A CASE FOR USING A PARALLEL CORPUS AND CONCORDANCER FOR BEGINNERS OF A FOREIGN LANGUAGE

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ABSTRACT

This pilot study set out to determine whether a parallel corpus and a concordancer would be appropriate tools to supplement a teaching programme of German at the beginners' level in an unsupervised environment. In this instance, a beginner student of German was asked to find satisfactory answers to unknown vocabulary and formulate appropriate grammar rules for himself using the parallel corpus and concordancer as the only tools. It is shown that these tools can be of great benefit for beginners.

AIMS AND OBJECTIVES

I describe a pilot study involving a beginner student of German who undertook a supplementary unsupervised programme of learning German using a concordancer and a parallel corpus. I investigate how a beginner student of German fares using a concordancer, Multiconcord (see King & Wools, 1996; St.John & Chattle, 1998), and a parallel German/English corpus, INTERSECT (Salkie, 1995) consisting of the original German source texts and their English translations. The aim of this study was to determine how this student copes using the parallel corpus and what conclusions he comes to when comparing the two languages, and in particular, when investigating lexical items. As students at the beginner and intermediate levels are still very dependent on a dictionary, their lack of vocabulary in the new language can often cause problems for them in class. As a consequence, most of the questions set were related to investigating the meaning of words (see Student Tasks).

Additionally, using corpora and a concordancer can be motivating and rewarding not only for the learner but also for the teacher. For the teacher, these tools can provide contextualised examples to confounding lexical questions. Moreover, the learner can develop an ability to "learn how to learn" (Johns, 1991a, p. 1) by being allowed to assume the role of an explorer. This study supports Barlow's (1995a, 1996a, p. 2) claim that one of the roles the language learner plays when using corpora is that of a language researcher and explains why "a suitable research environment" must be provided (Barlow, 1996b, p. 45; see also Johns, 1986, p. 151, 1991a, p. 2). This therefore assists the student in exploring the language in great detail and thereby gaining further insights into its grammar and vocabulary.

The use of concordancing in language teaching is not new. However, this pilot study demonstrates for the first time the potential of concordancing in learning German at the beginner's level.

CONCORDANCER AND CORPORA IN LANGUAGE ENVIRONMENTS

Concordancing is a tool that has been used extensively by linguistic and literary researchers. A concordance is a list of the occurrences of either a particular word, or a part of a word or a combination of words in context and it is drawn from a text corpus, which is presented in context. A corpus is a large body of text often in electronic format. (see Baker 1995, p. 226; Francis, 1993, p. 138; Johansson, 1995, p. 19; Leech, 1991, p. 8 for more detailed definitions)

Linguistic and applied linguistic researchers are not the only group who can benefit from the use of concordancing as a tool for language learning (i.e., as a means of exploring the meanings and uses of

words in their authentic contexts; see Aston, 1997a; Tribble, 1997). A concordance program enables research into the lexical, syntactic, semantic, and stylistic patterns of a language.

Concordancer and monolingual text corpora (comprising only one language) have already been employed by both the language teacher and learner in classroom exercises. Typical exercises using a monolingual English corpus have included vocabulary building and the exploration of the grammatical and discourse features of texts. For specific descriptions of classroom activities (mainly for EFL teaching, however) using a monolingual English corpus, see, for example, Aston (1997a, p. 51-64), Mindt (1997, p. 40-50), Minugh (1997, p. 67-82), Murphy (1996), Flowerdew (1993, 1996), Stevens (1991a, 1991b), Tribble (1990), and Johns (1986, 1991a, 1991b). In a well-known quote, Johns advocates the DDL (Data Driven Language) approach. The advantage of this approach is that, in a classroom situation, it enables the teacher to play a less active role whilst at the same time exposes the student to authentic texts like those found in a monolingual corpus:

> What distinguishes the DDL approach is the attempt to cut out the middleman as much as possible and give direct access to the data so that the learner can take part in building his or her own profiles of meanings and uses. The assumption that underlies this approach is that effective language learning is itself a form of linguistic research, and that the concordance printout offers a unique resource for the stimulation of inductive learning strategies -- in particular, the strategies of perceiving similarities and differences and of hypothesis formation and testing. (Johns, 1991b, p. 30)

Experiments in data driven learning and corpus-based methods (e.g., Baker, Francis, & Tognini-Bonelli, 1993; Barlow, 1995b, 1996a; Dickens & Salkie, 1996; Lewandowska-Tomaszcyk & Melia, 1997; Salkie, 1995, 1996; Tognini-Bonelli, 1996; Wichmann, Fligelstone, McEnery, & Knowles, 1997) are beginning to bear fruit in a wide range of language environments although there is as yet only a limited amount of experience on which to draw regarding learning German using a parallel corpus.

With regard to monolingual corpora, they have already been used to teach German.

Dodd (1997) exploits a corpus of written German for advanced language learning. After browsing through a raw corpus, his students compare corpus evidence with reference works. Dodd concludes that a computer-supported investigation of language corpora provides a powerful and simple tool for language learning. Fernández-Villanueva (1996) used a German monolingual corpus of oral language to research the function of German particles. She describes it as a very positive experience because it allows students to investigate the function of the particles, which do not have a direct equivalent in their mothertongue.

Wichmann (1995) used a monolingual English corpus for teaching German and sorting out problems of lexical choice. She proposes the use of both corpora and concordancer because dictionaries do not provide enough information of meaning in context (see Barlow, 1996b, p. 54). However, Wichmann's study does not explain what kind of exercises she set her students.

Parallel corpora (sometimes also called translation corpora) have already been successfully used by linguistic researchers for their research into the nature of translation. Zanettin (1994) focuses on the use of concordancing software on bilingual English/Italian parallel subcorpora to design language activities aimed at developing translation skills. Like this pilot study, he emphasises that concordancing programs "can be run by students at any time in a self-access environment, provided that instructional sheets explaining the background for the activity are supplied" (p. 108). Salkie (1996) also employs a parallel corpus to investigate grammar problems but concentrates on epistemic modality in English and French. Dickens and Salkie (1996) compare French/English bilingual dictionaries with a parallel corpus and show in analogy to this study how many equivalents one single word can actually have. Barlow (1996a) discusses research based on the analysis of parallel texts (English/Spanish) with particular regard to the translation of reflexive pronouns. He also advocates some uses for parallel texts in the language

classroom as it is carried out in this study. The unifying theme in his article is the notion that the use of corpora and a concordancer allows everyone, from the theoretical linguist to the student learning a second language, to become a researcher (p. 2). This notion is actually combined in the present study because the student observed is both a linguist (his major) and a language learner. In the analysis in Meaning of Particles (tasks 2-6), the student discovers that there are many English equivalents for a certain German particle. This reflects Barlow's (1996b, p. 53) observation that a basic search for concordances can make students aware that the French translation of *head* is not always *tête.* Barlow (1996b, p. 54) concludes that a parallel text provides an online contextualised dictionary, which language learners can exploit in a similar way to that demonstrated in the student's tasks 2-6 under Meaning of Particles.

Danielsson and Ridings (1996) report on their tool for work in parallel corpora (Skandinavian languages/English) and their efforts to integrate it into an academic programme for training translators. However, parallel corpora have not only been used for research into translation and translator training (see Baker, 1993, 1995; Buyse, 1997; Piotrowska, 1997; Schmied, 1994; Ulrych, 1997), they can also prove very useful to non-advanced language learners, as this pilot study will endeavour to demonstrate.

Finally, McEnery, Wilson, and Baker examine how corpora can meet the needs of grammar teaching at the pre-tertiary level in the UK. In general, they come to the conclusion that a corpus should be at least integrated into teaching. They further conclude that "corpus data present a means by which grammar teaching may be more effective -- and more importantly may be rated more positively by learners" (1997, p. 15).

It can be seen from the literature that parallel corpora have already been successfully employed in a number of studies. However German/English parallel corpora have not yet formed part of a study. In this present study, the student had to research a set of questions on his own and what is novel in this study about classroom concordancing is that the student is at beginner's level working on his own and that a German/English parallel corpus as opposed to a monolingual corpus was used. A parallel corpus was used, not only for investigating patterns in the language he was learning, but also to compare it with his mother tongue and to draw conclusions from it.

BACKGROUND

Corpus Used in This Study

The German-English INTERSECT corpus (Salkie, 1995) which was used for this study has about 800,000 words and comprises the following files:

Table 1. Composition of the INTERSECT Corpus (parts not used in the present study in italics)

file name	content	comment
Dbank	Annual bank reports	Hoechst, BASF, Siemens
newsapr	news reports	From the "German News" Web site
newsjan	news reports	From the "German News" Web site
Euro	EU texts	
UN	United Nations documents	
hertzgog	Transcripts of speeches by the President of Germany	Spoken (President Herzog)
Basiclaw	*Constitution Texts*	*Germany, Switzerland, & Austria*

The student worked with six files only. The constitution texts which are also part of the INTERSECT Corpus were not used because of the complexity of German legal language structures.

The corpus includes a variety of text types including spoken language, and it is thus both appropriate and sufficient for this pilot study because tendencies rather than rules are discovered. Corpus size is obviously a matter of considerable discussion and is not the point of this particular paper but the subject of further research. However, the problem with large corpora for language learners, especially beginners and intermediate students, is that concordances of frequent words can easily become too long and meaningless. This can be very demotivating for the beginner student. Aston comments in this respect that "work with small specialised corpora can not only be a valuable activity in its own right, as a means of discovering the characteristics of a particular area of language use, but also an instrument to help and train learners to use larger ones appropriately" (1997b, p. 61). The use of a small corpus has both advantages and disadvantages: Since the amount of data searched is relatively small, any observations on frequency of occurrence may be ungeneralisable, while on the other hand it avoids a proliferation of examples, particularly of common words which would prove too daunting to learners. When using a small corpus, the obvious strategy to employ is to focus on common words. In comparing the corpus with dictionaries, this is a logical approach in any case: if the corpus gives some clues about which words occur fairly often, this is in itself useful information as will be shown in the analysis.

Student

As already mentioned, I decided to only use one student for this particular study for several reasons. The literature review already shows that beginner language students had not previously been involved in corpus-based studies. In my view, it would present too great a risk if several students were included in the very first experiment of this kind. As with other new technologies before it, such as the language laboratory, a step-by-step introduction is probably most effective. As Flowerdew puts it:

> There is a danger of the enthusiasm for concordancing being inflated to such an extent that concordancing is seen as a sort of language teaching panacea. (1996, p. 112)

Therefore, carefully conducted evaluative studies will ensure that such an inflated view will not prevail. A study carried out on a small scale such as this, will be able to offer proper guidance to large-scale studies using concordance tools.

Furthermore, in a beginners' class, where the students are generally less confident than in an immediate or advanced class, it is usually more difficult to encourage and motivate them to take part in a project. A project involving new technologies would present in my judgement an even heavier threat to the students. Just as Stevens (1995, p. 2) divides language teachers into three groups, namely those who have never heard of concordances, those who have not yet taken them seriously, and those who actively use them, students could be divided into the same groups with beginner students most likely falling into the first group. Therefore, caution needs to be exercised when starting a project involving relatively new technology. I therefore decided to introduce only one new variable at a time, starting in this study with a beginner with a background in linguistics. I then propose to introduce a second variable (a beginner with no linguistic background, e.g., a student majoring in science) in a future experiment.

Out of all non-specialist language learners I teach, I considered a student with his main subject in linguistics to be most appropriate in this instance, rather than a student majoring, for example, in science. It is generally agreed that in a beginner class, one of the teacher's tasks is to maintain the students' interest in the language concerned. A project of this kind could prove counter-productive and possibly discourage non-linguists. The student observed in this study had just finished his first year at university studying linguistics with German as a subsidiary subject. At the beginning of the project, he had already completed one year of German at university (3 hours a week) and his level of German was approximately equivalent to basic GCSE level. However, it has to be stressed that this level is achieved within 1 year of intensive study at university in comparison to an average of 4 years at school. It is also important to mention that the student, unlike many other so-called "false beginners," had no knowledge of German before studying the language at university. The student was one of the best students in his year and fond of grammar.

However, there were still doubts about whether his level of German would be good enough to cope with some of the questions set. In particular, the language was thought to be too difficult as it was at a level to which only more advanced learners are exposed. Consultation with the student revealed that he actually regarded the project as a challenge.

The parallel corpus and the parallel concordancer were the learner's only resource. In the process of answering his set of questions, he was able to teach himself how to use the concordancer without using a manual and went on to describe the program as very user-friendly.

Student Tasks

Since the reference works most often used by undergraduate students of foreign languages seem to be dictionaries, one of the student's first tasks consisted of word or phrase searching. In this instance, he had to enter the word/phrase he wanted to examine. The software would then browse through the corpus of texts and look for the wanted expression in the search language while the correspondence would be shown in the target language parallel to the search language. Unlike KWIC (Key Word In Context) concordancers, which show the search word centralised in a single line of text, the format for the parallel display is the sentence and paragraph, with the results of each search being given as parallel sentences or paragraphs. This is mainly because, although the context word is known in the search language, there is no way of knowing where in the target language paragraph the relevant correspondence word will appear or, indeed, if it appears at all. There is even the possibility that the required word or words may appear in a preceding or following sentence, rather than the equivalent single sentence of the search language. In this pilot study, the emphasis is on the behaviour of words in context in both German and English.

The student had 17 tasks to choose from. If one question/search produced too many hits he went on to the next task, which again proves that too large a corpus would not be appropriate for a non-advanced learner (see Aston, 1997b, p. 61). From the hits of the other tasks, he also only selected sentences he could easily understand. Considering the learner's degree of proficiency, the level of the corpus as a whole was probably too demanding for him, but he correctly employed a strategy of finding his own level in the corpora by searching for shorter sentences. The examples in this paper show this.

ANALYSIS

Introduction

The set of tasks consisted of common lexical and grammar problems usually encountered by beginner students and was therefore considered as appropriate for this study. The following results show how the student coped with the given resources and whether he managed to find appropriate answers without the input and guidance of the teacher.

Task 1

The very first question the student was recommended to choose was based on two phrases that are often introduced in the first lesson of a beginner class when students have to learn phrases of introduction such as *Wie ist Ihr Name?* (What's your name?) and *Wie ist Ihre Telefonnummer*? (What's your telephone number?). Both interrogatives in the two questions are translated into English as *what* and the student was asked whether it is a pattern that *wie* always translates as *what* and not *how* as described in dictionaries. After using just *wie* and *was* as the search words in the input field of the interface which produced too many hits, the student decided to enter *ist* in the context. He subsequently came up with the following data and comments:

dbank.de 1a	**Wie ist** diese Differenz zu bewerten?
dbank.en 1b	How is such a spread to be assessed?
dbank.de 2a	**Wie ist** die Option „runde Wechselkurse" zu bewerten?

dbank.en 2b	How is the option "round exchange rates" to be assessed?
dbank.de3a	**<u>Was ist</u>** die EWU?
dbank.en3b	What is EMU?
dbank.de4a	**<u>Was ist</u>** die Alternative zur EWU?
dbank.en4b	What is the alternative to EMU?

> In general *was* translates into English as "what." However, anyone with a basic knowledge of German knows that there are cases where *wie* equates to "what" in English. The examples in the question show this. The system did provide examples where *wie* translates as "how" and from this evidence a student of German would conclude that, in general, *wie* equals "how" in English except in certain cases.

The above phrases were recommended to the student as the basis of his very first question because it required a simple search for a particular phrase with which the student was very familiar; and it also involved a simple examination of the meaning. It is also worth pointing out that the student felt sufficiently independent enough to go a step further when there were too many hits for *was* and *wie* and he then inserted an *ist* into the context field of the interface in order to reduce the number of hits. Even though it was the very first question, the student did not ask for the tutor's assistance but just tried to find a solution for himself, which is also very rewarding from a teacher's perspective.

Meaning of Particles

In the next set of tasks, the learner was asked to find out how certain German modal particles and conjunctions translate into English. In this case, all he had to search for was a particular particle and then examine the correspondence. Doherty (1982, p. 95) stated that the English language has no equivalents for these modal particles, so it was interesting to see what solutions the learner would actually provide.

Task 2

The first search term was *wohl* which produced 57 hits altogether (see Table 1 in Appendix A). The particle *wohl* gives the sentence a sense of uncertainty that is required in these kinds of texts (Helbig, 1994, p. 238). What was striking was that 41 of the 57 hits occurred in the *dbank* file alone. One would probably expect to find most hits in the *dbank* file considering that in financial reports many forecasts are made for future years that are based on hypotheses. The student produced many concordances and also categorised them (see Appendix B). He commented as follows:

> "Wohl" produced an interesting batch of searches. The general trend was that "wohl" introduced doubt into the sentence/paragraph. These were broken down into: "Wohl erst"; " wohl aber/aber wohl"; "wohl auch/wohl auch nicht"; "werden wohl"; "wohl nicht." When the English translations were read in conjunction with the German, it was noticed that most of the sentences tended to say: "probably"; "will probably"; "may well"; "is likely" etc.

> The general feeling when reading these sentences/paragraphs is one of doubt or caution and the word "wohl" appears with one of the aforementioned words.

From a teacher's point of view, the student's investigations are more than satisfactory because he managed to deduce the right meaning and quite rightly discovered the uncertainty of *wohl.* His attention was not, however, drawn to the fact that the majority of the hits were in the *dbank* file. The comments show nevertheless in what detail the student observed the concordance output. It becomes apparent that he no longer writes about a translation as in the first search. He probably started to realise that there is not always a one-to-one equivalent available. This can be very rewarding for the teacher who might find it very frustrating that s/he is not always able to provide the student with *one* definite answer. The student's comments also show how reading in the foreign language is practised whilst searching through the target

language to find patterns. It is moreover interesting to note how the student grouped the different meanings of *wohl* according to its collocation and meaning.

Task 3

The next search term was *also* which can be used either as a particle or an adverb depending on syntax and context. It gives a sentence a sense of conclusion and is also used as a connective particle between two successive sentences (Helbig, 1994, p. 86-87). Furthermore, *also* belongs to the category of *false friends* (Pascoe & Pascoe, 1985, p. 12). Beginner students very often translate it as *also* into English whilst *auch* is in fact the correct German word for *also.*

The student's search produced 74 hits altogether, probably too many for a low-level student to work through (see Table 2 in Appendix A). The student decided to only work on the following output with the following explanations afterwards:

dbank.de 5a	Es kann **also** kaum einen Zweifel daran geben, daß die EWU kommt - wenn der politische Wille stark genug ist und genügend Länder die Aufnahmeprüfung bestehen.
dbank.en 5b	There can, **therefore**, be little doubt that EMU will come - if the political will is strong enough and a sufficient number of countries pass the convergence examination.
dbank.de 6a	Da sich **also** der Umstellungskurs an Devisenmarktkursen orientieren wird, ist durch die Festlegung der Umrechnungskurse weder ein Gewinn noch ein Verlust zu erwarten.
dbank.en 6b	Since, **therefore**, the conversion rate will be geared to forex market rates, fixing the conversion rates should produce neither a profit nor a loss.

The examples, "also" revealed a pattern and the English translation was "therefore." The position in the sentence in German corresponded with the position in English in almost all cases. It would appear from the searches that, when "also" translates as "therefore," the relative position of the word in both languages is the same or very near.

Another pattern appeared where "also" translated as "thus." This was deduced because there appeared to be no other function for the word in the sentence. Unlike the translation "therefore," the relative position in each language varied. However, the translation could be worked out by reading the German and then the English. When the two were then compared, a deduction was made. The examples below demonstrate this.

herzgog.de 7a	Auch in Zukunft muß das Motto **also** heißen: Freiheit ist das höchste Gut.
herzgog.en 7b	**Thus**, in the future as well, our motto must be: Freedom is our most precious asset.
herzgog.de 8a	Wir stehen **also** nicht ohne Orientierung da.
herzgog.en 8b	**Thus** we do not stand here devoid of orientation.

The learner discovered its correct function as a modifier in at least four examples. Although the question did not ask for a pattern in terms of word order, the learner mainly concentrated on this aspect. This might be due to the fact that the student had a linguistic background and natural interest in exploring more but this also shows very interesting aspects of using concordances with students, namely the experience they gain of how the languages operate. It also demonstrates that he was examining and comparing the languages and developing some insight into both languages simultaneously. This example also shows that the English translations can prove to be very useful to the learner.

Task 4

The next search word was *eben,* which only produced 15 hits with 11 hits alone in the *herzgog* file (see Table 3 in Appendix A).

Eben is used as an adjective, adverb, or particle; in the latter case its meaning being very difficult to determine (Helbig, 1994, p. 124). This fact was also discovered by the student and the particle use is not found much in written language. That is why most hits occurred in the *herzgog* file, that is, the transcription of President Herzog's speech. König remarks in this respect that some scalar particles like *eben* "have a wider use in English than their German 'counterparts,' in other words, some particles in English will have several translational equivalents in German" (1982, p. 79). Thus the exact opposite can apply when working from English to German. It is interesting to examine the student's findings:

herzgog.de 9a	Und nach allem, was ich **eben** über das europäische Erbe gesagt habe, wäre eine undemokratische Lösung auch eine uneuropäische Lösung.
herzgog.en 9b	And after all that I have **just** said about the European inheritance, an undemocratic solution would also be an "un–European" solution.
herzgog.de 10a	man wechselte **eben** zu anderen.
herzgog.en 10b	one **simply** changed to others.

"Eben" appeared only 15 times in the corpora. In the searches below, "eben" seems to equate to "just" in English. When not translated exactly as "just," "just" seems to be implied as in example 10 where "eben" equates to "simply": "simply" could easily be replaced with "just" and carry the same meaning.

Looking through the other examples from the corpora, there were many interpretations, which could have been made for the translation of "eben."

These data and his comments suggest that the student is becoming aware that a word may not even be lexicalised at all in one language. This is a very important learning process and linguistic insight into languages for a student to grasp when starting to study a foreign language. The fact that he was not taught this but that he could find it out for himself is one of the most valuable aspects of concordancing and from the teacher's point of view very satisfactory. It is not easy for the teacher to tell students that there is just no translation available. It is more rewarding for both sides if the students can find out this fact himself.

Task 5

The next search term was the particle *doch,* which produced 170 hits altogether (see Table 4 in Appendix A): The particle *doch* has seven different uses as a modal particle (Helbig, 1994, p. 111-119). Its main use is adversative in contradictions (Helbig, p. 119). The student carefully chose to work on the following output:

newsjan.de 11a	Schmuggelplutonium stammt angeblich **doch** aus Moskau.
newsjan.en 11b	Smuggled plutonium **indeed** from Moscow
newsjan.de 12a	Nichts fuer sensible Gemueter - aber leider **doch** passiert
newsjan.en 12b	Not for the faint-hearted - but it **did** happen
dbank.de 13a	Zwar ist es seiner Meinung nach zu früh, um einen Erfolg oder ein mögliches Scheitern der EWU vorauszusagen, **doch** sieht er die Strukturen, auf denen die EWU aufbaut, als durchaus vernünftig an.
dbank.en 13b	Although it is too early to tell, in his opinion, whether or not EMU will succeed, its design **does** make sense.
dbank.de 14a	Dies hätte zweifellos negative Auswirkungen auf Spaniens Haushaltsposition, **doch** wären diese sehr viel geringer als im Falle Italiens.

> dbank.en 14b   While a collapse of EMU would undoubtedly have a negative impact on
>   Spain's budget position, the effect would be considerably smaller than in the
>   case of Italy.

He described the output as follows:

> What seemed to be evident was that the word "doch" had a modifying effect on the
> sentence. In the sentences, "doch" seems to refer to words like "indeed' and "did."

> In other examples, "doch" has many uses: One of which is to add a positive nature to a
> sentence. In trying to find a trend for its use in German, there was also evidence that it
> had a positive modifying effect on a sentence. However, this was not the only use for the
> word. It soon became clear that "doch" is used in a variety of subtle ways to shape a
> phrase or sentence. Some good examples of the versatility of "doch" can be seen when it
> is used at the beginning of a sentence. In some of these examples, "doch" translates into
> "but" in English.

The above example again shows that not only detailed reading in the target language is practised when
using corpora but also that text analysis is employed merely by going through the data and trying to find
patterns when analysing the sentences carefully.

Task 6

Strictly speaking, this was not a task set but a search, which was initiated by the learner himself. It shows
that the learner adopted a very interesting behaviour pattern, which might be ascribed to the fact that he
has a linguistic background. After searching several German particles, the student spotted *however*
several times and started becoming curious about the German correspondence. As a result, he carried out
a search of *however* to investigate what translation the system would come up with:

> The purpose of this exercise was to test the corpora when the search words found by the
> system varied. Here, the English word "however" was entered and the search found
> different German translations.

> When this happened, it was decided to try and cross-reference the German word in each
> case. The corpora produced many other examples for each word but the idea here was to
> test whether the same reference could be found in the corresponding German search.

> In this way the student can find what he/she wants to know by using a search in either
> language. This is useful if the student is weak in either language and needs to find a
> particular answer.

> dbank.en 15a   Formal participation in the exchange rate mechanism is, **<u>however</u>**, a binding
>   condition of the Treaty.
> dbank.de 15b   Die formale Teilnahme am Wechselkursverbund ist **<u>jedoch</u>** im Vertrag
>   zwingend vorgeschrieben.
> dbank.en 16a   **<u>However</u>**, a lasting improvement will probably only occur when Switzerland's
>   economic outlook brightens.
> dbank.de 16b   **<u>Allerdings</u>** sollte eine nachhaltige Stärkung wohl erst einsetzen, wenn auch
>   die konjunkturellen Perspektiven der Schweiz sich verbessern.
> dbank.de 17a   Die formale Teilnahme am Wechselkursverbund ist **<u>jedoch</u>** im Vertrag
>   zwingend vorgeschrieben.
> dbank.en 17b   Formal participation in the exchange rate mechanism is, **<u>however</u>**, a binding
>   condition of the Treaty.

The student came to a constructive conclusion and the fact that he carried out a cross-reference shows his interest in research and exploring. Here it would be most interesting to see whether a more typical language learner, that is, one without a linguistic background would behave in the same way. It also demonstrates the fact that concordances allow students to generate and collate the language data needed to invent their own rules of grammar and to develop the most appropriate ways of learning for themselves. This example clearly shows that the learner assumed control of his learning process. Once the student had seen how to use the program, he could, to a certain extent, set his own agenda for its use, as illustrated above with *however* and the cross-reference research.

Grammatical and Lexical Tasks

Task 7

Another trouble spot for English learners of German is the distinction of *aber* and *sondern* both translating as "but" into English. For this reason, the student was asked to find a possible semantic and/or syntactical distinction between the two. The concordance below helped him to grasp the difference almost by himself.

There were 576 hits of *aber* whereas s*ondern* only showed 178 entries the latter having a specific use (it only occurs after a preceding negative clause), which can also explain the fewer entries (see Tables 5 and 6 in Appendix A). *Aber* is also used as a co-ordinating conjunction and has two different uses as a modal particle (Helbig, 1994, p. 80-81). This can be another reason why on the whole there are more hits for *aber*. However, the frequency of a particle obviously also depends on the nature of the text. The subject came up with the following data and conclusion:

dbank.de 18a	Schuldenstand: Rückläufig, **aber** immer noch hoch
dbank.en 18b	Public sector debt: falling, but **still** high
dbank.de 19a	**Aber** kann man da sicher sein?
dbank.en 19b	**But** can we be sure here?

"Aber" translates into English as "but" when the sentence uses "but" as a straight-forward conjunction linking two main clauses of the sentence. The examples show the use of "aber" and the search produced many more examples. English also uses the word "but" when the German uses the word "sondern." "Sondern" is used in a different way to "aber" although it still translates as "but." "Sondern" is used when the sentence has a negative preceding the word.

euro.de 20a	Deshalb strebten die Gründerväter der Europäischen Gemeinschaften nach einer gemeinsamen Energiepolitik: **nicht** etwa als Selbstzweck, **sondern** als Motor für die politische Integration.
euro.en 20b	Appreciating its importance, the founding fathers of the European Community desired an energy policy **not** only for itself **but** also as a motor for political integration.
euro.de 21a	Der Europäische Rat gibt seiner ernsten Besorgnis Ausdruck über die anhaltende Gewalt im Gebiet der Großen Seen, von der **nicht** nur Ost-Zaire, **sondern** auch Burundi betroffen ist.
euro.en 21b	The European Council expresses grave concern about the continuing violence in the Great Lakes Region, **not** only in Eastern Zaire **but** also in Burundi.

As with "aber," there were many examples in the files which could also have been shown here. The system did throw up what looks like an exception. However, this could be correct in the context of this

particular sentence and without the time to explore more of the files, it will have to remain an exception in this project:

> dbank.de 22a   Um die — **nicht** kurzfristig, möglicherweise **aber** auf längere Sicht — bestehenden Risiken von Sanktionen im Rahmen des Stabilitätspakts zu minimieren…
>
> dbank.en 22b   In order to minimize the risks of sanctions in the framework of the stability pact — **not** so much on a short-term horizon **but** possibly over the longer term…

The student observed quite rightly that *aber* and not *sondern* occurred after *nicht.* In a classroom situation, students typically react negatively to the introduction of an exception to a rule but, by taking over control of his own learning, the student even analyses the exception he found. Also from the teacher's point of view, it is a better outcome to let students search for exceptions rather than merely presenting it to them. The reaction of the students will be more positive and learners should in turn be motivated if they can find such things for themselves, though it could be argued that, for this particular question, a monolingual context would be sufficient. The student, however, bearing in mind his level, always found it helpful to have the translation available. He also mentioned in his feedback that he learned new words by reading both the German and the English translation.

With regard to distinctions made in a target language and non-existent in the learner's language, Barlow comments concerning a distinction in Spanish, which is non-existent in English:

> By studying the context of instances of English *for* that correspond to Spanish *por,* compared with those that correspond to *para,* it is possible to form hypotheses about which of the meanings of *for* match up with *por* and which with *para.* (1996b, p. 54)

As can be seen above, the strategy Barlow describes is exactly practised by the learner who managed to work out the distinction for himself.

Task 8

The student had to find out a meaning for *denn,* a word many beginner students tend to equate with *then,* especially when it occurs at the beginning of a sentence. *Denn* occurred 75 times in all files together (see Table 7 in Appendix A).

It has seven different uses as a modal particle and is also used as causal conjunction and adverb (Helbig 1994, p. 105-110). The learner's comments regarding his data were that *denn* at the beginning of the sentence translates as *for.* However, he also discovered that it also occurs within commas with the words *es sei.* He concluded quite rightly that it then always translates as *unless* (see Appendix C).

> In the searches here "denn" at the beginning of the sentence translates as "for," however "denn" occurs within commas with the words: "es sei." This translates on all occasions as "unless."

It is very interesting that the student discovered that *denn* collocates with *es sei,* that is,. *es sei denn.* This demonstrates that concordancing makes hidden structures visible, and enhances the imagination.

Task 9

The last question the student chose was more challenging and complex in my judgement. He was asked to find possible meanings for *man.* With the word *man,* German has a very useful all-purpose impersonal pronoun that the 242 hits in all files reflect. The student produced the following data (see Table 8 in Appendix A):

herzgog.de 23a	Aus der eigenen Geschichte lernt **man** immer noch am besten.
herzgog.en 23b	**One's** own history teaches one the best lesson.
herzgog.de 24a	**Man** sah weg, als jüdischen Ärzten und Rechtsanwälten die Zulassung entzogen wurde;
herzgog.en 24b	**One** looked away when Jewish doctors and lawyers lost their licences;
newsjan.de 25a	Ausserdem koenne **man** den Menschen nicht anlasten, dass sie keine Arbeit faenden.
newsjan.en 25b	She added that no **one** could be held liable for not being able to find a job.

The subject wrote afterwards:

> "Man" generally translated into English as the pronoun "one." It appeared in different places in the sentence including the beginning. The examples demonstrate this very clearly. The examples also show that "man" does not always have an apparent translation but when the sentence is read as a whole, it would appear that "man" is being used to refer to the general idea, i.e. "it" or the situation in general. Furthermore "man" tends to refer to "people," "nobody," "we" (the people). There were many examples in the corpora like these when "man" was used to refer to someone or something.

His comments show once more how concerned he was about word order. They further indicate that he again looked for a translation but in the end accepted that there is not always a translation for one particular word.

This analysis provides an illustration of how the common content of parallel corpora can be exploited to gain linguistic insights into the structure and function of languages. However, it must also be stressed again that only one student used the corpora and concordancer on a self-access basis. Multiconcord was installed on a computer in the Self-Access-Centre where the student could use it as and when he wanted during open hours. Given that there was no tutor observation during the project period, even of the data that the learner ultimately produced, it is remarkable to see that a beginner student of German can actually discover and learn on his own. In answering my initial question, all his answers can be regarded as fully satisfactory and appropriate with regard to the language learning process. In most questions, the student's conclusions were the only correct answer. However, considering that the student might have shown a natural interest in exploring the data in more detail, taking into account that his main subject of study was linguistics, any generalisations drawn from this study need confirmation. The next step would be to include students from other subjects like engineering or science and to see whether they come up with the same and or similar conclusions before expanding the experiment to a whole beginners' class.

Student Observation and Feedback

The student was interviewed after the pilot study; there was no student/teacher interaction during the project time. The learner found the concordancer very user-friendly and he did not use any tools other than the corpora and the concordancer. He later said that he ignored sentences that were too difficult due to a long and complicated word order, that is, he selected the sentences he wanted to use for the data, which in itself is a very important "help yourself" learning strategy. Indeed, the data used consisted of sentences only without any complex structures.

This obviously means that the student's analysis is incomplete because, in order to reach reliable conclusions, all data should be considered and analysed. However, it was certainly a step forward in the learning process of a beginner student as it enabled him to draw certain conclusions about the language based on short and simple sentences. It was interesting, to see that the student used the corpus in two

ways: to answer the set questions and to look up things that were not directly related to the questions, for example his search for *however.*

He spent on average 2 hours on each question but he noticed that he became more efficient after each question. His explanation for this was that he became more confident in the course of time, that he knew what to do, and also that he became more used to the system. He also knew what to look for because he became more selective by choosing shorter sentences. The learner followed the following procedure:

After selecting a question, he first tested how many hits it produced. If there were enough hits but not too many to cope with, the concordanced evidence of this point was assembled in both languages. He then tried to find prominent features and classified them into up to four categories. The student then saved the sentences and/or printed them out. He tried to discover a pattern in the language and, by generalising found the rules, which governed those patterns (see Johns, 1991a, p. 4). The student's work became more exploratory and thus motivating and highly experimental. In addressing the theme of this study, that is, whether corpora and concordancer are appropriate tools at beginners' level, it can be said that the student not only found the meaning of the search words (i.e., learned new vocabulary), but he also had the satisfactory feeling of having achieved something.

CONCLUSION

In this paper, I have shown the use of parallel corpora and concordance software, in particular its usefulness in the very early stages of language acquisition for both teacher and learner alike. Learners often pose questions and answers that teachers cannot predict. A corpus and concordance can supplement the teaching. As Johns put it, "we simply provide the evidence needed to answer the learner's questions, and rely on the learner's intelligence to find answers" (1991a, p. 2).

In view of the degree of proficiency in German this student had, it was the correct decision to concentrate mainly on lexical questions. These were indeed neither easy nor straightforward. This pilot study proves that, when the translation is available, even beginner students can make use of concordancing. German was in most cases (except in the search for *however)* the search language and English was used to help understand the German.

In this pilot study, the selected student might be regarded as a rather untypical learner and therefore further research must involve more typical language learners to find out whether low level language students can generally cope with corpus work. Nevertheless, when carrying out a study on a bigger scale, the two groups of typical and untypical learners have to be clearly distinguished. It was important however to first carry out a pilot study of this kind with one student to avoid any possible failures, which could have lead to a demotivation of the students. This experiment must be seen as a pilot study to design more carefully prepared, objective, large scale experiments. For that reason, I would like to address the following issues:

Firstly, the data and subsequently the answers obtained here are relevant and appropriate for this particular pilot study. The data represents language that has been used in authentic and naturally occurring communicative situations.

Secondly, the conclusions cannot be generalised because of the nature of the student and also because of the fact that the student did not consider all data. The choice of student has also effected the outcome and a study on a bigger scale will provide an answer.

Finally, this study supports Zanettin's (1994, p. 108) claim that the interactive concordancer is a potential learning resource, which can be used freely and on their own initiative by all students from beginner to advanced in a self-access centre. The role of the teacher/language adviser is to suggest points at which the interactive concordancer may help to solve learning difficulties or, with instructional sheets, to explain the background for the activity and to give operational directions.

The use of parallel corpus and concordancing in the early stages of a German learning programme can add to grammar teaching and certainly make the work with new vocabulary more interesting and rewarding. As already stated, preferably, the study should be repeated on a larger number of students and on other types of students before conclusions are drawn as to whether a non-advanced learner of German can actually benefit from using the concordancer and a parallel corpus. I, however, strongly believe that corpora and concordancing are of great potential value in the very early stages of a language learning programme and I am positive that further studies will reinforce my claim.

APPENDIX A

Table 1

WORD	FILE	HITS
WOHL	all	57
	dbank	41

Table 2

WORD	FILE	HITS
ALSO	All	74

Table 3

WORD	FILE	HITS
EBEN	All	15
	Herzgog	11

Table 4

WORD	FILE	HITS
DOCH	All	170

Table 5

WORD	FILE	HITS
ABER	All	576

Table 6

WORD	FILE	HITS
SONDERN	all	178

Table 7

WORD	FILE	HITS
DENN	all	75

Table 8

WORD	FILE	HITS
MAN	all	242

APPENDIX B

Wohl erst

dbank.de 1a   Der Großteil des privaten Bankgeschäfts wird aber **wohl erst** umgestellt, wenn auch die
               Euro-Banknoten und Münzen eingeführt werden.
dbank.en 1b   The bulk of retail banking business **will**, however, **probably** not make the switch until
               euro notes and coins are introduced.

Wohl aber/ aber wohl

dbank.de 2a   Daran wird die EWU **aber wohl** nicht scheitern.
dbank.en 2b   But EMU is unlikely to fail because of this.
dbank.de 3a   1996 nicht signifikant, **wohl aber** in Relation zum IEP.
dbank.en 3b   this does not apply to the IEP.

Wohl auch

dbank.de 4a   Beide Staaten **werden wohl auch** hohe D-Mark-Anteile in der Reservehaltung aufweisen.
               Dies wird vor allem für Österreich vermutet.
dbank.en 4b   Both countries, particularly Austria, **probably** hold a large proportion of their reserves in
               DEM.

Wohl auch nicht

dbank.de 5a   Die Stärke eines Finanzplatzes hängt allerdings nicht nur von der Marktgröße ab, also von
               der Höhe der Staatsverschuldung eines Landes, sie sollte es **wohl auch nicht**.
dbank.en 5b   However, a financial centre's strength and attractiveness does not (and should not!) solely
               depend on the amount of government paper available, i.e. on the size of the public debt.

Werden wohl

dbank.de 6a   Der Anteil an den offiziellen Devisenreserven der Welt **wird wohl** über das Niveau der
               jetzigen Währungen des Wechselkursmechanismus, das bei etwa achtzehn Prozent liegt,
               hinaus anwachsen.
dbank.en 6b   Its share in world foreign exchange reserves **may well** rise to a level above the combined
               18 per cent of the major ERM currencies today.

Wohl nicht

dbank.de 7a   Zweifel an der Erfüllung des Maastrichter Zinskriteriums bestehen **wohl nicht** mehr; die
               weit weniger als in den EWS-Kernländern vorangeschrittene Zinskonvergenz könnte
               vielmehr in absehbarer Zukunft eine treibende Kraft der irischen
               Kapitalmarktbewegungen bleiben.
dbank.en 7b   Doubts about Ireland meeting the Maastricht interest rate criterion appear to have
               vanished: interest rate convergence, which has not progressed in Ireland nearly as far as
               in the EMS core countries, **could well** remain a driving force in the Irish capital market
               in the foreseeable future.

APPENDIX C

herzgog.de 8a	**Denn** die Zukunft gestaltete sich anders, als es die meisten am 8. Mai 1945 erwarteten, auch anders, als es dem soeben zitierten Dichterwort eigentlich entsprochen hätte.
herzgog.en 8b	**For** the future turned out differently from most people's expectations on 8 May 1945 and from the image conveyed by the prayer I have just quoted.
un.de 9a	**Denn** es mag für unseren Planeten, der nunmehr aus anderen Gründen nach wie vor in Gefahr schwebt, nicht noch eine dritte Chance geben.
un.en 9b	**For** there may not be a third opportunity for our planet which, now for different reasons, remains endangered.
dbank.de 10a	ob das Verhältnis des geplanten oder tatsächlichen öffentlichen Defizits zum Bruttoinlandsprodukt einen bestimmten Referenzwert überschreitet, **es sei denn**, daß entweder das Verhältnis erheblich zurückgegangen ist.
dbank.en 10b	whether the ratio of the planned or actual government deficit to gross domestic product exceeds a specified reference value, **unless** either the ratio has declined substantially.
dbank.de 11a	Die schwedische Regierung dürfte 1997 mit einem „sanften Nein" gegen die EWU stimmen, **es sei denn**, es gelingt ihr, die schwedischen Wähler umzustimmen.
dbank.en 11b	The Swedish government is likely to opt for a "soft no" to EMU in 1997, **unless** it is able to reverse public opposition to the single currency.

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