) Christian fuhr gestern auf den Markt \emptyset DENN er wollte Christian went yesterday to the market because he wanted dort einen Apfel fuht because he wanted there an apple buy

Example (6) shows a hypotactic rendering of the same sentence, where the second clause in (5) is now rendered using the conjunction *weil*. While the structure of the main clause is unchanged, the subordinate clause has been rendered verb-final by the hypotactic conjunction, so that the finite verb is now part of the closing bracket and the conjunction occupies the opening bracket (Pasch et al. 2003:95).

(6) Christian **fuhr** gestern auf den Markt **(1)** Weil er dort einen Christian went yesterday to the market because he there an Apfel kaufen wollte.

apple buy wanted

Pasch et al. define a verb-final clause in German as a clause where the finite part of the verb phrase succeeds all the complements of that verb phrase, unless they contain a verb⁸ (2003:95, my translation).

Some studies indicate that verb-final structures are harder for readers to understand because the information in the verb is not revealed until the end of the clause (Weyerts et al. 2002). However, the evidence supporting this claim that has been provided so far is not conclusive, and there are some good arguments against it. Farrar (1999:6f) argues that the *Satzklammer* in German usually demands that the content verb comes at the end of a clause, while the second position is occupied by the auxiliary verb, so readers regularly encounter the alleged parsing difficulty that they encounter in a verb-final construction. Strikingly, however, studies show that the *Satzklammer* in German is not in a process of change (Thurmair 1991; Marschall 1994; Wegener 2007). Further evidence against the attractiveness of parataxis is that it is perceived as overused and associated with low quality writing (see, for instance, Mittelberg 1967).

These considerations have important implications for translation. As example (7) shows, translators have the choice of translating in a hypotactic or a para-

 $^{^8}$ 'Sätze, bei denen das Finitum auf alle Verbkomplemente folgen muss, wenn diese $[\dots]$ kein Verb enthalten'

tactic way. (7a) is a possible hypotactic translation of the English sentence in (7). (7b), which is a paratactic translation, is the construction that was chosen by the translator. In the hypotactic translation, the conjunction obwohl governs the subordinate clause and causes it to be verb-final. In (7b), the concession is contained in a main clause that has a verb-second structure and is connected to the other main clause⁹ by the coordinating conjunction $aber^{10}$.

- (7) Though the company may ultimately endorse this particular approach, this shift is clearly not the only one to consider. (HBR 5/80,143)

 - b. Zwar könnte das Unternehmen letzten Endes dieser Methode it-is-true could in-the end to-this method the company seine Zustimmung |geben|qibtauch andere ABER esits agreement give but there are also other brauchbare Lösungen | Ø |. (HBM 1/82,44) solutions useful

The ramifications of this decision by the translator may have an effect on language use in German. The difference between English and German regarding the morphosyntactic effect of hypotactic conjunctions on the clauses they govern forms the basis of the research hypothesis in this study. Translators who encounter hypotactic structures in English have the option of translating them hypotactically or paratactically. As there is no syntactic difference between them in English (the conjunction does not have a morphosyntactic effect on the verb

⁹Note that the difference between *gibt es* and *es gibt* is due to subject-verb inversion in the hypotactic clause complex, where the adverbial clause occupies the initial element. Subject-verb inversion is required by verb-second languages and not related to the taxis of the clauses.

 $^{^{10}{\}rm The}$ conjunctions that the study will consider and the tax is they trigger will be discussed in Sections 3.3 and 3.4

or the subject-verb-object structure of the clause), translators may not immediately be aware of this option and, based on the English word order, translate the construction as a paratactic verb-second structure. The hypothesis, then, is that the English ST structure determines the choice of conjunction in German, which in turn determines the tactic type of the construction to be paratactic. If this structure then becomes selected by other language users, it would mean that the hypotactic structure may become a minor use pattern in German.

This section has adopted the grammatical framework in which the syntactic structures under analysis in this study will be discussed. The central element of this framework is the clause complex, which is a system of clauses that are connected by a degree of interdependency and a logico-semantic relation. The degrees of interdependency introduced so far are hypotaxis and parataxis, and it has been shown that the morphosyntactic difference between them, while non-existent in English, is recognisable in German by the fact that the hypotactic conjunction requires a verb-final word order. The two logico-semantic relations that will be studied have been identified as causality and concession. The remainder of this chapter will deal with the notion of complexity and how hypotaxis and parataxis can be differentiated in terms of it.

2.2 The relation of semantic transparency and linguistic complexity

In the previous section, two degrees of interdependency have been established: hypotaxis and parataxis. While these are the most common ones, there are some others which will also prove to be relevant for this study. A somewhat lower degree of interdependency, which is not marked by a connective device but simply by a punctuation mark, is called 'asyndetic coordination' (cf. Cosme 2008:93; Blühdorn 2008:60). Although no connective device is used in asyndetic coordination, readers can infer that there is a connection between the clauses by accessing their world knowledge and familiar linguistic schemata (Carrell 1982). Thus, in (8) we know that the clause unaware of how they can be used [...] over many years supplies the cause for the action described in the main clause.

(8) Unfortunately, most companies discard these data, unaware of how they can be used to track a brand not just over quarters but over many years. (HBR 7/07,104)

Clause complexes like the one in (8) do not have a tactic degree of interdependency, but only a logico-semantic relation and thus form a cohesive sequence (Halliday 1985/2004:365f). The varying degree to which relations of meaning in a clause complex are realised explicitly as signs will be called 'semantic transparency' (Fischer 2007). This term goes back to Langacker (1977), who defines the highest degree of 'transparency' as one where linguistic units are clearly associated with a 'reasonably consistent meaning or function' and where 'every semantic element in a sentence will be associated with a distinct and recognisable surface form', so that 'a one-to-one correspondence between units of expression and units of form' exists (1977:110).

Based on the strengths of clausal interdependency that we have identified here and in Section 2.1, we can suggest a continuum of semantic transparency as shown in Table 2.1. The continuum shows that the further down the scale we move, the less overt is the marking of the clause relationship, from explicit marking in hypotaxis along with logical subordination via coordination with or without a connective to a purely inferred connection.

Table 2.1: Continuum of semantic transparency in clausal relations

	Type of relationship	Linking device
1.	Hypotaxis	Conjunction
2.	Parataxis	Conjunction/Adverb
3.	Asyndetic coordination	Punctuation & juxtaposition

Semantic transparency, then, seems to help the reader in understanding the relationship of the different propositions in a clause complex to each other. However, the popular conception is that hypotaxis, which has a high semantic transparency according to Table 2.1 is more 'complex' and difficult, and usually preferred in high-brow pieces of writing (Greiner 2011), while parataxis has a low esteem, but is easy to digest (Mittelberg 1967:244ff). In order to assess the complexity of a clause complex construction, and thus to answer the research question of whether a change of parataxis towards a major use pattern, replacing hypotaxis as the standard way of connecting clauses, also means a simplification of German, we need to adopt a way of measuring the complexity of linguistic constructions.

Commonly applied terms for the concepts of parataxis and hypotaxis are 'compound' and 'complex' sentences. It is no surprise, then, that most people would

intuitively describe a subordinated or hypotactic sentence as complex. In order to investigate whether the shift of parataxis to a major use pattern can be labelled a case of simplification, we need a definition of what linguistic simplicity and complexity are and how we can judge the complexity of a sentence or text when we look at it. The definition of complexity I am going to adopt has been applied to linguistic analysis by Dahl (2004, 2009). In what follows, I will explain his definition of complexity and show how it can be applied to the syntactic analysis of clause combination.

The basic distinction Dahl makes is that between 'absolute' and 'agent-related' complexity (2004:39). This distinction is necessary because the complexity of language can be measured in two ways. One is that which most people would intuitively associate with the term complexity, i.e. 'the difficulty they have in learning, producing, and understanding the language' (Dahl 2009:51). This notion of 'difficulty' is very interesting for the purposes of the present study because it enquires how difficult a certain structure is to process and understand, and thus allows us to make judgements as to whether there is a gain in preferring one structure over the other. An example of this is the claim discussed in Section 2.1 that hypotaxis is harder to process than parataxis because the semantic content of the verb is delayed to the end of the sentence.

However, we must recognise that such judgements cannot possibly be attempted using the means of the present study, and perhaps any corpus study, for difficulty is always relative to the language user ('agent-related'). How a given speaker can process a given structure depends on a multitude of factors that are unique to the speaker, e.g. previous knowledge of the topic, the amount of daily reading the speaker does, the mental condition the speaker is in and so on. But because it is in the nature of corpus research to abstract from a text and make claims based on that, it cannot attempt to answer questions such as 'how difficult is it to process this text?'. And even psycholinguistic and neurocognitive research, which can use eye-tracking technology to make more reliable claims as regards language processing, cannot avoid the above-mentioned agent-related limitations.

For these reasons, Dahl (2004:39) proposes that the distinction described above is rather a limitation of the term 'complexity' to always mean 'absolute complexity', while agent-related complexity, which will not be discussed any further in this study, should be referred to as 'difficulty'. The definition of absolute com-

plexity, a concept based in information theory, is grounded on the view that complexity is 'an objective property of an object or a system' (Dahl 2004:50), so it tries to find a measure of the objective intricacy of a given system as such rather than the difficulty that this system represents to a user of it. Of course there are philosophical problems with the notion of objectivity, and it can be argued that nothing can ever be truly objective, but this discussion will not be entered into in this study.

One possible approach to complexity is to measure what is called the 'algorithmic information content'. This approach is based on the idea that the complexity of an object is measured by how easily it can be compressed, i.e. by 'the length of the shortest possible complete description of it' (Dahl 2009:50). Dahl (2009:51) gives the following example to show how this could be put into practice in linguistics:

Table 2.2: Example of measuring the absolute complexity of three words

Word	Compressed string	Complexity
hahaha byebye	$3 \times \text{ha}$ $2 \times \text{bye}$	6 characters compressed to 4 6 characters compressed to 5
pard on	$(1 \times)$ pardon	6 characters—no compress

According to this measure of complexity, the word 'hahaha' would be the simplest word, as it can be compressed to four characters $(3, \times, h, a)$, while 'pardon' would be the most complex one because it cannot be compressed and thus remains six characters long (p, a, r, d, o, n). On a somewhat larger scale, this would mean that a random sequence of characters is always considered to be more complex than one where there is some degree of order.

A simple measurement of this kind was proposed by Stahlheber (1992) in her diachronic contrastive analysis of differences in the degree of popularisation and differences in syntactic genre conventions in scientific writing, based on a corpus consisting of articles from the American journal *Science* and the German journal *Die Naturwissenschaften*. Stahlheber notes a significant decrease in syntactic complexity between the years of 1913 and 1987 in the German articles, which she says is primarily due to contact of the authors with English scientific journal articles (1992:185). Sentence complexity was measured by Stahlheber simply by adding the number of subclauses together, where a subclause is defined as a

clause that has only one finite verb (1992:173). Then, she divided the number of finite verbs by the number of sentences in the corpus. While this is an accurate enough guide to sentence length, it does not really say much about the complexity of the sentences itself, primarily because it gives paratactic and hypotactic constructions an equal weighting, as both have two finite verbs. Equating sentence length with complexity, then, does not seem to yield accurate results because it ignores layers of embedding in the sentences.

As it is a rather counter-intuitive trait of a definition of complexity that is supposed to be applied to any ordered system, the algorithmic information content measure has been criticised, and Dahl discusses an alternative called 'effective complexity', which measures, not the length of the description of the object, but the length of 'the specification of the totality of patterns it contains' (2004:24). Reviewing the example in Table 2.2, 'pardon' has a high measure of complexity when measured in algorithmic information content, but no effective complexity, as it has no patterns, while 'hahaha' and 'byebye' have one pattern. This view of complexity, Dahl argues, is both closer to 'an intuitive understanding of the notion of complexity' as well as being more appropriate to the study of language, as

the set of patterns that an object contains can be said to equal its structure, so the complexity of an object is really a measure of the complexity of its structure.

(Dahl 2004:24)

This measure of complexity could either be applied to the language system as a whole, where it measures the size of 'the system of regulations that determines how to express that which can be expressed' ('system complexity', Dahl 2004:43), for example in a contrastive comparison of two languages in one or more aspects, or it can be applied, for instance, to the morphological, phonetic or syntactic structure of a specific expression, in which case what is measured is called 'structural complexity' (Dahl 2004:44). The two concepts are connected in such a way that, in the establishment of the complexity of a language, we would draw on a large set of observations of structural complexity and deduce from this whether the language has a high or a low system complexity. In a discussion of diachronic change in linguistic complexity with reference to a particular structure,

it is important to consider the effect that language change has on the different kinds of complexity, because the change might affect different types of complexity in different ways, and thus 'it is not possible to classify changes simply as "complicating" or "simplifying" (Dahl 2004:45).

It is important to note that in measuring the complexity of a language, system complexity draws not only on the possibilities of that language (its 'resources'), but also on its 'regulations', which are the conventions that govern how it must be used to achieve communicative success (Dahl 2004:40f). Thus, for a language to be considered complex, it is not enough that it has the facilities to express as many messages as possible, but its speakers also need to have established, over time, an extensive system of conventions on the use of its facilities (as was mentioned in Section 1.3). So, in a sense, system complexity refers to the amount of regulations that can apply in the expression of a certain message in a given language.

The following examples should clarify what is meant here. Examples (9) and (10) present differences in system complexity between English and German with regards to morphology and aspect, respectively. Because they are conventions that most speakers know, rules of grammar serve to avoid redundancy, so, for instance, in the English sentence in (9), conventional regulations make it unnecessary to add 'now' or 'at the moment', because we know that the continuous aspect in English expresses that the action is happening at the moment.

(9) I'm working.

- a. ? Ich bin am Arbeiten.
 - I am at-the working
- b. Ich arbeite gerade.
 - I work now

If a language user does not draw on as many conventional regulations as the language allows, the utterance will require a greater amount of description, which requires a more extensive construction or at least a greater number of words. That may, at the extreme end, be considered a tautology.

Aspect also affects the system complexity of a language. While English has a continuous aspect, Standard German does not, and expressions like (9a) are currently only acceptable as vernacular forms. Thus, in translations into German,

in order to avoid ambiguity, we need to supply an adverb like *gerade* ('now') as in (9b) to express continuance, because *ich arbeite* can also mean 'I work', i.e. 'I am employed'. This means that, because German has a lower system complexity with regards to aspect, a translation must be more 'verbose' (Dahl 2004:52f) to avoid ambiguity by adding an adverb specifying the time of occurrence of the action described in the verb.

While both sentences in example (10) are equal in structural complexity (the ruleset NP VP(V ADJ) suffices for their description), German morphology requires the supplication of the gender of the noun (10a) while English morphology does not (10b), which makes German morphology more complex in the aspect of gender specification. In order to describe the German sentence, we need the same amount of rules that we need to describe the English sentence plus one, namely that which stipulates the provision of the noun gender. Because the word teacher can refer to two semantic units, the German sentence, supplying more information, not only has a higher system complexity, but is also more semantically transparent.

- (10) a. Die Lehrerin ist nett.
 - b. The teacher is nice.

As regards clausal relations, it can be argued that achieving high semantic transparency, and thus aiding the reader in penetrating the text, usually requires a more explicit indication of meaning relations, which can be achieved by a complex, i.e. more hierarchical construction. Similarly, Langacker (1977:111f) has argued that reducing 'intrinsic complexity' (which can be transposed into our terminology as 'structural complexity') will necessarily conflict with the aim of achieving semantic transparency. Complexity, according to our definition, supplies information about the inner relations of a clause complex by making use of conventional regulations, and thus removes uncertainty and leaves fewer things ambiguous.

However, as shown in example (9), it is also possible to increase semantic transparency by increasing the amount of description, thus making the construction more verbose. This is argued by Fischer (2013:49) using the example of the dative case in German. While the dative case is a marker of higher complexity, which English has to compensate for by using prepositions, it is not as semantically transparent. Fischer's (2013:49) example shows that the English

translations express the thematic roles better: the German sentences in (11a) and (12a) both use the same determiner *dem*, while the English prepositions distinguish recipient (11b) from beneficiary (12b).

- (11) a. Sie hat *ihm* das Auto erklärt.
 - b. She has explained the car to him.
- (12) a. Sie hat ihm das Auto geputzt.
 - b. She has cleaned the car for him.

Example (13) illustrates differences in structural complexity in German. Assume we wanted to say that inmates of a prison started a hunger strike, and the reason for their going on hunger strike is that they were illegitimately incarcerated. Some possibilities afforded by German are shown in example (13). Examples (13a) to (13c) are decreasingly structurally complex. The sentence in (13a) is hypotactic and thus has a hierarchical structure, while (13b) and (13c) are paratactic and consist of two independent main clauses, though (13b) is still more complex because denn denotes an explicit causal relation between the two clauses, while (13c) does not do this due to the absence of a conjunction.

- (13) a. Die Häftlinge traten in den Hungerstreik, da sie zu the inmates entered into the hunger-strike because they

 Unrecht ihrer Freiheit beraubt wurden.

 unjustifiedly of-their freedom deprived were
 - b. Die Häftlinge traten in den Hungerstreik, denn sie wurden the inmates entered into the hunger-strike because they were

 zu Unrecht ihrer Freiheit beraubt.

 unjustifiedly of-their freedom deprived
 - c. Die Häftlinge traten in den Hungerstreik. Sie wurden zu the inmates entered into the hunger-strike they were

 Unrecht ihrer Freiheit beraubt.

 unjustifiedly of-their freedom deprived

d. Die zu Unrecht ihrer Freiheit beraubten Häftlinge traten the unjustifiedly of-their freedom deprived inmates entered in den Hungerstreik.

into the hunger-strike

Example (13d) is structurally the simplest expression because it conveys the same message as the others but in a single-clause sentence with the simple structure NP VP PP. The cause of the hunger strike, which is expressed as a subordinate clause in the other constructions is here expressed as an attributive participle as part of the noun phrase. While the construction is structurally simple, it is an indicator of a higher system complexity of German than, for instance, English, where a noun phrase such as *the unjustifiedly deprived of freedom inmates is ungrammatical, which means that a speaker of German has more options of expressing the message, and their recipient will have to know an extra rule to successfully interpret the message.

While the sentences in (13) represent a continuum in decreasing complexity, they also represent (in this instance) a continuum in semantic transparency. While (13a) makes the relation between cause and effect clear, that relation is only implicit in (13c), and (13d) is even ambiguous: the attributive extension, in addition to the reading that it relates the cause for the hunger strike, may be understood in a restrictive function. In this function, the sentence refers to a specific set of prisoners who were unjustifiedly imprisoned and have begun a hunger strike. It contains an implication not understood in the other sentences that there are other prisoners who have not been imprisoned unjustifiedly and have not begun a hunger strike. Thus, the least complex sentence is also, in this case, the least semantically transparent one.

This kind of continuum of interdependency between clauses has been a recurrent idea in studies of contrastive syntax (see e.g. Givón 1984:328; Fabricius-Hansen 1999:181). In Figure 2.1, I extend the continuum of semantic transparency suggested above (see Table 2.1, p. 52) by adding complexity to visualise the results of the analysis of example (13) and to have a tool with which to divide up the examples in the corpus into groups based on the degree of interdependency. The figure shows that, in the case of degrees of interdependency between clauses, semantic transparency decreases along with complexity, so that the structurally simplest construction is also the one where meaning relations

Complexity			LogSem.	Taxis	Clause type
	1. 2. 3. 4. 5.	Hypotaxis Parataxis asyndetic (,) asyndetic (.) (attr. ext.)	, ,	yes yes no no	Clause complex 2 Clause simplexes 1 Clause simplex

Figure 2.1: Continuum of semantic transparency and complexity in clausal relations

are hardest to determine for the reader.

This section has introduced the concepts of semantic transparency and linguistic complexity. Semantic transparency in clause complexes relates to the degree to which meaning relations between clauses are realised as signs and thus to the ease with which these meaning relations can be determined by a reader. Linguistic complexity, I have argued, should be properly measured not by the length of the string to be analysed, but by the amount of rules that apply to its constituents. As regards the relation between linguistic complexity and semantic transparency, it has been argued that the latter decreases along with the former as regards the degrees of interdependency in clausal relations, so that the most complex utterance is the semantically most transparent. Crucially, this means that a change of parataxis towards a major use pattern, which would in turn result in a shift of hypotaxis to a minor use pattern, would reduce the linguistic complexity of the system of German clause relations.

2.3 Use pattern shifts as changes in system complexity

There is no consensus in the literature on whether language contact usually leads to simplification (Givón 1979) or complexification (Heine & Kuteva 2005:258); in a summary of available literature, Thomason (2001:64f) observes that evidence exists arguing either direction. In an attempt to determine the circumstances that lead to one or the other, Trudgill (2011:34) argues that 'complexification is most likely to occur in long-term co-territorial contact situations involving child bilingualism', while 'simplification is most likely to occur in situations involving language learning by adults, particularly short-term contact'.

While some of the translators involved in this study may certainly have been

raised bilingually¹¹, it is likely that the type of contact we are dealing with in this study is of the latter type, especially since contact with English in Germany is not 'territorial'¹². Therefore, we would expect convergence of German and English to be mainly a process of simplification. Consequently, the previous section has argued that a shift of parataxis towards a major use pattern with a concomitant shift of hypotaxis to a minor use pattern would mean a reduction in linguistic complexity of German. This section tries to reconcile the key notions of language change and language complexity that have been adopted in the two chapters so far. As was mentioned before, this study does not, strictly speaking, occupy itself with language change, but rather with change in language use.

Language change in the strict sense usually occurs first in spoken language (Schneider 2002), and is commonly said to consist of innovation and propagation (Croft 2000:4). Innovations first emerge in restricted environments or constructions (Heine & Kuteva 2005:45ff), and thus occur at the level of structural complexity. It is only in the phase of propagation that they may spread to other environments, become conventionalised and be used in written discourse. Corpus studies of written texts, therefore, are most interested as well as best at studying long-term developments and changes in language use (Aarts 1999; see also Olohan 2002:424), which occur at the level of system complexity. The hypothesis of diachronic change under analysis in this study, which holds that, since the early 1980s, parataxis has shifted to a major use pattern and thus replaced hypotaxis in the construction of causal and concessive clause complexes, is one such hypothesis of change in language use. How that change may come about was discussed in Chapter 1, while the present chapter has dealt with what it is exactly that will change. It remains for this section to distinguish changes in structural complexity from changes in system complexity, and enquire what kind of role that distinction will play in this study.

The existence of a tactic system and the types of embedding of clauses in a language relate to the level of system complexity, while, for instance, the morphosyntactic implications that a conjunction has on the clauses it connects

¹¹In fact, most of the translators who worked on the 2008 articles in this corpus and who were available to contact said they started learning English at school around the age of 10 and would thus classify as 'coordinate bilinguals' (cf. Section 1.2).

¹²In this respect, it would be interesting to see whether studies of language change involving translations conducted in bilingual countries where contact is territorial and which involve child bilingualism do indeed find evidence of complexification.

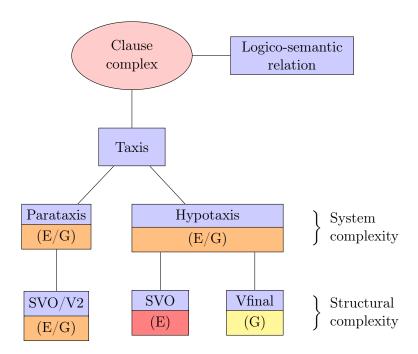


Figure 2.2: Model of structural and system complexity

are considered to be on the level of structural complexity (see Figure 2.2). As English and German both have hypotaxis and parataxis, we can say that they are, in this respect, equal in system complexity. As regards the actual hypotactic and paratactic expressions that can be formulated, paratactic constructions are basically equal in structural complexity in English (which has a subject-verb-object structure) and German (which has a verb-second structure, though the German Satzklammer can dictate a subject-verb inversion as shown in Section 2.1). Paratactic clause complexes are structured as main clauses in both languages. However, hypotactic constructions are structurally more complex in German as they require the application of an extra rule, namely that the adverbial clause must be restructured to be verb-final.

What must be noted is that it is not this rule itself that is under pressure, at least in written German. The hypothesis that parataxis replaces hypotaxis claims instead that there is a shift in preference from hypotaxis to parataxis. To test this hypothesis, we must first verify that hypotaxis was indeed a major use pattern in the 1982–3 TC, i.e. that translators chose it in a significant amount of cases to translate English causal and concessive structures. According to Becher

(2011), parataxis has replaced hypotaxis as the most frequently chosen structure in the translation of concessive clause complexes in popular science texts (see Section 1.3). For parataxis to be considered a major use pattern, it should be used at least as often as hypotaxis. If this is the case, it can be investigated whether it is also in progress of replacing hypotaxis as the preferred pattern to construct concessive and causal clause complexes in business and management articles.

The investigation of such a shift of use patterns that is conducted in this study can be regarded, then, as an investigation of change in system complexity. This is because, if there were such a change, it would mean that there is a shift from a predominantly subordinated system to a predominantly coordinated one. Structural complexity would not be affected because the structure and word order that is associated with each degree of interdependency does not change. Despite that, research on change in structural complexity of hypotactic causal and concessive constructions may be relevant, as it can inform hypotheses of changes in system complexity of the same environments in written German (see Section 6.4). A study of change in structural complexity would investigate changes in the structure of a particular type of interrelationship and be concerned with the structure that such constructions trigger. Such a change is indeed in progress in spoken German, as hypotactic causal and concessive clause relationships show variation between the verb-final structure that is considered grammatical in written German and the verb-second structure that is used in paratactic constructions (Gaumann 1983; Günthner 1996).

The verb-final structure required by hypotactic constructions is already under pressure in spoken German causal and, to a lesser albeit noticeable extent, concessive clause complexes. A study of casual spoken conversations has shown that 'syntactic choices in everyday language are closely connected to discourse-pragmatic factors' (Günthner 1996:352). This means that the utterance is structured according to its content and the function it is meant to achieve, so that, Günthner argues, word order variation between verb-second and verb-final order is predictable. Specifically, hypotactic relationships are strong when the clauses are closely integrated, i.e. when the dependent clause is 'within the scope of the main clause illocutionary force' and 'content domain' (Günthner 1996:352). So if the idea referred to in the dependent clause only loosely relates to that in the dominant clause, speakers can be observed to use

a paratactic verb-second construction with weil and obwohl (see example (14), taken from Günthner 1996:339), even though these conjunctions would require a hypotactic structure.

- (14) a. * Was wäre denn deiner Meinung nach falsch, weil
 what would-be then your opinion according-to wrong because

 du hast ja vorhin noch etwas anderes gesagt?

 you have after-all earlier still something different said
 - b. * Da kann man bis jetzt eigentlich noch froh sein, obwohl man so can one up-to now really still glad be although one weiß ja nicht was in einem schlummert.

 knows after-all not what in you sleeps

A further explanation is given by Keller (1993), who argues that the weil+v2 variant, which he calls 'epistemic weil', differs semantically from the standard use of the conjunction, which he calls 'factual weil'. Keller argues that when the latter is used, the speaker assumes that the receiver has some knowledge of the cause, and when the epistemic weil is used, the speaker assumes that what he or she says is new to the receiver. This observation supports Dahl's (2004:45) claim, already cited in Section 2.2, that 'it is not possible to classify changes simply as "complicating" or "simplifying" because the emergence of weil+v2 seems, at first, a simplification of the structural complexity of the German hypotactic structure, but if it represents a differentiation of pragmatically distinct forms, it would represent an increase in system complexity, as weil+v2 becomes grammatically associated with an epistemic function.

In written German, of course, such constructions are still minor use patterns and restricted to situations where the author wants to sound casual or intimate to the reader, as exemplified in the quote in (15).

(15)wirklich gut träumen. Also wenn sich Dalässt sich's nichtthere lets REFL-it really well dream if REFL not gerade wieder jemand neben mich setzt, obwohl in Hamburg right again someone next-to me sits although in Hamburg dernicht schlimm, WEIL der Hamburger an sich, ist es gar because the Hamburger in himself he is it at-all not bad hält sichganz gern zurück und spricht einen nicht an. jakeeps REFL after-all quite well away and talks REFL not

(Lohmeyer 2012)

'You can get well dreamy in that place. That is, unless someone sits down next to me again, although in Hamburg it's not bad at all, because people from Hamburg in themselves, they like to keep their distance and don't start conversations.'

While the existence of the weil+v2 construction is still considered unacceptable in written German and there is no evidence of the verb-final construction being under similar pressure in written German as it is in spoken German, Günthner's (1996) findings highlight that speakers seem to differentiate between various types of causal and concessive conjunctions. The fact that a verb-final construction is used in each case after obwohl and weil does not exclude the possibility that there are several types of causal and concessive conjunctions in the speakers' minds, differentiated according to, for instance, scope of illocutionary force.

The research discussed above suggests that the choice of one conjunction over another is influenced by speakers' evaluations of the semantic relation between the information contained in the clause complex in question. In languages such as German, where conjunctions usually dictate the syntactic structure of the clause they govern, the decision for one conjunction over another also influences the grammatical structure of the construction, so that the pragmatic considerations made by the speaker come to have a rather wide-ranging influence on the grammar of the sentence. For instance, if the speaker perceives an epistemic rather than a factual connection between the content of the two clauses, the causal clause may be formed with a paratactic structure, which gives it the structure of

a main clause. This currently happens when the epistemic weil is used in spoken language, and, due to the unacceptability of weil+v2 in written German, may have its counterpart there in cases where a paratactic conjunction such as denn is used (this issue is discussed further in Section 6.4).

The relevance of this discussion is not restricted to the analysis of a particular language, but is also important for translation studies, as it might tell us more about translation choices. The existence of a range of different interpretations of one conjunction might well bear an influence on translator behaviour: the translation choice in, say, concessive clause complexes, for a hypotactic conjunction such as obwohl, and thus, in languages such as German, the choice between coordination and subordination may depend on the interpretation of the conjunction as, in Keller's (1993) terms, epistemic or factual. In other words, whether the translator translates because with denn or with weil may depend on the interpretation of the relation between the clauses in the ST. Such a case of pragmaticisation would argue that any observed changes in language use might be language-internal developments rather than instances of change determined by language contact in translation.

The present section has argued that this research constitutes a study of system complexity because it does not analyse innovations on the structural level, but changes in the frequency of use patterns of existing constructions, which makes it primarily a study of change in language use. Currently observed developments in the structural complexity of spoken German point to an increasing distinction between epistemic and factual causality, which has led to weil+v2 as a major use pattern in spoken German in recent decades. If true, such a distinction may also exist in written German, though in a different structural expression because weil+v2 is considered ungrammatical in standard written German.

This chapter has introduced the framework of Hallidayan grammar, including, most importantly, the concepts of hypotaxis and parataxis as structures of the clause complex. In addition, the logico-semantic relations of causality and concession, which are the environments to be analysed in this study, are subsumed under the label of enhancement in Hallidayan grammar, and it remains to be seen whether this also makes them behave similarly with regards to changes in the frequency of use patterns. As the second most important point, the chapter has introduced the notion of linguistic complexity and argued that it should be measured by the rules which apply within a construction rather than the length of

that construction. We are thus equipped with a grammatical framework within which we can investigate whether parataxis has indeed replaced hypotaxis as a major use pattern in the present corpus, and whether this means a simplification of the system of clause relationships in German.

3 Methodology

This chapter contains a detailed account of the methodology that has been employed to address the research questions of this study. A detailed description of the corpora is given in Section 3.1. This contains an account of the corpus structure and a brief presentation of the background and targeted readership of the magazines that make up the source of the corpora. The method that is employed to analyse the corpus data is described in Section 3.2. The section is divided into, firstly, an account of the diachronic analysis, which uses the TC and the CC, and, secondly, an account of the analysis of the PC. The section also contains a discussion of some drawbacks of the combined analysis of a TC and a CC in general.

The second half of the chapter details the English concessive and causal conjunctions that have been searched for and the German connectives that have been found to be used as translations of those English conjunctions (Sections 3.3 and 3.4). In Chapter 2, I introduced a continuum of semantic transparency which featured hypotaxis, parataxis and asyndetic coordination. In this chapter, I explain how the individual German connectives are assigned to each of these categories.

3.1 Corpus structure, compilation and details

This section gives details on the articles in the corpus and their authors as well as providing some detail on the magazines in which the articles were published. Three corpora of business and management articles were compiled for this study:

- a translation corpus (TC), which consists of English originals and their published German translations,
- a comparable corpus (CC), which consists of German non-translations, and
- a pre-edited corpus (PC), which consists of English originals and their

published German translations as well as raw translations that have not undergone the mediation process by the editor.

The TC and CC are divided into two subcorpora, one containing texts from 1982–3 and the other containing texts from 2008, which roughly corresponds to the sample periods used by Becher (2011). The sources for the corpora are the Harvard Business Review (HBR), an American business magazine published by Harvard Business Publishing, and its licensed German edition, the Harvard Business Manager (HBM), published by Manager Magazin Verlagsgesellschaft. The period of 1982–3 was the earliest reasonably reliable sample period that could be used, as the HBM has only been published since 1980 and the issues released in the first two years contained translations of English articles that, at times, stem from the 1960s. In order to achieve a reasonably consistent pool of English STs, I have chosen the period of 1982–3. The time separating the two sample periods is 25 years, so that the diachronic corpus method used by the Covert Translation project, which drew on a corpus whose two sample periods were separated by about 20 years (Becher 2011:191), can be reliably replicated.

The genre under analysis can be described as business and management writing. The guidelines for authors who want to publish in the *HBR* state that the magazine seeks to 'be the source of the best new ideas for people creating, leading and transforming business', and whose articles 'focus on such areas as leadership, organizational change, negotiation, strategy, operations, marketing, finance, and managing people' (HBR 2013). Similarly, the *HBM* describes itself as a magazine for 'practice-oriented management topics' (see Appendix A).

The time periods of 1982–3 and 2008 also coincidentally roughly represent the era of neoliberalism. Neoliberalism is defined by Crouch (2011:vii) as a 'set of economic ideas that have ruled the western world [...] since the late 1970s' but that has faced a 'major crisis' since the financial crisis in 2008. The strong influence of English as the lingua franca is perhaps especially noticeable in the genre of business and management writing, due to the international prestige of English as the language of business (Viehöver 2003:13; Schweizer 2009). Ostler (2010:25) attributes the rise of English as a global lingua franca 'above all to the global prestige of its speakers', specifically to the economic power of the UK and the USA. Therefore, it is assumed that, if there was any influence from English in

¹'praxisnahe Managementthemen'

the business and management genre, it would have reached a significant level at the start of the period of neoliberalism where American economic and business thinking was most influential.

The TC contains 55 German-language articles published in 1982–3 and 65 German-language articles from 2008 as well as the English source texts of those articles (see Appendix B.1). Most articles in the magazines have a length of 8,000 to 10,000 words. The authors of the articles in the corpus are one-off rather than regular contributors, so the analysis draws on more than 100 different language users. According to the short biographies published with the articles in the magazines, the authors of both the English and the German articles in the corpus are economists, business leaders and academics. The translations were done by professional freelance translators, small translation businesses such as Rheinschrift mentioned above, as well as editorial staff. The articles in the 1982–3 subcorpus have been translated by nine different translators, while the articles in the 2008 subcorpus have been translated by sixteen individual translators as well as Rheinschrift. According to information available in the public domain, most translators have a strong background in economics and/or specialise in the field.

The texts in the PC originate from 2006 to 2011. The texts from 2008 also feature in the TC (see Appendix B.3 for details of the texts contained in the corpus). Unfortunately, it was not possible to source translation drafts from 1982–3 because the translators of those articles either could not be contacted or had not kept their drafts. Therefore, the analysis of the PC does not allow a diachronic investigation of the mediation process, yet it allows us to make a statement about whether the observed linguistic phenomena in the more recent time period are the products of translator or editor behaviour. The texts that could be acquired for the PC were translated by the translation agency *Rheinschrift*² and submitted to the publisher of the *HBM*, so that they represent the translated language before the mediation process that happens prior to publication. The approval process, according to the project manager at *Rheinschrift*, takes several months, after which the edited translations are sent back to the translators for approval. That significant changes have been made to the texts at this stage is confirmed both by the project manager (Michael Heinrichs, personal communication) and

²I would like to thank Michael Heinrichs for providing me with this material.

a senior editor at the HBM, who states that the translations are often 'rather literal' (Gesine Braun, personal communication).

All articles from the *HBR* were available online through the John Rylands University Library of Manchester and have been converted to UTF-8 text files. The permission to use the articles for research purposes (see Appendix C.1) was kindly granted by the publisher, Harvard Business School Publishing (see the permission statement in Appendix C.2). The articles from the *HBM* were available in hard copy at the University of Duisburg-Essen Library. They have been scanned, and also converted to UTF-8 text files. Permission to digitise and use the articles for research purposes was kindly granted by the publisher, Manager Magazin Verlagsgesellschaft (see permission statement in Appendix C.3).

In the compilation of the TC, the translations were sentence-aligned with the source text sentences, so that English sentences that were translated as two German sentences can be found. This was done using *PlusTools*, an add-on to *Wordfast*, a computer assisted translation tool, developed by Yves Champollion. After the alignment, the corpus was inspected and alignment errors were corrected manually. For the PC, the same procedure was followed to align the pre-edited translations with their source texts. Then, the same alignment was carried out to align the pre-edited and the published translations. The resulting column of published translations was then added to the previously aligned STs and pre-edited translations to produce a tripartite corpus of STs, pre-edited and published translations.

To ensure that the analysis produces meaningful results, the corpus has to be of a sufficiently large size. One shortcoming of Becher's (2011) study is that the analysis of his 1978–1982 corpus of German translations, which had a size of 37,830 words, was based on only 33 instances of concessive constructions (2011:195). I would argue that a study needs at least around 100 instances in order to yield meaningful results. Therefore, I have decided on a TC size of about 500,000 words per time period, which, based on the ratio found by Becher, I expected to give me at least 100 instances, taking into account that concessive and causal clauses were said by Becher (2011:192) to be highly frequent in the genre of popular science, which might not be the case in the business and management genre.

All issues of the *HBM* consist of two thirds translations and one third non-translations, which means that the size of the CC will necessarily be smaller than that of the TC. However, as the CC is only used to validate the results found in the analysis of the TC, its size is of minor importance and determined by the time periods that were chosen for this study. Attempting to create a CC as large as the TC would necessitate using issues from before or after the chosen time periods, thus widening the time span under analysis. The size of the corpora is shown in Tables 3.1 and 3.2.

Table 3.1: Size of the TC and CC in words

	1982-3	2008
English source texts	251,148	258,589
German translations	246,341	260,261
German non-translations	145,715	88,312
Total size	497,489	518,850

Table 3.2: Size of the PC in words

	2006–11
English source texts	104,678
German translations (before editing)	106,829
Published German translations	104,448
Total size	315,955

The HBR was first published in 1922, initially appearing quarterly, then bimonthly from 1948. Since 2001, it has been published on a monthly basis. It now has a circulation of 246,000 copies (Harvard Business School 2011). According to a 2011 survey, readers of the HBR are mostly male, on average 44 years old and hold chief officer responsibilities. Addressing potential advertisers, the HBR describes its readership as people who

have power, influence and potential. They are senior business strategists who have achieved success and continue to strive for more. Independent thinkers who embrace new ideas. Rising stars who are aiming for the top.

(Harvard Business School Publishing 2011)

The *HBM* publishes translations of selected *HBR*-articles as well as articles originally written for the magazine in German. It started in 1979 as a quarterly publication and was then published bimonthly from 1998, and has been published monthly since 2003. The readers of the *HBM* are said to be mainly high-income, university-educated young executives who are 40 years old on average (SPIEGEL-Gruppe 2009). Since its inception, the magazine has increased its sales from 2,900 to 27,000 copies each month (Kuhn 2009). In its notes for authors (see Appendix A), it is stated that the magazine

not only provides managers, consultants and academics with invaluable ideas for their everyday work, but it is also targeted at readers who have not acquired a business degree. For this reason, we ensure that all our articles are generally understandable and that specialist terminology is always explained³.

All texts included in the corpus of this study are assigned a code which allows retrieval of the article from which given examples are taken by referring to the list in Appendix B. The code contains the name of the magazine, the issue number and year and the page where the article begins (for example, 'HBR 3/81,28' refers to an article in the HBR, issue 3/81, beginning on page 28).

This section has given details on the corpus structure, explained how it has been compiled and provided some background on the publications and authors of the articles that comprise the corpus. The next section will explain how the corpus will be analysed.

3.2 Method of analysis

This section provides details on the method for the analysis of the TC and CC, which is diachronic, and the analysis of the PC, which is synchronic. The English conjunctions whose translations are analysed are shown in Table 3.3. They have

³'Unser Magazin liefert Führungskräften, Beratern und Akademikern wertvolle Anregungen für ihren Berufsalltag und wendet sich dabei auch an Leser ohne betriebswirtschaftliches Studium. Daher legen wir großen Wert darauf, dass alle Beiträge allgemeinverständlich sind und Fachbegriffe immer erklärt werden.'

been chosen because they are the most commonly used conjunctions to express the logico-semantic relationships of concession and causality (Halliday 1985/2004:411), and therefore provide a comprehensive sample set for the analysis. The section also discusses some limitations to the diachronic corpus method.

Table 3.3: English conjunctions analysed in this study

Causal	Concessive
because	although
since	$even\ though$
as	though
for	while

In addition to translations of the conjunctions in Table 3.3, I have also analysed cases where ST clause complexes have been split in the translation, i.e. where one ST sentence was translated as two TT sentences. Because the corpus is sentence-aligned by ST sentence, cases of sentence-splitting could be identified simply by searching for full stops in the translations. I now proceed to describing the method of analysis for each of the two corpus types.

3.2.1 The translation and comparable corpora

The diachronic corpus has been analysed using a two-step method. The first consists of an investigation of whether concessive and causal clause complexes in English–German translations of business and management articles show a frequency shift in hypotactic and paratactic translations between 1982–3 and 2008. In the second step, the CC is analysed to find out whether any trends towards paratactic constructions in concessive and causal clause complexes are limited to translated language or whether they can also be found in non-translated German business and management articles.

In the first step, German translations of the English articles from 1982–3 are compared with those from 2008 to determine diachronic changes in the translation of concessive and causal clause complexes. For this comparison, I have searched the TC for all clause complexes containing the conjunctions shown in Table 3.3. Whether they occurred in initial or medial position in the clause complex was taken into account. To test Becher et al.'s (2009) claim that sentence-initial concessive conjunctions have become more frequent under the influence of

English, I have paid special attention to the clause complex-initial occurrences of concessive conjunctions. Care was taken to only count translations where the English ST items occurred in conjunctive use. Instances such as *though* where it was used as a discourse marker (as argued by Barth-Weingarten & Couper-Kuhlen 2002:353) rather than a conjunction, for instance 'The CEO needs to listen to his customers, THOUGH.' (HBR 2/08,49), were excluded.

A problematic case is the conjunction *while* because it can be difficult to decide whether it serves as a concessive or a temporal conjunction in a given sentence. The clause complex in (16a) provides, in my view, a clear case of a concessive function, whereas that in (16b) is an example of *while* in the temporal function. Only cases like (16a) have been included in the analysis.

- (16) a. While it sounds as if everyone ought to have the need to achieve, in fact, as psychologists define and measure achievement motivation, it leads people to behave in very special ways that do not necessarily lead to good management. (HBR 2/77,27)
 - b. Now, while the young man is in the university, he is willing to sub-ordinate his professional ambitions to those of his professors. (HBR 1/68,72)

As regards the conjunction as, only cases in which it unambiguously served as a causal conjunction are included in the data for the analysis. It often seems to be used as a temporal conjunction, especially in the 1982–3 corpus, as exemplified in (17). Though it may seem that there is a causal relationship between the clauses in (17), I would argue that as serves as a temporal conjunction and could be replaced by e.g. while.

(17) As a supplier gains experience, as its capabilities increase, and as the global relationship deepens and becomes more important, it might decide to adopt separate GAM. (HBR9/07,102)

The German translations of the conjunctions in Table 3.3 are identified and analysed for the tactic relationships that the translators chose to use. The expected finding is a diachronic shift in the use patterns of the tactic types so that the frequency of one increases at the expense of another. As argued in Section 2.1, any diachronic change should be similar in both concessive and causal relationships because both are assumed to be a type of enhancement clause in Hallidayan grammar.

As will be shown in Section 3.3, some connectives such as *aber* and *doch* can occur both as conjunctions and as conjunctive adverbs. To ensure precision in the interpretation of the results, I have listed and analysed them separately. This added a challenge for the analysis of *aber* in the CC as every instance of the word had to be inspected manually (see also Section 6.1). Of course, occurrences of *aber* as intensifiers were also filtered out at this stage.

The second step of the analysis investigates the CC for whether the changes observed in the translations in the first step also happened in the non-translated articles. Here, the conjunctions that have been identified in the TC will be searched for in the CC to find out whether they exhibit a pattern similar to that observed in the first step. The findings from this step allow us to surmise whether what has been observed is a development exclusive to translated text or whether it is taking place in the language as a whole within this genre.

One problem with the analysis of the CC is comparability. The analysis of the TC allows a straightforward search for all clause complexes containing certain English conjunctions, followed by an analysis of their translations. The analysis of the CC is complicated by the fact that, in order to compare how a given German conjunction (e.g. aber) is used, we can only search for that conjunction. That, however, gives us all instances of aber, making it necessary to filter out manually the ones that do not have a concessive function. Consider example (18):

- (18) Ein Prämien- und ein Tantiemesystem sorgt für eine finanzielle Beteiligung der Mitarbeiter. Die Mitarbeiter sollen ABER auch immateriell teilhaben, nämlich an Entscheidungen. (HBM1/08,54)
 - 'A bonus and royalty system provides for financial remuneration of the staff. In addition, staff should participate immaterially, namely by being involved in decisions.'

In that example, *aber* is not a concessive linking device, but a copulative one. In a copulative relationship, two or more statements are connected, perhaps contrastively, but not concessively, as separate parts of a series of entities, such as types of participation in (18). Thus, the meaning of the statement above could not be achieved by employing *obwohl* ('although'), because the semantic structure is not 'if P then contrary to expectation Q' (Halliday 1985/2004), but 'P is true, but so is Q'.

⁴my translation

In the analysis of *aber* in the CC, such instances must not be counted. Therefore, a manual inspection of every instance of *aber* in the CC is necessary to ascertain in each case that the item in question is a concessive conjunction. While it can be argued that the difference between a concessive and e.g. a copulative function is not always easily discernible, the fact that there are several hundred clearly definable occurrences even in the present rather small CC means that general trends can be observed to a sufficient degree of reliability.

Admittedly, this method cannot prove a causal connection between translated and non-translated language purely based on corpora of translated texts and corpora of non-translated texts. Neumann (2011:241ff) argues that the occurrence of a given phenomenon in both corpora does not prove that language change is propagated by one of those corpora into the other one because the language users may equally well have been exposed to contact with English original language material. Thus, Neumann argues, diachronic corpus studies should be seen as necessary starting points, discovering trends and developments which can then be investigated further using research methods which look at the translation process in greater detail (2011:241ff). Therefore, while the diachronic corpus method does not attempt to determine that the language contact that is supposed to have led to the change occurred in translation or in the contact with foreign language material, it can at least show that multilingual production of text, which includes both contact with translated as well as foreign language material, has been a factor in a given use pattern shift.

3.2.2 The pre-edited corpus

While corpus studies often consider only the finished translation product, ignoring issues of the translation process, both during the translation phase and during the mediation process when several other people exert influence on the translator's work, this study tries to distinguish between the raw translation and the finished product by analysing pre-edited texts. Ideally, research in this area should look separately at the translations before and after the mediation process, as a lot of stylistic influence may be exerted on the text during editing, and a linguistic change that is ascribed to the translator may have actually been introduced into the text by the editor. A possible method to accomplish this is proposed in this subsection.

A synchronic corpus method is used to investigate whether the differences in tactic structure observed in the main analysis pertain to the translators' style or whether they are introduced at the mediation process. Any published text, and especially so a multilingually produced text such as a translation, is the product of a long process during which many people influence the content as well as the structure of the text. The multitude of different stages through which a text goes in that process has been demonstrated by Munday (2012:110ff). So far, scholars have largely ignored this characteristic of translated text. The dichotomy of 'source text-target text' is useful when the only objective is to keep apart translations from non-translations, but masks the different stages that a translation passes through before publication.

Therefore, it is useful to look at the draft translation and the final, published version separately. This allows us to make observations about the extent of influence the editors have exerted on the text. It may be, for instance, that the changes the editors make to the text do not significantly alter the syntactic phenomenon we are currently investigating. In this case, we can say that the observations we have made about the translation really are attributable to the translator. Alternatively, if we find that there are significant changes to the syntax of the objects under investigation, the evaluation of the analysis has to attribute part of the responsibility for the shift in use patterns to the editors that were involved in the creation of the text. The outcome of the study may then be significantly different, as the driving forces of change may not be entirely within the nature of translation as multilingual discourse, but also partly exerted by normative grammatical or syntactic policies applied within a monolingual framework, namely the mediation process. In this study, the claim that a given use pattern shift is indeed driven by translators rather than editors will be tested by the analysis of a corpus of German draft translations of HBR articles.

The texts in the pre-edited corpus have been aligned with both their source texts and the published versions. The STs have been searched for the same conjunctions as the TC (see Table 3.3). Then, the pre-edited translations were compared with the published version and analysed for discrepancies between the draft and published translations. The aim of the analysis is to determine whether there are any differences between the pre-edited and the published versions with respect to the degrees of interrelationship in causal and concessive clause complexes.

The following sections contain an account of the German connectives that are used to translate the concessive and causal conjunctions under analysis. I will explain how the different types of taxis are differentiated in the analysis, and how cases that are not so easily discernible are treated. This will be done separately for concessive (Section 3.3) and causal clauses (Section 3.4), as there are some important grammatical differences between the German cohesive devices that are found as translations of those two clause types.

3.3 Concessive connectives

The English concessive conjunctions that will be analysed in this study are although, though, even though and while. The German connectives⁵ that are used to translate them can be grouped into three larger categories: hypotactic, paratactic and non-tactic (see Sections 2.1 and 2.2 on the difference). The latter includes cases of asyndetic coordination and subsumes other types of clausal connection (see below for examples). The paratactic connectives are themselves subgrouped into paratactic conjunctions and conjunctive adverbs. Exemplary items for these groups and subgroups are shown in Table 3.4. I will discuss them in turn in this section, giving examples of the conjunctions found in the corpus, and explain how they are dealt with in the analysis.

Table 3.4: German connectives used to express concessive relationships in the TC

Hypotaxis	Parataxis	ъс.	Non-tactic
	ConAdv	ParaConj	
obwohl wenn auch auch wenn selbst wenn obgleich wenngleich obschon während	aber $jedoch$ $doch$ $allerdings$ $other$	aber $doch$	coordination other

The generally most commonly used hypotactic conjunction to express concessive

⁵I use the term 'connective' distinctly from the term 'conjunction' to include ways of connecting clauses such as conjunctive adverbs.

relationships in German is *obwohl*. Example (19) shows the English ST sentence and the German translation.

(19) Although this idea facilitates evaluation and supervision, the Chinese do not seem to prize teamwork as do the Japanese and Scandinavians. (HBR 3/81,28)

Obwohl dieser Schritt die Bewertung der Arbeitsleistung und the evaluation of-the performance although this step and die Kontrolle erleichtert, sieht es nicht so aus, als ob diethe supervision facilitates looks it not as though the Chinesen die Teamarbeit ähnlich preisen werden wie die Japaner Chinese the teamwork similarly prize will the Japanese und Skandinavier. (HBM 1/82,71) and Scandinavians

The conjunction wenn in connection with an intensifier (called 'Gradpartikel', see König et al. 1990:25) such as selbst or auch, as exemplified in (20), is also counted as part of the hypotactic conjunctions, as it can usually be replaced by conjunctions such as obwohl with little semantic difference.

(20) She does not flinch at the need to restructure the company, EVEN THOUGH 270 workers will lose their jobs. (HBR 11/07,39)

Sie schreckt nicht vor der Notwendigkeit zurück, das Unternehmen she flinches not at the need the company

zu restrukturieren, SELBST WENN 270 Arbeiter dabei ihre Stelle to restructure even though 270 workers in-this their jobs verlieren. (HBM 1/08,96) lose

This is the case even though the intensifier may sometimes be quite far apart from the conjunction, as shown for *auch wenn* in example (21).

(21) He can demotivate by separating himself from certain members of the organization which may happen inevitably EVEN THOUGH he would want it otherwise. (HBR 2/77,59)

Er kann demotivieren, indem er sich von bestimmten Mitgliedern he can demotivate by he himself from certain members derOrganisation absondert wasunausweichlichAUCH of-the organisation separates what inevitably also dann geschieht, WENN er gerade dies vermeiden möchte. then happens when he at-that-point this avoid wants-to (HBM 3/82,46)

Other conjunctions that occur are the complex concessive conjunction wenn auch (see König et al. 1990:29), and in some cases während, as exemplified in (22).

(22) While he took time for actors to develop the spontaneous ideas and behavior which he needed, he also handled the stresses of time schedule and budget in a way which ensured that the production phase was completed on time. (HBR 2/77,59)

Während er sich beiden Schauspielern sehr viel While he for-himself with the actors very much von ihm benötigten spontanen Ideen und time took the by him needed spontaneous ideas and zu entwickeln, stellte er trotz Verhaltensweisen **Zeitdrucks** patterns-of-behaviour to develop made he despite time-pressure und Budgetbeschränkungen sicher, daß die Produktionsphase in der and budget-limits sure that the production-phase in the vorgegebenen Zeit abgeschlossen werden würde. (HBM 3/82,46) set time completed would be

Finally, the hypotactic conjunctions *obgleich*, *wenngleich* and *obschon* also express concession as shown in example (23), though they have become rarely used even in written German.

(23) Although the results achieved by corporate programs are uncertain, there's no uncertainty about their considerable expense. (HBR 2/82,100)

OBGLEICH die durch Unternehmenskampagnen zu erzielenden although the through corporate-campaigns to-be achieved

Resultate ungewiß sind, besteht kein Zweifel an den beträchtlichen results uncertain are exists no doubt in the considerable Kosten. (HBM 4/82,37)

costs

Concessive relationships can also be expressed by paratactic connectives, most commonly aber and doch. The former can occur either as a paratactic conjunction or as a conjunctive adverb. The distinction between the two is shown in example (24). In both translations of the English sentence, the connectives trigger a paratactic structure which is evident from the verb-second word order of the secondary clause. Example (24a) shows aber used as a paratactic conjunction. The conjunction connects the two clauses, but it is not part of either of them. Example (24b) has been slightly rearranged so that aber is now used as a conjunctive adverb. Like a conjunction, a conjunctive adverb connects two clauses semantically, but, according to Hentschel (2010:157), it acts as part of the verb phrase and is thus part of the syntactic structure instead of being outside of it, as is the case with conjunctions.

- (24) Although education and training won't hurt, and may even help, their effect on the supply of leaders is negligible. (HBR 2/77,89)
 - a. Erziehung und Ausbildung können zwar nicht schaden und sogar education and training can not harm and even ganz nützlich sein, aber ihre Wirkung auf das Angebot von quite useful be but their effect on the supply of Führern ist unbedeutend. (HBM 2/82,72) leaders is unimportant

b. Erziehung und Ausbildung können zwar nicht schaden und sogar
education and training can not harm and even

ganz nützlich sein, ihre Wirkung auf das Angebot von Führern
quite useful be their effect on the supply of leaders

ist ABER unbedeutend.
is however unimportant

The two connectives *jedoch* and *allerdings* are conjunctive adverbs in all cases and are used clause-internally. They are thus interchangeable with *aber* in example (24b). Because they are adverbs, they can also occur in clause-initial position, as shown in (25).

(25) CEMEX owns the Construrama brand and handles promotion but doesn't charge distributors, operate stores, or have decision-making authority, ALTHOUGH service standards must be met. (HBR 1/08,43)

Cemex ist Eigentümer der Marke Construrama. Das Unternehmen Cemex is owner of-the brand Construrama The company organisiert das Marketing, wickelt aberdie Geschäfte mit the marketing handles though the business organises with den Distributoren nicht direkt ab, betreibt keine Filialen the distributors not directly manages no branches and Allerdings müssen die hat keine Entscheidungsbefugnis. decision-making-authority However has no must the Servicestandards von Cemex eingehalten werden. (HBM 5/08,66) service-standards of Cemex adhered-to be

Further conjunctive adverbs include *gleichwohl* and *trotzdem*, which, in written German, usually occur in clause-internal position, as shown in example (26).

(26) Although today less in fashion and to many a relic of more autocratic times, the simple structure remains a widespread and necessary configuration. (HBR 1/81,103)

```
Heute ist sie weniger gefragt
                                und qilt
                                           vielen
                                                    als Relikt aus
today is it less
                      asked-for and counts to-many as relic
                                                              from
  autokratischeren Zeiten. Trotzdem ist sie nach wie vor
                          still
  more-autocratic times
                                       is
                                          it
                                              then as
                                                        now a
  weithin verwendete und notwendige Konfiguration. (HBM 2/82,7)
  widely used
                     and necessary
                                     configuration
```

The second major type of paratactic connective is the paratactic conjunction, of which we have already seen an example in (24a). An example of the conjunction doch is shown in (27).

(27) André could take a closer look at competitors' branding strategies— ALTHOUGH in many cases it would be an apples-to-oranges comparison. (HBR 2/08,49)

```
André Cleary könnte die Markenstrategien seiner Konkurrenten
André Cleary could the branding-strategies of-his competitors

genauer analysieren, DOCH in vielen Fällen würde er dabei
more-thoroughly analyse but in many cases would he in-this
Äpfel mit Birnen vergleichen. (HBM 3/08,108)
apples with pears compare
```

In many cases where *aber* is used as a conjunction, translators add the modal particle *zwar* as shown in (28), which can be roughly translated as 'it is true', 'admittedly' (see König et al. 1990:264).

(28) Finally, ALTHOUGH rewards are tied to performance, they are not tied to one or two specific measures. (HBR 1/76,65)

```
Schließlich sind Belohnungen zwar an die Leistung
                                                        geknüpft,
finally
           are rewards
                                   to the performance tied
  ABER sie
             sind nicht an eine oder zwei bestimmte meßbare
  but
        they are
                                      two specific
                                                      measurable
                 not
                         to one
                                 or
  Leistungen
               gebunden. (HBM 3/82,38)
  achievements tied
```

The group entitled 'coordination' contains clause complexes where the translator did not employ a concessive conjunction and connected the clauses asyndetically instead.

(29) Although the global account managers have little or no authority over local operations [...], they are expected to take the lead in expanding accounts into new product lines [...]. (HBR 9/07,102)

Einerseits besitzen die Global-Account-Manager gegenüber on-the-one-hand own the global-account-managers in-contrast-to

den lokalen Vertriebsorganisationen bestenfalls beschränkte the local distribution-organisations at-best limited

Weisungsbefugnisse [...]. Andererseits wird von ihnen erwartet, authority on-the-other-hand is of them expected

beim Ausweiten von Accounts auf neue Produktlinien [...], die in-the expansion of accounts to new product-lines the

Führung zu übernehmen. (HBM 1/08,66) leadership to take

There are some types of translation that will not be counted as hypotactic or paratactic. Those translations include, for example, instances where the concessive clause has been omitted in translation or the concessive relationship removed. If a clause is introduced by the preposition *trotz*, which nominalises the concessive clause as shown in example (30), the clause complex will not be counted as tactic because the verb that the adverbial clause relates to in the ST has been removed by the translator.

Non-finite clause complexes are not counted among the tactic items either. Non-finite structures can of course have a tactic relationship (Halliday 1985/2004:386), but in my analysis I will concentrate on finite structures. This is because the ST clause complexes that are analysed are finite, so that instances where the translator introduced a non-finite structure that does not exist in the ST, as for example in example (30), the resulting German clause complex will not be included among the tactic instances.

(HBM 1/83,60)

(30) Although we have seen that there are certain obstacles to the internationalization of advertising, there are powerful reasons to try to make it work. (HBR 4/78,102)

```
TROTZ all der Hindernisse, die sich einer Internationalisierung despite all these obstacles which REFL of-an internationalisation der Werbung in den Weg stellen, gibt es gewichtige Gründe, of advertisement into the path put are there powerful reasons die es rechtfertigen, den Versuch dennoch zu unternehmen. which it justify the attempt yet to make
```

The final phenomenon to be mentioned here is the verbless concessive clause as shown in example (31). Because there is no verb in the clause containing the concessive connective, these clauses are not counted as tactic.

(31) Helen, Though less sure, was happy to say, Yeah, I just want to stay dry. (HBR 3/77,100)

```
Helen, WENN AUCH weniger entschieden, war glücklich, sagen zu
Helen even though less sure was happy say to-be
dürfen: Ich möchte nur trocken bleiben. (HBM 1/83,90)
allowed I want simply dry to-stay
```

The methodology described so far has concentrated on analysing the decisions of translators in the rendering of hypotactic concessive clause complexes, i.e. whether they kept or changed the hypotactic relationship of the ST clause complex in the translation. However, it is also instructive for the analysis to give an account of the hypotactic concessive conjunctions that were not triggered by the ST, but were introduced by translators into environments that in the ST were paratactic, did not contain concessive conjunctions or were not concessive at all. In the analysis, I therefore also look at whether there has been a diachronic change in the likelihood with which translators introduce hypotactic concessive conjunctions into their target texts. Examples (32) to (34) show instances of such cases.

(32) Salespeople might complain and schedulers might be pushed to the limits of their ingenuity, BUT the rule was firm. (HBR 3/82,32)

AUCH WENN die Verkäufer sich beschwerten und die Planer bis even though the salespeople complained and the schedulers up

an die Grenze ihres Erfindungsreichtums getrieben wurden: Diese to the limit of-their ingenuity driven were this

Regel galt unumstößlich. (HBM 2/82,20) rule was unalterable

(33) Why were these attempts to automate the nonstore purchasing of groceries so short-lived, especially GIVEN favorable demographic and lifestyle trends? (HBR 4/81,75)

Warum waren diese Versuche, den Nonstore-Einkauf von why were these attempts the nonstore-purchasing of

Lebensmitteln zu automatisieren, so kurzlebig, OBWOHL die Trends groceries to automate so short-lived although the trends

hinsichtlich Bevölkerungsstruktur und Lebensstils günstig waren? regarding demography and lifestyle favourable were (HBM 4/82,14)

(34) However, the councilmen desired to continue the new budget system DESPITE a lack of significant cost savings or cost reallocations. (HBR 6/77,76)

Die Stadträte wünschten aber, am neuen Budgetierungssystem the councilmen desired however to-the new budget-system

festzuhalten, OBWOHL es zu keiner signifikanten Einsparung oder to-stick although it to no significant saving or

Neuverteilung von Mitteln gekommen war. (HBM 1/83,13) reallocation of-the means come had

Example (32) shows a clause complex that was turned from a paratactic construction using but into a hypotactic construction using $auch\ wenn$. In (33), on the other hand, we see a case where the ST does not have a conjunction as

such, but the conjunctive adverb *given*, which is used to express concession and has been translated into German as the conjunction *obwohl*. Finally, in example (34), the ST has the preposition *despite*, while in the target text, the translator has again chosen to use the conjunction *obwohl*.

To study translators' decisions to introduce hypotactic conjunctions into the target text, I have searched the TC for the three hypotactic conjunctions *obwohl*, wenngleich and auch wenn, as well as the paratactic conjunction doch as a control item to test whether any change observed is exclusive to hypotactic items or whether there may be a general increase in conjunction supplication.

3.4 Causal connectives

This section provides details of the method of analysing the causal connectives in the corpus. The English causal conjunctions whose translations will be analysed in this study are *because*, *as*, *for* and *since*. The German translations of those conjunctions have been arranged into groups of cohesive devices as shown in Table 3.5. In this subsection, I will give examples of the most common cohesive devices expressing a causal relationship found in the corpus and explain how they are dealt with in the analysis.

Table 3.5: German connectives used to express causal relationships in the TC

Hypotaxis	Parataxis	Non-tactic
weil	denn	coordination
da	deshalb	modal clause
		transition phrase
		omissions

The main causal conjunctions in German are the two conjunctions weil and da, which trigger a hypotactic structure. As shown in examples (35) and (36), the dependent clauses introduced by weil and da have a verb-final structure.

(35) The market leader was leaving money on the table, possibly BECAUSE its image no longer appealed to customers. (HBR 11/07,110)

```
Möglicherweise verdiente der Marktführer
                                          nicht mehr
                                                         so viel.
                        the market-leader not
possibly
              earned
                                                anymore so much
          er mit
                   seinem Image die
  WEIL
                                         Kunden
                                                    nicht mehr
  because he with his
                           image to-the customers no
                                                          longer
  ansprach. (HBM 3/08,78)
  appealed
```

(36) Since it is management I hope to influence in this article, not the public, I shall rely mostly on simple examples. (HBR 6/80,102)

```
DA ich hoffe, mit diesem Artikel Managementkreise zu beeinflussen since I hope with this article management-circles to influence und nicht die Öffentlichkeit, werde ich in erster Linie auf einfache and not the public will I predominantly to simple Beispiele zurückgreifen. (HBM 2/82,82) examples resort
```

Clause complexes connected by *denn* and *deshalb* are paratactic, as shown in the examples (37) and (38). The clauses in (37) are connected by the conjunction *denn*, but could also stand alone because they are both main clauses with a verb-second structure.

(37) This is not a chancy decision BECAUSE most of the time management will be dealing with trained and controlled egos. (HBR 1/68,72)

```
Diese Entscheidung ist keineswegs risikoreich, DENN das Management this decision is not-at-all risky because the management wird es meistens mit geschulten und kontrollierten Egos zu tun will mostly with trained and controlled egos to do haben. (HBM 1/82,32) have.
```

The clause complex in (38) is another example of a paratactic clause complex where the clauses are connected by the conjunctive adverb deshalb.

(38) Yet, BECAUSE the drug enhanced efficiency, its use was necessary to keep the company going. (HBR 5/80,86)

```
Am unangenehmsten sei
                                   aber.
                                            da\beta
                                                  diese
                                                        Droge
    most-unpleasant is-said-to-be however that this
                                                        drug
 and ererse its
                   auch die Effizienz fördere; deshalb sei
 on-the-other-hand also the efficieny increase therefore is-deemed
 sie unerläßlich, um
                          das Unternehmen in Gana
     imperative
                 in-order the company
                                             in motion to keep.
 (HBM 2/83,61)
```

The group 'coordination' contains cases where the two causally related clauses in the ST are joined either asyndetically or by the coordinator *und*. It also contains cases where a full stop has been introduced into the ST clause complex, so that the ST sentence is split into two sentences in the TT. Such a case is given in example (39):

(39) Using regression analysis is more reliable than asking people how much they are willing to pay for each feature BECAUSE consumers often can't explain how they make their choices and they often don't do what they say. (HBR 11/07,110)

Diese Methode ist zuverlässiger, als Kunden zu fragen, wie viel this method is more-reliable than customers to ask how much

siefür einzelne Leistungsmerkmale zu zahlen bereit sind.they for individual features to spend prepared are Käufer können oft ihre Entscheidung nicht erklären, wie sie buvers can often not explain how they their decision treffen, und sie tun häufig nicht das, wassiesagen. make and they do often that what they say not (HBM 3/08,78)

The German clause complex in (2) contains two coordinated main clauses, which are not connected syntactically and therefore do not have a tactic relationship.

It could be argued that cases of coordination as defined above have a logico-semantic relationship of extension rather than enhancement and should therefore not form part of the analysis. However, as was argued in Section 2.2, the underlying logico-semantic relationship can be inferred to be one of causal enhancement. Thus, we know that the second sentence states the cause to the first one in this clause complex, and though the translator has translated them asyndetically, the underlying logico-semantic relationship is one of causal enhancement.

The remaining types of non-tactic translations contain cases where modal clauses or transition phrases were used. These clause complexes were considered neither hypotactic nor paratactic even though they can in some cases certainly have a tactic relationship, but they simply do not match the criteria of the analysis. In what are considered modal clause translations, the subordinate clause can be introduced, for instance, by dadurch, dass, as in example (40).

(40) The normal logistical problem is even more acute for this worker BECAUSE she has no nonworking relative living nearby who might prepare the food. (HBR 3/81,28)

Das Verpflegungsproblem der Arbeiterin wird Dadurch nochcatering-problem of-the worker is by-the-fact even verschärft, DASS sie keine nichtberufstätigen Verwandtenworsened that she no non-employed relatives in der Nachbarschaft hat, die das Essen vorbereiten könnten. her neighbourhood has who the food prepare could (HBM 1/82,71)

In Hallidayan terminology, the logico-semantic relationship is enhancement, but the feature specified is 'means', not cause (Halliday 1985/2004:411). Furthermore, the German clause complex contains a subordinate clause introduced by dass rather than a causal clause. Thus, there is grammatical evidence to suggest that the translator has chosen to alter the logico-semantic relationship between the clauses and replace the causal link with a modal link. This is why I have decided not to count modal clauses as either paratactic or hypotactic for the purposes of this study.

A further group of disregarded clause complexes is called 'transition phrase'.

A transition word or phrase is used to express a causal relationship between two clauses without using a conjunction, e.g. aus dem Grund, dass ('for the reason that', see example (41)) or schließlich ('after all').

(41) [...] simply BECAUSE they never even knew those rights existed. (HBR 6/08,129)

```
Und zwar nur Aus dem einfachen Grund, die and indeed only for the simple reason that to-them the Existenz dieser Rechte nicht bekannt war. (HBM 8/08,62) existence of-these rights not known was
```

The group also includes clause complexes that are more descriptive in expressing the causal relationship, such as example (42).

(42) It's easy to misjudge the role of the chief strategy officer, in part BECAUSE the title itself is misleading. (HBR 10/07,84)

```
Viele haben eine falsche Vorstellung davon, was ein Chief Strategy many have a wrong impression of-that which a chief strategy Officer eigentlich ist. Daran ist die missverständliche Bezeichnung officer actually is in-this is the misleading title NICHT GANZ UNSCHULDIG. (HBM 1/08,80) not entirely blameless
```

The resulting clause complexes can be paratactic or hypotactic because the syntactic structure is not determined by the transition phrase. In the analysis of hypotaxis and parataxis, therefore, they cannot be associated exclusively with one type of taxis.

The final group, called 'other', collects clause complexes in which the translator either omitted the causal clause entirely, or where a preposition was used instead of a conjunction (e.g. *aufgrund von* ('due to') or *wegen* ('because of')). The resulting clause complexes cannot be associated to either parataxis or hypotaxis.

In this chapter, I have described the methodology that is employed to conduct the analysis for this study. I have given details on the content and structure of the corpus and provided a short background on authors and intended readership of the magazines. The two-step diachronic corpus analysis was then explained, followed by a discussion of the individual cohesive devices that are found in the German translations of the articles. In the next chapter, I will proceed to present the results and findings of the analysis.

4 Analysis of the translation corpus

The analysis conducted in this chapter gathers the quantitative evidence necessary to address the first research question of this study. After introducing the required units for measuring frequencies (Section 4.1), I will analyse the frequency of use patterns with regards to taxis in clause complexes in the TC and compare them between the two analysed time periods of 1982–3 and 2008. This will be done for concessive (Section 4.2) and for causal (Section 4.3) clause complexes. My aim is to find out whether the paratactic interrelationship between those clause complexes has indeed become a major use pattern and whether it has even replaced hypotaxis as the preferred degree of interrelationship over the course of the 25 years. I also ascertain, through an analysis of the PC whether changes in use pattern frequencies found in the articles from 2008 are indeed attributable to changing translation conventions, or whether they represent a syntactic intervention by the editors of the magazine.

Section 4.4 contains an analysis of conjunctions that were introduced by translators into the target text (TT). This will complement the previous analysis by looking at the behaviour of the translators with regards to the conjunctions in question not only in their function as translations of the equivalent English conjunctions, but also as linguistic devices employed by translators of their own volition.

Finally, in Section 4.5, I look at translators' and editors' behaviour with regards to sentence-splitting, i.e. cases where one TT sentence is translated as two or more. This phenomenon has also been referred to in the literature as 'sententialisation' (Fabricius-Hansen 1999:181) and is investigated both in the TC and the PC to find out whether translators or editors (or both) are responsible for the observed developments.

4.1 Frequency units and measurements

The data in this and the next chapter are presented using three values: the absolute frequency (n), the normalised frequency (f) and the proportional frequency (p). As the data from the two time periods in the TC and CC differ in size, the absolute frequencies, i.e. the actual number of occurrences, must be converted to normalised frequencies for the analysis in order to allow us to compare the values independently of the size of each corpus. The normalised frequency f of an item f, measured in instances per hundred thousand words f (i/htw), is therefore the absolute frequency f multiplied by 100,000, and then divided by the size of the corpus in which this item occurs f (f), where f is the type of corpus and f is the sample period):

$$f_i = \frac{n_i \cdot 100,000}{N_{ts}}$$

The third value, the proportional frequency, is the percentage of an item occurring within its group of related items, e.g. paratactic conjunctions. The proportional frequency allows us to ascertain whether a given item is more or less favoured at a certain point in time because it tells us how often the item is used within the group of linguistic items under analysis. Changes to this frequency are measured in percentage points (pp).

The distribution of the most important data will be tested for statistical significance using the chi-square (χ^2) test, which is commonly applied in corpus linguistics to 'test whether the distribution of the observed frequencies of occurrence deviate significantly from an expected distribution' (Gries 2010:17). Two levels of statistical significance will be used: p<0.01 will be considered statistically significant, and p<0.001 will be considered highly statistically significant.

However, the normalised frequencies alone cannot be used to compare trends between the TC and the CC. That is because, in the CC, every appropriate instance of those items with multiple functions, such as *aber*, is counted, while in the TC, only those instances that are products of the translation process are counted. That means the normalised frequencies will be entirely different when comparing one corpus with the other, which is one of the major problems of diachronic corpus studies in general. Becher (2011) avoided this problem by stating proportional frequencies in the analysis of the translation corpus and normalised

frequencies in that of his comparable corpus, which has certain drawbacks with regards to comparability.

Therefore, to be able to compare trends between the corpora, we need to focus on the difference between the normalised frequencies instead of the frequencies themselves. Because each set of normalised frequencies comes from either the TC or the CC, it is calculated under the same constraints, and therefore the differences between the normalised frequencies are not affected by the method of analysis. So to describe the diachronic difference between the corpora, we have to correlate the corresponding data from each of the two sample points (1982–3 and 2008) so that frequencies can be compared.

To do this, I propose to use the relative frequency ratio (R) as a measurement of diachronic difference between two sample points in the corpus. The relative frequency ratio is usually used to compare selections of a corpus with the entire corpus (Gries 2010:8), and is defined as 'the contrast between the word's relative frequency f within the document and its relative frequency f in general use [...]. Such a contrast can be represented by the ratio f/r' (Edmundson & Wyllys 1961:227).

The relative frequency ratio is usually applied in corpus studies to compare word frequencies between subject-specific and general texts and has been described as being 'mainly useful to find subject-specific collocations' (Manning & Schütze 1999:176). The prime example of this method is the corpus study by Damerau (1993:435). He claims that the relative frequency of a word will be higher in a domain corpus than in a general corpus, and uses the relative frequency ratio to extract key words from the subject-specific corpora. In terms of the comparison of two corpora, Damerau found that 'a simple ratio of subject matter relative frequency to total sample relative frequency is about as good as more elaborate calculations, and in some instances superior' (1993:444f). As I will show in this study, the ratio can also be applied to show diachronic developments between corpora at two stages of development because a diachronic comparison of corpora at two points in time is basically a comparison of the frequency of the features under analysis at the later stage with the frequency of that same feature at the earlier stage.

The relative frequency of a word is calculated by dividing the absolute frequency by the corpus size. Rather than setting the relative frequency of an item within a document in relation to general use, as usually happens when the rel-

ative frequency ratio is used, we want to set the relative frequency of an item in the 2008 TC in relation to that of the same item in the 1982–3 corpus so that the computed value will tell us something about potential diachronic changes. The higher the numerator (i.e. the relative frequency of a given construction in the 2008 corpus) in relation to the denominator (i.e. the relative frequency of a given construction in the 1982–3 corpus), the higher the value. The formula to calculate the relative frequency ratio is below, to be read as 'the relative frequency ratio R of an item i is the quotient of the relative frequency r of that item i in the 2008 corpus and the relative frequency r of that item i in the 1982–3 corpus.

$$R_i = \frac{r_{i2008}}{r_{i1982-3}} = \frac{\frac{n_{i2008}}{N_{2008}}}{\frac{n_{i1982-3}}{N_{1982-3}}}$$

Thus, a high value means that there is a diachronic increase in relative frequency as well as in normalised frequency because both values feature in the formula for the relative frequency ratio. Due to the exponential nature of the graph representing the equation of R, we will consider a value as indicating a decline if it is below 0.5, but in order to indicate an increase in frequency, it must be above 2. A value of 1 means that the frequencies in both corpora are exactly the same, so the closer a value is to 1, the less change there is in the frequency.

Now that the necessary tools for the analysis have been discussed, we are ready to begin the analysis of concessive clause complexes.

4.2 Concessive clauses in the translation corpus

In this section, I will present the analysis of the concessive constructions in the TC. Clause complexes containing the English concessive constructions although, though, even though and while will be identified and their German translations investigated.

I will begin by giving the absolute and the normalised frequencies of the English concessive conjunctions and their German translations. Then, the conjunctions will be discussed as groups according to their syntactic function as either hypotactic conjunctions, paratactic conjunctions or conjunctive adverbs (see Section 3.3 for an explanation of these terms). The third part of the analysis will then treat them as grouped together by their degree of interdependency as paratactic or hypotactic.

As explained in Section 3.3, the analysis differentiates between instances of aber and doch where they were used as conjunctive adverbs, which is shown in Tables 4.1 and 4.2 as 'Adv', and where they were used as paratactic conjunctions (jedoch is a conjunctive adverb in all cases and thus not specially marked¹). The conjunctive adverbs trotzdem, gleichwohl and dennoch are grouped together as 'other (Adv)'.

Table 4.1: Translations of concessive conjunctions in the 1982–3 TC

	alth	ough	the	ough	eve	n th.	W	hile	To	otal
	\mathbf{n}	f	n	f	n	f	n	f	\mathbf{n}	f
obwohl	55	22.3	14	5.7	19	7.7	9	3.7	97	39.4
$wenn\ auch$	5	2.0	7	2.8	3	1.2	_	_	15	6.1
$auch\ wenn$	1	0.4	1	0.4	9	3.7	1	0.4	12	4.9
$selbst\ wenn$	2	0.8	_	_	7	2.8	_	_	9	3.7
obgleich	4	1.6	2	0.8	1	0.8	_	_	7	2.8
wenngleich	_	_	3	1.2	_	_	_	_	3	1.2
obschon	1	0.4	_	_	2	0.8	_	_	3	1.2
$w\ddot{a}hrend$	_	_	1	0.4	_	_	15	6.1	16	6.5
aber (Adv)	13	5.3	6	2.4	_	_	15	6.1	34	13.8
jedoch	5	2.0	1	0.4	_	_	3	1.2	9	3.7
doch (Adv)	2	0.8	_	_	_	_	_	_	2	0.8
allerdings	2	0.8	_	_	_	_	_	_	2	0.8
other (Adv)	4	1.6	_	_	_	_	1	0.4	5	2.0
aber	10	4.1	1	0.4	_	_	7	2.8	18	7.3
doch	1	0.4	1	0.4	_	_	1	0.4	3	1.2
coordination	2	0.8	2	0.8	1	0.4	2	0.8	7	2.8
other	3	1.2	4	1.6	1	0.4	6	2.4	14	5.7
Total	109	44.2	43	17.5	43	17.5	60	24.4	255	103.5

Tables 4.1 and 4.2 show the absolute and normalised values of all the TT expressions that were used in the German texts to translate the four English concessive conjunctions under analysis. It is evident that the concessive conjunctions in the English STs have decreased in frequency to some extent. While in 1982–3, concessive conjunctions occurred at a frequency of 103.5 i/htw, in the more recent corpus they only occur at a frequency of 72.6 i/htw. As there is a decrease in

¹There is one instance where *jedoch* was used as a paratactic conjunction, which is ungrammatical. That instance is therefore omitted in the table.

Table 4.2: Translations of concessive conjunctions in the 2008 TC

	altł	nough	the	ough	eve	n th.	W	hile	To	tal
	n	f	n	f	n	f	n	f	n	f
obwohl	27	10.4	7	2.7	7	2.7	6	2.3	47	18.1
$wenn\ auch$	1	0.4	2	0.8	_	_	_	_	3	1.2
$auch\ wenn$	7	2.7	1	0.4	9	3.5	_	_	17	6.5
$selbst\ wenn$	_	_	_	_	2	0.8	1	0.4	3	1.2
obgleich	2	0.8	1	0.4	1	0.4	1	0.4	5	1.9
wenngleich	_	_	1	0.4	_	_	_	_	1	0.4
obschon	_	_	_	_	_	_	_	_	6	2.3
$w\ddot{a}hrend$	_	_	_	_	_	_	6	2.3	6	2.3
aber (Adv)	7	2.7	4	1.5	1	0.4	4	1.5	16	6.1
jedoch	3	1.2	2	0.8	1	0.4	5	1.9	11	4.2
doch (Adv)	8	3.1	_	_	_	_	_	_	8	3.1
allerdings	3	1.2	2	0.8	_	_	_	_	5	1.9
other (Adv)	2	0.8	_	_	_	_	1	0.4	3	1.2
aber	9	3.5	1	0.4	1	0.4	13	5.0	24	9.2
doch	10	3.8	3	1.2	2	0.8	9	3.5	24	9.2
coordination	4	1.5	_	_	_	_	3	1.2	7	2.7
other	6	2.3	4	1.5	_	_	_	_	10	3.8
Total	89	34.2	28	10.8	24	9.2	49	18.8	190	72.6

the case of every conjunction, this is not a phenomenon limited to a certain conjunction but a general development. It might mean that concessive relationships are becoming rarer in this genre, or that authors increasingly find other ways of expressing such a relationship. This general decrease will also have an effect on the frequency measurement of individual instances, as it is hard to separate an individual decrease from the overall decrease of conjunctions.

However, the decline in ST conjunctions is only partly responsible for the general decline of hypotactic conjunctions that we notice when looking at the German equivalents. The frequency of *obwohl* has decreased strongly (from 39.4 i/htw down to 18.1 i/htw). Regarding the remaining conjunctions, even though there are not many instances in this corpus, it seems that in the 1982–3 corpus, translators maintained a diversity of means to express concessive relationships (wenn auch, selbst wenn, auch wenn), whereas the genre convention now seems to be the intensifier–conjunction combination auch wenn (6.5 i/htw), with wenn

auch and selbst wenn both occurring at only 1.2 i/htw.

A development is also noticeable in the case of *aber*. As a conjunctive adverb, its frequency has fallen from 13.8 i/htw to 6.1 i/htw, while the frequency of *aber* as a paratactic conjunction has increased from 7.3 i/htw to 9.2 i/htw. This is mainly due to a shift in the way *while* is translated. In the 1982–3 corpus, it was translated as the conjunctive adverb *aber* in one out of four cases (see Table 4.1). In the more recent corpus, however, that construction is only used in one out of ten cases (see Table 4.2), while the paratactic conjunction *aber* is now the most popular choice.

Accompanying this is the rise of another paratactic conjunction, doch, which was hardly used at all to translate while in the 1982–3 corpus, but is now the second most popular choice. The rise of doch in general, especially as a paratactic conjunction, but also as a conjunctive adverb, is one of the more noticeable developments visible in the data. Those observations are made independently of where in the clause the conjunction in question appears. The clause-position of the conjunction has no effect on the chosen translation or its taxis.

Table 4.3: Concessive syntactic function types in the 1982–3 TC

			1982-	-3	
		Hyp. Conj.	ConAdv	ParaConj	Other
although	n	67	26	11	5
(n=109)	p	61%	24%	11%	4%
$(f{=}44.2)$	f	27.2	10.6	4.5	2.0
though	n	28	7	2	6
(n=43)	p	65%	16%	5%	14%
$(f{=}17.5)$	f	11.4	2.8	0.8	2.4
even though	n	41	_	_	2
(n=43)	p	95%	0%	0%	5%
$(f{=}17.5)$	f	16.6	_	_	0.8
while	n	25	19	8	8
(n=60)	p	42%	32%	13%	13%
$(f{=}24.4)$	f	10.1	7.7	3.2	3.2
Total	n	161	52	21	21
(n=255)	p	63%	20%	8%	9%
(f=103.5)	f	65.4	21.1	8.5	8.5

Table 4.4: Concessive syntactic function types in the 2008 TC

			2008	}	
		Hyp. Conj.	ConAdv	ParaConj	Other
although	n	37	23	19	10
(n=89)	p	42%	26%	21%	11%
$(f{=}34.2)$	f	14.2	8.8	7.3	3.8
though	n	12	8	4	4
(n=28)	p	65%	16%	5%	14%
$(f{=}10.8)$	f	4.6	3.1	1.5	1.5
even though	n	19	2	3	_
(n=24)	p	79%	8%	13%	0%
(f=9.2)	f	7.3	0.8	1.2	_
while	n	14	10	22	3
(n=49)	p	29%	20%	45%	6%
$(f{=}18.8)$	f	5.4	3.8	8.5	1.2
Total	n	82	43	48	17
(n=190)	p	43%	23%	25%	9%
(f = 73.0)	f	31.5	16.5	18.4	6.5

What we have observed so far is that there seems to be a trend from a subordinated or at least partly joined structure using hypotactic conjunctions or conjunctive adverbs to a more coordinated connection of the clauses using paratactic conjunctions. To get a clearer picture of what is going on, we must group the raw data into categories. First, the conjunctions will be grouped by their syntactic function of hypotactic conjunction, conjunctive adverb, paratactic conjunction and 'other'. The resulting data is shown in Tables 4.3 and 4.4, for whom the chi-square test shows that the distribution is highly significant $(\chi^2 = 28.64 \ (df = 3), \ p < 0.001)$.

The tables state the absolute frequency, the normalised frequency and the proportional frequency. The latter gives the proportion of the absolute frequency of the construction within its group (reading example: *although* was translated as a subordinator 67 out of 109 times, so subordinators make up 61% of all translations of *although*).

The frequency of hypotactic conjunctions has decreased considerably. Their normalised frequency has halved (65.4 i/htw to 31.5 i/htw), and in relative terms

they are now only used in 43% of cases, while they were used in 63% of cases in 1982–3. The frequency of the conjunctive adverb has remained relatively stable (21.1 i/htw to 16.5 i/htw, and a relative increase of merely 3pp). The normalised frequency of the paratactic conjunction, on the other hand, doubles (8.5 i/htw to 18.4 i/htw) and its proportional frequency even triples. In all, the total normalised frequency values show a significant diachronic distributional difference between hypotactic conjunctions, conjunctive adverbs and paratactic conjunctions ($\chi^2 = 11.549$ (df = 2), p < 0.01). While in 1982–3, about two thirds of all English concessive clause complexes were translated using a hypotactic structure, and only a tenth were translated by paratactic structures, in the 2008 corpus, not even half of all instances are hypotactic constructions while the paratactic constructions have increased to about one quarter. The development is shown comprehensively in the following bar chart.

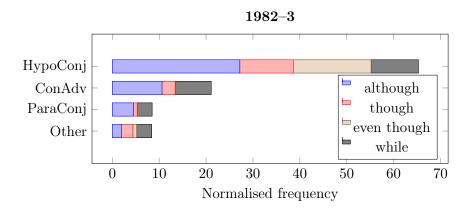


Figure 4.1: Normalised frequency values for the syntactic function types in the 1982–3 TC

Figures 4.1 and 4.2 show the four concessive conjunctions under analysis and their normalised frequencies in 1982–3 and 2008. The f-values are stacked so that their share of the total can also be gleaned from this figure. Comparing the full size of the bars, we notice that each bar representing a 2008 value is smaller than that representing the corresponding 1982–3 value, with the exception of the paratactic conjunction, which has grown in size. The most noticeable development in the graph is that of the hypotactic conjunction, whose bar has almost halved, while the development of the conjunctive adverb happens comparably slowly.

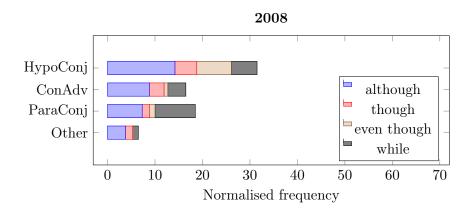


Figure 4.2: Normalised frequency values for the syntactic function types in the 2008 TC

Table 4.5 shows the relative frequency ratios of the three functional types of concessive conjunctions in the TC:

Table 4.5: Types of concessive conjunction and their relative frequency ratios

Item	R
Hypotactic Conjunction Conjunctive Adverb	0.4821 0.7827
Paratactic Conjunction	2.1635

The R-values in Table 4.5 have been entered into the graph in Figure 4.3. A line has been drawn at y=1 to show the border between increase and decrease in frequency. As stated in Section 4.1, the closer an item is to that line, the less diachronic change the item exhibits. Items below the line are decreasing and items above it are increasing in relative frequency. The advantage of such an R-graph is that we can visualise both general diachronic developments as well as trends from specified groups of items, such as hypotactic or paratactic conjunctions.

The graph shows what we have been able to glean from Tables 4.3 and 4.4: hypotactic conjunctions are decreasing to a significant extent (as their relative frequency ratios are nearer to 0 than to 1). Conjunctive adverbs are decreasing slightly, but the relative frequency ratio is close to 1, so there is no significant change. Paratactic conjunctions are on the increase. As the graph goes steadily

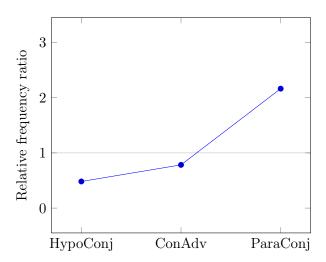


Figure 4.3: R-values of functional groups of conjunctions in the TC

upwards (i.e. each value is higher than the one before), there is a clear trend from hypotaxis to parataxis. Such a development towards a more loosely joined structure exemplifies the general shift in preference away from hypotaxis and towards parataxis, and mainly expresses itself by an increase in frequency of paratactic conjunctions.

Table 4.6 displays the items grouped together by taxis. It shows that, in the 1982–3 time period, English concessive conjunctions were mostly translated by German conjunctions that require a hypotactic structure (61% and 67%). The conjunction *while* is the only one in the 1982–3 corpus that is translated predominantly paratactically (if only by a small margin). A third of all instances of *although* is translated paratactically, and only a quarter of the occurrences of *though*.

In the 2008 time period, the situation has changed considerably. The rise of the paratactic structure as the preferred use pattern is clearly visible in the change of translation choices for *even though*. In 1982–3, this conjunction was not translated paratactically at all, but in 2008, it received a paratactic rendering in one in five cases. So it seems that translators in the 1982–3 corpus perceived a stronger sense of concession in *even though* which translators of today no longer perceive, or at least not as strongly. *Although* and *though* now receive a hypotactic translation in only just over 40% of cases, and, in the case of *although*, a paratactic translation in half the cases, and *though* has a paratactic translation

Table 4.6: Degrees of interdependency in the TC listed by ST concessive conjunctions

	Hypotaxis			F	Parata	xis		Other		
1982-3	n	f	р	n	f	р	n	f	р	
although	67	27.2	61%	39	15.8	36%	3	1.2	3%	
though	28	11.4	67%	11	4.5	24%	4	1.6	10%	
even th.	41	16.6	95%	1	0.4	2%	1	0.4	2%	
while	25	10.1	44%	29	11.8	48%	6	2.4	8%	
Total	161	65.4	63%	80	32.5	32%	14	5.7	5%	
2008										
although	37	14.2	42%	46	17.7	51%	6	2.3	7%	
though	12	4.6	43%	12	4.6	43%	4	1.5	14%	
even th.	19	7.3	79%	5	1.9	21%	_	_	0%	
while	14	5.4	28%	35	13.4	72%	_	_	0%	
Total	82	31.5	43%	98	37.7	52%	10	3.8	5%	

in 44% of cases. While, where paratactic translation was only marginally more common in 1982–3, is now translated paratactically in three quarters of cases.

The normalised frequency of paratactic constructions, on the other hand, shows only a slight increase, while those of the hypotactic constructions have halved. This means that, while the total amount of concessive constructions is falling, that decrease is mostly borne by the hypotactic concessive constructions, while paratactic concessive constructions are hardly affected at all. Table 4.7 shows the total values for hypotactic and paratactic structures and the statistically highly significant change that has taken place in the 25 years that separate the two time periods ($\chi^2 = 18.20$ (df = 1), p < 0.001).

Table 4.7: Diachronic change in the taxis of concessive clause complexes in the TC

		1982-3	3		2008		Change		
	n	f	p	n	f	p	f	p	
Hypotaxis	161	65.4	63%	82	31.5	43%	-33.8	-20pp	
Parataxis	80	32.5	31%	98	37.7	52%	+5.2	+21pp	
Other	14	5.7	5%	10	3.8	5%	-1.8	0pp	
Total	255	103.5		189	73.0		-30.5		

In the interpretation of results from diachronic corpus studies, we need to con-

sider both normalised frequencies as well as proportional frequencies within a group. Looking at the proportional frequency of paratactic constructions, we see a rather strong increase of 21pp. The normalised frequency, on the other hand, tells us that parataxis is stable. Both values are important to consider because neither of them is in itself a reliable measurement of diachronic difference in the frequency of the item. The normalised frequency, which is based on the absolute frequency, tells us how frequently a word occurs in the corpus in general. While that makes it a guide to the actual frequency of the item, it does not tell us anything about the relationship of that item with other related items, nor about the proportional representation of the item within its group. For instance, judging only based on normalised frequency values, paratactic constructions have remained stable between 32.5 and 37.7 i/htw.

But such a conclusion would hide the fact that, because the total number of concessive constructions has fallen, the proportion of paratactic constructions used to express concessive relationships has risen. The change in the proportion is brought on by the overall decrease of conjunctions in the corpus, so even though the absolute frequency of parataxis has not increased, its proportion of the total amount of conjunctions has. Hypotactic structures, on the other hand, have declined by 20pp and 33.8 i/htw, so both normalised frequency and share have fallen, and it can be inferred that hypotactic structures have undergone a major decrease.

Figure 4.4 shows the R-values of hypotaxis (R = 0.4821) and parataxis (R = 1.1595). The 'other'-group is not shown in the graph because it remains at the statistical significance threshold of 5% in both sample periods, but it is shown in Figure 4.5. The R-value for hypotaxis is the same as that for hypotactic conjunctions in Figure 4.3, showing a decrease. The value for parataxis is close to 1, which means that there is no diachronic change in its relative frequency ratio.

The bar chart in Figure 4.5, on the other hand, shows that there is a change in the proportional frequency, with parataxis increasing and hypotaxis decreasing. Interpreted together, we can now say that there is a proportional change between hypotaxis and parataxis, and that this change is due to the decrease in frequency in hypotactic constructions, and not to an increase in paratactic constructions.

The main findings from the TC are that there is a decline in hypotactic structures but no significant increase in normalised frequency in paratactic structures

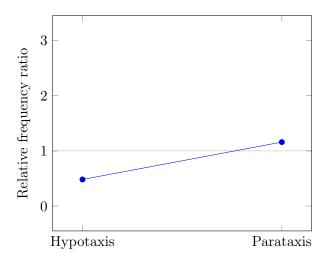


Figure 4.4: R-values of the taxis of concessive clauses in the TC

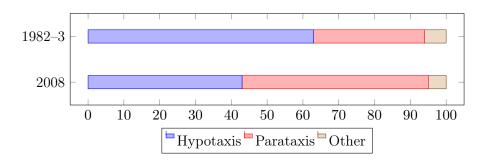


Figure 4.5: Proportional development of the taxis of concessive clauses in the TC

when comparing the data from 1982–3 with that from 2008. Due to the decline of hypotactic structures, paratactic translations have increased their share of the total number of translations of concessive structures, though both types of taxis are still regularly used and hypotaxis has not quite been replaced as the major use pattern yet. As the ST data shows, this diachronic change has its motivation within the target language context, as the source language English does not seem to exhibit a development away from hypotaxis.

To test whether these findings are indeed issues of translated language instead of being due to the mediation process, I have searched for the above conjunctions in the PC and summarised them into the groups hypotaxis and parataxis. The result is that thirteen clause complexes were translated hypotactically and 62 were translated paratactically, and in each case only one instance was changed

to the other taxis by the editor. Due to the low level of influence of the mediation process on taxis, we can conclude that editors do not exert a significant influence on the use pattern shift, but that translators are responsible for the shift of hypotaxis towards a minor use pattern.

4.2.1 The sentence-initial concessive conjunction but

In this subsection, I present the analysis of the sentence-initial concessive conjunctions in the TC and in the PC. Table 4.8 shows a diachronic comparison of frequencies of translations of the conjunction but where it was used sentence-initially in the English ST. This conjunction was dealt with by translators in three major ways: first, it was translated by the conjunctions aber and doch used sentence-initially, second, it was translated by a conjunctive adverb, and third, it was not translated and the resulting sentence did not have a concessive connection to the previous one. It is noticeable that there is no instance where a SICC in the ST has led the translator (or editor, for that matter) to combine that sentence with the previous one.

Table 4.8: Translations of sentence-initial but into German

		1982-	3		2008		Cha	Change		
	n	f	p	n	f	p	f	p		
\overline{Aber}	149	60.5	48%	113	43.4	38%	-17.1	-10pp		
Doch	26	10.6	8%	97	37.3	33%	+27.3	+25pp		
ConAdv	104	42.2	34%	60	23.1	20%	-19.1	-14pp		
Omitted	24	9.7	8%	19	7.3	6%	-2.4	-2pp		
Other	5	2.0	2%	9	3.5	3%	+1.5	+1pp		
Total	308	123.0	100%	298	114.5	100%	-8.5			

The data shows that sentence-initial aber has decreased somewhat in normalised frequency from 60.5 i/htw in 1982-3 to 43.4 i/htw in 2008, while sentence-initial doch has increased considerably from 10.6 i/htw to 37.3 i/htw in the same time span. This means that in the overall share of translations of sentence-initial but, aber has lost 10pp, while doch has gained 25pp, so that, in 2008, the latter is used in a third of cases. It is also the case, however, that aber remains the most commonly used way of translating the English sentence-initial conjunction but, and is only partly replaced by doch.

Taking the two sentence-initial conjunctions *aber* and *doch* together, they show a statistically significant increase as compared to the conjunctive adverbs $(\chi^2 = 14.13 \ (df = 1), \ p < 0.001)$. While in 1982–3, sentence-initial conjunctions have been used in just over half of all cases to translate sentence-initial *but*, they are used in almost three quarters of cases in 2008. Conjunctive adverbs have consequently seen a decline by 14pp. What the data thus shows is that sentence-initial conjunctions have been a major use pattern in both observed time periods while conjunctive adverbs exhibit a decrease in frequency from being used in a third of cases in 1982–3 to being used in only a fifth in 2008.

To assess the role of editors in this situation, the PC has been analysed in the same way as the TC (see Table 4.9). The results show that in the majority of cases (85%), the editor made no changes, but in the remaining 15% of cases, which is not few considering time and practicality constraints that prevent extensive syntactic editing, there was a wide variety of actions. In a third of cases where editing action was taken, the editor swapped a conjunctive adverb with another one as in Example (43). This noticeable discrepancy between editors' and translators' choices seems to show that, for the editors, conjunctive adverbs play a significant role in achieving the linguistic style they consider appropriate for the magazine. The fact that editors quite often seem to change the conjunctive adverb *jedoch* into something else, as exemplified in (43), in quite a few cases is also noticeable and may show a tendency by editors to avoid *jedoch*, perhaps because they consider it informal.

Table 4.9: Editorial changes to translations of sentence-initial but

Editorial action				120 tokens
No change				102
Change				18
	$of\ which$			
	Conj	\rightarrow	ConAdv	2
	Conj	\rightarrow	omitted	1
	ConAdv	\rightarrow	omitted	4
	ConAdv	\rightarrow	other	1
	jedoch	\rightarrow	other ConAdv	6
	omitted	\rightarrow	Conj	1
	omitted	\rightarrow	ConAdv	1
	other	\rightarrow	Conj	1

- (43) But the mailing is an expensive proposition, and you know that in the past only about 3% of customers have actually responded to mailings by making a purchase. (HBR 3/06,131)
 - a. Die Postaktion ist JEDOCH eine teure Angelegenheit und Sie the mailing is however an expensive matter and you wissen aus Erfahrung, dass lediglich 3 Prozent der Kunden know from experience that only 3 percent of-the customers tatsächlich mit einem Kauf auf die Briefe reagieren. (raw1) actually with a purchase to the letters react
 - b. Das Versenden solcher Werbebriefe ist aber teuer, the sending of-such advertising-letters is however expensive und nur 3 Prozent der Kunden reagieren mit with a and only 3 percent of-the customers react auf diese Post, wie Aktionen in der Vergangenheit purchase to this post as initiatives in the past $gezeigt\ haben.\ (HBM\ 10/06,116)$ shown have

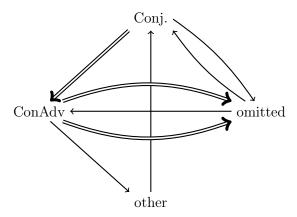


Figure 4.6: Directions of editorial changes to translations of sentence-initial but

The general direction of editorial change seems to be moving away from an explicit expression of contrast and towards marking it either through conjunctive adverbs or not at all. Figure 4.6 displays the data from Table 4.9 so that the

direction of change is shown and each single arrow symbolises one instance where the editor has made a change, and a double arrow means two changes in that direction have been made. If we consider the way the data in Table 4.9 is ordered a continuum from most to least explicit marking of contrast, most editorial changes happen downwards on that continuum: from a conjunction to a less overt marking with a conjunctive adverb (see example (44)), and from a conjunctive adverb to no overt marking by the omission of a connective (example (45)). For a discussion of this finding, see Section 6.2.

- (44) But such precision is often the most difficult thing to achieve. (HBR 12/08,50)
 - a. Doch gerade diese Genauigkeit ist oftmals das Schwierigste but exactly this precision is often the most-difficult-thing an der Sache. (raw14) in the matter
 - b. Gerade diese Genauigkeit ist oftmals jedoch das Schwierigste exactly this precision is often however the most-difficult-thing an der Sache. (HBM 4/09,36) in the matter
- (45) But after GE had expanded that base, it continued with internal development of highly successful CT instruments. (HBR 7/10,102)
 - a. Nach der Erweiterung dieser Basis wurde jedoch die Entwicklung after the expansion of-this base was however the development von CT-Instrumenten intern fortgesetzt— mit großem Erfolg.

 of CT-instruments internally continued with great success (raw22)
 - b. Nach der Erweiterung dieser Basis entwickelte GE die Sparte after the expansion of-this base developed GE the branch
 CT-Instrumente intern weiter— mit großem Erfolg.
 CT-instruments internally further with great success
 (HBM 2/11,84)

The analysis of concessive clauses has produced the observation that there is indeed a development from hypotaxis to parataxis, which is primarily driven by the strong decline in hypotaxis. Both patterns are still regularly used, but it seems that there is a steady trend towards parataxis as the major use pattern. The trend towards paratactic conjunctions is caused by the action of translators, since the analysis of the PC has shown that editors have not intervened in the taxis of the clause complexes in the corpus. The effect of the mediation process on SICCs, on the other hand, is significant and shows that editors prefer using conjunctive adverbs or marking concession implicitly, a style that has been argued to be the conventional German way of marking concession (Becher et al. 2009), whereas translators seem to prefer a style primarily drawing on sentence-initial conjunctions.

4.3 Causal clauses in the translation corpus

Tables 4.10 and 4.11 show the TT expressions that were used to translate the four causal conjunctions under analysis. There are three causal conjunctions that are used most commonly: weil, da and denn. Modal clauses are also used in some cases, but, as discussed in Section 3.4, they do not imply a causal relationship between the clauses.

Table 4.10: Translations of causal conjunctions in the 1982–3 TC

		weil	da	denn	desh.	coord.	modal	trans.	other
because	n	247	17	10	5	2	11	4	17
(f=127.1)	f	100.3	6.9	4.1	2.0	0.8	4.5	1.6	6.9
since	n	62	38	3	_	4	2	_	6
$(f{=}46.7)$	f	25.2	15.4	1.2	_	1.6	0.8	_	2.4
for	n	4	1	14	_	1	1	1	
(f = 8.9)	f	1.6	0.4	5.7	_	0.4	0.4	0.4	_
as	n	_	4	1	_	1	_	_	
$(f{=}2.4)$	f	_	1.6	0.4	-	0.4	_	_	_
total	n	313	60	28	5	8	14	5	23
(f=185.1)	f	127.1	24.4	11.4	2.0	3.2	5.7	2.0	9.3

There seems to be a strong decline in the use of some causal conjunctions in

Table 4.11:	Translations	of causal	conjunctions	in	the 2008	TC
-------------	--------------	-----------	--------------	----	----------	----

		weil	da	denn	desh.	coord.	modal	trans.	other
because	n	127	72	38	8	14	20	21	14
(f=120.6)	f	48.8	27.7	14.6	3.1	5.4	7.7	8.1	5.4
since	n	4	30	8	1	6	_	3	3
$(f{=}21.1)$	f	1.5	11.5	3.1	0.4	2.3	_	1.2	1.2
for	n	_	_	1	_	_	_	_	
(f=0.4)	f	_	_	0.4	_	_	_	_	_
as	n	6	9	3	_	4	1	1	1
(f=9.6)	f	2.3	3.5	1.2	_	1.5	0.4	0.4	0.4
total	n	137	111	50	9	24	21	25	18
(f=151.8)	f	52.6	42.6	19.2	3.5	9.2	8.1	9.6	6.9

English. While the frequency of because has hardly changed (127.1 i/htw compared to 120.6 i/htw), since and especially for are in strong decline (46.7 i/htw down to 21.1 i/htw for since, 8.9 i/htw down to 0.4 i/htw for for). The use of as as a causal conjunction, on the other hand, has increased strongly. In 1982–3, it was hardly used as a causal conjunction at all (2.4 i/htw). It occured mainly as a temporal conjunction signalling that the actions described in two clauses are happening at the same time (e.g. 'As profit margins increase, companies can employ more staff.'), instances that were not counted here. In 2008, it is used regularly to mark a causal relationship (9.6 i/htw) and seems to be replacing the conjunction for as an alternative to because. However, the decline of since and for has not led to an increase in the usage of because, so what we notice here does not seem to be a decline in the variety of causal conjunctions, but possibly a decline of subordination as a way of expressing causal relationships between clauses.

There are a range of significant changes in the German translations, too. Most strikingly, the data shows that, over time, weil has lost its place as the most commonly used causal conjunction, while especially da and denn have become more frequent. That is not the case in the translations of since, though weil has still decreased dramatically as a translation of that ST conjunction. This observation may lead us to assume that, similarly to what we observed in the previous section, it is not so much the case that paratactic constructions are

increasing, but rather than hypotactic constructions are disappearing, as the data shows a change in preference away from weil. In 1982–3, weil occurred at a frequency of 127.1 i/htw while the other conjunctions occurred at less than 25 i/htw. In the 2008 time period, the normalised frequency of weil has more than halved to 52.6 i/htw and those of da and denn have increased to 42.6 i/htw and 19.2 i/htw, respectively. As is the case with concessive clause complexes, the position of the English conjunction in the ST has no effect on the translation choice or the taxis of the conjunctions.

Instances where the translator did not use one of the causal connectives have also increased. Most notable is the case of coordination (9.2 i/htw up from 3.2 i/htw), which in this case contains clause complexes that are simply joined by punctuation or by und. Translations employing deshalb, modal clauses as well as other clauses are all on the increase too. In the 1982–3 corpus, the 'other'-group contains mainly instances where the causal link was omitted, either because the causal part of the complex was not translated at all or because the clause complex was simply translated into two sentences without a formal linking device. In the 2008 corpus, the number of 'other'-constructions has risen somewhat. In addition to the omissions mentioned before, it now contains more verbose ways of translating ST causal clause complexes, using phrases along the lines of one reason for that is and on top of that, it seems that, two of which are exemplified in (46) and (47).

(46) This effect occurs not just BECAUSE more drives are being met but BECAUSE actions taken on several fronts seem to reinforce one another. $(HBR\ 7/08,78)$

```
MITENTSCHEIDEND DAFÜR IST, DASS
                                       an mehreren Punkten
Partly-decisive
                    for-this is
                                 that
                                            several
                                                      points
  zugleich
                 angesetzt wird. Darüber hinaus scheint es.
  simultaneously addressed are
                                 on-top-of-that
                                                   seems
                                                             it
  ALS würden die einzelnen Maßnahmen einander
                                                      wechselseitig
  as-if would the individual measures
                                          one-another mutually
  verstärken. (HBM 9/08,20)
  reinforce
```

(47) It's easy to misjudge the role of the chief strategy officer, in part BECAUSE the title itself is misleading. (HBR 10/07,84)

Viele haben eine falsche Vorstellung davon, was ein Chief Strategy Many have a wrong imagination of-that what a Chief Strategy

Officer eigentlich ist. DARAN IST die missverständliche Bezeichnung Officer actually is in-this is the misleading term

NICHT GANZ UNSCHULDIG. (HBM 1/08,80) not entirely blameless

The analysis of cases where the translator omitted the causal clause is problematic because we do not know the reason for the omission. It is impossible to tell whether a clause may have been omitted for grammatical reasons or for reasons of space or target culture appropriateness. In fact, we do not even know whether the omission was effected by the editor or the translator. However, the observation that all the ways of translating causal clauses are on the increase while the preferred choice in the 1982–3 TC, weil, is decreasing is evidence for the claim that translators increasingly look for diverse ways of translating causal clause complexes.

Table 4.12 provides a breakdown of absolute, normalised and relative frequencies of the ST conjunctions and their translations, grouped by degree of interdependency. As explained in Section 3.4, constructions joined by weil and da were counted as hypotactic, while those connected by denn, deshalb and by coordination were counted as paratactic.

Table 4.12 shows that because and since are translated in a similar fashion. In the 1982–3 time period they were both mainly translated in a hypotactic way (84% and 87%). In the 2008 time periods, that is still the case, but both frequencies fell by the same amount so that now only about two thirds of cases show a hypotactic pattern. Paratactic translations are on the increase, especially as translations of clause complexes involving since, where we see an increase of 21pp. A slight increase is also shown by the group of 'other' translations. The ST causal conjunction as, which rarely occurs in the 1982–3 time period, has attained the same frequency of paratactic translations as the other conjunctions. The translation data of as provides evidence for the claim that translators in 2008 prefer the paratactic structure because, facing a newly established causal

Table 4.12: Degrees of interdependency in the TC listed by ST causal conjunctions

	I	Hypotax	is		Parata	axis		Othe	r
1982–3	n	f	р	n	f	р	n	f	р
because	264	107.2	84%	17	6.9	5%	32	13.0	10%
since	100	40.6	87%	7	2.8	6%	8	3.2	7%
for	5	2.0	23%	15	6.1	68%	2	0.8	9%
as	4	1.6	67%	2	0.8	33%	_	_	0%
Total	373	151.4	82%	41	16.6	9%	42	17.0	9%
2008									
because	199	76.5	63%	60	23.1	19%	55	21.1	18%
since	34	13.1	62%	15	5.8	27%	6	2.3	11%
for	_	_	0%	1	0.4	100%	_	_	0%
as	15	5.8	60%	7	2.7	28%	3	1.2	12%
Total	248	95.3	63%	83	31.9	21%	64	24.6	16%

conjunction, they employ the same predominantly paratactic frequency pattern that they use with the other conjunctions.

Table 4.13: Diachronic change in the taxis of causal clause complexes in the TC

		1982-3	3		2008		Cha	ange
	n	f	р	n	f	р	f	p
Hypotaxis	373	151.4	82%	248	95.3	63%	-56.1	-19pp
Parataxis	41	16.6	9%	83	31.9	21%	+15.3	+12pp
Other	42	17.0	9%	64	24.6	16%	+7.6	+7pp
Total	456	185.1		395	151.8		-24.8	

The overall difference between the two time periods is shown more clearly in Table 4.13, which shows only the total values for hypotactic, paratactic and other translations and the diachronic difference between them. A highly significant $(\chi^2 = 29.43 \ (df = 1), \ p < 0.001)$ decrease in hypotactic and an increase in the frequency of paratactic structures for causal clause complexes can be observed. In 1982–3, four out of five clause complexes exhibited a hypotactic structure while only one in ten cases were paratactic. In 2008, only about three in five cases were hypotactic and one in five were paratactic. This means a diachronic difference of –19pp for hypotactic and +12pp for paratactic structures. Table 4.14 shows

the relative frequency ratios for the TC, and Figure 4.7 shows the trend as a graph. The relative frequency ratios mark a decrease in hypotactic structures, though contrary to our first impression it is not as strong as that observed in the concessive clause complexes (Figure 4.3, p. 104). The 'other'-translations have been drawn between hypotaxis and parataxis and show a moderate increase. The paratactic constructions show an increase.

Table 4.14: Types of causal conjunction and their relative frequency ratios

Item	R
Hypotaxis	0.6293
Other	1.4423
Parataxis	1.9161

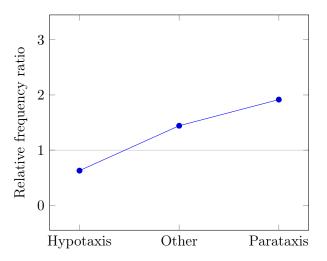


Figure 4.7: R-values of the taxis of causal clauses in the TC

According to the bar chart in Figure 4.8, which shows the diachronic shift in proportional frequency distribution, there is a redistribution of proportional frequency. The proportion of hypotactic constructions has decreased visibly from 80% to 60%, while the shares of both 'other' and paratactic translations have increased.

We can conclude that in the case of causal clause complexes, similarly to what has been observed for concessive clauses, there is a diachronic proportional decrease of hypotaxis. Unlike what is the case in concessive structures, however,

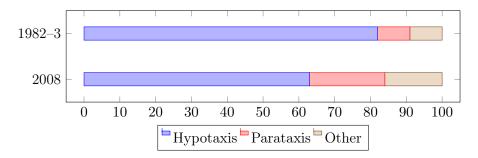


Figure 4.8: Proportional development of the taxis of causal clauses in the TC

there is also a strong increase of paratactic constructions as well as of constructions which deviate from the ST pattern, for instance those presented in example (46). The decrease in frequency of hypotaxis is rather small and, as Figure 4.8 shows, hypotaxis is still used in the majority of cases to express a causal connection between clauses. Parataxis may have increased its frequency, but it is still just above being the threshold of a minor use pattern. What can also be observed is that translators show a growing preference to translate causal clause complexes more diversely, which means they look for conjunctions other than weil or alternative ways of expressing causal relationships.

I have tested whether the observations made so far are features of translated language by analysing the PC. This has produced the results that out of 108 clause complexes that were translated hypotactically, the editors changed ten to paratactic structures by changing the conjunction. For clause complexes that were translated paratactically, one instance was changed to hypotaxis.

Thus, there is a slightly higher editorial influence on the text in causal clauses compared to concessive clauses, as about 10% of all structures that were translated hypotactically by translators were changed to a paratactic structure by editors. In most of these cases, which involved sentences connected by weil and da, the editor split the sentence with a full stop, thus removing the overt causal connection and either leaving it implicit, as in (48) or expressing it by the use of denn, as in (49).

(48) Delta Airlines, for example, recently pulled out of its call centers overseas BECAUSE cultural differences damaged the airline's ability to interact with North American customers. Delta concluded that the negative impact on the quality of customer relationships wasn't worth the cost savings. (HBR 1/10,94)

a. Delta Airlines schloss beispielsweise vor kurzem die Callcenter

Delta Airlines closed for-example of late the call-centres

in Indien [AU: can we say why, very briefly? '...in India,
in India

where the goal was to satisfy the customer's immediate need

as quickly as possible and move on to the next call'?],

WEIL die negativen Auswirkungen auf die Qualität der because the negative effects on the quality of-the Kundenbeziehungen schwerer wogen als die durch den customer-relations heaviar weighed than the through the Umzug nach Indien erzielten Kosteneinsparungen. (raw18) move to India achieved cost-savings

b. Delta Airlinesschlossbe is piels we is evorKurzemdieDelta Airlines closed for-example of late the Callcenter in Indien. Die kulturellen Unterschiede zwischen call-centres in India the cultural differences between Callcenter-Mitarbeitern und US-Kunden waren zu $gro\beta$, call-centre-staff and US-clients were too great einereibungslose Interaktion mit den Kunden nicht interaction with the frictionless client gewährleistet. Die negativen Auswirkungen auf die Qualität der guaranteed the negative effects on the quality of-the Kundenbeziehungen wogen schwerer als die Kostenersparnis, customer-relations weighed heavier than the cost-savings der Umzug nach Indien brachte. (HBM 3/10,86) that the move India brought to

In example (48), the translator considered omitting the original ST causal clause,

and left a note in the TT (see (48a)) suggesting to instead explain the cultural differences alluded to in the ST. The following sentence, which is separate in the ST, was then turned into the causal clause in the TT. The editor has decided not to explain what the cultural differences are in the published text (see (48b)), but retained the original ST clause referring to US customers, though without the causal link.

- (49) HCHP executives worked hard to deliver on this promise BECAUSE they understood that each part added value to the firm as a whole. (HBR 7/08,50)
 - Die HCHP-Führungskräfte legten größten auf die the HCHP-executives placed greatest importance on $_{
 m the}$ Einhaltung dieser Versprechen, DA ihnen bewusst war, dass keeping of-these promises since they aware were that einen Nutzen für das Unternehmen als Ganzes jedes einzelne each individual a for the company as a-whole use bietet. (raw7) offers
 - b. HCHP-Führungskräfte legen $qr\ddot{o}\beta ten$ Wertaufdie**HCHP-executives** placed greatest importance on the Einhaltung dieser Versprechen. Denn ihnenbewusst.keeping these promise because they are dassjedes einzelne einen Nutzen für das Unternehmen aware that each individual a use for the Ganzes schafft. (HBM 8/08,20) alscompany as a-whole creates

Examples (48a) and (49a) show the pre-edited translations while (48b) and (49b) show the translations that were eventually published. In both cases, the translator has chosen a hypotactic translation, which the editor has replaced by a paratactic construction. As a possible explanation for why causal clauses seem more likely to be changed to parataxis by the editor than concessive clauses we might refer to Musacchio's (2005) claim that a causal clause relationship is more easily discernible than, for instance, a concessive relationship, so that someone

editing a text will enter a smaller risk of distorting the ST meaning when changing causal clause relationships.

This chapter has so far shown that there is a small overall increase of parataxis in both concessive and causal clauses, but that hypotaxis, though decreasing strongly, is still used in the majority of cases and thus not on the way to becoming a minor use pattern. In fact, the decrease of hypotaxis may also be conditioned by the fact that the frequency of conjoined clause complexes overall has decreased. This phenomenon will be investigated further in Section 4.5. To investigate whether the decrease in hypotaxis is caused by attitudes towards the conjunctions themselves, it is useful to investigate the frequencies with which translators introduce certain conjunctions in general, which is done in the next section.

4.4 Conjunctions introduced by the translators

This section contains an analysis of cases where the translators introduced conjunctions into clause complexes that did not have a hypotactic conjunction in the ST. The aim of this section is to test the observations made in the analysis so far by gaining an idea about whether there are any diachronic shifts in the frequency with which certain conjunctions are introduced. The hypothesis is that conjunctions whose frequency decreases in translation circumstances are also introduced less frequently into the TT.

4.4.1 Concessive conjunctions

Table 4.15 shows a diachronic comparison of the concessive conjunctions that were introduced by the translators. The conjunction *doch* shows the same strong frequency increase that has been observed in Tables 4.1 and 4.2. Rather more surprising is the fact that *obwohl* as well as *auch wenn*, both hypotactic conjunctions, are introduced with a slightly higher frequency in 2008. Since, as noted in Section 4.2, they both decline in the TC where they are used to translate ST concessive constructions, we would have expected a decrease in conjunctions supplied by the translator that did not exist in the ST, especially in the case of *obwohl*.

Overall, the data in Table 4.15 seems to show a slight general increase in

Table 4.15: Normalised frequency of concessive conjunctions introduced by the translators

	1982–3	2008
obwohl	1.8	4.0
wenngleich	0.2	0.2
auch wenn	1.8	3.1
doch	0.8	4.0

the frequency with which translators introduce conjunctions into the ST (the numbers are too small to do a reliable chi-square test). Taken together with the noticeable decline in conjunctions noted in Section 4.2, this may mean that the translators introduce conjunctions in order to compensate for their decline elsewhere in their translations and adhere to German syntactic conventions. Alternatively, it may support the claim that it is not hypotactic conjunctions themselves that translators avoid, but that there is another reason for the decline in hypotaxis. The strong increase of the frequency with which doch is used, not only in translating concessive conjunctions, as shown in Section 4.2, but in concessive constructions in general, seems to argue for a general increase in its popularity. At first, we might speculate that the increase of doch may be caused by an increase of its most obvious English equivalent, but. However, the frequency of but remains stable between the time periods, as Table 4.16 shows. This suggests that there may be other motivations for the increasing introduction of doch.

Table 4.16: Absolute frequency of but in the STs

	1982–3	2008
but	866	925

Examples (50) and (51) show two instances where doch has been introduced.

- (50)Practices and structures that may have worked well with simple teams of people who were all in one location and knew one another are likely to lead to failure when teams grow more complex. (HBR 11/07,100) Gut möglich, dass eingespielte Methoden und Strukturen bei vertrauten well possible that practised methods and structures with intimate Kollegen an einem einzigen Standort ausgezeichnet funktioniert colleagues in one single location excellently worked werden, können haben. Doch sobald die Teams komplexer
 - have but as-soon-as the teams more-complex become can eben jene Strukturen zum Misserfolg führen. (HBM 1/08,24) just those structures to failure lead
- (51) Companies like GE and Procter & Gamble tend to attract aspiring managers; professionals in PSFs, on the other hand, often disdain the duties of management. (HBR 1/08,115)

Unternehmen wie General Electric und Procter & Gamble üben companies like General Electric and Procter & Gamble exercise

große Anziehungskraft auf junge, aufstrebende Manager aus; great attraction on young aspiring managers

DOCH Leute, die bei einem hochprofessionellen Dienstleister but people who for a highly-professional service-provider

arbeiten, haben oft eine ausgesprochene Abneigung gegen work have often a significant reservation against

Managementaufgaben. (HBM 5/08,90) management-tasks

In example (50), the translator has introduced doch in order to simplify the sentence structure of the ST, which has the long restrictive relative clause that may have worked well with simple teams of people who were all in one location and knew one another, by avoiding a similarly long relative clause in German. The second example, (51), shows an instance where the translator has preferred to translate on the other hand using doch instead of the more literal translation along the lines of auf der anderen Seite.

The general motivation of the translators who introduced the paratactic conjunction *doch* seems to have been to simplify the target language where the ST has a structure that they considered too complex to translate closely. The findings from this analysis confirm the observation that *doch* is becoming more

frequent in German business and management writing, as a means of translationg concessive conjunctions, especially sentence-initial ones. The analysis of conjunctions introduced by translators that has been conducted in this section shows that *doch* is introduced a lot more often as well.

Another rather surprising finding is that the hypotactic concessive conjunction obwohl is also introduced with greater frequency in 2008 than was the case in 1982–3. This perhaps argues against the claim that it is hypotaxis itself that is becoming used less frequently in German concessive clause complexes in this genre. Instead, the decline seems to be limited to translated language, which perhaps suggests that its reasons have less to do with taxis itself and more with another development that is ongoing in translated language (see further Section 4.5).

4.4.2 Causal conjunctions

Table 4.17 shows a diachronic comparison of the causal conjunctions that were introduced by the translators. It is noticeable that, throughout the observed time span, translators are much more likely to introduce causal relationships than concessive relationships (cf. Table 4.15, p. 122). This may be because concessive relationships are somewhat more complex semantically and therefore the reluctance to introduce an incorrect connection into the TT is greater than in the translation of causal clause complexes.

Table 4.17: Normalised frequency of causal conjunctions introduced by the translators

	1982-3	2008
weil	21.5	20.4
da	6.8	10.2
denn	9.4	13.5
deshalb	8.2	7.1

While there seem to be some slight increases in the case of da and denn, the changes in frequency are not statistically significant ($\chi^2 = 1.24$ (df = 3), p = 0.74). Intrinsic differences between the conjunctions which might be responsible for the fact that some of them increase in frequency but not others will be discussed in Chapter 6. The results in Table 4.17 support the claim made at the end of Section 4.3, namely that language users are more likely to alter

the explicitness of causal marking than concessive marking, as causal conjunctions are introduced significantly more often than concessive ones. The following examples show some cases where conjunctions have been introduced to change implicitly causal relationships to overtly ones.

Example (52) shows a case where a coordinated paratactic construction has been turned into a causal construction:

(52) He couldn't learn to live with stress. He couldn't adjust. (HBR 5/80,86)

Er lernte nicht, mit Streβ umzugehen, WEIL er sich nicht
he learned not with stress to-deal because he himself not

anpassen konnte. (HBM 2/83,61)
adapt could

Example (52) is a rare case where sentences have been combined in translation (cf. Table 4.18). More common are cases such as the ones shown in (53) and (54). In these cases, instrumental adverb phrases are replaced by causal conjunctions.

- (53) Therefore, on two counts he draws back, FEARING that he will be hamstrung in his ambition. (HBR 1/68,72)

 Folglich macht er oft einen Rückzieher, WEIL er fürchtet, consequently makes he often a withdrawal because he is-afraid

 daβ er seine Ambitionen nicht verwirklichen kann. (HBM 1/82,32)

 that he his ambitions not make-reality can
- (54) Information systems can support an organizational structure BY STRENGTHENING communication lines and clarifying measures of performance. (HBR 5/80,143)

Weil sie die interorganisationale Kommunikation stärken because they the interorganisational communication strengthen

und Leistungsmaßstäbe deutlicher machen, können and measures-of-performance clearer make can

Informationssysteme als eine Stütze für die Organisationsstruktur information-systems as a support for the organisational-structure angesehen werden. (HBM 1/82,44)

seen be

(HBM 1/82,71)

Another common pattern is the one seen in example (55). Here, the translator has introduced weil in order to replace another adverb phrase, this time one containing with.

WITH SO MUCH AT STAKE PERSONALLY, the employees not only (55)cooperate but also pressure managers to perform well. (HBR 3/81,28) Da jetzt auch für sie persönlich etwas auf dem Spiel steht, now also for her personally something at-stake is arbeiten sie nicht nur besser zusammen, sondern üben auchwork they not only better together but exercise also Druckauf das Management aus, bessere Arbeit zu leisten. pressure on the management better work to produce

The final example, (56), shows a case where a construction using *given* was replaced by the translator by a da clause.

GIVEN how invested associates can be in even fleeting acknowledgments, (56)more-substantive small gestures can go quite far. (HBR 1/08,115) die kleinste Geste der Anerkennung diesen Da schon Mitarbeiternas already the smallest gesture of recognition to-these workers sehr viel bedeutet, können Sie mit noch deutlicheren positiven very much means you with even smaller positive can Signalen eine ganze Menge bewirken. (HBM 5/08,90) signals whole lot effect

What the preceding examples show is that translators more readily introduce conjunctions in the translation of ST adverbial constructions that have a causal connection than in cases where the constructions have a concessive connection. The frequency with which this has happened has not changed significantly between the time periods under analysis. Most relevantly for this study, in introducing causal relationships, translators draw on hypotactic as well as paratactic constructions.

4.5 Sentence splitting

A stylistic difference between the two time periods that has been repeatedly mentioned in this chapter is that translators seem more likely to translate one ST sentence as two in the 2008 corpus, i.e. to split sentences. For example, as regards paratactic clause complexes in 1982–3, three of them were split in this way (6% of paratactic translations), while 25 years later that number had risen to 21, which means that translators were prepared to introduce sentence breaks in more than a third of the cases (34%) where they translated paratactically. I have suggested in the discussion of concessive clauses in Section 4.4 that there may be another development that is responsible for the decrease of hypotactic constructions. From the data presented in this section, it seems that parataxis is reconciled more easily with a stylistic trend towards sentence-splitting and an increased use of clause simplexes.

The observation that there is an increasing tendency towards 'sententialisation' (Fabricius-Hansen 1999), which has remained unsystematic so far, will be supported by evidence from the corpus in this section. I discuss changes in clause-complex integrity which manifest themselves in a change of the typographic representation of clause complexes on the level of writing. The data in Table 4.18, visualised in Figure 4.9, gives an account of the frequency with which translators split a clause complex that consists of one sentence in the ST or combined two ST sentences to make one in the TT.

Table 4.18: Sententialisation in the TC

	1983	2-3	2008		
	n	f	\mathbf{n}	f	
Sentences split	423	85	1516	292	
Sentences combined	42	8	65	12	

The analysis shows two things. First, the tendency among translators towards sententialisation is much stronger than the opposite tendency towards combining them, and second, sentence-splitting has become dramatically more frequent in the 2008 corpus, while sentence combination has remained rare ($\chi^2 = 16.58$ (df = 1), p < 0.001). Even allowing for a number of cases where it can be an appropriate translation strategy to combine two ST sentences, the number of sentences

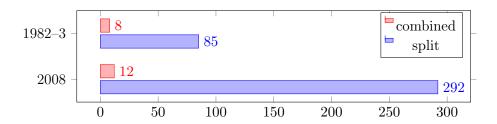


Figure 4.9: Sententialisation in the TC

split is already remarkable in the 1982–3 time period, but the number in the 2008 period is rather staggering. This fundamental alteration of the syntactic characteristics of the ST is evidence that the shortening and piecemeal presentation of information in clause simplexes is not what is sometimes termed a 'local translation strategy', which refers to a strategy applied only in individual cases, but rather a 'global strategy', i.e. a strategy applied to the entire text (Baker & Saldanha 2009:283).

Analysed along with the observation in Section 4.4 that the hypotactic conjunctions do not become less frequent in general, the large-scale alteration of clause complex integrity also suggests itself as a possible underlying cause of the shift from hypotactic to paratactic constructions observed in this chapter—if translators attempt to break up sentences they encounter in the ST, they may be more likely to use paratactic conjunctions because the clause simplexes they connect are verb-second main clauses which can stand alone. This would mean that the reason for the decline in hypotactic constructions in the present corpus is not to be sought in the tactic properties of the constructions but in the fact that they do not lend themselves to the translation strategy of shortening sentences because sentences starting with a hypotactic conjunction are marked or ungrammatical in written standard German.

It is worth looking a bit more closely at where sententialisation tends to occur to identify possible circumstances that may trigger this action. It might be argued that keeping sentences short improves readability and is thus a commendable translation strategy (I will explore the relationship between sentence length and syntactic complexity in detail in Section 6.3). Looking at examples (57) and (58), that explanation seems to offer itself.

(57) Many younger employees find they can complete tasks faster than older workers, perhaps partly because of technological proficiency but even more, in my view, BECAUSE they work differently. (HBR 2/08,17)

Viele dieser jungen Angestellten stellen fest, dass sie Aufgaben many of-these young employees find out that they tasks

schneller erledigen als ihreälteren Kollegen. Das mag zum than their older faster do colleagues that may on ihrem technischen Können liegen. Vor einenanallemone-hand due-to their technical skill be above all aberqlaube ich, dass sie andersarbeiten. (HBM 2/08.8) however believe I that they differently work

(58) While a communal spirit can develop spontaneously, we discovered that HR can also play a critical role in cultivating it, by sponsoring group events and activities such as women's networks, cooking weekends, and tennis coaching, or creating policies and practices that encourage them. (HBR 11/07,100)

Natürlich kann sich ein Gemeinschaftsgefühl auch spontan of-course can itself a communal-spirit also spontaneously Wir entdeckten jedoch, dass die Personalführung entwickeln. develop discovered however that the HR vielzu seiner Pflege beitragen kann. Sie kann beispielsweise much to its care contribute can it can for-example Teamveranstaltungen und -aktionen unterstützen— Frauennetzwerke, and activities support team-events women's-networks gemeinsames Kochen am Wochenende, Tennistraining— oder sie cooking at weekends, tennis-coaching communal

kann Grundsätze und Methoden einführen, die zu solchen Aktionen can basics and methods introduce which to such events anregen. (HBM 1/08,24) encourage

Examples (57) and (58) show clause complexes that are somewhat long, with several causal and concessive subordinate clauses. Therefore, we can see why

the translators may have considered it necessary to split the sentence in two to make it more accessible for the target audience. As a result, the information that was contained in one sentence in the ST is spread out across an array of three agglutinated TT main clauses, which is more reminiscent of low quality writing and may even seem somewhat patronising to the reader, as the ST sentences were arguably hardly incomprehensible.

Even allowing for cases such as those mentioned above, the vast number of split sentences observed in the analysis seems to argue against the claim that a global translation strategy of presenting information more accessibly was necessary, for to claim that such a strategy was applied to the TTs would mean that the English STs were too complex to understand, which, as readers may attest, is not the case. On the contrary, the clause complexes that were split were often rather simple ones, as can be seen by inspecting some other examples.

Examples (59) and (60) show rather simple clause complexes that were split by the translator, and it does not immediately become clear why the translator felt a need to do so. Example (59) is a rather straightforward connection of two main clauses by the coordinator and, which was removed in the TT. In (60), a causal conjunction was replaced by the sentence-initial adverb $schlie\beta lich$ and the sentence split into two.

(59) At the other extreme, the user performs all the tasks himself, and the centralized group—if one exists—is completely uninvolved. (HBR 5/80,143)

```
anderen Extrem, also ganz
Am
                                                  erfüllt der Benutzer
                                      rechts,
at-the other
               extreme so
                             entirely to-the-right fulfills the user
  alle Aufgaben selbst.
                         Die zentrale DV-Gruppe, falls überhaupt
                                                     if
  all
       tasks
                 himself the central group
                                                          at-all
  vorhanden, ist vollkommen unbeteiligt. (HBM 1/82,44)
  existent
              is completely uninvolved
```

(60) Some people have suggested that relationship-oriented leadership is most appropriate in complex teams, SINCE people are more likely to share knowledge in an environment of trust and goodwill. (HBR 11/07,100)

Einige wiesen darauf hin, dass der beziehungsorientierte Führungsstil some pointed to that the relationship-oriented leadership

am besten zu komplexen Gruppen passe. Schließlich teilen Menschen after-all best to complex groups fits share people ihrWisseneheranderen, wenn man ihnen Vertrauen their knowledge rather with others if one them trust und Wohlwollen entgegenbringt. (HBM 1/08,24) and goodwill shows

At this point, it is useful to investigate whether the observed phenomena can indeed be attributed to the translator and thus be considered translation decisions, or whether they are caused by the intervention of editors and thus be considered decisions made during the mediation process. This seems especially likely because the splitting of sentences can be easily done without great danger of interrupting the information flow. I have used the PC to ascertain whether sententialisation primarily happens during the translation or the mediation process. Table 4.19 shows a comparison of translators' and editors' behaviour in splitting or joining sentences.

Table 4.19: Editorial influence on sententialisation

Translator's action	Editor's action	Occurrences
sentence split	_	542
sentence split	split reverted	26
_	sentence split	296
two sentences combined	_	20
two sentences combined	combination reverted	0

The majority of sentences that were split are to be attributed to the work of the translators. However, there is also a vast number of sentences that were kept as one by the translators and then split by an editor, as, for instance, in example (61). There is no instance, however, where an editor has split a sentence that was previously combined by a translator. Combining sentences, as

was noted previously in this chapter, is a rare action, as out of the 568 sentences the translators split, only 26 were combined again by an editor.

- (61) Unfortunately, he inadvertently decreased proximity, throwing the three P's out of balance and causing casual interactions to plummet. (HBR 7/11,102)
 - hatte er unabsichtlich die Nähe a. Leider verringert und unfortunately had he inadvertently the proximity decreased and dem Gleichgewicht gebracht, mit damit die drei Aspekte aus the three aspects out-of the balance brought with der Folge eines Rückgangs der beiläufigen Kontakte. the consequence of-a decrease in-the casual contacts (raw22)
 - b. Leider hatte er unabsichtlich die Distanz vergrößert und that is however in-the highest order improbable this drei Aspekte aus dem Gleichgewicht means that the via the regression-analysis estimated gebracht. Die Folge: Die beiläuligen Kontakte variables the actual purchasing-behaviour of-the client wurden weniger. (HBM 10/11,46) predict can. not really precisely

The analysis of the effect of the mediation process confirms that sententialisation by far outnumbers the combination of sentences, which has also been observed to be the case for the behaviour of translators. This section also contains evidence to show that sentence-splitting is a strategy followed by translators and editors alike. It can be argued that the underlying motive of both translators and editors is not driven by aesthetic considerations, as that would surely entail a more balanced distribution between splitting and combining sentences. Instead, the main motive seems to be to keep sentences short.

The analysis in this section shows that the tendency towards sententialisation in translation happens increasingly often despite the fact that there is no such change in the ST. It is a development attributable mainly to translators, but also

to a significant extent to editors. The vast majority of changes made by both translators and editors consists of sententialisation; only rarely are sentences combined to a clause complex. That is why the development observed here must be seen in conjunction with the slight but noticeable shift in preference from hypotaxis to parataxis that was observed in the preceding sections of this chapter as part of a larger development towards a preference for shorter sentences where, at least in the case of concessive clause complexes, hypotaxis may become a minor use pattern.

The claim that concessive clauses decline faster than causal clauses made by Polenz (1999:354, see Section 2.1) seems to be confirmed for translated texts, as there is a significant difference between developments in concessive clauses, where parataxis is now used in the majority of cases, and causal clauses, where hypotaxis is still the preferred pattern. As was argued above, the shortening of sentences may well also be seen as the underlying cause of the move towards parataxis, as it makes translators prefer paratactic conjunctions simply because they allow them to use shorter sentences.

Thus, contrary to the hypothesis posited at the outset of this thesis, namely that a use pattern shift in preference from hypotaxis to parataxis in German syntax is happening because of influence from, or in analogy to, English, it seems that the shift is a development driven by language-internal factors, as there is no comparable development in the English STs, which, at least in the structures analysed here, maintain both their use of subordination and their sentence length. In the next chapter, I will test that hypothesis by looking at whether a similar development can be detected in non-translated language.

5 Analysis of the comparable corpus

Having analysed the TC and established that there is a change in frequency in hypotaxis and parataxis, it is now time to test whether the CC corroborates these results for non-translated language. That will be done for concessive (Section 5.1) and causal constructions (Section 5.2) in this chapter. The section on concessive constructions includes an analysis placing special focus on sentence-initial concessive conjunctions, which aims to corroborate the findings from the previous chapter. Section 5.3 then contains an analysis of the issue of sententialisation, which will show whether the strong trend towards splitting sentences observed in translated language can be confirmed for non-translated language.

5.1 Concessive clauses in the comparable corpus

The analysis of the CC is necessarily speculative to some extent. If language use is defined as a series of choices that the speaker makes both consciously and subconsciously, determining the degree of consciousness with which any given linguistic choice was made is impossible. We can assume, though, that, due to the prestige of the publication, the author will try to maintain a formal and sophisticated register, while also trying to avoid making it unnecessarily hard for the reader to understand the article. This is most problematic in the case of *aber*, which occurs very frequently in German and makes it hard to decide whether the translator could have used a hypotactic structure in each case. However, as the structures follow a recurring pattern, the analysis does allow us to infer the authors' preferences for one or the other structure.

Table 5.1 details the frequencies in the CC of all the connectives that were observed as translations for the four English concessive conjunctions in the TC. As before, I have divided the conjunctions by whether they functioned as conjunctive adverbs, hypotactic or paratactic conjunctions. The group 'ConAdv [other]' contains the three adverbs dennoch, trotzdem and gleichwohl. The conjunctive

adverbs *aber* and *jedoch* have rather high absolute numbers, which is due to the fact that every instance of them had to be counted, while in the TC, only those occurring in a translated clause complex were counted.

Table 5.1: Frequencies of concessive conjunctions in the CC

		1982-3	3		2008			Change		
	\mathbf{n}	f	p	n	f	p	n	f		
obwohl	19	13.0	5%	23	26.0	6%	+4	+13.0		
$wenn\ auch$	5	3.4	1%	1	1.1	0%	-4	-2.3		
$auch\ wenn$	13	8.9	3%	17	19.2	5%	+4	+10.3		
$selbst\ wenn$	8	5.5	2%	2	2.3	1%	-6	-3.2		
obgleich	3	2.1	1%	1	1.1	0%	-2	-1.0		
wenngleich	_	_	0%	1	1.1	0%	+1	+1.1		
obschon	_	_	0%	_	_	0%	0	0		
$w\ddot{a}hrend$	3	2.1	1%	1	1.1	0%	-2	-1.0		
aber (Adv)	139	95.4	37%	98	111.0	26%	-41	+15.6		
jedoch	96	65.9	25%	29	32.8	8%	-67	-33.1		
doch (Adv)	13	8.9	3%	21	23.8	6%	+8	+14.9		
allerdings	23	15.8	6%	36	40.8	12%	+13	+25.0		
other (Adv)	14	9.6	4%	12	13.6	4%	-2	+4.0		
aber	37	25.4	10%	31	35.1	8%	-6	+9.7		
doch	4	2.7	1%	37	41.9	10%	+33	+39.2		
Total	377	258.7		310	351.0		-68	+91.6		

The CC does not exhibit a frequency decrease of concessive conjunctions; instead, there is an increase by almost 100 i/htw. The non-translated German texts do not show the decline of *obwohl* that was obvious in the TC. Instead, there is even a small frequency increase by 13 i/htw. The frequency of *aber* increases for both functions by 15.6 and 9.7 i/htw. The conjunctive adverb *jedoch* which exhibits an increasing frequency in the translations, is found to be decreasing strongly in the non-translated texts (–33.1 i/htw). The conjunctive adverb *doch*, on the other hand, shows an increase by 14.9 i/htw.

Strong frequency increases can be observed in the cases of allerdings (+25 i/htw) and the paratactic conjunction doch (+39.2 i/htw), which mirrors what is the case in the TC. The CC data also confirms that there is indeed a trend that makes $auch\ wenn$ become the most commonly used one (+10.3 i/htw) while $wenn\ auch\ and\ selbst\ wenn\ recede\ (<math>-2.3$ and -3.2 i/htw).

The most significant diachronic development is the general increase in frequency of conjunctions between the two time periods. Table 5.2, where the items are grouped together by their function, shows things more clearly. There is an overall increase in frequency of concessive conjunctions by 91.6 i/htw, a development that masks the other changes that have occurred, as every normalised frequency count in Table 5.2 shows a statistically significant increase ($\chi^2 = 17.04$ (df = 2), p < 0.001). According to the proportional frequency data, hypotactic conjunctions are used as commonly as in the older time period, while paratactic conjunctions are increasing in frequency, and conjunctive adverbs are decreasing.

Table 5.2: Concessive syntactic function types in the CC

		1982-3	3		2008			Change		
	n	f	p	n	f	p	f	p		
HypCon	51	35.0	14%	46	52.1	15%	+17.1	+2pp		
ConAdv	285	195.6	76%	196	221.9	63%	+26.4	-12pp		
ParCon	41	28.8	11%	68	77.0	22%	+48.2	+11pp		
Total	377	259.4		310	351.0		+91.6			

Two methodological conclusions can be drawn from this section so far. For logico-semantic relations whose conjunction inventory in the language is large enough to warrant a differentiation between conjunctive adverbs and conjunctions, the necessity of such a division is shown by the drastic difference in diachronic change between them in the present case. It is not enough to only search for paratactic constructions. Furthermore, any corpus study of diachronic change must look at differences in normalised as well as proportional frequency, as they can differ significantly, depending on the development of the total number of tokens. In the present case, the hypotactic conjunctions have increased in normalised frequency by 17.1 i/htw, but their proportional share of all the conjunctions in the 1982–3 CC has remained stable. The paratactic conjunction has increased significantly and the conjunctive adverb has increased in normalised frequency, but fallen in proportional terms.

The relative frequency ratios of the concessive connective types are shown in Table 5.3. We will now revisit Figure 4.3 and enter the R-values of the CC into that graph to compare the trends exhibited in both corpora (Figure 5.1). The

Table 5.3: Relative frequency ratios of concessive syntactic function types

Item	R
Hypotactic conjunction	1.4883
Conjunctive Adverb	1.1347
Paratactic conjunction	2.7366

red line represents the graph for the CC.

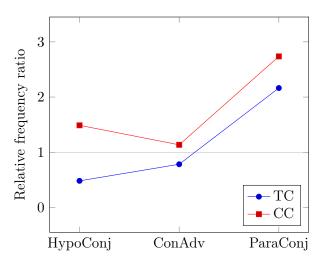


Figure 5.1: R-values of functional groups of conjunctions in the TC and CC

There is a significant difference in the relative frequency ratios of hypotactic conjunctions between the TC and the CC. While in the TC they are decreasing in frequency, they are stable or even slightly increasing in frequency in the CC, though it must be admitted that the general increase in all connective types perhaps distorts the situation to some extent. In the 1982–3 TC, hypotactic conjunctions occurred at a normalised frequency of 65.4 i/htw, which then decreased to 31.1 i/htw in the 2008 TC. In the CC, that development is inverted (from 35 i/htw to 52.1 i/htw), as Table 5.4 shows.

The values in Table 5.4 are grouped by parataxis and hypotaxis, and the data is shown in Figures 5.2 and 5.3. Figure 5.2 shows the development in *R*-values (1.4882 for hypotaxis and 1.3362 for parataxis), and the bar chart in Figure 5.3 shows that, in proportional terms, the majority of concessive relationships in the non-translated articles have always been expressed in paratactic constructions.

Table 5.4: Diachronic	change in	the	taxis of	concessive	clause	complexes in	the CC
Table 5.4. Diacinome	change in	ULIC	taxis or	COHCESSIVE	Clause	COMPLEXES II	

	1982–3		2008		Change	
	f	р	f	p	f	p
Hypotactic	35.0	13%	52.1	15%	+17.1	+2pp
Paratactic	223.7	87%	298.9	85%	+75.2	-2pp
Total	258.7	100%	351.0	100%	+92.3	

It has to be remembered, however, that this data is not entirely compatible with the TC because we have not counted every concessive clause complex in that corpus, but merely those that were translated from the English ST.

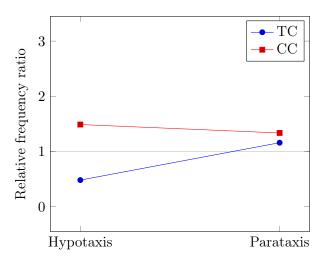


Figure 5.2: R-values of the taxis of concessive clauses in the CC

There is no trend in the R-values for the CC; both hypotaxis and parataxis remain stable. The bar chart correspondingly shows that no proportional redistribution has taken place. Read together, the graphs tell us that there is no diachronic change among hypotaxis and parataxis in the CC.

In all, the CC does not entirely corroborate the findings from the TC. Based on the TC analysis, we would have expected a decrease in hypotactic concessive structures, which is not the case. Instead, hypotactic structures remain stable between the two periods of analysis. Therefore, we can conclude that the decrease of hypotactic concessive constructions in the TC is not a phenomenon that happens generally in this genre, but that it is limited to translated lan-

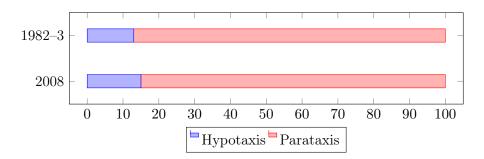


Figure 5.3: Proportional development of the taxis of concessive clauses in the CC

guage. The preference for hypotaxis in the 1982–3 translations may have been caused by a close rendering of the predominantly subordinative structure of the English STs, an influencing factor whose absence in non-translated language may be the reason why the style observed in the CC is more paratactic. The English articles have largely retained long sentences (see Section 5.3) and hypotactic structures (see Table 4.16, p. 122) across both time periods, while the recent German translations have become less hypotactic, that development may represent a trend to, consciously or unconsciously, translate more freely.

5.1.1 Sentence-initial concessive conjunctions

The analysis of sentence-initial conjunctions in the previous chapter has shown that translators of business and management articles have always preferred sentence-initial concessive conjunctions to sentence-internal conjunctive adverbs, a tendency that has grown even stronger over the observed time period. The present analysis of the CC (Table 5.5) shows that there is a statistically significant ($\chi^2 = 13.84$ (df = 1), p < 0.001) increase of sentence-internal concessive conjunctions in the CC.

Table 5.5: Frequencies of sentence-initial aber and doch in the CC

	19	1982–3		008	Change
	n	f	n	f	f
Aber	24	16.5	45	60.0	+43.5
Doch	5	3.4	63	71.3	+67.9
Total	29	19.9	108	122.3	+102.4

As has been observed in the TC, it is especially doch that exhibits a strong increase, as it is used more than 20 times as often in sentence-initial position in 2008 as it was in 1982–3. Sentence-initial aber also shows a strong increase and is used almost four times as often in 2008 compared to 1982–3. Interestingly, the frequencies of both conjunctions in sentence-initial use in the 1982–3 TC (see Table 4.8, p. 108), which only include the translations of sentence-initial but, were significantly higher than those of the entire CC. This argues that the use of sentence-initial conjunctions has been popular in translations before it became frequent in non-translated language as well—a good sign for this shift being motivated by language contact in translation, or at least contact with English language material.

5.2 Causal clauses in the comparable corpus

Table 5.6 shows a breakdown of the four conjunctions that were used to translate the ST conjunctions under analysis in the TC.

Table 5.6:	Frequencies	of causal	conjunctions	in	the ($^{\circ}$ CC
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		1982-3	3		2008	Change	
	n	f	p	n	f	p	p
weil	118	81.0	37%	67	75.9	34%	-3pp
da	133	91.3	42%	53	60.0	27%	-15pp
deshalb	8	5.5	3%	12	13.6	6%	+3pp
denn	60	41.2	19%	68	77.0	34%	+15pp
Total	319	218.9		200	226.5		

Looking at the two hypotactic conjunctions weil and da, we notice a development that is distinct to that observed in the TC. In the translations, da is used only rarely as a causal conjunction in 1982–3 (see Table 4.10 on page 112), but in the 1982–3 CC, it is used more often than weil. And while its frequency increases over time in the TC, it declines even more significantly than because in the CC. The diachronic development is displayed more comprehensively in Figure 5.4, where weil is shown in red and da in blue. TC frequencies are marked by filled dots and CC frequencies are marked by empty triangles.

Most strikingly, both conjunctions converge to the same proportional fre-

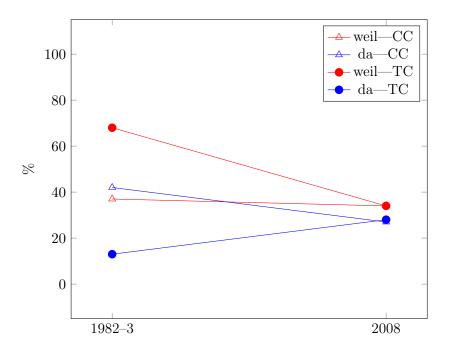


Figure 5.4: Diachronic development of the proportional frequency of da and weil in the TC and CC

quency in both corpora in 2008. This means that the significant difference in frequency between translated and non-translated language that existed in 1982–3 has been eliminated in the 2008 corpus. In the case of weil, the change has been a strong decrease in frequency in the TC, where weil declined at a relative frequency ratio of 0.4143, while there is no significant change for it in the CC (R=0.9369). In the case of da, the change is caused by a frequency decrease in the CC (R=0.6575) as well as a frequency increase in the TC (R=1.7511). So together, weil and da converge from a significantly different distribution to a very similar one in the TC. This analysis seems to show that there is a significantly different perception of the conjunction da depending on whether the text under analysis is a translation or not; its popularity in non-translated text is falling at the same time as its popularity is increasing in translated text.

The strong decrease of weil is especially significant in sentence-initial position (see Table 5.7). The proportional frequencies show an overall decrease in the use of sentence-initial causal conjunctions. The normalised frequency of sentence-initial da shows no significant diachronic change, and the decrease of

Table 5.7: Diachronic change in sentence-initial instances of weil and da in the TC.

	198	1982–3		08
	p	f	p	f
Weil	28%	18.1	16%	4.4
Da	55%	6.6	34%	7.3

its proportional frequency is only due to the strong overall frequency increase of da. This means that, as the normalised frequency shows, translators still use da sentence-initially as often as in 1982–3, but proportionally less so because they use da more frequently in general. Sentence-initial weil, on the other hand, shows a strong decrease in normalised frequency. While in 1982–3, weil was three times more commonly used as a sentence-initial causal conjunction than da, the frequency of the latter has now clearly overtaken that of weil.

As I reported elsewhere (Bisiada 2013:15f), it also seems that the translators of the articles analysed in this study sometimes attempt to avoid causal clauses altogether and prefer alternative solutions, especially transition words and phrases such as aus diesem Grund ('for this reason'). There is some evidence in the data for this, such as the increase of transition phrases from 1 to 4.8 i/htw. An inspection of the items in that category (see e.g. examples (41) and (42) on p. 92) shows further that there is a multitude of different transition phrases, two of which are shown in examples (62) and (63).

(62) People want to go to a job that is fulfilling and that they get excited about. They get excited BECAUSE we've got the right growth initiatives for them. (HBR 7/08,50)

möchten einen erfüllenden und interessanten Job haben. fulfilling and interesting job have they want and ihrJob ist dann interessant für sie, WENN wir ihnen die their job is then interesting for them if we them the richtigen Angebote für ihre persönliche Weiterentwicklung machen. right offers for their personal development make (HBM 7/08,108)

(63) The local companies were reluctant to push a low-priced product, SINCE they earn more from the higher-priced version. (HBR 12/07,60)

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Die Unternehmen vor Ort zögerten, für ein preisgünstiges Produkt the companies at-the place hesitated for an affordable product zu werben, wohl WISSEND, DASS an der teureren Version to advertise well knowing that with the more-expensive version mehr zu verdienen war. (HBM 2/08,40) more to earn was
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In both cases, the translators could have chosen to translate using a conjunction, but they chose to use alternative, more elaborate ways, which may be some evidence to suggest a shift in typical features of translation in this genre (Bisiada 2013). While, as discussed in Section 4.3, the 1982–3 TC shows a strong convention by translators to use weil, and thus to translate the English causal conjunctions rather closely, the data from 2008 contains a greater variety of different translation methods of causal clause relationships with no such change being observed in the STs.

We will now move on to look at the development of hypotactic and paratactic translations in the CC, so the conjunctions have again been grouped together (Table 5.8). The diachronic distribution analysis of hypotaxis (R = 0.7888) and parataxis (R = 1.9412) is shown in Figures 5.5 and 5.6¹. The CC exhibits the same statistically significant trend ($\chi^2 = 20.14$ (df = 1), p < 0.001) as the TC, which can be seen in Figure 5.5. Just as in the TC, the CC exhibits a strong increase in paratactic constructions, while the decrease in hypotactic structures is even smaller than in the TC and therefore not significant. The distribution shown in the bar chart in Figure 5.6 is also similar to that observed in the TC. The proportional frequency of paratactic constructions has increased from 21% to 40%. According to the relative frequency ratios, the strong increase in parataxis is primarily responsible for this redistribution in proportional frequencies.

There is also a noticeable difference in developments of hypotaxis and parataxis between causal clauses (Figure 5.5) and concessive clauses (Figure 5.2, p. 138). The reason why concessive clause complexes in the CC seem to behave differently can be gleaned from looking again at Figure 5.1 (p. 137). It shows that paratactic

¹The 'other' group is no longer shown.

Table 5.8: Diachronic change in the taxis of causal clause complexes in the CC

	1982-3	3	2008			Change		
Hypotaxis Parataxis	J		120			$-36.4 \\ +43.9$	-19pp ±19pp	
Total	218.9	21/0	200	226.5	1070	+7.5	1 <i>0</i> pp	

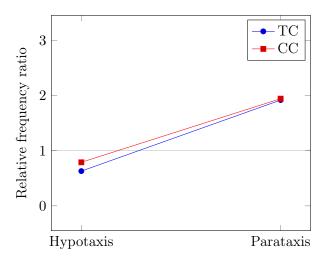


Figure 5.5: R-values of the taxis of causal clauses in the CC

concessive conjunctions also exhibit a strong increase in the CC. The difference in R-values for parataxis between concessive and causal clause complexes in the CC is explained by the fact that, in the concessive clause complexes, most paratactic constructions are connected by conjunctive adverbs, which show no change according to Figure 5.1. In the causal clause complexes, on the other hand, the paratactic group is made up mostly of the paratactic conjunction denn, which also shows a rise. So the conclusion we can draw is that paratactic conjunctions such as denn, doch and aber are all increasing in frequency. But since conjunctive adverbs such as aber and jedoch are numerous among the paratactic concessive connectives and show no change, the R-value for parataxis in concessive clause complexes in Figure 5.2 shows that parataxis on the whole is stable.

The analysis of the CC corroborates the observations made in the analysis of

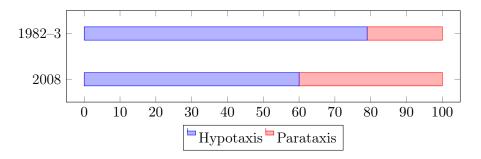


Figure 5.6: Proportional development of the taxis of causal clauses in the CC

the TC. Hypotactic structures have decreased by about 20pp while paratactic structures have increased by the same amount. This shows that, in causal clause complexes, there is a combined development exhibited by the translated and non-translated language of business and management articles, which may mean that language in that genre is becoming more paratactic as a whole, and the development of parataxis towards a major use pattern is not unique to either translated or non-translated language. However, in spite of the shift from hypotaxis to parataxis as the major use pattern, the results show that hypotaxis is still the preferred pattern to express causal relations. Section 6.1 will discuss the results from both logico-semantic relations taken together. The remainder of this chapter will deal with the issue of sentence-splitting in the CC.

5.3 Sentence-splitting

In Section 4.5, it has been observed that the tendency to shorten sentences may be responsible for the frequency shift from hypotaxis to parataxis that has been observed in the TC. The aim of this section is to find out if those observations hold true for the CC. Due to the fact that the texts in the CC are not translations but originally produced articles, it is of course not possible to know where and when an author was considering the choice between one or two sentences.

For this reason, other means of determining whether sentence length is affected have been applied. Firstly, the sentence-initial use of concessive and causal conjunctions has been investigated. In the TC, we have observed an increasing use of sentence-initial conjunctions with a concomitant splitting of the sentence into two. Thus, an increase in the frequency with which sentence-initial conjunctions

have been used can be seen as a good indicator of an increasing frequency of sentence-splitting in the CC.

The analysis in the previous sections has shown that some of the conjunctions under analysis have increased significantly over the analysed time span. Table 5.9 shows that this is particularly driven by paratactic connectives being used in sentence-initial position. The underlying development is similar to that already observed in the PC, namely the tendency towards sententialisation. The connectives that can be used in sentence-initial environments, for instance doch and allerdings, show a strong frequency increase because of the generally increasing tendency to construct concessive syntactic relationships across two sentences. The trend for concessive constructions does not seem to move away from hypotaxis, but away from sentence connection using conjunctive adverbs, especially jedoch. This corroborates what has been observed regarding the use of sentence-initial concessive conjunctions, whose analysis also pointed toward a decreasing tendency to use sentence-internal conjunctive adverbs.

Table 5.9: Sentence-initial use of aber, doch, allerdings and denn

	1982–3 f	2008 f
aber	4.1	17.8
doch	4.1	79.3
allerdings	6.9	18.1
denn	9.6	60.0

This seems to argue further that the aim to construct shorter sentences is the motivation behind the increase in paratactic patterns. Evidence for this claim is provided by the observation that the tendency towards clause simplexes is even stronger in the non-translations than it is in the translations. Authors favour writing concessive clause complexes by recourse to a sentence-initial conjunction such as *doch* or a sentence-initial conjunctive adverb such as *allerdings*, so that German clause complexes become increasingly disjointed by sentence breaks while the English STs remain hypotactically joined.

The second way of determining whether the CC exhibits an increasing tendency of sentence-splitting in the more recent texts than in the older ones is based on the measurement of document statistics such as average sentence length. Sentence length is an important factor in most proposed measurements of readability which calculate a score based on formal properties of the text. This matter will be discussed at length in Section 6.3. The corpus software WordSmith has been used to identify the mean sentence length of the texts in the CC (see Table 5.10). For comparison, the statistics for the TC are also given.

Table 5.10: Document statistics for the CC and the source and target texts in the TC

		1982-3	2008
CC	Full stops per 100,000 words	4363.3	5161.2
	Number of words per full stop	23.2	19.3
ST	Full stops per 100,000 words	4544.2	4693.8
	Number of words per full stop	22.0	21.3
TT	Full stops per 100,000 words	4481.8	5070.3
	Number of words per full stop	22.3	19.7

While the average sentence length in the English texts has remained more or less the same (-0.7 words per full stop), both German texts show a noticeable decrease in their average sentence length. The translated texts have decreased by 2.6 words per full stop and the non-translated texts have even decreased by 3.9 words per full stop. Thus, based on the evidence this data and the increasing use of paratactic connectives in sentence-initial position provide, it can be stated that decreasing sentence length and thus sentence simplification are phenomena of both TC and CC.

In all, the findings presented in this chapter only confirm the TC results of the causal clauses, where hypotactic structures in the CC have decreased at a rate similar to that in the TC. In spite of the strong decrease in its frequency, however, hypotaxis remains the preferred pattern to express causal clause relations. As regards concessive structures, the findings from the TC could not be corroborated by the analysis of the CC. Here, hypotaxis is stable, though at a much lower level than in the TC, which may argue that the frequency level with which hypotactic constructions are used in translation has adapted to the low level prevalent in non-translations.

Contrary to the hypothesis formulated at the outset of the study, little of the diachronic change observed appears to be motivated by language contact in translation, or to be conditioned by influence from the source language in an environment of multilingual discourse production. The findings do not seem to provide evidence for the claim that the source language plays a role in changing the target language in translation in this genre. It is more likely that a major factor conditioning the process of change towards parataxis is a strategy to keep sentence length down, at least in this genre, as translators and editors of translations as well as authors and editors of non-translations alike are responsible for a significant amount of sentence-splitting. This development seems to prompt language users away from employing sentence-internal conjunctions to express concessive and causal relationships and towards what Fabricius-Hansen (1999) calls an 'incremental' style, in which information is conveyed sentence by sentence, and tactic relationships, if they do exist, are expressed by sentence-initial conjunctions. These hypotheses will be discussed in detail in the following chapter.

6 Discussion

The analysis of the TC in Chapter 4 has shown that concessive and causal clause complexes in English–German translations of business and management articles do indeed show a diachronic change from hypotaxis to parataxis in the analysed time span between 1982–3 and 2008 (Sections 4.2 and 4.3). The analysis of the PC has confirmed that the tendency toward paratactic constructions is primarily attributable to translators rather than editors. The analysis of the CC in Chapter 5 has then shown that this tendency is not limited to translations, but, at least in the case of causal constructions, happens to a similar extent in non-translations (Sections 5.1 and 5.2).

What remains to do, then, is to address the third research question of this study, which asks whether there is evidence that the increasing preference for paratactic structures exhibited by language users in this genre that has been observed in the analysis can be described, firstly, as a case of syntactic convergence with English through language contact in translation and, secondly, as a reduction in system complexity of German syntax.

There are some non-linguistic reasons to argue for the idea that language in the *Harvard Business Manager* may have become less complex. There is, on the one hand, the effect of the rise in readership numbers that the magazine has experienced. There has been a tenfold increase in circulation in the 25 years under analysis (see Section 3.1 and Kuhn 2009), and the magazine has changed from a quarterly to a monthly publication. To maintain a wide base of readers and increase circulation numbers, the magazine may lean more towards the style of mainstream media.

Another reason that must be considered is the change in layout of the articles: while the 1982–3 articles are mainly blocks of text, the 2008 articles contain many diagrams, boxes and tables. That means that certain ideas may not have to be laid out discursively to the reader, but can simply be shown in a diagram and referred to in the article, which may favour a writing style that is less

argumentative and elaborate and instead more descriptive and incremental.

While the effect of paratextual elements such as the amount of diagrams on the creation of cohesion in a piece of writing is an interesting issue, for the purposes of this chapter, I will focus on linguistic explanations of the results of this study. As discussed in Section 2.3, it cannot necessarily be assumed that syntactic convergence in a language contact situation will lead to simplification, and, conversely, if simplification is observed in a language, it cannot automatically be attributed to the influence from another language. That is why the two aspects will be discussed separately in this chapter. The first half is guided by the question of whether the increase of paratactic structures can be considered a phenomenon of convergence of German and English. Section 6.1 will discuss the results of this study and seek to provide a unified picture of the findings. Section 6.2 specifically discusses whether the observed phenomena may have been caused by source language interference.

The second half of this chapter is devoted to the question of whether an increasing frequency in paratactic constructions also leads to a decrease in system complexity of German. More specifically, in Section 6.3, the connection between sentence length and the observed trend towards paratactic constructions will be investigated by discussing whether, firstly, a shorter sentence can automatically be considered 'simpler', and, secondly, whether a text becomes more coherent and readable by consisting to a greater extent of short sentences. I also investigate whether there is evidence to say that authors' concerns about the length of the sentence contribute to the increasing frequency of paratactic constructions in German business and management writing, or whether that is conditioned by other factors, such as the avoidance of subordination, so that decreasing sentence length would be just a consequence, or indeed an indicator, of a shift of parataxis towards a major use pattern in concessive and causal clauses.

The final section, 6.4, discusses an observation concerning the causal clauses analysed in this study. I argue in this section that evidence has been provided to suggest that the pragmatic differences proposed in the literature between weil, da and denn can be confirmed in the genre of business and management articles through the diachronic increase in frequency of the latter two conjunctions that has been observed in the analysis. The evidence thus seems to suggest that users of German increasingly differentiate between the different conjunctions they have at their disposal.

6.1 Paratacticisation in enhancement clauses

The key reasons for my choosing to study causal and concessive constructions for this study are that, firstly, they both share the logico-semantic relationship of enhancement in English and German (Halliday 1985/2004), and, secondly, causal clauses are argued by Polenz (1999) to diachronically decrease at a slower frequency than concessive clauses (see Section 2.1). As the first hypothesis could suggest that they fulfil a similar function and would thus decrease at a similar pace, these two hypotheses stand in contrast to each other. The analysis in the previous chapters has shown that concessive clauses indeed decrease at a faster pace than causal clauses. As Figure 6.2, displaying the diachronic differences in the proportional distribution of hypotactic and paratactic constructions, shows, the hypotactic concessive clauses have decreased in proportional frequency in translations from just over 60% to just over 40%, whereas hypotactic causal clauses have decreased from just over 80% to just over 60%, so that the latter are still used in the majority of cases. Furthermore, paratactic concessive constructions have increased in proportional frequency by 20pp, while paratactic causal constructions over the same time span have only increased their frequency by 10pp. At the same time, however, both logico-semantic relations have in common a rate of decrease in hypotaxis of about 20pp.

Therefore, both Polenz's (1999) and Halliday's (1985/2004) hypotheses can be verified. The graphs showing the diachronic trend of causal and concessive clause complexes, reproduced in Figure 6.1, show that, for the most part, causal and concessive clause complexes do seem to behave rather similarly, as their graphs are roughly parallel, except for concessive clauses in the CC, where there seems to be no increase in either paratactic or hypotactic constructions. Apart from that, it seems that hypotactic concessive clauses are indeed at a slightly more advanced stage in their decline. While hypotactic structures are decreasing in concessive as well as causal clauses in translation, parataxis is increasing more significantly in concessive clauses, and, in contrast to its minor role in causal clauses, is no longer a minor use pattern (see Figure 6.2). Parataxis occurs more frequently in causal clauses in non-translated as well as translated texts, though they already occurred more frequently there in the 1982–3 CC and have increased more strongly there as well.

As was observed above, both concessive and causal hypotactic constructions

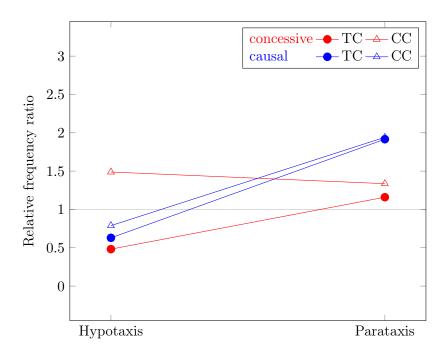


Figure 6.1: Comparison of R-values of concessive and causal constructions

show a decrease in proportional frequency in the TC by about 20pp, though concessive constructions already had a significantly smaller distribution than causal ones. For the causal clauses, the same proportional frequency shift is shown in the CC, which confirms the observations made in the TC.

For the most part, then, we can conclude from the analysis that the behaviour of concessive and causal clause complexes is largely similar in the present corpus of business and management articles. This confirms the assumption made for this study (see Section 3.2) that if, following Halliday (1985/2004), causal and concessive conjunctions can be grouped together under the logico-semantic relationship of enhancement, the tactic structures they have associated with them should also follow similar patterns of diachronic development. The only exception to this pattern is presented by concessive constructions in the CC (see Section 5.1 for an attempt at an explanation).

Though hypotactic concessive clause complexes are more strongly affected by the decrease of hypotaxis, there is evidence to suggest that concessive hypotactic structures are more resistant to being split. The evidence from sentence-splitting in the TC (discussed further in Section 6.3) as well as that provided by Musac-

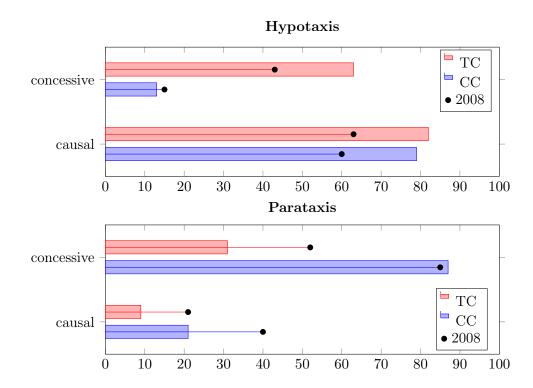


Figure 6.2: Comparison of proportional development of concessive and causal constructions

chio (2005) seem to argue that concessive clause relationships are less prone to being removed because they are less transparent, i.e. the reader is less likely to comprehend the concessive relationship if it is not explicitly marked by a conjunction.

The data (see Table 5.1 on p. 135) shows that, in the CC, some constructions, especially aber and jedoch, have a considerably higher normalised frequency than they do in the TC. It could be argued that these numbers are not very resilient because the analysis of these constructions in the CC is complicated by the fact that every instance of aber had to be manually inspected (see Section 3.3). The discrepancy between the TC and the CC as regards the frequencies of jedoch, which is less ambiguous and thus less dependent on context-sensitive interpretation, may be explained by the fact that it is an item that translators introduce often as a conjunctive adverb. A word search performed on the 1982–3 translations shows that there are 290 instances of jedoch, of which only 9 are translations from a concessive conjunction (see Table 4.1, p. 98). This

again points to the importance, repeatedly mentioned throughout this study, of distinguishing between conjunctions and conjunctive adverbs in the analysis of concessive connectives.

In the discussion of his own comparable corpus, Becher does not mention this as a problem, but simply states that he counted all those concessive connectors which were identified as translation equivalents of *although* in the analysis of the translation corpus¹ (Becher 2011:197, my translation). His values of 308 i/htw² in 1978–82, rising to 455 i/htw in 1999–2002, however, are three times as high as the values in my study. Unfortunately, Becher does not give more detail on his study, such as whether he has simply run a word search for the items and included all of them or whether he has manually discarded non-conjunctive instances of *aber*, so we can only observe that the use of concessive conjunctions seems to be extraordinarily high in popular science texts.

Based on these figures, Becher states that the frequency of concessive connectors in general has increased, and speculates that this might be explained by an influence of English on the textual conventions of German (Becher 2011:197). My study cannot corroborate these findings, as in my TC, concessive connectives in general are decreasing in frequency (see Tables 4.1 and 4.2). Becher's figure of 740 i/htw is inexplicably high compared to 34.2 i/htw in my data.

This is remarkable because a search for some concessive conjunctions in the DWDS (Das Digitale Wörterbuch der deutschen Sprache, a reference corpus for German, consisting of journalistic and scientific texts, novels and instruction manuals) reveals that the frequency observed in business and management texts is similar to those frequencies exhibited by the conjunctions in question in the reference corpus. A search for the most common concessive conjunctions obwohl, jedoch and aber yields that obwohl occurs at an average normalised frequency of 7 to 10 i/htw, the highest value is 15 i/htw. The conjunctive adverb jedoch occurs at a frequency of 30 to 35 i/htw in the reference corpus and aber, counting every instance, occurs at a frequency of 250 i/htw on average. Overall, taking into account that we should only count the instances of aber that are conjunctions, concessive conjunctions occur at an average frequency of 150 to 200 i/htw,

¹'Es wurden alle diejenigen konzessiven Konnektoren gezählt, die in der Übersetzungsanalyse als Übersetzungsäquivalente von although identifiziert wurden.'

²All of Becher's values are given in instances per ten thousand words (in this case, 30.8 instances pttw), so I have converted them to instances per hundred thousand words to facilitate comparability.

which means that they are comparatively rare in my corpus of business and management articles and extremely common in popular science articles.

A similar frequency discrepancy exists for concessive items in the TC in Becher's (2011) study and the present one. Becher calls the English conjunction although and its German equivalents highly frequent phenomena³ (2011:192, my translation). And indeed, his corpus seems to contain a lot of them: in his 1978–82 corpus of 37,830 words (2011:192), there are 33 instances where although was translated into German, of which 18 (55%) are hypotactic conjunctions (2011:195), which gives a normalised frequency of 47.6 instances of German translations of although per hundred thousand words. For comparison, the data for 1982–3 in my corpus yields a normalised frequency of only 21.9 instances of German translations of although per hundred thousand words.

In the data for 1999–2002 in Becher's corpus, which at 113,420 words is almost three times as large as his 1978–82 corpus, there are 109 instances where *although* was translated into German, of which now only 19% (21 instances) are hypotactic conjunctions (2011:195), which gives a normalised frequency of 18.5 i/htw. For the time period of 1982–3 deliberately chosen to be similar, my corpus shows a very similar frequency of 17.2 i/htw.

The question arises, then, why although and thus German translations of it occur more than twice as frequently in popular science articles of 1978–82 as in business and management articles of roughly the same time period. The compilers of the Covert Translation project do not specify what inclusion criteria they followed when selecting the texts for their corpus. Thus we must assume that authors of English popular science articles in 1978–82 used although roughly twice as often as authors of business and management articles did at the same time, while this discrepancy has almost entirely disappeared now. An alternative explanation may be that the small size of the 1978–82 Covert Translation corpus has caused the discrepancy.

This claim is supported by my observation concerning the proportional frequency of hypotactic translations of *although*, according to which translators used a hypotactic translation in 61% of cases, which is similar to the frequency of 55% found in popular science writing (Becher 2011:195). This shows that, even though *although* seems to occur at a very high frequency in Becher's 1978–82 cor-

 $^{^3}$ 'hochfrequente Phänomene (wie z.B. der Konnektor although und seine deutschen Äquivalente)'

pus on the whole, within the articles themselves the behaviour of the translators of popular science and business and management articles is rather similar.

Among the paratactic occurrences, however, there is a considerable difference between Becher's and my findings when it comes to the values for conjunctions and conjunctive adverbs. I suggest that the discrepancy is due to Becher's exclusive attribution of $aber^4$ to the category of conjunctions. It has been shown above (see the discussion of example (24) in Section 3.3) that aber and doch can act both as conjunctions and as conjunctive adverbs. Becher, however, only counts jedoch, allerdings, dennoch and trotzdem as conjunctive adverbs. This leads him to conclude that, in his 1978–82 corpus, conjunctive adverbs are marginal phenomena⁵ (2011:196, my translation) at 6% of all translations of although, and even in 1999–2002, they only occur at a proportional frequency of 13%. Conjunctions, meanwhile, soar from 21% to 46%.

The results presented in Chapters 4.2 and 5.1, which include a distinction of the conjunctive function of aber and doch from their adverbial function, suggest that conjunctive adverbs are used as commonly as conjunctions to translate although. In spite of this, my study corroborates Becher's observations as regards the strong frequency in conjunctions. Looking at the translations of although, conjunctive adverbs maintain a proportional frequency of 24% in 1982–3 and 26% in 2008 (the frequency values for all conjunctions taken together mirror this closely with 20% in 1982–3 and 23% in 2008), while it is the conjunctions that increase significantly in frequency, from 11% to 21% (8% to 25% overall). This means that, if we correctly distinguish between the conjunctive and the adverbial function of aber and doch, we must conclude that it is not an increase in conjunctive adverbs that drives the overall increase in frequency of parataxis, but an increase in conjunctions. Although it does not, of course, affect the overall observation that paratactic constructions are diachronically increasing in frequency, I would argue that a differentiated treatment of aber and doch is an important detail to observe in future studies of German concessive connectives.

I have argued that the similar behaviour of hypotaxis and parataxis in both corpora indeed warrants their collection under one logico-semantic group, as language users seem to be in the process of turning parataxis into a major use

⁴as well as, albeit to a less consequential effect, doch

⁵ 'konnektive Adverbien wie *jedoch* stellen mit nur 6% Anteil an allen *although*-Übersetzungen ein marginales Phänomen dar'

pattern in both of them. It has also been shown that hypotactic concessive constructions have declined further than causal constructions in both corpora, which stands in contrast to the finding that translators are less likely to remove concessive connectives than causal ones. More research is needed to find out if, as Polenz (1999:354) claims, concessive constructions are indeed more prone to decline because they are less semantically important than causal clauses. Having put the findings of this study into contrast with each other, the following section will investigate the role of the source language in these changes.

6.2 From hypotaxis to parataxis—a phenomenon of syntactic convergence?

If one thing has become increasingly clear over the course of the data analysis in this study, it is that the source language probably has not played too significant a role in the phenomena that have been observed. This has many reasons: one is that, similarly to what has been observed for children's books by Fischer (2007:397), the English business and management articles maintain a preference for hierarchical, hypotactic constructions, so that the reasons for the development towards parataxis that has been observed in German seem more likely to be found within German than in a language contact situation. That empirical observation runs counter to the popular impression which holds that convoluted sentences with a large amount of subordination are typical for German, whereas English is known to be precise and brief. The tendency in German language users to increasingly prefer parataxis may, in fact, be attributable to that popular impression, representing a phenomenon of overcompensation in which language users who consider German intrinsically difficult decide in favour of a paratactic construction, aware that the amount of subordination typical for German is perceived to make understanding the text unnecessarily difficult.

Such an explanation for the diachronic syntactic change observed is necessarily speculative, but if valid, would still be an explanation attributable to multilingual discourse production. While there may not be an act of copying of English syntactic structures or patterns, as might happen in cases where the prestige difference between English and the language in question is higher (see e.g. Bennett 2010, 2011; Malamatidou forthcoming), there may well be an influence of

a higher order, in which authors and translators who regularly deal with English have views about a certain contrast between the linguistic effectiveness of English and German that, though not based on evidence, may lead them, for instance, to believe that the amount of German hypotaxis is too high to be easily understood by the reader.

As Neumann (2011) has argued, language contact might be observed by diachronic corpus studies even in cases where the authors of non-translated texts regularly read English articles in their field. Corpus studies cannot determine, she argues, whether it is the reception of a translation of an English article or the reception of that English article itself that constitutes the language contact situation. The effect of language contact in multilingual discourse, then, is not necessarily, as was suggested initially, one of direct influence on use pattern frequencies, but more indirect, informing the linguistic views of language users of German and making them, consciously or subconsciously, use the language in a way that they think is more likely to achieve the intended communicative effect. In this section, I focus on this claim and, by discussing the findings of this study comparatively to similar work done by other researchers, hope to shed some light on the question of whether the observed diachronic change from hypotaxis to parataxis really is driven by the widespread though inaccurate view that German is overcomplicated compared to English, or whether there is evidence to suggest that there is a direct influence in the form of an adoption of at least some linguistic features from English into German.

To start with, no clear evidence was found to support the presumption made at the outset of this study that the verb-second word order of both clauses in an English clause complex affects the verb-final word order of German hypotactic subordinate clauses. Paratactic conjunctions do increase in frequency, but these conjunctions increasingly occur sentence-initially after the sentence has been split in two. Thus, rather than leading to a higher frequency of verb-second order in clause complexes, the increase of paratactic conjunctions such as *denn* and *aber* seems predominantly to be determined by the suitability of these conjunctions to occur in sentence-initial position (the question of whether an increase in split sentences may cause an increase in paratactic constructions will be discussed further in Section 6.3).

House (2011a:171) argues that many English genres prefer 'a fixed set of routine formulas' for expressing cohesion in texts. This is confirmed by my

results, for example regarding the marking of causal relations, where because is by far the preferred choice used in the STs (see Tables 4.10 and 4.11). Users of German, on the other hand, prefer 'situation-anchored, ad-hoc formulations' as well as 'a great variety of expressions adapted in situ to the respective contexts and co-texts' (House 2011a:171). A sign of convergence with the SL would then entail a move away from such constructions and towards a 'routine formula' similar to because in English. But the evidence suggests that the opposite may be the case, as it is ad-hoc formulations such as those presented in examples (46) and (47) in Section 4.3 that are becoming more common (see Table 4.13). As translators use such translations increasingly often, even though they could simply use weil, this may be a case of 'resistance to Anglophone discourse conventions and preferences' (House 2011a:171).

As discussed in Section 1.1, Becher et al. (2009:146) see the increasing frequency of sentence-initial concessive conjunctions ('SICCs') in German popular science texts as an 'adoption of Anglophone communicative norms'. A strong increase of SICCs has also been observed in the present study, so that the hypothesis that there is an 'increasing convergence of German covert translations towards the model represented by the (prestigious) English source texts' (Becher et al. 2009:147) seems to be confirmed for the genre of business and management articles.

Looking at the DWDS reference corpus, we find that the sentence-initial conjunction doch shows a strong increase in frequency in journalistic texts (the green bars in Figure 6.3), but not in instructive and scientific texts (the orange and yellow bars). It could, therefore, be argued that the strong increase in SICCs, which, in my corpus, is especially an increase in the sentence-initial conjunction doch, merely represents a shift in genre-specific rather than linguistic norms, i.e. an adoption of communicative norms common in journalistic rather than scientific texts in order to reach a wider audience.

That is supported by the observation that, in the present genre of business and management articles, sentence-initial concessive conjunctions are used rather often to translate the English sentence-initial conjunction *but* (see Section 4.2.1). A different picture is provided for the genre of popular science writing by Becher et al. (2009:144), where the sentence-initial conjunctions were a minor use pattern in German in 1978–82, and have become a major use pattern in 1999–2002. This may suggest an earlier move by business and management articles towards

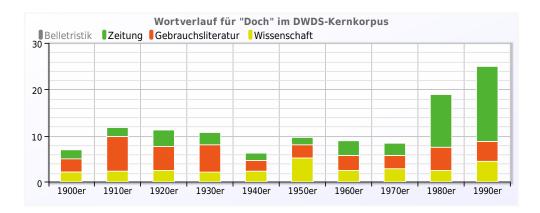


Figure 6.3: Diachronic frequencies of sentence-initial *doch* in German journalistic, instruction and scientific texts (instances per million words)

conventions prevalent in journalistic texts and a delay of this process in popular science texts while scientific conventions were adhered to for longer.

Differing conventions between genres certainly lead to different processes of change in language use. The findings presented in this study, however, provide some evidence to suggest that genre is not the only explanation. The observed frequencies (see Table 4.8, p. 108 and Table 5.5, p. 139) show that, in 1982–3, SICCs were used a lot more often in translated texts than in non-translated texts, whereas in 2008, though still appearing commonly in translated texts, they are even more frequent in non-translated texts. This data seems to be strong evidence that the increasing use of SICCs in German business and management articles has been driven by their frequent occurrence in translations.

There is no way of telling whether this increasing use of sentence-initial conjunctions, especially doch, in translations is due to SL influence or whether the explicit marking of concessive relations has developed independently in German business and management translation, for reasons such as translators' being eager to get the meaning across correctly and unambiguously. What can be stated, however, is that it certainly seems to be a translation-induced change. Data supporting this view has been presented in Section 4.4 in my analysis of the conjunctions that translators introduced into the TTs where the ST had no overtly marked concessive relation. For the conjunction doch, Table 4.15 (p. 122) shows that there has been an increase in the use of the conjunction doch even where the ST clause complex does not have an overt concessive relationship. This suggests

a classic shift from a minor to a major use pattern (see Section 1.1) as proposed by Heine & Kuteva (2005). The increasing use of *doch* has become established in translated language and is spreading to contexts other than that where the variation was originally prompted by the SL.

Further evidence for this conclusion is provided by the analysis of translations of sentence-initial but in the PC in Section 4.2.1, where it has been shown that there is considerable disagreement between translators and editors, and editorial changes are relatively frequent (see Table 4.9, p. 109), which can be considered an indicator for change in progress. This means that editors try to avoid to a noticeable extent 'the interactional (and incremental) mode of presenting information achieved by means of sentence-initial Aber and Doch' which 'is (or used to be?) highly untypical of German texts' (Becher et al. 2009:146), showing a preference for 'rendering the contrast through word order inversions' (2009:147), which is said to be more typical of German. This is evidence to show two things.

Firstly, there seems to be a difference between translated and non-translated language that editors perceive, prompting them to effect a considerable amount of rather intricate changes to the syntactic marking of contrast. Secondly, editors feel quite strongly about this matter, as the changes even within categories show, and seem to have a more conservative intuition of language, though some of them also act as in-house translators for the *HBM*, suggesting that this conservative intuition may not always be consciously applied.

In an analysis of student translations of English political articles into German, Stein (1979:310f) finds that logical relations between propositions are syntactically marked in the German translations of sentences that are asyndetically connected in the English STs. Stein concludes that there are differences in the way cohesion is created between English and German: logical relations that readers in both languages detect are additionally marked in German (Stein 1979:310f). This observation may be partly responsible for the tendency to explicit marking that Becher et al. observe, namely that 'in English–German translations it is often the case that a German equivalent of sentence-initial But such as Aber or Doch is avoided' (2009:137).

Seeing that sentence-initial concessive conjunctions occur increasingly frequently especially in non-translations, we may conclude that, with regard to the marking of concessive relations, we are witnessing the establishment of 'a fixed set of routine formulas' (House 2011a:171) akin to what is argued to be

in place in English to express, for instance, concessive relations. This study has observed an overall increase in conjunctive adverbs (see the end of Section 6.1), but an increase in conjunctions in sentence-initial position. This might suggest that, in the genre of business and management writing, language users increasingly assign the connective to a specific place in the sentence, whereby conjunctions are increasingly used in sentence-initial position and conjunctive adverbs in sentence-internal position.

So far in this chapter, I have shown that causal and concessive clauses both exhibit a similar degree of diachronic change from hypotaxis to parataxis. Parataxis seems to be in the progress of becoming a major use pattern, which has already happened in concessive clauses and may soon happen in causal clauses. That development, however, does not seem to represent a case of syntactic convergence of German with English in this genre. The only instance where good evidence for such a shift could be found is in the analysis of sentence-initial concessive conjunctions, which appear to become more frequent in German in the present genre, a trend that could be observed first in translated text and may have spread from there to non-translated text. The remainder of this chapter will address the question of whether the move of parataxis towards a major use pattern can be considered a process of simplification of German syntax.

6.3 Correlating sentence length with syntactic complexity

Most notably among the unexpected diachronic developments that this study has found is the increasing tendency towards sententialisation shown by language users in the genre of business and management writing, i.e. to translate one ST clause complex into two or more clause complexes in the TT. Unlike Italian translators in the business genre, who join English clause simplexes in their Italian translation to satisfy Italian syntactic conventions (Musacchio 2005:81f; see Section 1.1), German translators rarely join ST sentences (see Table 4.18, p. 127). Instead, we have observed that a sizeable number of ST clause complexes are split in the translation process, and a further significant amount in the mediation process. It may be tempting to explain this as a phenomenon of explicitation, i.e. 'the technique of making explicit in the target text information that is im-

plicit in the source text' (Baker & Saldanha 2009:104). Evidence for this claim comes from Séguinot (1988), who criticises definitions of explicitation that limit it to making the text 'more redundant', as originally proposed by Blum-Kulka (1986:19). She instead suggests that

languages are inherently explicit or implicit in the kinds of information they convey and the way they convey it, first through their informal properties and secondly through their stylistic and rhetorical preferences.

(1988:108)

German, for instance, always supplies gender information, while English does not, and German uses cases where English uses prepositions (see examples (10) to (12), Section 2.2). In a translation from English to German, such language-inherent differences in semantic transparency mean that the translator often needs to make the TT more semantically transparent by supplying extra information. If such additions lead to redundancy, the redundancy is an issue of the language rather than of translation.

Séguinot therefore suggests reserving the term explicitation 'for additions in a translated text which cannot be explained by structural, stylistic, or rhetorical differences between the two languages' (1988:108). In her study, she finds greater explicitness in the TTs, deriving, among other things, from the 'raising of information subordinated in the source text into co-ordinate or principal structures' (1988:109). As German sentence structure allows, or even stipulates, the construction of hierarchical and at times heavily subordinated sentences, most changes from a hypotactic to a paratactic structure that we have observed in this study cannot be explained on structural grounds. Therefore, in accordance with Séguinot's definition, the translations analysed in the present study show significant levels of explicitation.

However, explicitation alone cannot account for the tendency towards splitting sentences and an increased use of sentence-initial conjunctions in the entirety of this corpus. That is because a preference for shorter sentences and presentation of information in small units is not just a translation strategy, but is also observed in the CC. Authors of the non-translations analysed also increasingly use conjunctions sentence-initially, which reflects a tendency to write two sentences

where authors of 1982–3 may have used one sentence (the relevant results are shown in Table 5.10, p. 147).

The analysis of the PC has yielded that this observation is not limited to the authors of the texts, but extends to the editors of the translations in the magazine as well (see Table 4.19 on p. 131). What those results also show is that the strong tendency to sententialise is not matched by an equal tendency to combine ST sentences (see also Table 4.18, p. 127). Instead, that happens rather rarely, which supports the claim made above that keeping sentences short has become a pervasive text creation strategy exhibited by the authors in the present corpus. As was already argued in Section 4.5, if that strategy had at its heart evaluations of effective ways to present information, it would be more likely that there would at least be a reasonable balance between splitting and combining sentences.

The aim of this section is to discuss the observation of diachronically decreasing sentence length as part of the wider shift of parataxis towards a major use pattern that has been observed in this study. An intervention during the mediation process whereby one sentence is split into several ones involves the creation of main clauses, and will unavoidably lead to a greater amount of paratactic constructions in the text. Similarly, a translation strategy that avoids long sentences and alters or removes the conjunctions that signal logico-semantic relations in the ST will also produce a more paratactic text.

The focus of argument is the confusion of complexity with readability. As will be argued below, structural complexity can easily be confused with aspects of accessibility of texts. As was argued in Section 2.2, a low complexity of a sentence cannot necessarily be equated with a high semantic transparency and vice versa. For example, a sentence with a lot of long NPs is structurally a simple sentence, but hard to parse due to the amount of information that the reader has to memorise between each finite verb. Conversely, a sentence may be long and complex, but have a high semantic transparency due to a clear hierarchisation and theme—rheme progress, and thus be semantically transparent. It is also important to differentiate between difficulty and absolute complexity (see Section 2.2). Different readers may perceive different sentences as more or less difficult, but in order to judge the absolute complexity of a construction, we need a measurement that is as objective as possible.

The reader is reminded that, as was pointed out in Section 2.2, this issue will not be looked at in terms of 'difficulty' or 'ease of processing'; the methodological means of this study do not allow hypotheses in this direction and are better pursued using psycholinguistic or neurocognitive methodology. Instead, I will attempt to analyse the complexity of structures according to the framework adopted in Chapter 2. I will address the question of whether system complexity is decreasing through the shift of parataxis to a major use pattern in this section by first discussing the issue of sentence length in the context of text production, and then move on to discuss the matter of complexity of sentences in more syntactic terms.

A possible reason why the avoidance of long sentences in both translations and non-translations happens more frequently in the 2008 corpus is that authors write in accordance with what is stipulated by the publisher in the various guidelines which are sent to all writers involved in producing texts for the HBM. The manuscript guidelines for authors (see Appendix A) ask that 'Schachtelsätze' ('nested sentences') should be avoided. Similar guidelines are given to translators (also in Appendix A): 'Lösen Sie Schachtelsätze, insbesondere dass-Sätze, möglichst auf.', though they are also warned not to leave out parts of sentences that they do not understand⁶. In personal communication with an editor of the Harvard Business Manager, I have learnt that the translations are 'rather literal' when they arrive and become 'polished into understandable and clear language'.

It is worth looking a bit more closely at the term *Schachtelsatz*, which literally means 'boxed sentence', as it reoccurs in treatments of German writing and stylistics. The mental image that has led to the term *Schachtelsatz* is the idea that, like the box inside the box inside the box, there is a sentence inside a sentence inside a sentence. The Duden defines a *Schachtelsatz* as a long sentence that is built in a complicated way and that has multiply subordinated dependent clauses⁷. The last part of this definition is important to note, since it means that, at least according to the Duden, a sentence must have at least three layers of subordination to qualify as a *Schachtelsatz*. Consider as an example Christian Morgenstern's parody of pedantic language in the introduction to his *Galgenlieder*:

⁶ Lassen Sie keine Sätze oder Satzteile weg, die Ihnen unverständlich erscheinen.'

^{7&#}x27;langer, kompliziert gebauter Satz mit mehrfach untergeordneten Nebensätzen', my translation

Es darf daher getrost, was auch von allen, deren Sinne, weil sie unter Sternen, die, wie der Dichter sagt: "zu dörren statt zu leuchten" geschaffen sind, geboren sind, vertrocknet sind, behauptet wird, enthauptet werden, daß hier einem sozumaßen und im Sinne der Zeit, dieselbe im Negativen als Hydra betrachtet, hydratherapeutischen Moment ersten Ranges [...] gegenübergestanden und beigewohnt werden zu dürfen gelten lassen zu müssen sein möchte.

(Morgenstern 1965:191)

However, though the *Schachtelsatz* is rather precisely defined, authors writing on style apply the term *Schachtelsatz* rather freely to sentences, and usually in a negative or discrediting way, claiming that the use of them betrays authors' inability to focus their thoughts (Baum 2004:43), or blaming complex syntax for the decline of public intelligence:

Diese Schachtelsätze sind mitschuldig, wenn der Leser, gepeinigt und gelangweilt, sich leichter eingängigen Werken einer bequemen Unterhaltungsliteratur zuwendet. Der Schachtelsatz entspringt verschiedenen Quellen: bei den einen ist es Verachtung gegenüber dem Leser, bei andern Zerfahrenheit des Denkens.

(Reiners 1943/2004:87)

'These boxed sentences are partly to blame if the reader, feeling tormented and bored, turns to more accessible works of comfortable entertainment literature. The boxed sentence originates in different sources: in some cases, it is contempt for the reader, in others, unfocussed thinking.'

Alongside such claims, we usually find cultural stereotypes about German exceptionalism, usually at some point quoting Mark Twain (1880), and claiming that complex syntax is somehow peculiar to German:

Der Franzose bildet—nach Übersetzungen zu urteilen—etwa halb so viele Nebensätze wie wir [...]. Der Engländer ist noch nebensatzfeindlicher.

(Reiners 1943/2004:87)

'Judging by translations, the Frenchman makes use of half as many subordinate clauses as we do [...]. The Englishman is even more inimical to subordinate clauses.'

This assertion seems primarily based on intuition or individual perception, as there is no evidence that German uses exceptionally many subordinate clauses compared to other languages (see e.g. Fischer's (2007) refutation of Hawkins's (1986) claim that German is, in its entirety, more complex than English). The present study confirms the view that German is not syntactically much more complex than English at least in the observation that hypotaxis remains used more often in English than in German.

In Section 2.2, I have suggested a scale of semantic transparency depending on the overt presence of markers of logical interdependency (Figure 2.1, p. 60). The continuum places sententialisation (shown as an asyndetic marking of relations using a full stop) two levels below parataxis. This indicates that the logical relation is marked less clearly than in a paratactic degree of interdependency. Thus, semantic transparency is lower in asyndetic relationship marking compared to paratactic marking. It now remains to investigate whether it is the observed tendency towards shorter sentences which causes the text to be more paratactic, or whether there is conversely a general tendency towards parataxis, one of whose effects is the shortening of sentences.

Diachronic research in the field of quantitative linguistics indicates that sentence length in German has been undergoing a process of shortening since the early 20th century. In a longitudinal study of German scientific and technical articles, Möslein (1981:503) finds a decrease from 25.77 words per sentence in 1900 to 17.66 words per sentence in 1960. Similarly, Stahlheber's (1992:174) comparative study of the sentence length of articles in the German scientific journal *Die Naturwissenschaften* and in the English equivalent *Science* finds a small decrease in sentence length over the course of the 20th century.

Both studies, however, also show that sentence length had increased through the late 18th century, with a peak of a syntactic style strongly geared towards written language⁸ around 1850 (Polenz 1999:353, my translation), so it can be argued that the decrease that is observed now is simply a return to an earlier standard in German. Though German is stereotypically known as a language

⁸'stark schreibsprachlich orientierten Satzbaustils'

favouring long sentences, Stahlheber's findings show a consistently greater average sentence length in the English texts. A number of studies on scientific texts, summarised by Best (2007:54f), show conflicting results as to whether the decline continues, which Best attributes to an emergence of styles specific to the individual subfields of science.

For most casual observers, the length of the sentences in a text is directly correlated with what is called 'readability' of that text, i.e. the ease with which the mind can process the text. Formulas devised to measure readability usually have sentence length as one of their factors. Figure 6.4 shows some popular readability measures⁹, where 'ASL' stands for 'average sentence length' and 'HW' stands for 'hard words' (a word is considered hard by the authors of the below formulas when it has three or more syllables).

Flesch-Kincaid Grade Level

$$0.39 \cdot ASL + 11.8 \left(\frac{total\ syllables}{total\ words} \right) - 15.59$$

Gunning Fog Grade Level

$$0.4 \cdot (ASL + HW)$$

Wiener Sachtextformel

$$0.2656 \cdot ASL + 0.2744 \cdot HW - 1.693$$

Figure 6.4: Popular readability formulas

The Hamburger Verständlichkeitskonzept ('Hamburg Model of Readability', c.f. Langer et al. 1974), another widely discussed model of measuring readability, does not suggest a formula, but establishes four parameters of readability, among them simplicity ('Einfachheit'), which stipulates short sentences of between nine and thirteen well-known words of no more than three syllables where possible, and structure ('Gliederung'), where the authors suggest that sentences should ideally contain no more than one idea that should be found at the beginning of the sentence. Based on such generalisations, one of the most immediately made recommendations of style guides is to 'keep sentences short' at about twelve

⁹For a summary of the most widely used formulas in English and German, see Dubay (2006) and Best (2006), respectively.

words (Baum 2004:43) and stick to one idea (LaRocque 2003:14; OECD 2007:31) because 'most language experts say that short sentences are better as they are readable' (Rizvi 2005:330). As no conclusive evidence on the effect on sentence length has yet been provided, such claims are rarely backed up with convincing evidence. A general belief among such authors seems to be that shortness equals simplicity, and notions such as semantic transparency and the coherence in a text are seldom discussed, so that the topic of clear writing, which is itself a complex issue, is unwarrantedly simplified by leading the discussion about the quality of writing or 'good style' in purely quantitative terms of sentence length.

The very featuring of the concept of sentence length in style guides is worth querying. It is unlikely that authors are constantly aware of the length of their sentences, as concentration on the content of the text is more important. If writing is an act of bringing ideas to paper, then the mantra of 'keeping sentences short' is either a constant interruption to the authors' work flow, as they constantly have to remind themselves not to exceed a certain number of words per sentence, or, more likely, it is a strategy to achieve readability that is applied both during and after the creation of the text.

Assuming that the latter is the case, in order to address our question for this section of whether increasing parataxis produces shorter sentences overall, or whether the perceived need to shorten sentences promotes a paratactic style, we need to look at specific sentences and try to extract information which might help us determine the reason for specific stylistic decisions. The fact that a text consists of short sentences does not mean that the author explicitly aimed to write in such a style. Instead, a strategy that produces a text with short sentences may, for instance, aim to avoid subordinate clauses (Eichinger 2005:374) or condense information by extending noun phrases, which has been described as, if not a cause of, at least a parallel development to, the tendency towards diachronically decreasing sentence length:

Die Tendenz zum kürzeren Satz geht einher mit der vom hypotaktischen oder Nebensatzstil, der ein Maximum an explizitem Ausdruck darstellt, zum mehr parataktischen Nominalisierungsstil, der eine 'Konzentration von möglichst vielem Inhalt auf möglichst wenige Wörter' bezweckt (Eggers 1983:138).

(Polenz 1999:354)

'The tendency towards shorter sentences goes together with a tendency from a hypotactic or subordinative style, which represents a maximally explicit expression, towards a more paratactic style of nominalisation, whose purpose is the 'concentration of the largest amount of content to the smallest amount of words.'

Example (64) shows an instance where the translator has chosen to render the relative clause which Rita [...] planning as the prepositional attribute von den [...] beschriebene within the noun phrase that is the subject of this sentence. The resulting translation is less semantically transparent, mainly because the NP such process has been removed. By its pronoun such, this NP clearly attributes the 'Discovery-Driven Planning' as one of the 'alternative systems' mentioned in the previous clause complex, so that both clause complexes form a cohesive sequence.

(64) Happily, though, there are alternative systems specifically designed to support intelligent investments in future growth. One such process, WHICH Rita Gunther McGrath and Ian MacMillan call discovery-driven planning, has the potential to greatly improve the success rate. (HBR 1/08,98)

Glücklicherweise gibt es aber Alternativen, die speziellthankfully however alternatives which especially there-are daraufausgelegt sind, intelligente Investitionen in künftiges towards geared are intelligent investments in future Wachstum zu fördern. Das von den US-Professoren Rita Gunther to support the by the US-professors growth Rita Gunther McGrath und Ian MacMillan beschriebene Discovery-Driven Planning McGrath and Ian MacMillan described Discovery-Driven Planning kann die Erfolgsquote enorm verbessern. (HBM 5/08.52) the success-rate greatly improve

The clause complexes in the German translation, on the other hand, provide no such theme—rheme structure of the information content. Instead, they stand rather unconnectedly, and it is not immediately obvious that there is a semantic connection between them. On a more subtle level, additional semantic transparency is lost in the translation because 'Discovery-Driven Planning' is no longer

'called' thus by its authors, but simply 'described', moving them from being explicitly suggested as the creators of the process (a description that is not carried across into the TT either) to mere observers.

The translators thus opted against the obvious alternative, which would be a relative clause such as Ein solcher Prozess, der [...] genannt wird. While it is not clear whether the reason for the lost cohesion is the decision to avoid the relative clause or whether it is a generally 'economising' translation strategy, trying to shorten the translated text where possible, the result, as has been shown above, is greater ambiguity. This is the case in spite of the fact that the TT is less complex, as it is a simple sentence, whereas the source sentence has one level of embedding.

The reason why the above example did not draw on a causal or concessive clause complex is that the data does not provide any such instance. The present study shows that a trend towards condensing information by extending NPs in German cannot be found either for causal or for concessive clauses in the genre of business and management writing. Authors do seem to avoid subordinate clauses at times, but they do not do so, for example, by pushing information into attributive extensions of subject NPs.

An analysis of attributive extensions would be highly instructive in answering the main question that the findings of this study have produced, namely whether the development from hypotaxis to parataxis is driven by an increase in parataxis as such, or by a decrease in popularity of subordinate structures. It would be interesting to investigate whether there is also an increase in attributive extension of NPs in translations and non-translations. If so, this would support the claim that there is a syntactic development away from the subordinate structure, with information either being packed into NPs or presented as paratactic sentences. If there is no separate development, we might speculate that there may be an increase of paratactic structures themselves.

Only a few studies (e.g. Doherty 1998) have analysed whether attributive extensions of NPs occur more or less frequently in translations from English to German or to another language that permits extended NPs, presumably because it is difficult to comprehensively search for attributes in a corpus. A study of the frequency of attributive present participles might search for the German participle affix 'end(e)' in a corpus, but of course that would not yield a complete picture of all the methods of attributive extension of NPs, such as past participles.

A promising method was applied by Stahlheber (1992), who suggested counting the number of finite verbs in a corpus. A decrease of finite verbs would then tell us that there has been a development from an explicit verbal style, where ideas are routinely expressed in clauses, to a nominal style where information is contained within NPs.

In her study of sententialisation in translations from German to English and Norwegian, Fabricius-Hansen (1999) finds that the target languages in her study often make use of the tactic of rendering one source language sentence as two sentences in the TT. She argues that the effect of sententialisation is that the TT becomes more 'incremental', i.e. arranging its informational content into smaller chunks according to what she calls 'Principles of Incremental Discourse Organisation' (1999). Those principles are the minimisation of the number of new discourse referents, the amount of information that is attached to those referents as well as the use of presupposition as a way of conveying information (1999:183f).

Sententialisation is said to occur when the translator perceives the violation of one of the principles of incremental discourse organisation, and as to its reasons, Fabricius-Hansen (1999:203) suggests not only differing 'incrementality standards' among languages, but also language-inherent factors. For instance, she mentions the possibility of German having phrasal adverbials in the middle field (see, e.g., example (65c)), which can be exploited to convey non-critical information as adjuncts, while English adverbials usually follow the verb, which can lead to ambiguity. Similarly, German allows greater extensions of noun phrases (e.g. (65d), cf. also the discussion of example (13d) in Section 2.2) as well as more freedom in compound building so that sentences can be kept simple whereas, in English, the information must often be expressed in a separate clause.

The basic idea, then, is that users of a language that has the structural possibilities which seem to make incrementality unnecessary are less prone to sententialise. In light of the findings presented in the present study, this idea is to be reconsidered, as it seems that language-inherent possibilities alone do not suffice to prevent sententialisation in translation. Furthermore, a similar development can be observed in non-translations, which is evidence that sententialisation is not just a phenomenon of explicitation in translation. The increasing frequency of sententialisation observed in the present corpus is not only surprising insofar as German is stereotypically known as an information-structurally dense lan-

guage, but also because of the 'structural peculiarities' that German provides to avoid incrementality. Consider the English sentence in (65) and its German translation.

- (65) Customer involvement in operations has profound implications for management BECAUSE it alters the traditional role of the business in value creation. (HBR 4/08,70)
 - Dass die Kunden an der betrieblichen Leistungserstellung that the customers in the operational creation-of-performance beteiligt sind, hat tiefgreifende Auswirkungen auf das involved are has profound implications the on Management. Es verändert die traditionelle Rolle desmanagement it alters the traditional role of-the

 $Unternehmens\ im\ Wertsch\"{o}pfungsprozess.\ (HBM\ 6/08,60)$ company in-the process-of-value-creation

The translation is a case of sententialisation where the causal marker has been removed. Therefore, the sentence is less semantically transparent than the English sentence. In the English sentence, the causal connection between the propositions is made clear by the arrangement of the information as a causal clause complex. The German sentence sequence, on the other hand, is ambiguous because here it is not clear whether alteration of the traditional role of business in value creation is the cause of the profound implications or just another consequence of customer involvement. In other words, the ambiguity is introduced by the fact that we do not know whether the full stop should be interpreted as a weil or an und.

The examples in (65) show some alternatives that the translator could have used. The most obvious one in (65b) makes the logico-semantic relation between the propositions clear. It should be noted that the German translation is semantically more transparent than the English source sentence, as in the latter, it is theoretically ambiguous whether the pronoun it in the causal clause refers to 'customer involvement' or 'management', while in (65b), the reference is clear through the gender specification in sie.

- an der betrieblichen Leistungserstellung b. Eine Kundenbeteiligung (65)customer-involvement in the corporate operations hat tiefgreifende Auswirkungen auf das Management, weil has profound implications on the management because traditionelle Rolle des dieUnternehmens im siethe traditional role of-the company it in-the Wertschöpfungsprozess verändert. value-creation-process alters
 - Eine Kundenbeteiligung an der betrieblichen Leistungserstellung customer-involvement in the corporate operations die einhergehende Veränderung der tradition ellenhat durch of-the traditional has through the concomitant alteration Rolle des Unternehmens Wertschöpfungsprozess imrole of-the company in-the value-creation-process tiefgreifende Auswirkungen auf das Management. profound implications on the management
 - d. Die die traditionelle Rolle desUnternehmens imthe the traditional role of-the company in-the Wertschöpfungsprozess verändernde Beteiligung der Kunden involvement of-the customer value-creation-process altering der betrieblichen Leistungserstellung hat tiefgreifende the corporate operations has profound Auswirkungen auf das Management. implications on the management

Examples (65c) and (65d) draw on the potentials of German to avoid incrementality suggested by Fabricius-Hansen (1999:203). The actual translation as shown in (65a) makes use of none of these possibilities. Instead, the translator expands the NP Customer involvement in operations into a whole subject clause (possibly due to an insecurity as to a precise and unlengthy translation of 'operations') and thus increases verbosity. The sentence is then shortened by removing the

causal link. Both that splitting of the sentence and the increase of verbosity considerably reduce the semantic transparency of the resulting sentence.

While translations such as (65a) represent extreme cases of increasing ambiguity through sententialisation, sentences such as (66) are commonplace. The translation follows the ST closely, except for the fact that the translator has introduced a sentence boundary, giving the causal information in the following sentence. Instead of a clause complex, the German translation has two clause simplexes. Such examples of sententialisation run the risk of inappropriately making information that is logically subordinated or downgraded in the ST seem part of the main structure in the TT (Solfield 2008:116). This makes the text less semantically transparent because, other than in the ST, there is no indicator of exactly which effect the cause refers to; we can only assume it is the clause immediately preceding it, but we cannot be sure that it is not the two preceding clauses. Thus, there is an overall simplification of the TT through the avoidance of subordination, while, unlike in (65), the causal conjunction is not removed. As the structure of the sentence is not changed, this particular phenomenon, occurring frequently in the corpus, may well be attributable to the idea that information can be presented in a more accessible fashion by simply shortening the sentences in a text.

(66) Functional staffers in the divisions (financial analysts, for example) often deferred to their higher-ups in corporate rather than their division vice president, SINCE functional leaders were responsible for rewards and promotions. (HBR 6/08,60)

Das Funktionspersonal in den einzelnen Geschäftsbereichen (etwa the functional-staffers in the individual divisions (such-as

sichoftPersonal) beugtedenFachvorgesetzten personnel) deferred REFL often to-the higher-ups inder Konzernzentrale dem Leiter des statteigenen the headquarters instead-of the leader of-their own Geschäftsbereichs. Denn die Funktionsleiter in der Zentrale division since the functional-leaders in the head-office waren für Vergütung und Beförderungen zuständig. (HBM 9/08,58)for rewards and promotions responsible were

Sentence length alone, however, is not a criterion of accessibility. If we imagine the act of reading a text as a process of interpreting it sentence by sentence, the representational structure that the reader has mentally created of the discourse while reading the text will be updated after each sentence (Asher 1993:63). A full stop thus marks the end of a 'basic complete unit of communication' which the author communicates with a particular intention (1993:270f). A text can then be considered an array of thoughts which are in logico-semantic and interdependent relations to each other. If those relations are overtly expressed, the reader can detect the hierarchy straight away. If they are not, the reader has to infer them by drawing on the order of discourse units, semantic knowledge or world knowledge (Fabricius-Hansen 1996:543). This means that the interpretation of a written text demands two activities from the readers: firstly, they have to use the information in the sentence and their 'non-linguistic knowledge systems' to build a 'representation of the information given in the discourse' and update this constantly, and secondly, they have to 'assign a segmented discourse structure to the text' and decide for each new sentence how the previously built discourse representation fits into that structure, and revise it if necessary (Fabricius-Hansen 1996:543).

The important aspect of this concept is that the text as the container of information is considered as a whole. Those proposing a strategy of keeping to short sentences in order to maximise readability of a text sometimes seem to assume that each sentence is an independent element. This would, however, only take into account the first of the two tasks described above, i.e. creating a mental representation of the discourse and updating it after every sentence. That task may indeed be facilitated by shorter sentences, as the amount each 'update' contains is kept small. But the second activity that is demanded of the reader, namely the creation of a segmented structure in which the reader has to decide how the current sentence fits into the entire text is not made easier if the text mainly contains short sentences. The information content of a text does not change, only the way it is laid out, so it may well cost more effort to create a coherent discourse map of the text if the author does not give guidance on how the various discourse units are to be connected.

From the evidence in the corpus and the discussion above, it seems that the translators of the articles in this corpus have applied the global translation strategy of keeping sentences short and splitting ST sentences with causal and concessive links into two sentences. We should ask whether the translators, in deciding for this global translation strategy, do so in order to keep the sentence length down or because of syntactic considerations, for instance, to reduce subordination. It is hard to tell without a survey of the translators, but the tendency towards sentence-initial conjunctions is rather odd from a stylistic point of view. Also, as we have seen above, there is an at times considerable difference in semantic transparency between a clause complex and a sequence of two sentences that are only connected by a logical device, namely the conjunction at the beginning of the second sentence. It seems, at times, that translators need to keep to a certain sentence length, but realise that this is not possible without losing coherence of information in the text. Splitting sentences at the point of the conjunction, then, may be seen as the least intrusive way of introducing full stops that does not require reformulation of the sentence.

It seems, then, that the decreasing sentence length observed in this study is produced by a writing strategy that aims to keep sentences as short as possible. Despite the means of the German language discussed above, which should help to avoid sententialisation, the language users in the present corpus show an increasing tendency towards splitting logico-semantic relationships, especially causal ones, over two sentences. This might be evidence to show that language users in the field of business and management writing attach more importance to style guides and house styles than to their own linguistic knowledge that may well lead them to a more equal balance between formal marking of the subordination of ideas and necessary brevity to present information clearly. Simple pieces of purportedly universally applicable advice such as 'keep sentences short' and 'avoid multiple subordination' given by some style guides increasingly seem to be given preference over more detailed and reflective accounts of text production.

The discussion in this section has provided some arguments against the claim that decreasing sentence length automatically achieves an increase in semantic transparency and in turn increases readability. A long, hierarchical sentence with a lot of subordination is not necessarily less semantically transparent than an array of short and unconnected sentences. Semantic transparency, and thus readability, is created by signalling to the reader how different ideas are related to each other within the sentence and the text. I will continue the discussion of sentence length by arguing that the increasing tendency to shorten sentences is part of the trend towards parataxis that we have observed in this study.

6.4 Pragmatic differences between weil, da and denn

In this section, a closer look will be taken at the varying changes in frequency of the German causal conjunctions analysed in this study depending on the subcorpus. Reviewing some major works on these conjunctions in German and English, I will argue that pragmatic differences can be established between the conjunctions in question, which authors make more use of now than they did in 1982–3. Apart from strategic reasons to do with the author-reader relationship, I argue that the increasingly pragmatically differentiated use of the German causal conjunctions, and the increase in semantic transparency that this achieves, represents a compensation for the loss in semantic transparency that is caused by the increasing use of parataxis. I will conclude that the hierarchisation of semantic units, in the present genre, seems increasingly to happen lexico-pragmatically rather than syntactically.

Unlike in the concessive clauses, where *obwohl* is the main hypotactic conjunction, there are two regularly used hypotactic causal conjunctions, namely weil and da. In the diachronic development of the causal conjunctions, we have observed that weil and da behave differently in the TC and CC (see Figure 6.5). Da has increased in frequency in the TC, while we may have expected it to decrease in frequency along with weil, the other hypotactic causal conjunction. It has at the same time decreased in frequency in the CC. This should lead us to assume that there is some kind of property that seems to 'protect' da from the general decline that hypotactic conjunctions have been observed to undergo in translated texts. I will investigate that idea further in this section, suggesting that there may be pragmatic reasons why the development patterns of the two major hypotactic causal conjunctions differ so noticeably from each other.

Figure 6.5 reproduces the graph showing the diachronic development of the proportional frequencies with which da and weil are used to express causal relationships, with the data for the development of denn added to it. Above all, we notice that, regarding the frequency of hypotactic causal conjunctions, translated and non-translated language have become more alike. As pointed out in Chapter 5, weil decreases strongly in the TC to reach the level that it has in the CC. This development partly suggests an increasing diversification in the ways of expressing a causal relation in clause complexes, but also evidences a decrease in hypotactic conjunctions. The main choice for expressing causal connections

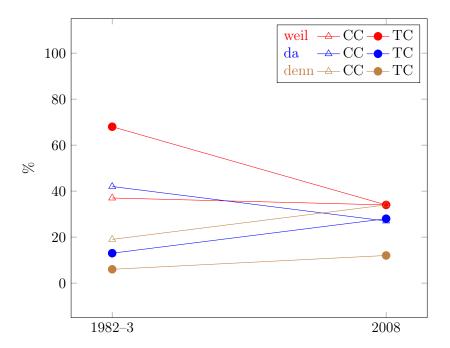


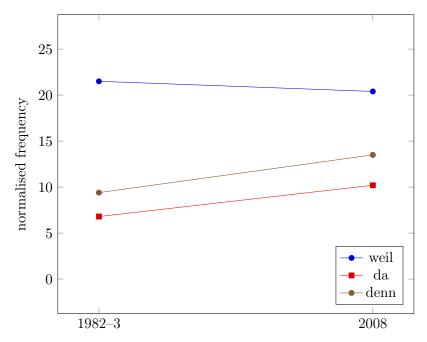
Figure 6.5: Diachronic development of the proportional frequency of *da*, *weil* and *denn* in the TC and CC

in English remains *because* in both periods of the corpus (see Tables 4.10 and 4.11), so this observation does not support a claim for SL-induced reasons for the change in frequency.

The reason for this development, though, must be connected to translation, as it cannot be observed in the CC, which shows a decrease in frequency of da and it is only in the CC that the paratactic conjunction denn increases significantly in frequency. In addition, as the analysis of conjunctions introduced by the translators (see Section 4.4) has shown, weil is still introduced commonly and more often than other causal conjunctions into non-overt ST causal relationships (see Table 4.17, p. 124, whose data is shown in Figure 6.6).

Figure 6.6 shows that, while weil remains the most popular among the conjunctions that translators introduce, da and denn are on the increase here as well. It is odd that weil reduces in frequency as a conjunction that is used in actual causal clauses, while it remains commonly introduced in non-overt causal relationships. This might mean that the change that seems to be ongoing in causal conjunctions has not affected cases where translators introduce conjunc-

tions yet; however, we can see from the slight increase of da and denn that it is beginning. We may therefore ask, based on these observations, why da has gained over weil in frequency in translated texts while it has decreased in frequency in non-translated text, where denn seems to become more popular.



 $\begin{tabular}{lll} \textbf{Figure 6.6:} & Normalised & frequency & (i/htw) & of & conjunctions & introduced & by & the \\ & & translators & \\ \end{tabular}$

To address this question, we need to look at the differences between the two hypotactic conjunctions in order possibly to infer some reasons as to why language users may choose one over the other. One such reason may be that language users in the genre of business and management writing increasingly consider weil to belong to an informal register or be more appropriate to spoken German than da and $denn^{10}$ (Keller 1993:243). This negative perception of weil may be intensified by an increasing awareness of the weil+v2 variation discussed in Section 2.3.

Pasch (1989) argues for a differentiation of weil on the one hand da and denn on the other on the basis of semantic considerations. She proposes three situations in which weil must be used and 'cannot be replaced by da or denn'

¹⁰I would like to thank Britta Domke, Marco Krämer and Anne Loos, all of them regular translators of articles in the *HBM*, for providing me with this possible interpretation.

(1989:143). This is the case if

- 1. the causal subordinate clause contains the *rheme* and the main clause contains the theme, as in example (67).
- (67) Es gehört dabei zu den Prinzipien des Feldaufbaus der Abbildung 2, daß man unwichtige Wünsche erst gar nicht in die Betrachtung hineinnimmt. Ein solches Ausfiltern unwichtiger Bedürfnisfaktoren ist vorteilhaft, WEIL ihnen aufgrund fehlender Energieintensität ohnehin keine Bedeutung zukommt [...]. (HBM 1/82,86)

'Here, it belongs to the principles of field creation in figure 2 that unimportant requests are not even considered. Such a filtering of unimportant desirables is advantageous BECAUSE, due to a lack of intensity in energy, they do not have a function.'11

- 2. the main clause contains the *rheme* and the causal clause contains the theme and follows the main clause, as in example (68).
- (68) Es kommt vor, daß Technologien nicht mehr zur Strategie eines Unternehmens passen, nachdem sie eine Zeit lang eingesetzt worden sind. GE verkaufte zum Beispiel seine ausgereifte Fluidal-Technologie [...], WEIL sie sich nicht mehr mit den Schwerpunkten und der Strategie des Unternehmens vereinbaren ließ. (HBM 2/83,22)

Technologies may even cease to fit with a corporate strategy after they have been in use for some time. For example, GE sold off its mature Fluidics technology $[\dots]$ BECAUSE it no longer fitted the company's major strengths or strategy. (HBR 2/81,117)

- 3. the cause lies in the scope of an adverb, as in example (69).
- (69) Reden und Vorlesungen hält er DESHALB, WEIL er leidenschaftlich davon überzeugt ist, daß unsere Gesellschaft eine bessere Städteplanung braucht. (HBM 2/82,82)

He makes speeches and gives lectures BECAUSE he passionately believes in society's need for better urban planning [...]. (HBR 6/80,102)

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¹¹my translation

Examples (67) to (69) are clause complexes from my corpus that seem to match Pasch's descriptions. The examples she gives in her article are rather artificial ('Hans schläft schon wieder. Und er wird Ärger bekommen, weil (/*da) er schon wieder schläft' (1989:143)), which may be why the rules Pasch proposes do hold true in her examples. Applied to more realistic examples, it becomes clear that despite a theme—rheme structure that matches Pasch's descriptions, it is questionable whether in examples such as (67) and (68) da cannot be used instead.

It further seems that rule 1 is really a subset of rule 3. The function of this clause complex is to use the main clause (the theme) to repeat the point made in the previous sentence and to support it with an argument, given in the causal clause (the rheme). Inserting deshalb would enhance this function, which is why (67) can be considered functionally equivalent to (69), the only difference being that the adverb whose scope the causal clause is in is not realised. As such, the only rule that seems to really hold in Pasch's account is that particular adverbs such as deshalb, nicht or wahrscheinlich can only be used with weil, which is confirmed in this corpus and seems to be in line with the intuition of speakers of German.

More interesting is the rule that Pasch proposes for clause complexes that can only be used with da and denn. She argues that this is the case if the content of the main clause contains a deductive (logical) inference (Pasch 1989:143). For this, examples can also be found in the corpus, e.g. those in (70) and (71). Based on this characterisation of da and denn, Pasch proposes that they connect clause complexes in which the causal clause is a factual proposition that can be theme or rheme, while the main clause contains the speaker's attitude to or evaluation of the topic matter of the sentence.

- (70) DA sich der Vorstandschef und die anderen nur vage über die Unternehmensmarke Lilypad äußern, besteht offenbar kein klares Bild hinsichtlich der Kunden. (HBM 3/08,108)
 - It's evident from the unfocused way Andre and others talk about the Lilypad brand that they don't have a clear sense of the customer. (HBR 2/08,49)
- (71) Wir hoffen, dass die Manager den Mut finden, anders mit ihrem geistigen Eigentum umzugehen, DENN erst dann werden die Patenthaie sie in Ruhe lassen. (HBM 8/08,62)

We hope that companies find the courage to change how they work with their intellectual property—BECAUSE it's quite clear that the sharks won't leave them alone until they do. (HBR 6/08,129)

Thus, in (70), the fact that the manager and the others talk only in vague terms about the brand is not the reason why they do not have a clear sense of the customer, but it is the knowledge of that fact that makes the author infer that no clear picture exists. The author emphasises that he or she has made a deductive inference by the use of offenbar. Indeed, looking at the source sentence, the deductive inference is overtly made by the use of it's evident from [...] that. The translator has decided to introduce an overt causal connection, and in this instance, I would agree with Pasch that weil could not be used instead. Example (71) shows a similar case. Again, a logical conclusion is drawn by the author, which is signalled in the ST by the presence of it's quite clear that, and the translator has rendered this connection using denn.

It thus seems that a differentiation of weil from other causal conjunctions is more appropriately based on pragmatic grounds, such as the epistemology of the causal information supplied by the construction in question than on pragmatic ones such as the structure of theme and rheme. This has led other scholars to the distinction between factual and epistemic use of causal conjunctions, which in itself is not peculiar to German. A similar distinction can be found between what Sweetser (1990) calls the 'content' and the 'epistemic' domains¹² in the English language, though here the different types of relation are expressed by only one causal (because) and concessive (mainly although) conjunction, which is therefore ambiguous (Sweetser 1990:76ff). As examples, Sweetser gives the two sentences in (72), where (72a) exemplifies the content domain and (72b) exemplifies the epistemic domain.

- (72) a. John came back because he loved her.
 - b. John loved her, because he came back.

In the content domain, the dependent clause gives a reason for the action described in the dominant clause; they are connected by 'real-world causality' (1990:77), so (72'b) does not work because the information given in the dependent clause is not a factual cause for John's love.

¹²Sweetser also proposes a 'conversational domain', which occurs mostly in spoken language. I will therefore concentrate on the content and epistemic domains.

- (72') a. It was because he loved her that John came back.
 - b. ?It was because he came back that John loved her.

Rather, the information supplied in the dependent clause leads the speaker to the conclusion that John loved her. That is why this domain is called the epistemic domain; 'the speaker's *knowledge* of John's return (as a premise) causes the *conclusion* that John loved her' (Sweetser 1990:77, emphasis original).

Due to this differentiation in the types of causality, another pragmatic implication of the uses of the German causal conjunctions can be established. While weil represents 'structures of reality' and may thus imply that the author is telling the reader something 'newly discovered' or 'covert', da and denn represent 'structures of reflection', which aim at clarifying to the reader why a certain statement was made and refer in a 'reassuring' manner to causes that are thought of or implied as 'known' or 'obvious' (Köller 2004:522; see also Küper 1991). Therefore, using reflective ('reflexionsthematisch') conjunctions, authors position themselves on the same level as the readers, telling them things they may already be aware of, rather than implying that what they have said is news to the readers. An awareness of this difference can have an inclusive effect on readers rather than alienating them.

Furthermore, according to Köller, the reflectively motivated use of causal conjunctions is mainly used in 'dialogical discourse' that has a clear focus on the role of the author, rather than in scientific texts where objective relations are dealt with (2004:523). In the latter, factual ('sachthematisch') use of conjunctions is more appropriate. In author-focussed texts, authors not only aim to objectivise complex matters of fact, but also to present themselves and their own attempts of correlation and perspectivisation, and thus to draw the addressees into their world¹³ (Köller 2004:523, my translation).

That the articles analysed in this study belong to this class of author-focussed texts is shown by the fact that in most of them, authors make extensive use of the first person singular pronoun (a word list analysis yields the result that *ich* occurs 1,430 times in the German TTs taken together, making it the fiftieth most common word in the entire corpus). The differences between author-focussed

¹³ Bei diesem Sprachgebrauch geht es den Textproduzenten keineswegs nur um die Objektivierung von komplexen Sachverhalten, sondern auch darum, sich selbst darzustellen und ihre eigenen Korrelations- und Perspektivierungsanstrengungen anderen kenntlich zu machen, um die Angesprochenen auf diese Weise in seine Sicht der Welt hineinzuziehen.'

texts and scientific texts not only seem to lie in the type of conjunctions used, but also in their frequency as a whole, as emerged from the comparison of frequencies of concessive conjunctions between popular-scientific texts and texts from the present corpus in Section 6.1, showing that the latter make considerably less use of concessive conjunctions.

That language users of German in the present corpus are acutely aware of the pragmatic distinction between weil and da is evidenced by the fact that editors of the HBM amend sentences where they seem to perceive that a causal conjunction is inappropriately used. Example (73a) from the PC shows the translation of a causal clause complex in the ST before the mediation process, and example (73b) shows the translation after it.

- (73) Professions are made up of particular categories of people from whom we seek advice and services BECAUSE they have knowledge and skills that we do not. (HBR 07/10,52)
 - Der Begriff "Profession" ist auf bestimmte Berufsstände beschränkt: the term profession is to certain job-categories limited auf Personen, deren Rat wir suchen und deren Dienste people whose advice we seek and whose services wir in Anspruch nehmen, DA über ganz besondere siewe of use make because they very special Kompetenzen verfügen. raw21 competences possess
 - b. Der Begriff "Profession" ist auf bestimmte Berufsstände beschränkt: the term profession is to certain job-categories limited auf Personen, deren Rat wir suchen und deren Dienste wir whose advice we seek and whose services we to people in Anspruch nehmen, WEIL über besondere Kompetenzen sieof use make because they special competences verfügen. (HBM 09/10,92) possess

The editor has replaced da with weil, assumedly for the reason that because is used in the factual sense in the source sentence, as the test in (74) shows, and

that therefore, a German factual conjunction should be used.

(74) It is because they have knowledge and skills that we do not [have] that we seek advice and services from professional people.

Having differentiated between the conjunctions in this way, it could be argued that the change in frequency exhibited in the TC indicates a pragmatic change that contains a separation of weil on the one hand and da and denn on the other according to their pragmatic function. Argumentative texts, it would seem, draw at least as often on a reflective/epistemic pragmatic conjunction as on an objective/content conjunction. The data would then indicate a change in progress by which the authors have adapted their use of the causal conjunctions to the different pragmatic effects: instead of using weil throughout, as they did in 1982–3, they use each conjunction according to its pragmatic meaning.

In addition to the idea that this development is the manifestation of translators' increased awareness of the pragmatic distinction of da and weil, the change observed here could be driven by a desire in language users to express in written language the difference between epistemic and content causality that is widely made in spoken language. The distinction is commonly made in spoken German with the weil+v2 construction (see Section 2.3), but since this syntactic construction is not acceptable in written German, it is likely that language users use the alternative conjunctions da and denn instead to achieve this function.

If valid, this hypothesis would argue for an increase in complexity in the repertoire of causal conjunctions, as previously interchangeable items become conventionalised to certain pragmatic situations. It would also signal an increase in semantic transparency, as a pragmatic difference is realised in a lexical difference rather than being ambiguous, as is the case in English. Thirdly, it can be argued that written language in the genre of business and management writing assimilates to spoken language by adopting a distinction that has been present there for a considerable amount of time. Comparable claims have been put forward by the *Covert Translation* project, whose researchers argue that in the popular scientific writing genre, German communicative style is becoming more dialogical and interactive (Baumgarten 2008; Baumgarten & Özçetin 2008).

It is debatable, however, whether the adoption in written language of a pragmatic distinction that allows to differentiate between epistemic and content causality can be considered an assimilation to spoken language purely on the grounds that such a distinction exists in spoken language. Independently of this, however, it seems that the findings of this study confirm the impression of Becher (2009) that this shift is not conditioned entirely by SL influence. Instead, the present study provides some evidence that the shift is at least partly conditioned by a language-internal development which involves a reanalysis of the lexico-pragmatic inventory of the German causal conjunctions and manifests itself through the complexification of pragmatic narrowing.

Pasch (1989:150f) further proposes a distinction between the conjunctions da and denn based on the claim that clauses introduced by da can be thematic while denn clauses cannot. Thus, the clause complex in (75a) works as a textually cohesive continuation of (75), but (75b) sounds counterintuitive.

- (75) Die Marketingabteilung entwickelte neue Angebote, ohne die Sachbearbeiter zu fragen, ob sie die daraus entstehenden Versicherungsansprüche überhaupt bearbeiten könnten. (HBM 9/08,58)
 - 'The marketing department would develop new coverage options without asking the claims-processing group whether it had the ability to process the claims.' (HBR 6/08,60)
 - a. DA [sie die daraus entstehenden Versicherungsansprüche nicht bearbeiten konnten]¹⁴, mussten die Sachbearbeiter zu teuren Behelfslösungen greifen, als die ersten Anträge eingingen. (HBM 9/08,58)
 - 'SINCE it [could not process the claims], processors had to create expensive manual work-arounds when the new kinds of claims started pouring in.' (HBR 6/08,60)
 - b. ? Die Sachbearbeiter mussten zu teuren Behelfslösungen greifen, als die ersten Anträge eingingen, DENN sie konnten die aus den neuen Angeboten enstehenden Versicherungsansprüche nicht bearbeiten.

As an explanation for this, Pasch (1989:151) argues that the use of da, which indicates that the clause contains some kind of judgement, 'degrades' the content of the clause so that, in a comparison of semantic weight of the clauses in a clause complex, the da clause provides 'background information'. Thus, authors may use da to give a hierarchy to their arguments, which tells the reader which parts are important and which are background information or assumed to be known. This increases the semantic transparency of the text by emphasising the themerheme structure of it. What is more, because denn must be located between the

¹⁴The original ST here reads 'dies nicht der Fall war'. This pronominal phrase has been expanded for reasons of clarity.

clauses it connects, it is said to have a more narrative function rather than an argumentative function like weil and da (Köller 2004:506).

From a pragmatic point of view, language users of German are getting increasingly used to the differentiation between epistemic and content causality through the use of weil+v2 that has been common in German for a significant amount of time. It is thus likely that they, consciously or not, establish a similar distinction in written German through a pragmaticisation of the available conjunctions. That this process happens unbeknownst to the speakers is likely in some cases, as many translators involved in the production of the articles for the HBM told me, when asked about their perception of a difference between da and weil, that they find the use of weil+v2 rather uneducated. Yet, as is often the case with self-perception, it is likely that they use that construction in spoken German themselves, unaware of its pragmatic effect.

The claim that not only da and weil, but also da and denn differ pragmatically is supported by Keller (1993). Based on his analysis of the weil+v2 variation in German (see Section (2.3)), Keller argues that, in written German, da takes over the function of weil in cases where some knowledge of the cause is presupposed. Denn, on the other hand, takes over the function of the epistemic weil, where the entire content is assumed to be new to the speaker (1993:243f). As I argued elsewhere (Bisiada 2013), if speakers do perceive the need to distinguish these degrees of presupposition, which the word order variation in German causal clauses seems to suggest, the different functions of causal conjunctions may also be increasingly differentiated in written German, and da and denn may be used to achieve this.

Overall, it may be argued that the increase in semantic transparency of causal clause relations that is achieved by an increasing use of da may compensate to some extent for the loss in semantic transparency caused by the tendency towards parataxis and simplification of clause hierarchy discussed so far in this chapter. In other words, the present analysis may be evidence to suggest that translators of business and management articles no longer express the hierarchy of causal semantic units in their texts syntactically through tactic clause relationships, but instead pragmatically through the differentiated use of causal conjunctions that have a specific pragmatic function.

This chapter has answered the two final research questions of this study. As regards the first, there has been little evidence to suggest that the tendency of pa-

rataxis towards becoming a major use pattern is a case of syntactic convergence with English; only the diachronic increase in sentence-initial concessive conjunctions can be said to have been influenced by contact with prevalent conventions in English. As regards the second question, it has been shown that parataxis as a major use pattern does indeed represent a simplification, but one that at the same time reduces semantic transparency. Therefore, it has been argued that existing conjunctions and conjunctive adverbs take on a more restricted role, so that doch is becoming increasingly limited to sentence-initial use while a pragmatic differentiation between weil, da and denn assigns a specific semantic function to them and thus determines the situation in which each conjunction is used.

Conclusion

The main aim of this study has been to find out whether German in business and management texts is becoming more paratactic in the expression of causal and concessive clause relations, and whether this may happen through language contact in translation. The answer to the first question is 'yes': a tendency to construct concessive and causal clause complexes paratactically rather than hypotactically has been shown to exist in the translation corpus as well as, to a largely similar extent, in the comparable corpus. In spite of this increase in frequency, hypotaxis remains the most frequently used pattern to express causal and concessive clause relationships in the genre. Thus, the observation that parataxis has replaced hypotaxis in concessive constructions in the popular science genre (Becher 2011) could not be confirmed for the present genre.

The answer to the second question is largely 'no'. Though the increasing use of sentence-initial concessive conjunctions seems to point to an effect of language contact in translation on German, supporting a hypothesis to this effect proposed by Becher et al. (2009), the initial claim that source language interference is responsible for the shift towards parataxis has largely been rejected. The rise of parataxis as a major use pattern is instead particularly driven by the tendency for both translators and editors to split sentences, which has been shown to lead to a decrease in complexity as well as semantic transparency. Splitting sentences often demands the use of sentence-initial conjunctions such as *aber*, *doch* and *denn*, which are paratactic. As for an explanation for the increase of single-clause sentences, it has been suggested that the popular belief that German is long-winded and complex may lead language users to think that German is hard to understand and that they therefore need to avoid complexity as much as possible.

The issue of sentence-splitting should receive more attention by translation scholars and in translator training. The analysis of the present corpus has shown that sententialisation is widespread even in genres where translators do not regularly work with computer-assisted translation tools, which usually segment texts by sentences and which may thus be said to support sentence-splitting. As we have seen, sentence-splitting happens not only in languages whose syntactic conventions prefer shorter sentences anyway, as argued by Fabricius-Hansen (1999), but also in languages such as German that are known for preferring longer, heavily subordinated sentences.

It was further argued that there has been a pragmaticisation of the conjunctions da, weil and denn. The difference between epistemic and content causality, which has long been expressed in spoken German through a difference in the word order triggered by weil may be adopted increasingly in written German, where da takes on the epistemic causality function. This leads to an increase of semantic transparency, which may compensate for the loss in semantic transparency caused by the increasingly unmarked relations between clauses that is brought on by sententialisation. Thus, it has been speculated that there may be a shift in how language users in this genre express causal relations from a primarily syntactic marking through hypotaxis to a primarily pragmatic marking through specific semantic functions of conjunctions, which makes overt clause combination less important.

Future research in this field should concentrate on the question of how consciously aware translators are of processes of language change. Using Coetsem's (2000) concept of neutralisation of source and target language in highly proficient bilinguals, this study has proposed that language users can intentionally influence processes of language change. But the corpus method alone cannot determine the underlying causes of the changes in question. A promising method might be to include more research of the working methods of the translators as suggested by Neumann (2011), e.g. the sources they consult for their work, and their attitudes to the target and source language generally and certain linguistic devices specifically, which is something that could, unfortunately, only be referred to unsystematically in this study.

Corpus research of translation should also more regularly replicate previous studies, which this study has argued to be a good way of increasing our knowledge of the influence of genres on change in language use. It has been shown here that even genres which may superficially seem quite closely related can have rather distinct conventions of ordering information, which can lead to differing preferences with regards to the syntactic constructions.

This study is also one of the first to investigate the effect of editing on translated language. It has shown that the mediation process is responsible to a considerable extent for sentence-splitting in translation. Future studies, where possible, should try to obtain pre-edited copies of the translations they analyse in order to investigate the amount and nature of changes that editors have effected on the translated text.

In its cross-disciplinary approach, my research has yielded results that are relevant to several fields of enquiry. The results are relevant to translation scholars as they discuss the important issue of sententialisation and its implications for the accessibility of a text. They are relevant to comparative linguists because they show that the traditional perspective on German as being more hierarchical and complex than English should be reconsidered. And they are relevant to linguists of German because of their discussion of an adoption by written German of a useful pragmatic distinction among causal conjunctions from spoken German.

In spite of the mentioned shortcomings, the diachronic approach in corpus linguistics has been shown to be a useful tool to identify trends in language. Using translation corpora allows us to focus on a linguistic pattern in the source language and analyse changes in the way that pattern is rendered in the target language, as has been done in this study. The observed changes in such quantitative analyses can then be investigated more closely in qualitative analyses or replicated for other genres and languages, which I have argued to be an important way of obtaining comprehensive knowledge of language change through translation as well as advancing linguistic research in general.

Appendix A

Guides for authors and translators

Harvard Business manager

MERKBLATT

WER WIR SIND

Der Harvard Business Manager ist ein iournalistisch unabhängiges Magazin für praxisnahe Managementthemen. Als erweiterte deutsche Ausgabe der renommierten US-Zeitschrift "Harvard Business Review" (HBR) ergänzt er die besten Artikel aus der HBR um wichtige Forschungsergebnisse von Professoren europäischer Universitäten und Business Schools sowie um Texte deutschsprachiger Experten aus Beratungen und dem Management von Unternehmen. Unsere Autoren zählen zu den besten und bekanntesten Fachleuten auf ihrem Gebiet und haben ihre Erkenntnisse durch langjährige Studien und Berufspraxis erworben. Unser Magazin liefert Führungskräften, Beratern und Akademikern wertvolle Anregungen für ihren Berufsalltag und wendet sich dabei auch an Leser ohne betriebswirtschaftliches Studium. Daher legen wir großen Wert darauf, dass alle Beiträge allgemeinverständlich sind und Fachbegriffe immer erklärt werden. Das Themenspektrum des Harvard Business Managers umfasst alle Bereiche des Managements wie Strategie, Führung, Organisation, Marketing, Finanzen, Innovation, Produktion, Unternehmensgründung, Karriere oder Personal. Im monatlich erscheinenden Harvard Business Manager gibt es drei Rubriken:

TRENDS

Neue Ideen und Konzepte für die Managementpraxis bieten wir unseren Lesern im ersten Teil des Heftes in relativ kurzen Beiträgen an. Hier stellen wir Erkenntnisse aus Studien oder zukunftsweisende Ideen vor.

STRATEGIEN

Im Hauptteil des Heftes finden unsere Leser ausführliche, fundierte Beiträge, die in der Praxis erprobte neue Managementkonzepte erläutern und umfassende Handlungsempfehlungen geben.

MEINUNGEN

Hier geben wir Autoren die Möglichkeit, sich in Kommentaren oder Essays zu aktuellen Themen der Managementpraxis zu äußern.

EXPOSÉ

SCHREIBEN SIE UNS

Wenn Sie uns einen Beitrag anbieten möchten, schicken Sie uns bei Ihrer ersten Kontaktaufnahme bitte keinen fertigen Text. Helfen Sie uns, Ihre Idee zu beurteilen, indem Sie uns ein schriftliches Exposé zusenden, in dem Sie die folgenden Fragen möglichst gründlich beantworten. Zuschriften ohne Exposé werden von der Redaktion nicht bewertet. Sollten Sie bereits ein fertiges Manuskript verfasst haben, können Sie es aber gern mitschicken. Wir werden Ihren Vorschlag intensiv diskutieren und mit Ihnen das weitere Vorgehen besprechen.

Bitte schicken Sie das Exposé mit Ihren Antworten und gegebenenfalls Ihr Manuskript an folgende E-Mail-Adresse: info@harvardbusinessmanager.de

BITTE BEANTWORTEN SIE FOLGENDE FRAGEN

- 1. Was ist der zentrale Aspekt des Beitrags, den Sie uns anbieten?
- 2. Was ist daran neu und überraschend?
- Haben Sie systematisch untersucht am besten in Form einer repräsentativen Studie –, ob Ihr Ansatz den Unternehmenserfolg erhöht? (Falls nein, weiter mit Frage 6)
- 4. Falls ja: a) Wie viele Menschen haben Sie befragt? b) Wie viele haben geantwortet? c) Wer wurde befragt? d) Wann fand die Befragung statt? e) Wie haben Sie gefragt – per Fragebogen, Gespräch, online etc.? f) Ist Ihre Befragung repräsentativ?

Merkblatt für Übersetzer des Harvard Businessmanager

Redaktionelles Konzept

Vorab ein paar Worte zum redaktionellen Konzept für Übersetzer, die das Magazin noch nicht kennen: Der Harvard Businessmanager ist eine journalistisch unabhängige Zeitschrift für praxisnahe Managementthemen. Die Beiträge sollen Führungskräften, Beratern und Akademikern wertvolle Anregungen für ihren Berufsalltag liefern. Dazu stellt der Harvard Businessmanager die besten Artikel aus der "Harvard Business Review" auf Deutsch vor, wichtige Forschungsergebnisse renommierter Business Schools sowie Originaltexte deutschsprachiger Autoren. Das Themenspektrum umfasst alle Bereiche des Managements wie Strategie, Führung, Unternehmensgründung, Marketing, Finanzen, Produktion, Karriere oder Personalfragen.

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Bitte übersetzen Sie möglichst textgetreu in einem klaren, verständlichen und lebendigen Deutsch. Lassen Sie keine Sätze oder Satzteile weg, die Ihnen unverständlich erscheinen. Vermeiden Sie Nominalstil, Fachjargon, das Passiv und das Wörtchen "man". Lösen Sie Schachtelsätze, insbesondere dass-Sätze, möglichst auf. Deutschen Sie englische Managementbegriffe ein, wo immer dies sinnvoll möglich ist. Schreiben Sie Abkürzungen wie z. B., usw., etc., ca., Mrd., % und dergleichen in Texten und Abbildungen immer aus.

Aufbau des Artikels

Ein Artikel im Harvard Businessmanager besteht in der Regel aus Überschrift, Vorspann, Autorenname, Vita und Lauftext. Bitte gliedern Sie die Übersetzung entsprechend. **Lauftext:** Kennzeichnen Sie Zwischenüberschriften am Ende des Satzes durch ein großes "Z" in Klammern: "(Z)". Gibt es mehrere Ebenen von Zwischenüberschriften, machen Sie das bitte durch "(Z1)", "(Z2)" und so weiter für jede Ebene deutlich. Gefettete Textpassagen markieren Sie bitte durch ein doppeltes Größerzeichen zu Beginn (">>") und ein doppeltes Kleinerzeichen am Ende ("<<"), kursive durch ein einzelnes Größerzeichen zu Beginn (">") und ein einzelnes Kleinerzeichen am Ende ("<").

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Dateien

In der Regel senden wir Übersetzern die englischen Manuskripte per E-Mail als PDF-Dateien. Sollten Sie eine andere Art der Übermittlung wünschen, teilen Sie uns das bitte mit. Speichern Sie bitte die Übersetzungen in einer Datei im Word- oder dem Rich-Text-Format (rtf). Benennen Sie die Datei mit dem Lauftext (inklusive Überschrift, Vita und Vorspann) nach dem ersten Autorennachnamen; die Datei mit allen Quotes als "Autorenname - Quotes", Textkästen (einzeln) als "Autorenname - Kasten" (gegebenenfalls nummeriert) und Abbildungen als "Autorenname - Abbildung" (gegebenenfalls nummeriert).

Viel Vergnügen beim Übersetzen.

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Warum Mentoring so wichtig ist	HBM 5/08,90
Why Mentoring Matters in a Hypercompetitive World	HBR 1/08,115
Wie man die Welt verändert	HBM 5/08,10
How to Change the World	HBR 1/08,29
Wegen Überfüllung geschlossen	HBM 6/08,6
The Tourism Time Bomb	HBR 4/08,20
Überschätzte Synergien	HBM 6/08,10
To Get Value From a Merger, Grow Sales	HBR 5/08,24
Vorbild Google	HBM 6/08,44
Reverse Engineering Google's Innovation Machine	HBR 4/08,58
Vier Gewinnerprinzipien für Dienstieister	HBM 6/08,60
The Four Things a Service Business Must Get Right	HBR 4/08,70
Führen lernen in Online-Welten	HBM 6/08,76
Leadership's Online Labs	HBR 5/08,58
Ist es authentisch, oder ist es Marketing?	HBM 6/08,90
Authenticity: Is It Real or Is It Marketing?	HBR 3/08,33
Wie Online-Werbung den Offline-Verkauf ankurbelt	HBM 7/08,24
The Off-Line Impact of Online-Ads	HBR 4/08,28
Querdenken mit System	HBM 7/08,28
Breakthrough Thinking from Inside the Box	HBR 12/07,70
Designer als Entwickler	HBM 7/08,56
Design Thinking	HBR 6/08,84
Fusionen und Übernahmen objektiv bewerten	HBM 7/08,80
Deals without Delusions	HBR 12/07,92
Macht uns Open Source kaputt—oder stark?	HBM 7/08,90
Open Source. Salvation or Suicide?	HBR 4/08,33
Arbeiten in der Grauzone	HBM 8/08,15

Working in the Gray Zone	HBR 5/08,20
Bilder sind besser als Texte	HBM 8/08,18
Emerging Graphic Tool Gets People Talking	HBR 5/08,30
Der perfekte Chef	HBM 8/08,20
The Uncompromising Leader	HBR 7/08,50
Das Märchen vom Long Tail	HBM 8/08,32
Should You Invest in the Long Tail?	HBR 7/08,88
Der große Firmen-Check	HBM 8/08,46
The New Leader's Guide to Diagnosing the Business	HBR 2/08,62
Vorsicht: Patenthaie	HBM 8/08,62
Patent Sharks	HBR 6/08,129
Wenn die Marktforschung danebenliegt	HBM 8/08,80
The Sure Thing That Flopped	HBR 7/08,29
Warum in aller Welt Personalwesen?	HBM 8/08,90
Why Did We Ever Go Into HR?	HBR 7/08,39
Wenn Kunden zu vernünftig sind	HBM 9/08,17
When Virtue Is a Vice	HBR 7/08,22
Mitarbeiter richtig motivieren	HBM 9/08,20
Employee Motivation	HBR 7/08,78
Was Toyota besonders macht	HBM 9/08,30
The Contradictions That Drive Toyota's Success	HBR 6/08,96
Von Filialisten lernen	HBM 9/08,42
The Multiunit Enterprise	HBR 6/08,106
Die vier Bausteine erfolgreicher Umsetzung	HBM 9/08,58
The Secrets to Successful Strategy Execution	HBR 6/08,60
So managen Sie Hyperwachstum	HBM 9/08,74
Managing Hypergrowth	HBR 4/08,121
Warum verlieren wir unsere guten Leute?	HBM 9/08,86
Why Are We Losing All Our Good People?	HBR 6/08,41
Warum integre Manager mehr verdienen sollten	HBM 10/08,8
The Fatal Flaw in Pay for Performance	HBR 6/08,31
Den Exodus stoppen	HBM 10/08,14
Halting the Exodus After a Layoff	HBR 5/08,30
Wie IT zum strategischen Vorteil wird	HBM 10/08,24

Investing in the IT That Makes a Competitive Difference	HBR 7/08,98
Mit unrentablen Kunden richtig umgehen	HBM 10/08,58
The Right Way to Manage Unprofitable Customers	HBR 4/08,94
Talentmanagement im 21. Jahrhundert	HBM 10/08,86
Talent Management for the Twenty-First Century	HBR 3/08,74
Wie retten wir uns vor der Insolvenz?	HBM 10/08,100
Will Our Customers Bail Us Out?	HBR 5/08,37
Menschenliebe mit Rendite	HBM 10/08,114
Business Basics at the Base of the Pyramid	HBR 6/08,53
Verbessern Sie Ihre kognitive Fitness	HBM 11/08,26
Cognitive Fitness	HBR 11/07,53
Der Weg zur zweiten Karriere	HBM 11/08,56
The Existential Necessity of Midlife Change	HBR 2/08,82
Das lernende Unternehmen	HBM 11/08,76
Is Yours a Learning Organization?	HBR 3/08,109
Die Erfahrungsfalle	HBM 11/08,90
The Experience Trap	HBR 2/08,94
Kollektive Kreativität bei Pixar	HBM 12/08,82
How Pixar Fosters Collective Creativity	HBR 9/08,64
Wenn bewährte Strategien fehlschlagen	HBM 12/08,96
7 Ways to Fail Big	HBR 9/08,82
Wie retten wir die Privatsphäre?	HBM 12/08,120
What Was Privacy?	HBR 10/08,123

B.2 Comparable corpus

B.2.1 1982-3

Kategoriale Widersprüche zwischen Führungsforschung und	HBM 1/82,16
Führungskräfte-Auswahl	
Systemdesign und Prozeßmanagement	HBM 1/82,64
Entwicklung und Realisierung einer Weiterbildungskonzep-	HBM 1/82,80
tion	
Das Feldmodell bei Personalauswahl und Sanierung	HBM 1/82,86

Job Sharing	HBM 2/82,42
Das Management technischer Innovation	HBM 2/82,42 HBM 2/82,92
Wachstumskrise: ein Managementfehler?	HBM 2/82,92
	, ,
Strategische Marketingplanung im Handel	HBM 2/82,104
Das Gleichgewicht bei der Entscheidungsfindung	HBM 3/82,16
Managementtraining—eine besondere Form von Entertainment?	HBM 3/82,30
Konzepte der modernen Organisationstheorie	HBM 3/82,66
Symptome oder echte Probleme?	HBM 3/82,72
Anmerkungen eines jurisprudenten Managers	HBM 3/82,77
Marketing-Controlling	HBM 3/82,87
Mehr Effektivität in der Materialwirtschaft	HBM 4/82,24
Werkstatt des Wandels	HBM 4/82,32
Die Motivationstheorien von Maslow und Herzberg	HBM 4/82,44
Innovation durch F+E oder Lizenzen?	HBM 4/82,51
Controlling ist wichtiger denn je	HBM 1/83,20
Risikoquantifizierung	HBM 1/83,26
Zur Problematik der betrieblichen Weiterbildung	HBM 1/83,43
Szenarien als Grundlage strategischer Planung	HBM 1/83,71
Mikroelektronik in der Informationsgesellschaft	HBM 2/83,7
Organisationsentwicklung	HBM 2/83,32
Strategische Unternehmensplanung	HBM 2/83,50
Der Mitarbeiter als Teil der Marketingkonzeption	HBM 2/83,94
Wie bekannt ist Bildschirmtext?	HBM 2/83,108
Die Welt der Kommunikation im Umbruch: Was bringt uns	HBM 2/83,108
die Zukunft?	
Effektives Führungsverhalten	HBM 3/83,22
Strategische Frühaufklärung für die Materialbeschaffung	HBM 3/83,29
Logistik	HBM 3/83,56
Fremdmanager in Familienunternehmen	HBM 3/83,64
Was leisten Assessment-Center?	HBM 3/83,70
Zehn Thesen zur Gewinnung von Unternehmensidentität	HBM 3/83,94
Mitbestimmungsmanagement	HBM 4/83,26

Fertigungssteuerung	HBM 4/83,39
Preismanagement: Gewinnpotentiale ausschöpfen	HBM $4/83,55$
Die Bedeutung soziopolitischer Strategien	HBM 4/83,74
Strategische Alternativen in schrumpfenden Branchen	HBM 4/83,89
Bücher	HBM 4/83,109

B.2.2 2008

Der Nutzen anständigen Wirtschaftens	HBM 1/08,6
Talente finden und fördern	HBM 1/08,54
Der Einfluss von Strategieexperten wächst	HBM 1/08,92
Personal—der unterschätzte Faktor	HBM 1/08,116
Blind Date mit 40	HBM 2/08,101
Am Kunden vorbei	HBM 3/08,8
Einmal Star, immer Star	HBM 3/08,14
Die Wahrheit über Private Equity	HBM 3/08,20
Talente fördern—Wissen bewahren	HBM 3/08,24
Zwang zur Professionalisierung	HBM 3/08,38
Asiatinnen auf dem Vormarsch	HBM 3/08,120
Der feine Unterschied	HBM 3/08,127
Neue Interpretationen	HBM 4/08,10
Schule der Topmanager	HBM 4/08,14
Geist und Unabhängigkeit	HBM 4/08,25
Klub der Vordenker	HBM 4/08,26
Studieren in Harvard	HBM 4/08,32
Der B-School-Romantiker	HBM 4/08,40
Freunde auf der ganzen Welt	HBM 4/08,38
Vom Oberarzt zum CEO	HBM 4/08,42
Virtuelles Studium	HBM 5/08,117
Das Klinsmann-Projekt	HBM 6/08,16
Die Philosophie der Nummer eins	HBM 6/08,32
Trainierter Geist	HBM 6/08,111
Abschalten unmöglich?	HBM 7/08,10

Nebenwirkungen schlechten Managements	HBM 7/08,16
Trendsuche mit Online-Spielen	HBM $7/08,22$
Was Manager von Ingenieuren lernen können	HBM 7/08,40
So managen Sie Kleinkunden	HBM 7/08,70
Nur Erfahrung zählt	HBM 7/08,102
Verkannte Elite	HBM 7/08,105
Kaum Multikulti in Europas Vorständen	HBM 8/08,6
Freunderlwirtschaft	HBM 8/08,90
Keine Karriere ohne Assessment-Center	HBM 9/08,6
Wie Flatrates profitabel werden	HBM 9/08,12
Fehlende Glaubwürdigkeit	HBM 9/08,98
Auf in den Dschungel	HBM 9/08,101
Showdown im Internet	HBM 9/08,102
So vermeiden Sie Regallücken	HBM 10/08,18
Kollektiv handeln lernen	HBM 10/08,44
Die Realtime-Illusion	HBM 10/08,54
Wachstumsinitiativen erfolgreich managen	HBM 10/08,74
Kleine Klassentheorie	HBM 10/08,123
Lektionen des Lebens	HBM 11/08,10
Wie wir lernen	HBM 11/08,40
Spielend zu besserer Teamarbeit	HBM 11/08,102
Weitsichtige Zwerge	HBM 11/08,107
Die Long-Tail-Theorie	HBM 11/08,110
Wie Konzerne innovativer werden	HBM 12/08,16
Was Produkte unverwechselbar macht	HBM 12/08,34
Premiummarken richtig managen	HBM 12/08,66
Schrecken des Marktes	HBM 12/08,135

B.3 Pre-edited corpus

Knowing what to sell, when and to whom	HBR 3/06,131
Wie Sie wissen, wem Sie wann was verkaufen können	raw1
Der gläserne Kunde	HBM 10/06,116

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Inner Work Life	HBR 5/07,72
Ein Einblick in die Ursachen der Leistung	raw2
Was Mitarbeiter wirklich denken	HBM 9/07,48
The CEO's Private Investigation	HBR 10/07,47
Die CEO als Privatdetektivin	raw3
Wie korrupt ist mein Unternehmen?	HBM 12/07,108
Putting Leadership Back into Strategy	HBR 1/08,54
Führungsstärke und Strategie gehören zusammen	raw4
Die Rückkehr der strategischen Führung	HBM 5/08,10
Leadership's Online Labs	HBR 5/08,58
Online-Spiele—Experimentierfeld für Führungskräfte	raw5
Führen lernen in Online-Welten	HBM 6/08,76
Design Thinking	HBR 6/08,84
Erfinderisches Entwickeln	raw6
Designer als Entwickler	HBM 7/08,56
The Uncompromising Leader	HBR 7/08,50
Führungskräfte, die keine Kompromisse eingehen	raw7
Der perfekte Chef	HBM 8/08,20
Patent Sharks	HBR 6/08,129
Patenthaie	raw8
Vorsicht: Patenthaie	HBM 8/08,62
The Contradictions That Drive Toyota's Success	HBR 6/08,96
Die Widersprüche, die Toyota zum Erfolg verholfen haben	raw9
Was Toyota besonders macht	HBM 9/08,30
How Pixar Fosters Collective Creativity	HBR 9/08,64
So fördert Pixar die gemeinsame Kreativität	raw10
Kollektive Kreativität bei Pixar	HBM 12/08,82
7 Ways to Fail Big	HBR 9/08,82
Sieben Wege zu einem großen Flop	raw11
Wenn bewährte Strategien fehlschlagen	HBM 12/08,96
It's Time to make Management a true Profession	HBR 10/08,70
Es ist Zeit, dass Management als echte Profession anerkannt	raw12
wird	

Die Neuerfindung des Managers	HBM 1/09,20
The Quick Wins Paradox	HBR 1/09,54
Das Paradoxon des schnellen Erfolgs	raw13
Warum schneller Erfolg gefährlich ist	HBM 3/09,10
Reinventing your Business Model	HBR 12/08,50
Das Geschäftsmodell neu erfinden	raw14
Wie Sie Ihr Geschäftsmodell neu erfinden	HBM 4/09,36
Moon Shots for Management	HBR 2/09,91
Revolutionäre Neuerungen beim Management	raw15
Mission: Management 2.0	HBM 4/09,86
Are you having Trouble keeping your Operations Focused?	HBR 9/09,90
Wie sorgen Sie dauerhaft für optimierte betriebliche Abläufe?	raw16
Das fokussierte Unternehmen	HBM 12/09,78
Is the Rookie Ready?	HBR 12/09,33
Erfolg trotz fehlender Erfahrung	raw17
Die Reifeprüfung	HBM 1/10,82
Rethinking Marketing	HBR 1/10,94
Neue Entwicklungen beim Marketing	raw18
Das neue Gesicht des Marketings	HBM 3/10,86
Negotiation? Auction? A Deal Maker's Guide	HBR 12/09,101
Verhandeln? Versteigern? Leitfaden für Geschäftsabschlüsse	raw19
Versteigern oder Verhandeln?	HBM 6/10,74
Turn the Job You have into the Job You want	HBR 6/10,114
So machen Sie Ihren Job zum Traumjob	raw20
Den eigenen Job gestalten	HBM 8/10,68
No, Management is not a Profession	HBR 7/10,52
Nein, Management ist keine Profession	raw21
Management ist keine Profession	HBM 9/10,92
Finding the Right Path	HBR 7/10,102
Auf der Suche nach dem richtigen Weg	raw22
Der richtige Weg zu mehr Wachstum	HBM 2/11,84
Are you a Good Boss—or a Great One?	HBR 1/11,124
Sind Sie ein guter Chef oder ein sehr guter?	raw23
Sind Sie ein guter Chef?	HBM 3/11,22

Are you a Collaborative Leader?	HBR 7/11,68
Leiten Sie Ihr Unternehmen kooperationsorientiert?	raw24
Der kooperative Manager	HBM 10/11,22
Who Moved my Cube?	HBR 7/11,102
Wo ist mein Einzelarbeitsplatz geblieben?	raw25
Das kreative Büro	HBM 10/11,46
Leadership is a Conversation	HBR 6/12,76
Führung ist Konversation	raw26
Führung ist Konversation	HBM 7/12,46

Appendix C

Digitisation permission documents

C.1 Permission request



School of Languages, Linguistics and Cultures
The University of Manchester
Oxford Road
Manchester
M12 oPL

tel +44(0)161 306 1200 www.manchester.ac.uk

Dear Sir or Madam

Permission Request

I am a PhD student at the University of Manchester, and I am researching language change by comparing German translations of business articles with their source texts. I focus on the translations of conjunctions such as *because* and *although*. The results of my research will show whether translations from English have an effect on the structure of business articles in German. In order to do this, I would require a text corpus which allows me to align the text with its translations and filter out instances of *because* and *although*. Therefore, I am writing to you to ask permission to use selected articles in the *Harvard Business Review* for my research.

As the John Rylands Library of Manchester subscribes to the *HBR*, I have access to the digitised texts. With your permission, I will align the texts with the translated versions from the German sister publication *Harvard Business Manager* and then filter out only those sentences containing the conjunctions under analysis. I have already obtained permission to use articles from the *HBM*.

I guarantee that no one other than myself will have access to the corpus and that it will be used for research purposes only. I will only cite some examples from the corpus and thus only small excerpts will be included in the final thesis and research publications. Whenever material from the *HBR* is cited, full reference will be given. The *HBR* as the source of the corpus will be extensively introduced at the beginning of the thesis.

Of course, I would be pleased to provide you with the results of my research. If you require any further information, do not hesitate to contact me.

I am looking forward to hearing from you

Mario Bisiada

C.2 HBR permission grant

From: Permissions [IS5820 12897@is.instantservice.com]

Sent: 04 March 2011 15:48

To: Mario Bisiada

Subject: RE: Permission request (#8095-218975159-5679)

Dear Mario Bisiada,

Thanks for the email. As long as this is purely for the advancement of your degree, you may use material from Harvard Business Review as described below, at no charge. Please fully cite the source and you have our permission to include excerpts for free. After graduation, if you plan on writing a book, please contact us again at that time as there may be a royalty fee for republishing material from HBR.

Sincerely,

Tad Dearden

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C.3 *HBM* permission grant

From: Margret Ziska@SPIEGEL.DE

Sent: 03 March 2011 13:50

To: Mario BisiadaSubject: Antwort: Anfrage

Sehr geehrter Herr Bisiada,

vielen Dank für Ihre Anfrage vom 2. März 2011.

Gern genehmigen wir Ihnen die kostenlose Verwendung einiger Artikel aus "Harvard Business Manager" für Forschungszwecke. Bei einer eventuellen Veröffentlichung vergessen Sie bitte nicht den Quellenhinweis.

Wir wünschen Ihnen viel Erfolg bei Ihrer Arbeit.

Noch ein kleiner Hinweis aus der Redaktion: Scheuen Sie sich nicht, Ihre Arbeit nach Fertigstellung vorzustellen.

Mit freundlichen Grüßen

Margret Ziska

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Geschäftsführer Ove Saffe

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