

# What happens in translation? A comparison of original and translated texts containing verbs meaning SIT, STAND and LIE in the English-Swedish Parallel Corpus (ESPC)<sup>1</sup>

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## Abstract

This article studies translation effects by comparing the use of verbs meaning SIT, STAND and LIE in original and translated texts in the English-Swedish Parallel Corpus (ESPC). Effects on both the frequency of use and the use of lexical and structural translation shifts are studied. Postural verbs have a much higher frequency overall in Swedish than in English. In Swedish translated texts, postural verbs are significantly under-represented in comparison to original texts, whereas postural verbs are significantly over-represented in English translations. At a more fine-grained level, it is possible to show that various categories are treated differently, in particular the types of subjects. The effect on frequency is stronger for Human subjects, which represent an unmarked category, than it is for Inanimate subjects, which are more marked. However, the pattern of over- and under-representation presupposes a functional overlap across languages. Writing as subject, which is a category that is unique to Swedish in relation to English, follows a different pattern. (This type of subject appears in examples such as: *Nyheten står i tidningen* 'The news is (literally: stands) in the paper'). The result is discussed both from the point of view of the research methodology used in contrastive studies based on translation corpora and from a theoretical point of view. For methodology, the conclusion is that frequencies can be considerably skewed, whereas a language remains true to its system of basic semantic contrasts in professional translations. Theoretically, the result can be related to theories of language contact and studies of second language acquisition and bilingual development.

## 1. Introduction: Contrastive studies and translation studies

### 1.1 Aim of the study

What happens in translation? Is the same content expressed in the translated text as in the original? Are translated texts different from original texts in the same language and, if so, to what extent is this difference dependent on the particular source language? In certain

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situations of language contact, translated texts have been, and are, important forces behind language change – sometimes in conjunction with the influence from second language users of the target language. The present paper, focusing on postural verbs in original and translated texts in English and Swedish, will give only partial answers to some of these overarching questions, but it is important to keep the broader picture in mind. In addition to theoretical questions, an important aim of the paper is to test the methodology in contrastive studies based on translation corpora. The advantage of using translation corpora is that the expression of the same meaning in the same context can be compared across languages. On the other hand, the fact that translations do not always give a representative picture of original target language texts must be taken into consideration. In particular, it is important to identify which features are most vulnerable.

### *1.2 Why look at postural verbs?*

The justification for looking at postural verbs in particular is that these verbs have been studied extensively from a typological (Newman 2002) as well as from a contrastive point of view (Lemmens 2002, Svensson 2005, Viberg 2013) and also from a second language acquisition perspective (Lemmens & Perres 2010). Of particular importance for the present study is the detailed and well-documented contrastive study by Kortteinen (2008) comparing the Swedish postural verbs *sitta* ‘sit’, *stå* ‘stand’ and *ligga* ‘lie’ with their French correspondents. That study contains a comparison of the use of the Swedish postural verbs in original and translated texts and shows that all three Swedish verbs are under-represented in translations.

In French, the salience of manner is low in descriptions of motion and location. The closest correspondents to SIT, STAND and LIE are not simple verbs in French and are used with a much lower frequency than in Swedish. English and Swedish, on the other hand, share historical cognates that still are very similar in form: *sit/sitta*, *stand/stå* and *lie/ligga*. The relationship between the postural verbs in English and Swedish represents a very special case that is likely to lead to maximal cross-linguistic influence. Semantically, not only the core meanings in reference to human posture are similar, but there is also a semantic overlap in several cases when postural verbs refer to the location of

physical objects (Viberg 2013). From a methodological point of view, this represents a suitable area for testing the validity of translation-based contrastive studies.

### *1.3 Earlier research*

The answer to the question of what happens in translation can be approached from many different perspectives. The present study takes corpus-based contrastive studies (Johansson 2007) as a point of departure and confronts them with certain aspects of translation studies (Gambier & van Doorslaer 2010, Malmkjær & Windle 2011, Munday 2008, Halverson 2003, 2010) and in particular corpus-based translation studies (Laviosa 2002). From a contrastive point of view, this study approaches what Johansson (2007, 32-33) refers to as translation effects, i.e. features which in some way make translated texts different from original texts in the same language. Johansson's term is neutral in comparison to the more value-laden term *translationese* used in Gellerstam's (1986) seminal article. An important issue is how to cope with translation effects from a methodological point of view in contrastive studies based on multilingual translation corpora such as Viberg (2013).

One specific type of translation effect, which has been much discussed in translation studies, is *translation universals* (Baker 1993, Mauranen & Kujamäki 2004), features that are characteristic of translated texts in general, irrespective of the source language. Examples of possible such effects are normalization and explicitation (see Malmkjær 2011 for a balanced review). Typically, studies of translation universals are based on comparison between originals and translations of the same language. The present study will primarily be concerned with translation effects characteristic of specific source-target language pairs and is closely related to studies of interference, transfer or cross-linguistic influence in bilingualism and second language acquisition research (see Jarvis & Pavlenko 2008 for a broad review, cf. Viberg 1998). In contact linguistics, translation effects are an important source of convergence and divergence between languages (see Braunmüller & House 2009 and, for translation, in particular Becher, House & Kranich 2009.)

As is often the case in corpus-based studies, this study treats translation as a collective process without taking individual translators into consideration (see Johansson 2007, 197-215 for an exception). This

is justified by the general importance of translations as a societal phenomenon. What happens in translation can also be studied from the perspective of the translator (the producer) in studies of the translation process, which are concerned with what happens in the translator's mind. Such research is based on methods such as think-aloud protocols, eye-tracking and keystroke logging (see Englund Dimitrova 2010 for a concise review). A corpus-based study can also – albeit more indirectly – shed light on the translation process seen from the translator's perspective, in particular in studies of translating strategies (Gambier 2010).

#### *1.4. Translation patterns*

In this paper, the closest correspondent to a word (or multi-word unit) that appears in a translated text will be referred to as *a translation* (with a corresponding plural form: translations). Broadly, translations will be divided into *direct translations* (the corresponding postural verb in this case), *lexical translation shifts*, when some other word is used, and *structural translation shifts* such as restructuring and structural reduction. In addition, there are *free translations*, where the translation differs so much that it is impossible to identify any systematic structural relationship with the original text. A further category is *no translation*, which refers to examples where an extensive text has not been translated and the translation is lacking for reasons that are not structurally motivated as in reductions. A systematic description of all translations of a word along these lines will be referred to as the *translation pattern* of the word.

#### *1.5 The corpus and its composition*

This study is based on the English-Swedish Parallel Corpus (ESPC) compiled by Altenberg and Aijmer (2000) according to the same principles as the English-Norwegian Parallel Corpus (see Johansson 2007, 9-21). The ESPC corpus consists of original printed texts in Swedish and English together with their translations. The texts are divided into two broad genres: Fiction and Non-fiction with several subcategories. The sizes of the various sub-corpora of the ESPC are shown in Table 1 (see Electronic sources for more information).

Table 1. The composition and size of *the English Swedish Parallel Corpus (ESPC)*

	EO	ST	SO	ET	Total
Fiction	340,745	346,649	308,160	333,375	1,328,929
Non-Fiction	364,648	344,131	353,303	413,500	1,475,582
Total	705,393	690,780	661,463	746,875	2,804,511

EO = English Originals; ST = Swedish Translations; SO = Swedish Originals; ET = English Translations.

The corpus allows comparisons of various types. It can be used as a comparable corpus to compare originals in both languages in a contrastive study (see Section 2.1). Contrastive studies often also look at the translation patterns of the linguistic elements as a way of getting a better grasp of the meaning of the words that have been singled out for a study, for example all English translations of Swedish *stå* 'stand'. This means that originals in one language are compared with translations in the other language. The ESPC can also be used for corpus-based translation studies, which involves in particular the language-internal comparison of originals in one language with translations into the same language. The corpus also allows comparison between two genres (or registers): Fiction and Non-Fiction. This is relevant also for the present study, since the distribution of uses (or meanings) of the postural verbs varies dramatically in certain respects between Fiction and Non-Fiction. For reasons of space this aspect will be treated briefly in Section 6.

The rest of the paper is structured as follows: Section 2 presents global comparisons, which means that various uses (or senses) of the postural verbs are not taken into consideration. Section 3 presents a semantic classification of grammatical subjects on which the following quantitative analysis is based. In Section 4, this classification is applied in a quantitative study of the distribution of direct translations across subject classes. Section 5 is devoted to a fine-grained descriptive comparison of lexical and structural translation shifts, where grammatical constructions are also taken into consideration. Section 6 looks at the distribution of the major uses across genres (represented by fiction and non-fiction) followed by conclusions and discussion in Section 7.

2. Global comparisons

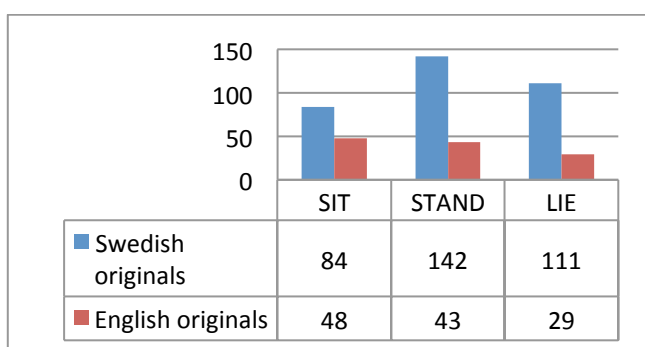
2.1 Swedish and English originals

Table 2 compares the frequencies of the postural verbs in original texts. The result is also shown in Diagram 1. As can be observed, all of the Swedish verbs are considerably more frequent than their English correspondents.

Table 2. Frequency of SIT, STAND and LIE in Swedish vs. English original texts in ESPC

	Number of occurrences				Significance of difference
	Raw scores		Per 100 000 words		
	Sw.	Eng.	Sw.	Eng.	One-Tail
SIT	557	339	84	48	p<0.0001
STAND	939	301	142	43	p<0.0001
LIE	733	204	111	29	p<0.0001
Corpus size	661,463	705,393			

All of the differences are statistically significant (p< 0.0001). Statistical testing has been done with “The Significance of the Difference Between Two Independent Proportions” (Vassarstats, see electronic sources), which calculates the z-ratio for the significance of the difference between two independent proportions. This test as well as the following ones are based on raw scores, whereas the diagrams presented below show the frequencies per 100 000 words.

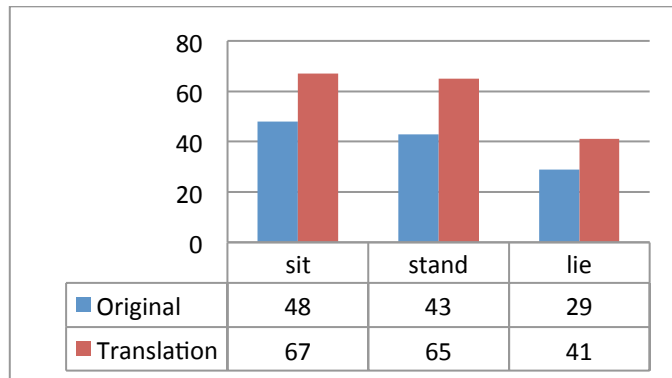


p<	.0001	.0001	.0001
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Diagram 1. Swedish and English Postural verbs. The frequency in original texts of Swedish *sitta*, *stå* and *ligga* compared with English *sit*, *stand* and *lie*. Frequency per 100 000 words.

2.2 Intra-lingual comparison between originals and translations

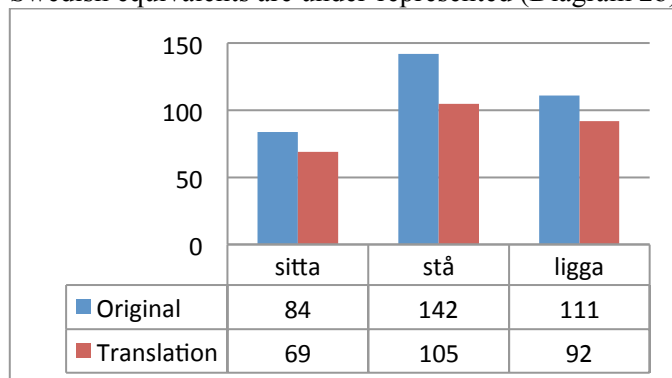
Diagram 2ab shows what happens when the frequencies of the English and Swedish postural verbs are compared in original and translated texts.



p<	.0001	.0001	.0001
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Diagram 2a. The Frequency of the English postural verbs: *sit*, *stand* and *lie* in originals and translations. Frequency per 100,000 words

In translated texts (Diagram 2a), English postural verbs are significantly over-represented (if original texts are regarded as the norm), whereas the Swedish equivalents are under-represented (Diagram 2b).



p<	.0006	.0001	.0002
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Diagram 2b The frequency of the Swedish postural verbs: *sitta* *stå* and *ligga* in originals and translations. Frequency per 100,000 words

As mentioned above, Kortteinen (2008) obtained a similar result as in Diagram 2b for Swedish texts translated from French. What is worth

noticing is that postural verbs are much more frequent and have a much wider range of uses in English than in French. Still, there is a strong translation effect. The results so far can be summed up as follows:

Contrastive relationships:

- In original texts, the Swedish postural verbs are much more frequent than their English direct correspondents in spite of the fact that all verbs are cognates which are transparently related in form and share core meaning.

Cross-linguistic influence:

- In translations from Swedish, English *sit*, *stand* and *lie* are significantly over-represented.
- In translations from English, Swedish *sitta*, *stå* and *ligga* are significantly under-represented.

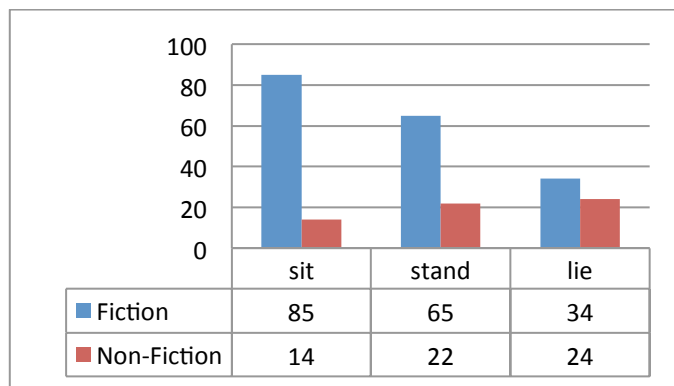
At the global level, this points to a striking difference between originals and translations in the same language. However, this case cannot be generalized in a simple way. It turns out that other frequent lexical verbs do not always follow a similar pattern. The postural verbs were chosen as an example to test what happens in translation because they appear to represent a worst-case scenario from the point of view of contrastive studies based on translation corpora. (However, this applies only to mono-directional comparison. Bi-directional corpora like the ESPC can also be used to compare originals.)

From a general theoretical standpoint, it is interesting to get a more differentiated view of what happens. Are all uses (meanings) of a frequent polyfunctional word affected in the same way, or do we find translation effects only for some uses? What are the correspondents, when the postural verb does not correspond to a postural verb in the other language? The result so far seems to suggest severe translation effects, which does call for caution when using translated texts for contrastive comparison, but, as the results will reveal, a language stays true to its basic system of contrasts in professional translations and a comparison based exclusively on originals in comparable corpora misses important contrastive relationships. However, first a specific methodological problem must be addressed in the next section.



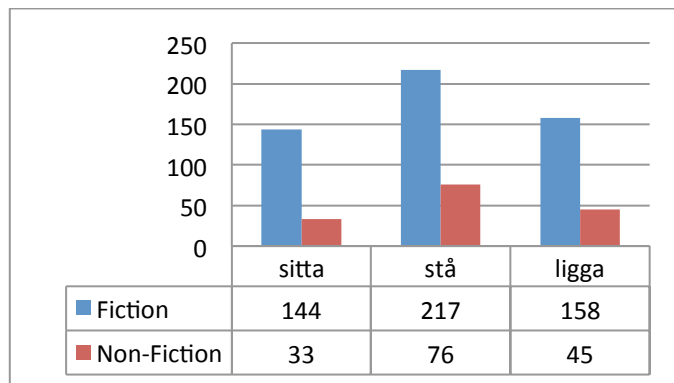
2.3 Variation due to genre: Fiction versus Non-Fiction

Variation due to genre (or register variation in general) is reflected in the use of individual words, but rather few of the many studies that, like the present one, deal with the polysemy of frequent words have tried to address this as a problem. Diagram 3ab shows the distribution of the postural verbs across the two genres of the ESPC.



p<	.0001	.0001	.004
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Diagram 3a. The English postural verbs *sit*, *stand* and *lie* in fiction and non-fiction. Frequency per 100,000 words



p<	.0001	.0001	.0001
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Diagram 3b. The Swedish postural verbs *sitta*, *stå* and *ligga* in fiction and non-fiction. Frequency per 100,000 words

There turns out to be very clear and significant differences. Both in English and Swedish, the postural verbs are considerably more frequent

in fiction than in non-fiction. The results are in line with the characterization of fiction as a distinct register (Ebeling & Ebeling 2013) and in particular with Stubbs & Barth's (2003, 65) conclusion that "verbs of physical movement, mental activity, and nouns for part of the body" are characteristic of fiction.<sup>2</sup> Non-fiction is negatively defined in the ESPC and even in actual practice covers a very broad variety of texts that serve as an interesting contrast to fiction, but need to be broken down into more clearly defined categories. (See, for example Biber et al. 1999, who compare fiction with conversation, news and academic prose.)

By comparing the frequencies in Diagram 3a and Diagram 3b, it is clear that each of the Swedish verbs is more frequent than its English counterpart in both fiction and non-fiction. This means that the conclusion reached in Section 2.1 concerning the contrastive relationship holds across registers (as far as we can tell from the ESPC corpus). As will be shown below, the register differences are more problematic when specific meanings or uses are taken into consideration, since certain uses are actually more frequent in non-fiction than in fiction. As a result, it is an open question whether fiction and non-fiction should be accounted for separately from the very beginning or not. In the coding of individual examples, the distinction is made, but the general account will present data from the whole corpus indiscriminately, and register differences will be discussed in Section 6.

### *3. Semantic classes of subjects*

In order to test whether the global differences between originals and translations depend primarily on any specific meaning or are more evenly distributed across meanings, a functional-semantic coding of all examples was carried out. A natural starting point was the semantic category of the subject. The coding was done at different levels of granularity to make it possible to identify classes that were general enough to allow statistical comparison. At the coarsest level, four types of subject were distinguished: Human, Animal, Inanimate (concrete) and Abstract (see

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<sup>2</sup> Postural verbs describe movement only in some uses but are closely related to such verbs. To be exact, we could refer to verbs of physical movement and posture as, perhaps, physical action in general.

Section 3.1). Different types of more fine-grained coding will be discussed in Section 3.2.

### 3.1 The four major classes

In its most frequent use, SIT, STAND and LIE have a **human** subject and refer to the posture of a human functioning as subject of the verb. Often, a locative complement is added. The Swedish verbs can also freely be used in presentative constructions (see (1)), which have the basic structure *det* ‘it’ + Verb + NP<sup>indefinite</sup>. All the three Swedish postural verbs can appear in this structure with the same postural meaning, as in the corresponding non-presentative clause.<sup>3</sup>

- (1) *Det står* en man här ute som nödvändigtvis vill tala med dig. (HM2)  
[It stands a man]  
“There’s a man out here who insists on talking to you.” (HM2T)

In example (1), *a man* is the subject. To be exact, the classification is based on the **located entity** in cases like this one, but since the located entity in the majority of cases is realized as grammatical subject, this has been used as a general term in order not to complicate the terminology. In a few cases such as (2) and (3), when metonymy is involved, the choice of verb is decided by a category that is clearly different from the grammatical subject. In the Swedish original version there is a human subject, but the verb actually refers to the location of that person’s car and boat, respectively. A similar type of metonymy is involved in: *I’m parked outside*. In example (3), *she* obviously refers to a boat in the English translation.

- (2) Kan en av er komma med mig och se om jag *står* bra där jag *står*.  
(SC1)  
[see if I stand all right where I stand]

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<sup>3</sup> In all examples from the ESPC corpus, the original version appears first followed by a text code, e.g. (HM2) in (1), the reference of which is listed on the homepage of the ESPC project (see Electronic sources). Literal translations and other comments are sometimes given within square brackets. The original text is provided on top, followed by the translation. That’s why there is a switch, for example in (4) below.

Could one of you come with me and check that I'm all right where I am? (SC1T)

- (3) Över vintern *låg jag i Dragör*, som hade en av de få hamnarna i Öresund där det var liv och rörelse året om. (BL1)  
[Over the winter, I lay at Dragör]  
At present, *she was laid up* for the winter at Dragor, that being one of the few ports on the Sound which remained astir whatever the season. (BL1T)

Such examples are coded as inanimate subject, since that is what decides the choice of verb. (In canonical position, cars stand and boats lie in Swedish.) There are not very many examples of this type, but they are theoretically interesting.

**Animal** subjects were so few that it is not meaningful to include them in most of the comparisons. It is tempting to collapse this class with human into an animate class, but the naming of animal postures follows different rules and certain animals have a default verb (birds sit in trees, snakes lie in the grass etc.).

Both English and Swedish can use the postural verbs to denote the location of **inanimate** concrete subjects. When the verbs meaning STAND and LIE are used, the basic semantic distinctions are similar, but there is a rather strong tendency to express location with the copula in English, whereas such uses are very restricted in Swedish. In both languages, LIE basically refers to an object placed in such a way that it has a maximal extension in the horizontal dimension, whereas STAND refers to a maximal vertical extension. In examples (4) and (5), the closest Swedish equivalent is used as a translation.

- (4) She came forward to open a folder that *lay* on the counter. (AT1)  
Hon gick fram och slog upp en pärm som *låg* på disken. (AT1T)
- (5) The father took a golf-club that was *standing* in the corner. (RD1)  
Hennes pappa tog en golfklubba som *stod* i ett hörn. (RD1T)

In Swedish, a special case is represented by physical objects (in particular artefacts such as a plate) that have a distinctive upper side, when they are used in a canonical way. The location of such objects is referred to with

*stå*, even when the horizontal extension is dominant (see example 6). Functional upper side appears to cover the same cases as *base* in other accounts (e.g. Lemmens 2002) but is based more on the typical human interaction with physical objects.

- (6) Tallriken *stod* på en grå vaxduk med röd bård. (IB1)  
 The plate *is* on grey oilcloth with a red border. (IB1T)  
 [There is a tense shift in the translation from past to present.]

This special use is referred to as *functional upper side* in Table 3, which shows the basic contrasts in Swedish. Even when the subject is inanimate, the located entity is sometimes not explicitly referred to due to metonymy, for example, contents for container as in the Swedish original in (7), which literally means: ‘It stood wine on the table’. The choice of verb in the Swedish example is based on the orientation of the bottle and is coded accordingly. In the English translation, the bottle is referred to explicitly.

- (7) *Det stod* vin på bordet och en sallad. (KOB1)  
 [it stood wine on table-the]  
*There was* a bottle of wine on the table, and a salad. (KOB1)

Table 3. The basic contrasts between Swedish Posture verbs indicating Inanimate Location.

Orientation	Posture verb
Horizontal dimension salient	<i>ligga</i> ‘lie’
1. Vertical dimension salient	<i>stå</i> ‘stand’
2. Functional upper side	
Attached	<i>sitta</i> ‘sit’

SIT represents a special case in both languages. According to Newman (2002:19), English *sit* basically has two functions with inanimate objects: (1) Non-activity *sit* “with a nuance suggesting that the entity is underutilized, out of use, useless etc.” and (2) Good-fit *sit*, a position which represents a tidy arrangement or “good fit”. Shape and orientation are irrelevant. An example of “good fit” *sit* is given in (8) and of “non-activity” *sit* in (9). In both cases, the translation is a verb that basically describes a different posture.

- (8) (...) and one of the great attractions of this house was that it *sat* within the boundaries of a National Park. (PM1)  
(...) och något av det mest lockande med det här huset var att det *låg* i en nationalpark. (PM1T)
- (9) Their wedding picture used to *sit* on the piano in their living room. (JSM1)  
Deras bröllopsfoto brukade *stå* på pianot i deras vardagsrum. (JSM1T)

In Swedish, *sitta* refers to an attachment of some kind. Both *stå* and *ligga* refer to situations where a physical object rests on a supporting surface, whereas *sitta* is typically used when such support is missing. The attachment can be of various types such as adhesion (see 10) or a tight fit that “holds” an object in its place (see (11)).

- (10) Sedan ritade jag rent spårplanen för just den stationen och den industrin och klistrade in fotografierna där de skulle *sitta*. (JMY1)  
Then I drew track plans for each station or factory and pasted in the photographs where they should *be*. (JMY1)
- (11) Där *satt* redan de två knivarna i sina slidor. (HM1)  
The two knives *were* already there in their sheaths. (HM1T)

The role played by the concept of attachment is very language-specific in Swedish and is not lexicalized in the same way in closely related languages such as German and Dutch (Viberg 2013: 160-163).

Both the English and the Swedish postural verbs are frequently used with **abstract** subjects (*Inflation stands at three percent*), but such uses are based on conceptual metaphors, which are often lexicalized as more or less fixed phrases. For that reason they follow different types of rules and require separate treatment. To a certain extent uses with such subjects are shared between English and Swedish, but very often translations contain verbs from more abstract fields and the translation is in many cases rather free, as in (12).

- (12) Unfortunately this theory does not *stand up* too well either. (DM1)  
Tyvärr *fungerar* inte heller detta särskilt bra. (DM1T)  
[Unfortunately, this does not function very well either]

Various types of subject are more or less marked or prototypical. Human subjects represent the unmarked or prototypical category. The use of postural verbs with Human subjects is conceptually basic and the use with other types of subject is derived via metonymy and/or metaphor.

### 3.2 More specific categories

It is possible to draw finer distinctions and to distinguish a number of further subcategories, but only a few more specific categories will be discussed. In many other cases, the examples are too few to make a quantitative comparison meaningful. The categories that will be identified are “robust” and can be coded and counted in a straightforward way. The category inanimate (concrete) subject can be divided into a number of subcategories. The basic contrasts represented in Table 3 apply most clearly to **physical objects** that can be held in the hand and manipulated, such as *bottle* or *plate*. Another important subcategory is **building**. According to Newman (2009, 46-52), *stand* and *sit* are used in English to refer to the location of buildings, and both of these alternatives occur in the ESPC corpus. In Swedish, *ligga* is the dominant alternative as in the translation of example (13). *Stå* can also be used, when the subject refers to a building, but that is a less frequent alternative.

- (13) The house itself was medium-sized, unexceptional to look at, *standing* on a street of such houses in an older part of Baltimore. (AT1)  
Själva huset var medelstort och skilde sig inte från andra där det *låg* vid en gata med hus av samma typ i en äldre del av Baltimore. (AT1T)

This said, there are still some examples with *lie* in English originals as in (14).

- (14) Corte's farm *lies* just north of the Panama Canal watershed. (LT1)  
Cortes gård *ligger* strax norr om Panamakanalens vattenavrinningsområde. (LT1T)

It must be pointed out that the most frequent correspondent to *ligga* in the ESPC corpus is locative *be* (see 15).

- (15) Hans hus *ligger* inte tvåhundra meter från hennes. (SW1)  
‘His house *isn't* two hundred yards from hers. (SW1T)

In addition to straightforward examples meaning ‘house’, ‘building’, ‘church’ ‘farm’ and ‘cottage’ (Swed. *stuga*), the category building also includes parts of buildings such as apartments (see (16)) and rooms (e.g. ‘kitchen’) and nouns such as ‘theatre’, ‘café’, ‘restaurant’ and ‘bakery’ (see (17)), which may be parts of buildings or constitute free-standing buildings.

- (16) Lägenheten *låg* högst upp i hyreshuset. (KOB1)  
His apartment *was* on the very top floor of the block. (KOB1T)
- (17) Han erinrade sig att *det låg* ett konditori på gatan som gick parallellt med järnvägen. (HM2)  
He remembered *there was* a bakery on the street running parallel to the railroad. (HM2T)

A further category is **geographical place** (for short called place in the diagrams below) such as countries and cities and natural formations such as mountains and fields (see (18) and (19)).

- (18) Triana *ligger* på "andra" sidan av floden Guadalquivir. (BTC1)  
Triana *is situated* on the "wrong" side of the Guadalquivir River. (BTC1T)
- (19) Runt ån *låg* ett otillgängligt myrland genomkorsat av djurstigar.(KE1)  
All round the river *was* inaccessible marshland crisscrossed by animal paths. (KE1T)

In Swedish, *stå* is frequently used with reference to writing in a way that has no correspondence in English, which justifies distinguishing **writing** as a separate category (see Section 4.1). Originally, the justification for using *stå* appears to be the orientation of the letters, but in present-day



Swedish, reference can be made either to the actual text, as in (20), or to the propositional content, as in (21).

- (20) I slutet på mormors brev som följde med presenterna brukade det *stå*: "Morfar hälsar så mycket." (MG1)  
At the end of Grandmother's letters, which accompanied the presents, it usually *said*: "Grandfather sends his best." (MG1T)
- (21) Men det måste *stå* på skylten hur långt det är till fornminnet. (SC1)  
[it must stand]  
But it ought to *say* on the sign how far it is to the ancient monument. (SC1T)

Writing has a special semantic status combining concrete and abstract readings (see Viberg 2013: 157-159 for discussion), but for the purposes of this paper, it is enough to say that examples of this type are treated separately and not included in the abstract (or inanimate) category.

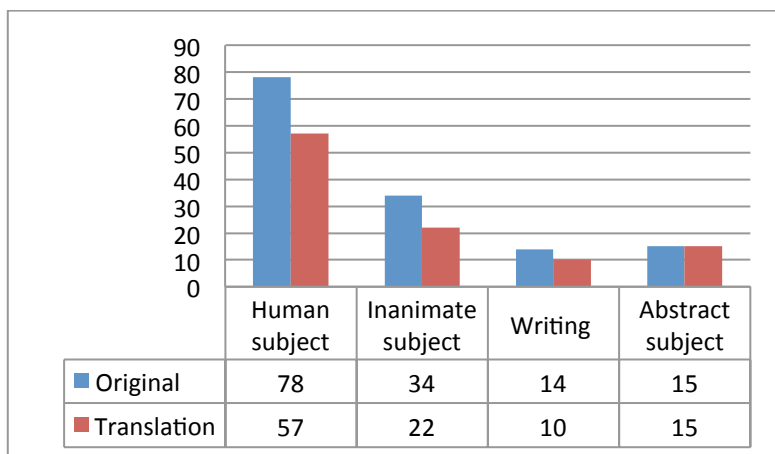
#### *4. Over- and under-representation across different classes of subjects*

##### *4.1 STAND*

Diagram 4a compares the frequencies of the major categories of Swedish *stå* in originals and translations. As can be observed, all categories except Abstract subject are significantly under-represented in the translations. (Animal is too small to be meaningfully discussed.) Note in particular the under-representation of the category Writing, which is relevant only for Swedish *stå*.

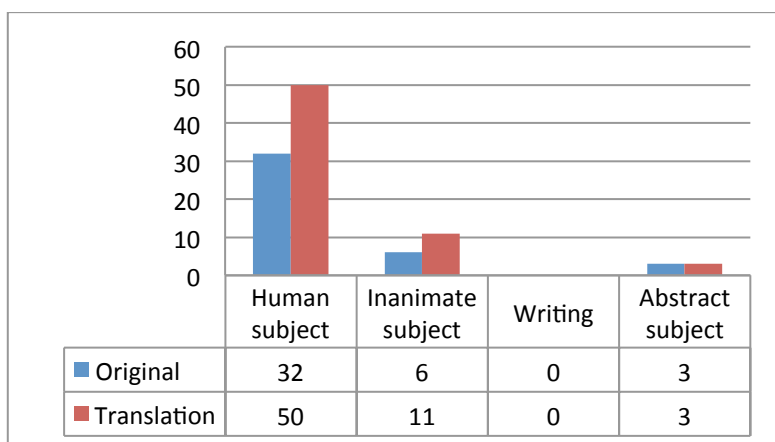
The relationships between originals and translations in English are shown in Diagram 4b. Human and Inanimate subjects are over-represented. Writing, on the other hand, which is a category that is unique to Swedish (with respect to English), only occurs in one translated example (0.13 per 100 000 words), and this means that calques or loan translations are practically non-existent in this category. Human and Inanimate subjects, which have overlapping functions in English and Swedish, differ with respect to frequency of use in originals and translations. In Swedish, no translation effect was found for Abstract

subjects and as will be evident, Abstract subjects do not follow the general pattern of other verbs either (for some discussion, see Section 6).



p<	.0001	.0001	.03	ns
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Diagram 4a. Major categories of Swedish *stå* in originals and translations. Frequency per 100,000 words.



p<	.0001	.0012	--	ns
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Diagram 4b. Major categories of English *stand* in originals and translations. Frequency per 100 000 words.

By comparing Diagram 4a and 4b, we can also see that Human subjects and in particular Inanimate subjects are considerably more frequent in

Swedish than in English originals. In spite of that, both categories of use must be said to be clearly established in English. The overlap of functions appears to be a major explanation for the strong cross-linguistic influence on the translations.

#### 4.2 *LIE*

Human subjects follow the same pattern for LIE as for STAND. They are under-represented in Swedish translated texts and over-represented in English translated texts. The same applies to Inanimate subjects taken as general category. However, in this section an attempt will be made to see what happens if different subcategories of Inanimate are distinguished. The reason for this is that *ligga* can be regarded as a default category for describing the location of inanimate subjects in Swedish. The frequency of occurrence per 100 000 words for inanimate subjects of *ligga* is 56 in originals, which is higher than for human subjects of *ligga* and higher than for inanimate subjects of *stå* and *sitta*.

An inspection of the Swedish originals in Diagram 5a shows that physical object, building and place are well established in Swedish. In translations, Human is significantly under-represented. As for the subcategories of inanimate subjects, only Building and Other are significantly under-represented in the translated texts if tested individually. (Inanimate as a whole will be treated in 4.4.)

It is important to note that all the subcategories of Inanimate distinguished in the analysis of Swedish also appear in the English original texts (see Diagram 5b), but all categories have a considerably lower frequency than in Swedish (compare Diagram 5a). There is substantial functional overlap between the systems, but salient differences with respect to frequency of use. In English translated texts, Human and the Inanimate subcategory Physical object are significantly over-represented, whereas Place and in particular Building ( $p$  just above 0.05) appear to be under-represented, but the data are inconclusive with respect to categories other than Physical object due to the low frequency in both originals and translations.

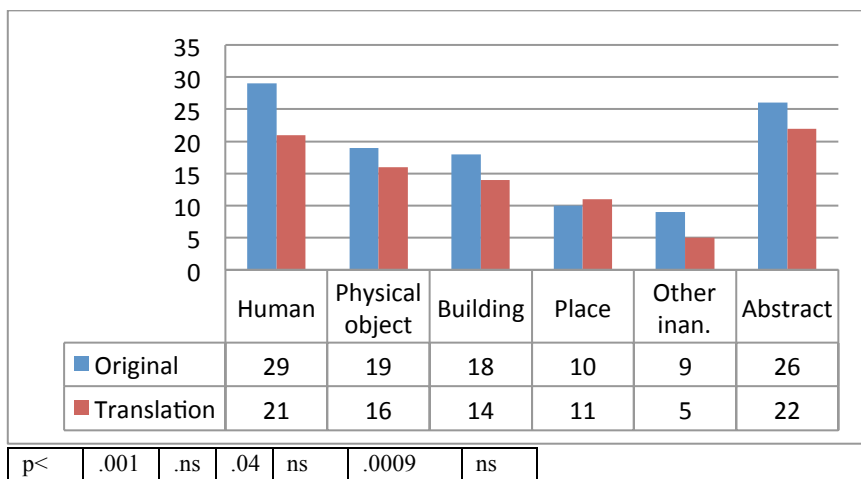


Diagram 5a. Categories of Swedish *ligga* in originals and translations. Frequency per 100 000 words.

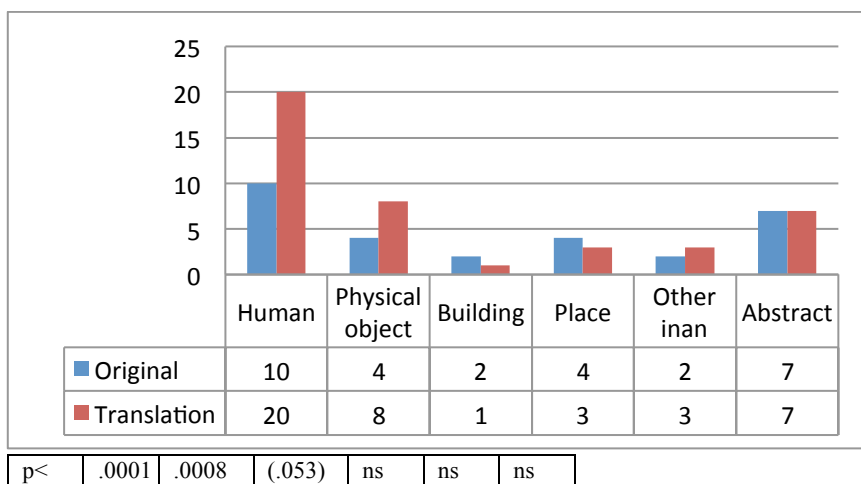


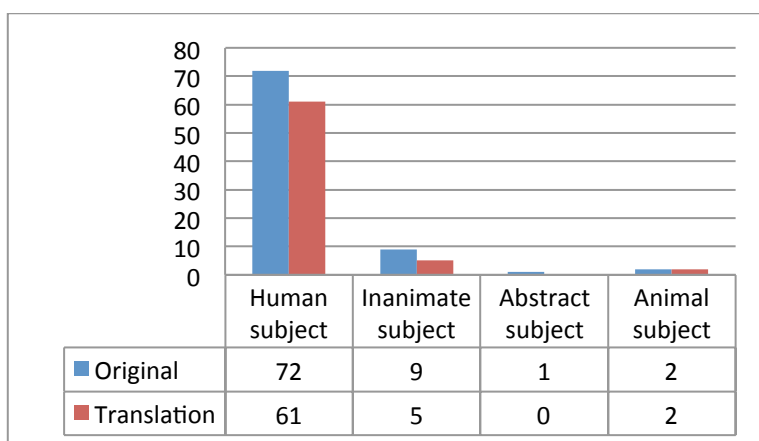
Diagram 5b. Categories of English *lie* in originals and translations. Frequency per 100 000 words.

### 4.3 SIT

The categories of Swedish *sitta* are presented in Diagram 6a. With respect to the use with inanimate subjects, *sitta* represents the most language-specific category among the postural verbs (see comments to Table 3 above). Although well established, the use of *sitta* with inanimate

subjects is marked even in comparison to the other postural verbs in Swedish, and is considerably less frequent than the use of *stå* and *ligga* with inanimate subjects. Per 100 000 words, its frequency of occurrence is 9, which should be compared to 34 for *stå* and 56 for *ligga*. Abstract subjects are infrequent with *sitta* in Swedish.

Diagram 6b shows the distribution of the categories of English *sit*. The most striking characteristic is that human subjects dominate completely over the other types. The other categories have such low frequencies that it is not meaningful to compare originals and translations. Human subjects are significantly over-represented in translations ( $p < 0.0001$ ).



p<	.04	.009	na	ns
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Diagram 6a. Categories of Swedish *sitta* (sit) in originals and translations. Frequency per 100 000 words

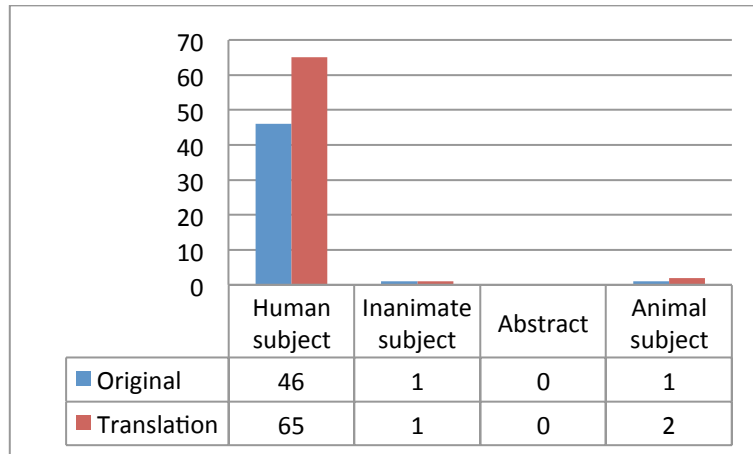


Diagram 6b. Categories of English *sit* in originals and translations. Frequency per 100 000 words

#### 4.4 Contrast and convergence

Repeatedly, the clearest difference has been found between Human and Inanimate subjects. In order to illustrate this, the frequencies of occurrence of human and inanimate subjects are compared for all verbs in Diagram 7. In originals (Diagram 7a), there is contrast. Both human and inanimate uses are much more frequent in Swedish than in English, and this applies to all verbs. All of these differences are statistically significant except for SIT when it has an inanimate subject since it is too infrequent in English, but the difference is still clear. (The raw scores are 58 for *sitta* vs 4 for *sit*).

In translations (Diagram 7b), there is a significant statistical difference between the frequencies of human subjects only for STAND, and even in that case the difference is proportionally much smaller than for the inanimate subjects, which all are significantly more frequent in Swedish than in English.<sup>4</sup> There is a tendency for Human to converge in translations, whereas there is still a clear difference between the two languages in the Inanimate category.

<sup>4</sup> The reason why it is significant for SIT in translations but not in originals is that the raw scores are 37 vs 6 and that the test requires both scores to be equal to or higher than 5.

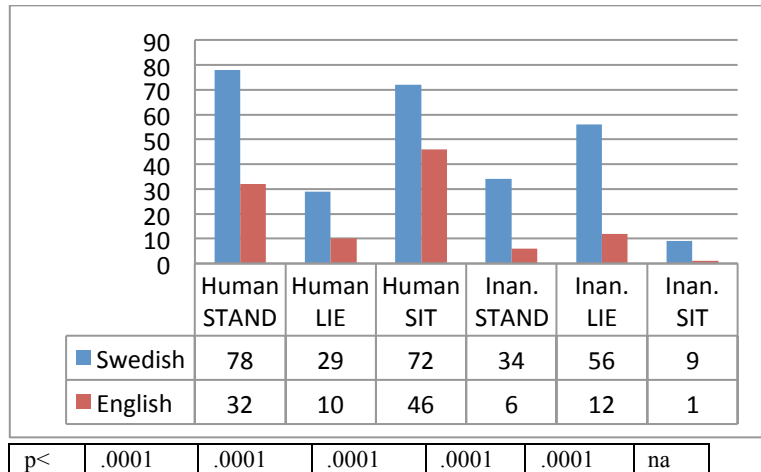


Diagram 7a Human and inanimate Subjects in Originals. Frequency per 100 000 words.

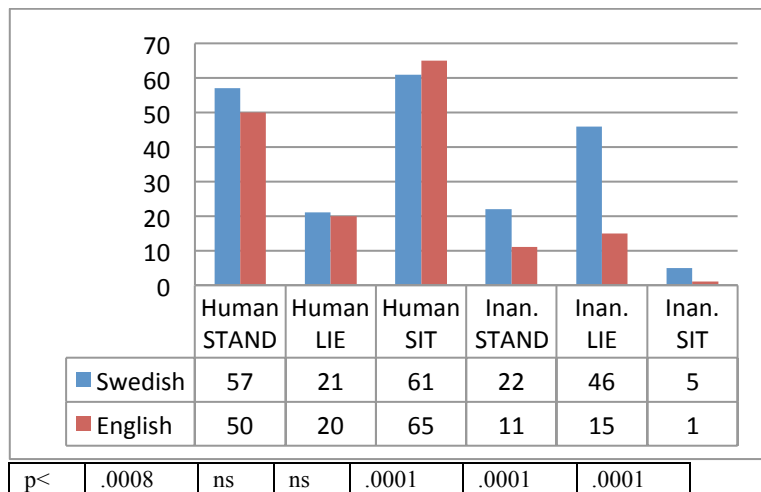


Diagram 7b. Human and inanimate subjects in translations. Frequency per 100,000 words

### 5. What happens in translation: Translation shifts

So far, the analysis has been restricted to the use of the corresponding verbs in originals and translations. What happens in translation, however, is much more complicated than that. This section will present a more qualitatively-oriented description of the translation pattern of individual

words using the categories discussed in Section 1.4. For reasons of space, only STAND will be systematically described. The general patterns are similar for LIE and SIT (see also Viberg 2013 for a contrastive study of the Swedish postural verbs).

5.1 Lexical shifts

The lexical shifts related to English *stand* when it is translated into Swedish are shown in Table 4. (The structural shifts will be commented on in Section 5.2.) As would be expected, direct lexical translations dominate.

Table 4. The translation pattern of English *stand* 1: Direct lexical translations and Lexical shifts:

		Translations				
		Direct	Lexical shifts			Other
Type of subject	F	(stå)	ställa sig	resa sig	ligga	
<b>Human</b>						
<i>State/Activity</i>						
Literal	151	133	4			14
Figurative	39	19	1			19
<i>Change of Posture</i>	40	1	13	19		7
<b>Animal</b>	6	5	1			0
<b>Inanimate</b>						
Physical object	29	20				9
Building	7	1			4	2
Other Literal	2	2				0
Figurative	10	4				6
<b>Writing</b>	0					
<b>Abstract subject</b>	17	5				12
<b>Total</b>	<b>301</b>	<b>190</b>	<b>19</b>	<b>19</b>	<b>4</b>	<b>69</b>

Since it turns out that direct lexical translations are much less frequent when the postural verbs are used figuratively (Table 4), literal



and figurative uses are accounted for separately when the subject is Human or Inanimate as in (22) and (23).

- (22) He was prepared to *stand by* that report. (FF1)  
 Han var beredd att *hålla fast vid* rapporten. (FF1T)  
 [hold on to the report]
- (23) One of the many tank-traps that *lie ahead*: senility's revenge. (JB1)  
 En av de många fallgropar som *väntar*: senilitetens revansch.  
 (JB1T)  
 [that wait]

It should be noted that Figurative refers to the interpretation of the whole sentence. The subject in (22) still literally refers to a human. In (23), the subject *tank-trap* is used in a figurative sense, but the subject is classified as inanimate rather than as abstract since the choice of postural verb is still decided by the type of concrete inanimate referent that is referred to when tank-trap is used literally. Metaphorization applies to the whole proposition 'tank-traps lie ahead'.

The major lexical shifts shown in Table 4 are *ställa sig upp* and *resa sig upp*, which refer to change-of-posture in Swedish. In English, change-of-posture is primarily formed by combining *sit*, *stand* and *lie* with a directional particle (e.g. *lie down*, *stand up*. See Newman 2009: 36-46 for discussion and some exceptions). One major difference between English and Swedish is that Swedish *sitta*, *stå* and *ligga* are not generally used to denote change of posture. Instead, a reflexive form of a related causative verb is used as in (24) or in some cases as in (25) a reflexive form of another action verb (*resa sig* 'rise', a reflexive of *resa* 'raise').

- (24) Kevin *stood up* again and scouted for a watchman. (RDO1)  
 Kevin *ställde sig upp* igen och spanade efter vakten. (RDO1T)
- (25) Archbold *stood up* when Wexford came in. (RR1)  
 Archbold *reste sig* när Wexford kom in, (RR1T)

The directional particles *upp* and *ner* 'down' are optional in Swedish with a few exceptions as indicated in Table 5, which shows the dynamic

system of Swedish posture verb (state/activity – postural change – causative).

Table 5. The dynamic system of Swedish Posture verbs (with Human subject).

State/Activity	Postural change (Inchoative)	Causative
<i>stå</i> ‘stand’	<i>ställa sig</i> (upp) ‘stand up’ <i>resa sig</i> (upp) ‘rise (up)’	<i>ställa</i> ‘stand’
<i>ligga</i> ‘lie’	<i>lägga sig</i> (ner) ‘lie down’	<i>lägga</i> ‘lay’
<i>sitta</i> ‘sit’	<i>sätta sig</i> (ner) ‘sit down’ <i>sätta sig upp</i> ‘sit up’ (from a lying position) <i>slå sig ner</i> * ‘sit down’; ‘settle’	<i>sätta</i> ‘seat’, ‘set’

\*For *slå sig ner* ‘sit down’, literally ‘strike oneself down’, see Viberg (2016)

There are also a few examples where a Swedish postural verb is used in combination with a spatial particle to describe change of posture. This occurs in particular in the imperative form (*Stå upp!* (LH1) - *On your feet!* (LH1T)).<sup>5</sup>

Table 6 shows what happens when Swedish *stå* is translated into English. A direct translation is the most frequent alternative when the subject is human or inanimate and does not have a figurative meaning. Direct translations are used with a very low frequency in figurative uses with human subjects and with abstract subjects. Such translations require separate treatment and are only briefly discussed in this paper.

When the subject is human or animate, the second most frequent translation is *be*, used in various functions. This verb thus represents the most frequent type of lexical shift. The use of *be* to indicate the location of the subject is referred to as “Locative *be*” in Table 6. Proportionally, locative *be* occurs more often with inanimate than human subjects. The same applies even more to *there is* (in various inflected forms), which is treated separately and has been classified as a lexical shift. Sometimes it also involves a structural shift, when the Swedish verb does not appear in a presentative construction. (Although relevant, this is not shown in the table, since perspicuity would be lost if too many subcategories were to be introduced.)

<sup>5</sup> This use has such a low frequency (3 for *stå* in the originals) that it is not accounted for separately in Table 6.

In (26), the Swedish posture verb is used in a copula-like construction with an adjective or past participle (see 27) as a predicative complement. Such constructions occur both with human and inanimate subjects, which are coded separately but will be briefly commented on together in this section.

- (26) – Han *låg medvetslös* i över tjugue minuter, sa Åke. (KE1)  
[he lay unconscious]  
"He *was unconscious* for over twenty minutes," said Åke.  
(KE1T)
- (27) Dom *ligger begravda* vid kyrkan som alla andra. (SC1)  
[they lie buried]  
They're *buried* beside the church like everybody else. (SC1T)

In most cases, English uses the copula as a translation ("Copula *be*" in Table 6), but English postural verbs can also appear in a copula-like construction. Example (28) is taken from an English original text.

- (28) The front door *stood open*.(RR1)  
Ytterdörren *stod öppen*. (RR1T)

*Say* is the most frequent translation of *stå* when the subject refers to Writing (see examples 20 and 21 above). Other relatively frequent alternatives specific to this category are *read* and *write* (usually in passive form: *be written*).

Table 6. The translation pattern of Swedish *stå*: Direct lexical translations and Lexical shifts

Type of subject	F	Lexical translations										Total lexical translations	
		Direct stand		Lexical shifts									Other
		stand	be	Locative	Copula	there is	say	read	write				
Human													
Concrete	400	287	27	5	2	0	0	0	0	0	0	26	347
Figurative	117	8	16	7	0	0	0	0	0	0	0	33	64
Animal	4	2	0	0	0	0	0	0	0	0	0	0	2
Inanimate													
Concrete	209	52	39	17	26	0	0	0	0	0	0	26	160
Figurative	17	2	2	6	0	0	0	0	0	0	0	1	11
Writing	91	1	4	2	6	24	10	8	13	68			
Abstract	101	11	4	14	1	0	0	0	31	61			
TOTAL	939	363	92	51	35	24	10	8	130	713			

### 5.2 Structural shifts

Structural shifts can have an impact on the occurrence of lexical correspondents in the translation. This section will discuss the types of structural shifts that directly affect the occurrence of postural verbs in the translations, especially various types of reductions that are characteristic of translations from Swedish into English. The clearest example is the reduction of relative clauses to prepositional phrases (or occasionally to some other type of place adverbial): *som* (Relative marker) + Postural verb + PP<sup>Locative</sup> > PP<sup>Locative</sup> (for short: Rel > PP). Relative clauses are typically introduced with the indeclinable relative marker *som*, as in (29).

- (29) En av orsakerna var hans far som bodde ensam i ett hus *som låg på slätten* strax utanför Löderup. (HM2)  
 [that lay on the plain]  
 One of the causes was his father, who lived alone in a house *on the plain* just outside Löderup. (HM2T)

There are 18 shifts of this type when *stå* is translated into English. This kind of reduction is mirrored by expansion when English is the source language as in (30). (There are 12 such expansions with *stå*.)

- (30) We passed a lady in her front garden. (JB1)  
 Vi passerade en tant *som stod* i sin trädgård. (JB1T)  
 [that stood in her garden]

Shifts of this type are particularly frequent with *ligga* when it has an inanimate subject (for *ligga* with inanimate subject, there are 31 reductions in English translated texts versus 34 expansions in Swedish translations). Example (31) goes from Swedish to English and (32) shows what happens in the opposite direction.

- (31) Jag pekade ut de få segelbåtarna *som fortfarande låg i vattnet*. (BL1)  
 [that still lay in the water]  
 I pointed out the few sailing-boats *still in the water*. (BL1T)
- (32) The memorandum *on his desk* when he arrived indicated this was not going to happen. (FF1)

Meddelandet *som låg på hans skrivbord* när han kom dit (...)  
(FF1T)  
[that lay on his desk]

Actually, it is possible to find parallel examples where a postural verb without a correspondent in the Swedish version appears in a relative clause in English, as in (33), but there are very few of them. For *lie*, there is this example in the translated texts but there is none in the original English texts.

- (33) Vi måste gå till ett garage *litet längre bort*. (MS1)  
[a garage (a) little further away]  
We 've got to go to the garage *which lies a bit further back*.  
(MS1T)

The correspondents of *sitta* behave in a similar way as the other postural verbs (10 reductions of the type Rel > PP in translations from Swedish into English and 17 expansions PP > Rel in the opposite direction). Somewhat surprisingly, translational shifts involving relatives work in a direction that reduces the characteristic degree of over- and under-representation. In English translated texts, for example, postural verbs are over-represented in spite of the fact that reductions cut down the number of postural verb correspondents. The shifts involving relative clauses probably reflect general structural differences between English and Swedish, since relative clauses are very easy to form in Swedish and probably also are more frequent than in English.<sup>6</sup>

Another general structural difference affecting the translation patterns of the postural verbs are various types of participial constructions. Sometimes Swedish relative clauses are reduced to participial constructions in English, as in (34).

- (34) Trots att han försökte leva så anonymt som möjligt, i detta hus *som låg* strax öster om Ystad, hände det att nyfikna människor höll honom under uppsikt.(HM1)  
[this house that *lay* just east of Ystad]

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<sup>6</sup> I am not aware of any systematic study of this, so this represents a suggestion for further studies.

Even though he tried to live as anonymously as possible in this house *located* just east of Ystad, sometimes curiosity-seekers spied on him. (HM1T)

Such constructions are not completely ruled out in Swedish but usually sound very formal (*ett hus beläget strax öster om Ystad*). There is another type of structural shift that involves a past participle, where a postural verb is translated with a resultative expression as in (35).

- (35) Vintaffeln *står* i Karl XIV Johans sängkammare. (GAPG1)  
[The wine table stands]  
The wine table *is placed* in the bedroom of Karl XIV Johan.  
(GAPG1T)

Some expressions included into this structural shift such as *be located* (see (36)) and *be situated*, which are used primarily as translations of *ligga* with places and buildings as subjects, are so conventionalized and have such a bleached resultative meaning that it would be justified to regard them as purely lexical (multi-word) shifts.

- (36) Den hette Ercildoune och *låg* utanför Centerport (JMY1)  
[lay outside Centerport]  
It was called Ercildoune and *was located* outside Centerport  
(JMY1T)

Non-finite *ing*-clauses and *ed*-clauses in various syntactic roles (Biber et al 1999, 199-200) can very often not be translated with the corresponding present and past participles in Swedish without sounding unidiomatic. This lack of correspondence relatively frequently leads to reductions and expansions of various types. In (37) and (38) the postural verb disappears in the Swedish translation.

- (37) *Lying* just south of the Thames in west London, Richmond Park is the most “natural” and largest of the London Royal Parks (SUG1)  
Strax söder om Themsen i sydvästra London, (...) (SUG1T)  
[Just south of the Thames...]
- (38) Jim Rawlings spent the hour between nine and ten that night

*sitting* in another, smaller rented car outside Fontenoy House. (FF1)  
Jim Rawlings tillbringade timmen mellan nio och tio den kvällen  
[Zero] i en annan, mindre hyrbil utanför Fontenoy House. (FF1T)  
[spent the hour --- in another --- car]

Another option is to expand the non-finite clause into a relative clause (if the structural context allows it), as is done with the *ed*-clause in (39) in a way that introduces a postural verb into the translation.

- (39) (...) music so loud it made the transistor radio *balanced* on the stoop steps buzz and tremble. (NG1)  
(...) transistorradion *som stod balanserad* på förstubron (NG1T)  
[that stood balanced]

The structural shifts characteristic of the translations of non-finite clauses are a general phenomenon that affects the grammar more than the lexicon, but still the effect on the translation patterns of postural verbs appears to be rather great.<sup>7</sup>

### 5.3 Swedish pseudo-coordination

The most discussed characteristic of Swedish postural verbs is their use in so-called pseudo-coordination (see Darnell 2008 for an overview of earlier research and a detailed study). This structure can be regarded as a case of emergent grammaticalization and has often been compared to the general tendency across languages to develop durative aspectual meanings such as the progressive and the continuative (Newman 2002). Recently, Blensienius (2015) has challenged the view that pseudo-coordination with postural verbs expresses progressive meaning in Swedish. They are “instead locative and, in some cases, episodic” (Blensienius 2015, Abstract).

In pseudo-coordinations, the postural verb is de-accented and coordinated with a lexical verb, as in (40). There are at least four recurring types of English correspondents of pseudo-coordination. The correspondences go in both directions, which will be demonstrated by

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<sup>7</sup> Such shifts have been coded in the database but need to be worked on more in order to present reliable statistics.



presenting first an example from a Swedish original text and then from an English original. The most frequent and also the closest correspondent, according to my intuition, which is not as strong for English as it is for Swedish, is the construction  $V^{\text{Postural}} + V\text{-ing}$ , which appears in (40). The construction is referred to as “simultaneous conjunction” and is regarded as “a potential root of grammaticalization” in Newman & Rice (2004, 371).

- (40) När jag låg och smälte frukosten uppenbarade sig ronden. (PCJ1)  
 [lay and melted the breakfast]  
 While I lay *digesting my breakfast*, the round appeared. (PCJ1T)

The same type of correspondence can be observed when English is the source language (see 41).

- (41) He would drop the spoon in the sink and *stand sipping* from his mug while the cat wove between his feet. (AT1)  
 Sedan skulle han släppa ner skeden i diskhon och *stå och läppja* på kaffet medan katten slingrade sig ut och in mellan fötterna på honom. (AT1T)

However, there are several other relatively frequent correspondences. One option is to use a single lexical verb in the progressive, as in (42) and (43). This happens 21 times when *stå* is translated and 17 times when *sitta* is translated (from Swedish originals) but only twice when *ligga* is pseudo-coordinated.

- (42) Patron Björk kommer in en dag när han *stod och rätade till* flugan: (...)(GT1)  
 [when he stood and straightened his bow tie]  
 Boss Björk came in one day when he *was straightening* his bow tie: (...)(GT1T)
- (43) He was replacing the element in the kettle and she *was cutting up* vegetables for one of her delicious cheap dishes; (NG1)  
 Han lagade elementet i tekitteln och hon *stod och skar* grönsaker till delikata billiga rätter. (NG1T)  
 [stood and cut]

Further options are to use a co-ordination also in English, as in (44) and (45).

- (44) Jag gick ut i väntrummet där min far *satt och väntade*. (MS1)  
I went into the waiting room where my father *sat and waited*.  
(MS1T)
- (45) I *sat and stared* at the flies. (BO1)  
Jag *satt och stirrade* på flugorna. (BO1T)

There are also examples where a single lexical verb in non-progressive form appears in the English version as in (46), but this option has a rather low frequency.

- (46) As he was borne upwards in a series of disconcerting jerks Dalglish *reflected* that success, (...) (PDJ1)  
Medan hissen ryckvis förde Dalglish uppåt *stod* han *och tänkte på* att framgången, (...) (PDJ1T)

Pseudo-coordination has been commented on rather extensively because of its theoretical interest, but it will not be studied in detail in this paper. In order to be meaningful, a study would require a detailed discussion of the problem to identify all pseudo-coordinations in an actual corpus, which appears to have been underestimated.<sup>8</sup> In the quantitative tables, postural verbs appearing in pseudo-coordinations are simply counted like other postural verbs, since they still refer to posture in this construction.

#### *6. The problem with genre, in particular Non-Fiction*

The comparisons between originals and translations in Section 4 are based on the whole corpus. As mentioned in Section 2.3, postural verbs have an overall frequency that is much higher in Fiction than in Non-Fiction. This section will show what happens when Fiction and Non-Fiction are analyzed separately. Only raw frequencies will be presented,

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<sup>8</sup> That is why no quantitative table is presented in Section 5.3. What is said about frequencies is based on a coding of all examples that tentatively have been identified as pseudo-coordinations.

since the frequencies in many cases would be extremely low if presented per 100 000 words. (As in Section 4, the statistical testing is based on the raw frequencies.)

*6.1 The distribution of meanings across genres*

The differences between genres are not restricted to the overall frequency, but also involve the distribution of meanings or uses. As can be observed in Table 7, Non-Fiction contains a greater proportion than Fiction of human subjects in sentences with a figurative meaning such as *I can't stand him* and an even greater proportion of abstract subjects (except for *sitta*, which is primarily used literally). Direct translations dominate when the subject is human and the overall interpretation is literal, reaching a proportion as high as 71% if the result is summed up for all three postural verbs. For figurative uses of Humans subjects and for Abstract subjects, the proportion of direct translations is very low.



### 6.2 The influence of genre on over- and under-representation

In this section, the comparisons will be made separately for Fiction and Non-Fiction. Table 8 shows the result for STAND. Fiction (see Table 8ab) follows the pattern of the complete corpus, whereas the statistical test in many cases is not applicable or gives a non-significant result when we look at Non-Fiction (see Table 8cd). In addition, there is at least one significant result in Non-Fiction that contradicts the general pattern, since *stand* is significantly under-represented in English translations when the subject is Human. One explanation for this could be that figurative uses of Human are much more frequent in Non-Fiction than in Fiction, and, as demonstrated above, figurative uses behave in a different way than literal uses. In particular, there are few direct translations.

Table 8a English *stand* in originals and translations, fiction

	Number of occurrences		Significance of difference
	Original	Translation	
Human	177	341	<0.0001
Animal	3	3	n.a.
Inanimate	35	68	<0.0004
Writing	0	0	n.a.
Abstract	5	7	n.s.
Total	220	419	<0.0001
Corpus size	340,745	333,375	

Table 8b Swedish *stå* in originals and translations, fiction

	Number of occurrences		Significance of difference
	Original	Translation	
Human	396	275	<.0001
Animal	4	3	n.a.
Inanimate	182	111	<.0001
Writing	61	54	n.s.
Abstract	26	44	<0.0482
Total	669	487	<.00001
Corpus size	308,160	346,649	

Table 8c English *stand* in originals and translations, non-fiction

	Number of occurrences		Significance of difference
	Original	Translation	
Human	53	34	0.0043
Animal	3	0	n.a.
Inanimate	13	16	n.s
Writing	0	1	n.a.
Abstract	12	16	n.s.
Total	81	67	0.0275
Corpus size	364,648	413,500	

Table 8d Swedish *stå* in originals and translations, non-fiction

	Number of occurrences		Significance of difference
	Original	Translation	
Human	121	126	n.s
Animal	0	4	n.a.
Inanimate	44	36	n.s
Writing	30	16	<0.0241
Abstract	75	61	n.s
Total	270	243	n.s
Corpus size	353,303	344,131	

Table 9 shows the result for LIE. In this case, Non-Fiction also presents some problems for the generalizations arrived at in Section 4. In Swedish, human subjects are significantly over-represented in Non-Fiction (see Table 9d). However, it must be noted that the number of examples is small. The proportion of figurative uses is also high (8 out of 18 in originals and 11 out of 30 in translations). Inanimate subjects also behave in an exceptional way and are significantly under-represented in English Non-Fiction and close to significantly over-represented in Swedish Non-Fiction. A closer look at the data reveals that the number of physical objects is small and the major difference is related to the category of subjects coded as Place (see Table 9e).

Table 9a English *lie* in originals and translations, fiction

	Number of occurrences		Significance of difference
	Original	Translation	
Human	57	139	0.0001
Animal	4	8	n.a.
Inanimate	37	91	0.001
Abstract	19	12	n.s.
Total	117	250	0.0001
Corpus size	340,745	333,375	

Table 9b Swedish *ligga* in originals and translations, fiction

	Number of occurrences		Significance of difference
	Orig.	Trans.	
Human	171	117	0.0001
Animal	7	11	n.s.
Inanimate	276	213	0.0001
Abstract	33	42	n.s.
Total	487	383	0.0001
Corpus size	308,160	346,649	

Table 9c English *lie* in originals and translations, non-fiction

	Number of occurrences		Significance of difference
	Original	Translation	
Human	12	9	n.s.
Animal	3	0	n.a.
Inanimate	39	12	0.0001
Abstract	33	38	n.s.
Total	87	59	0.001
Corpus size	364,648	413,500	

Table 9d Swedish *ligga* in originals and translations, non-fiction

	Number of occurrences		Significance of difference
	Original	Translation	
Human	18	30	0.0342
Animal	0	0	n.a.
Inanimate	89	109	(0.054)
Abstract	139	112	(0.0533)
Total	246	251	n.s.
Corpus size	353,303	344,131	

Table 9e The major subcategories of inanimate for English *lie* and Swedish *ligga*, non-fiction.

	English <i>lie</i>		Swedish <i>ligga</i>	
	Original	Translation	Original	Translation
Physical object	5	5	15	9
Place	21	4	20	48
Building	9	1	44	41

SIT as shown in Table 10 is characterized by a dominance of human subjects, which are used literally (as shown in Table 7). Apart from that, both Fiction and Non-Fiction follow the pattern for the whole corpus and do not present any problems for the generalizations presented in Section 4.

Table 10a English *sit* in originals and translations, fiction

	Number of occurrences		Significance
	Original	Translation	
Human	276	401	<0.0001
Animal	10	12	n.s.
Inanimate	3	6	n.a.
Abstract	0	0	n.a.
Total	289	419	<0.0001
Corpus size	340,745	333,375	

Table 10b Swedish *sitta* in originals and translations, fiction

	Number of occurrences		Significance
	Original	Translation	
Human	382	372	<0.0237
Animal	10	9	n.s.
Inanimate	48	33	<0.0139
Abstract	2	0	n.a.
Total	442	414	<0.0036
Corpus size	308,160	346,649	



Table 10c English *sit* in originals and translations, non-fiction

	Number of occurrences		Significance
	Original	Translation	
Human	49	85	<0.0085
Animal	0	0	n.a.
Inanim.	1	0	n.a.
Abstract	0	0	n.a.
Total	50	85	<0.0111
Corpus size	364,648	413,500	

Table 10d Swedish *sitta* in originals and translations, non-fiction

	Number of occurrences		Significance
	Original	Translation	
Human	102	52	<0.0001
Animal	0	4	n.a.
Inanimate	10	4	n.a.
Abstract	3	2	n.a.
Total	115	62	<0.0001
Corpus size	353,303	344,131	

To sum up, the comparison across genres shows that the generalizations arrived at in Section 4 very clearly hold up for Fiction. For Non-Fiction, the picture is unclear. One reason for that could be the low proportion of literal uses. Another reason is that Non-Fiction is negatively defined. It actually contains a number of different types of texts such as biographies, academic prose, written versions of public speeches, legal texts and annual reports. For lexical studies, this variety is valuable for giving examples of a wider range of uses than what would have been possible with a more narrowly defined selection (given the size of the corpus). On the other hand, this variety makes it more difficult to achieve comparability across languages and makes quantitative comparisons as the ones presented here less reliable.

### 7. Conclusions and discussion

The major result of the present study is that there is a rather strong tendency in translations towards convergence in the usage patterns (word frequencies) between languages on points where functions/meanings overlap. Unmarked categories (Human subjects) tend to be more affected

than marked categories (Inanimate subjects). In spite of this, the system of semantic contrasts tends to be preserved.

As a test of the methodology used in corpus-based contrastive studies, the study shows that special care must be taken when mono-directional translation corpora are used and the characterization of some language(s) is based on translated texts alone (cf. Johansson 2007: 31-33). Word frequencies may be strongly affected in particular when the functions overlap across languages. On the other hand, the system of semantic contrasts is preserved, judging from the present study, which probably represents a particularly problematic case. The preservation of the semantic contrasts and the avoidance of translations that can directly be spotted as semantic calques presuppose that translations of high quality are used. Problems do not arise when bi-directional corpora such as the ESPC are used and translation patterns are used only as a complement to the comparison of original texts in both languages. From this, it appears that the inclusion of original texts from all the languages compared is ideal. However, translations make it possible to compare how a specific meaning is expressed in exactly the same context, so the exclusive use of original texts may also be problematic due to lack of comparability. When many languages are compared, as is the case in typologically oriented studies based on corpora, the desirability of having original texts in all languages must be balanced against the desirability of having access to translations, since resources in terms of time and effort are limited.

As a contribution to general linguistic theory, the result of the study of translation effects should be related to theories of bilingualism and language contact. Of special interest from the point of view of contact linguistics and language change is the comparison by Kranich, Becher & Höder (2011) of the contact between Latin and Old Swedish and the contact between English and German today and their discussion of the importance of factors such as the degree of standardization overall of the target language and the establishment of the genre in the target language. Old Swedish lacked a written standard. The influence of Latin could be traced at all linguistic levels, and Latin served as a model for many new genres to the extent that formal equivalence became a preferred strategy in translation at the end of the period (for example, in religious literature). In German, where two relatively new genres were studied (popular

science and business communication), the influence was restricted to pragmatic and stylistic features.

However, the convergence seen in translations (especially) of fiction in the present study is related neither to the lack of standardization of the languages involved nor to the lack of an establishment of the genre. In most cases, it is probably completely unconscious as far as the translators are concerned, and it does not fill any expressive gaps; nor is it likely to affect the structure of original texts for the time being. On the other hand, it is a latent feature probably present in most situations where translations are produced, and when the external conditions are right, this type of translation effect can lead to contact-induced language change. (This type of change is discussed in Thomason 2001, Chapter 4).

It is also interesting to compare translation effects with data from bilingual speakers and L2 learners. At a general level (with important differences at a more detailed level), the convergence in translations by professional translators noted in Section 4 has a parallel in second-language acquisition and in bilingual development. In a recent study of Turkish-German contact varieties, Goschler (2013, 127) concludes: “Most of the time, bilinguals neither simply transfer constructions from their L1 to their L2, nor do they behave exactly like monolinguals. Instead, they use L2 patterns that occur in their L1 as well”. (Cf. bilingual “compromise systems”, Obler 1982.)

Professional translators are bilingual speakers with a very advanced level of competence in both their languages. Ideally they translate into their strongest language. When comparing with L2 learners, it is important to take the level of proficiency into consideration, since acquisition often involves several different steps (see Viberg 2002 for a summary of the development of the causative counterparts of the postural verbs in Swedish used as placement verbs, *sätta/ställa/lägga* ‘cause-sit/stand/lie’). In a longitudinal study of Swedish as L2, Viberg (1999) found that postural verbs belonged to the type of frequent verbs that had a tendency to be under-represented in the speech of the L2 learners in comparison to native controls. This was evident even in recordings carried out two years after the first recordings. (After four years, *sitta* was still under-represented, whereas the situation was unclear for *stå* and *ligga*.) More recently, Lemmens & Perez (2012) have presented a study of French learners of Dutch as L2 based on oral picture descriptions. Learners were divided into three proficiency groups and compared to a

group of native speakers. In general, the learners had a clear tendency to under-use Dutch postural verbs. Given that both Swedish and Dutch use postural verbs much more than French, this is a clear parallel to the under-use of Swedish postural verbs that Kortteinen (2008) found in translations from French (see Section 1.2). However, the French L2 learners also had a tendency to confuse the different posture verbs. Such confusion lacks a clear parallel in the translation data. There was also a tendency among learners at a more advanced stage to over-use some of the Dutch verbs. In general, there was a U-shaped development, since confusions increased in frequency as the learners started to use posture verbs more often.

Thus, what happens in translation sheds interesting light on what happens in language contact and in bilingual development (cf. Hyltenstam & Viberg 1993). If professional translators are regarded as highly proficient bilinguals, translation effects represent cross-linguistic influence at the upper end of bilingual development. In a similar vein, language contact can be regarded as the study of bilingual language development at the societal (in distinction to the individual) level. From this perspective, the translation effects found in this study represent a kind of language variation that is limited to translated texts, but that – if the social circumstances are the right ones – can rise to the surface and be established as part of the norm of the language.

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<http://www.sol.lu.se/engelska/corpus/corpus/espc.html>  
Vassarstats: <http://www.vassarstats.net>