English translations as a clue to the structure of Swedish över.*

MATS JOHANSSON

1 Introduction

At first blush, prepositional meanings appear highly arbitrary and idiomatic. Moreover, as dictionary entries for reasonably common prepositions show, one and the same preposition can have a considerable range of senses. Lexicographers' intuitions about what constitutes a main entry and what constitutes a mere subentry, nevertheless, point to an important property of prepositional meanings, namely that they are felt to be related to one another. Within cognitive semantics, such intuitions about relatedness of meaning count as powerful evidence that the correspondence between form and meaning is much less arbitrary than it may appear. In other words, the polysemy of lexical items reflect their status as 'categories' with internal structure, where the structure is expressed, for example, in terms of networks of related senses, typically with a 'central' prototypical member.

Lakoff (1987) presents an analysis of *over*, where some 30 senses are teased apart and analysed in terms of their relation to a basic image schema. Lakoff's analysis (adapted from Brugman 1981) takes its point of departure in the basic image schema 1, represented below.

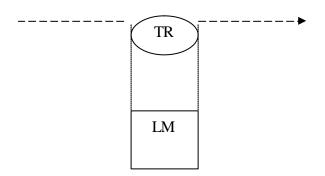


Figure 1. The plane flew over (Schema 1, Lakoff 1987: 419)

Illustrated in Figure 1 is what Lakoff takes to be the central sense of *over*. *The plane* is a TRAJECTOR moving over a LANDMARK, which in this case is left unexpressed. The path traversed by the trajector goes all the way across the landmark on a horizontal axis situated higher than the landmark. Related to this basic, abstract schema, there are a number of more specific instances. For example, the landmark may be an entity with a vertical extension, a horizontal extension, or both. These instances are exemplified in (1).

- (1) (a) The bird flew over the yard.
 - (b) The bird flew over the wall.
 - (c) The plane flew over the hill.

^{*} Thanks to Lena Ekberg and Carita Paradis for valuable comments on a previous version of this paper.

Each of these cases may be further specified according to whether there is contact or not between the landmark and the trajector. In (1), there is no contact, whereas (2) exemplifies cases where there is:

- (2) (a) Sam drove over the bridge.
 - (b) Sam climbed over the wall.
 - (c) Sam walked over the hill.

The examples in (1) and (2) are related to Schema 1 by what Lakoff calls INSTANCE LINKS, where some element of the basic schema is made more specific or elaborate. Moreover, e.g. (1a) and (2a) are related by a SIMILARITY LINK, where two schemas share some element, or subschema. For example (1a) and (2a) differ only in whether there is contact or not between the trajector and the landmark, and all other features of the schemas are shared.

A third way that image schemas can be linked is through TRANSFORMATIONS. This type of linkage involves *related* subschemas, rather than shared ones, as in the case of similarity links. For example, related to one instance of schema 1, repeated here as (3a), there is a variant where the trajector is 'one-dimensional', as in (3b):

- (3) (a) The bird flew over the yard.
 - (b) The power line stretches over the yard.

The important difference between (3a) and (3b) is that the trajector moves along a path in (3a), whereas in (3b) there is no path, a difference which is expressed in Lakoff's analysis in terms of a transformational relation between an extended path and a one-dimensional trajector.

Given Lakoff's suggestion that the separate meanings of *over* are related in a highly structured way, we might ask to what extent linked schemas are useful in accounting for the degree of overlap found with corresponding prepositions in other languages. Taylor (1988), investigating *on*, *over*, and *above* and their approximate Italian equivalents *su*, *sopra*, and *al di sopra*, suggests that the degree of overlap between uses in the two languages reflects the degree to which prepositional categories are similarly structured, and ultimately the degree of similarity in spatial categorization in the languages. The same reasoning forms the motivation for the present study, although the scope is more limited.

The aim of the present study, then, is to take a first stab at the structure of Swedish över. The somewhat roundabout approach to the question is to study English translations of över as they are evidenced in The English Swedish Parallel Corpus. The corpus consists of English and Swedish original texts and their translations into Swedish and English, respectively. The original texts are as closely matched as possible in terms of genre. The basic design of the corpus is shown in Figure 2 (see Aijmer et al. 1996 for a more detailed description). Arrows indicate the types of comparisons that the corpus makes possible. Some are perhaps more interesting than others, but depending on the purpose, each of these comparisons may be useful. The present study will be mostly concerned with the comparisons that are indicated by boldface arrows, i.e. comparisons between Swedish and English originals and between Swedish originals and English translations and, to a very small extent, English originals and Swedish translations. As the double arrows indicate, the corpus makes it possible to select either translations or originals as the starting point. Thus, a comparison of Swedish originals and English translations might answer either the question 'How is Swedish över translated into English?' or the question 'What does English over translate?' It is mostly the first of these questions that will concern me here.

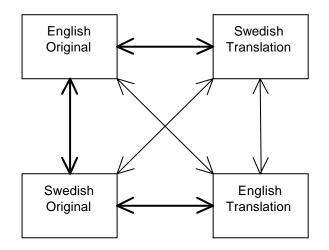


Figure 2. Design of the English Swedish Parallel Corpus

The size of the corpus is roughly 2 million words, distributed as shown in Table 1.

	English	Swedish	Swedish	English	Total
	Original	Translation	Original	Translation	Total
Fiction	276 591	281 127	243 727	262 864	1 064 309
Non-fiction	248 116	236 684	242 161	282 604	1 009 565
Total	524 707	517 811	485 888	545 468	2 073 874

 Table 1. Size of The English-Swedish Parallel Corpus, number of words

A rough distinction is made between fiction and non-fiction texts, and there is also a more fine-grained classification, so that the fiction category, for example, can be broken down into genres like children's fiction, crime fiction etc. For the purposes of this paper, genre distinctions have been disregarded altogether.

Lakoff's analysis of *over*, like most other studies of polysemy in a cognitive framework, is based on the assumption that lexical items are "natural categories of senses" (1987: 417) structured round a central member, represented by the image schema in Figure 1. From a contrastive perspective (at least) two questions arise immediately, namely:

- Do languages differ with respect to the selection of the central category for cognates?
- Do the extensions from the central category differ between languages? If so what motivates the difference?

Raising these questions highlights a problem in identifying the central member of the category. Taylor (1995:119) defines the central member of a family resemblance category (Lakoff's "radial category") as "that member from which all others can be most plausibly and most economically related". Dewell (1994:353) while essentially subscribing to the same view also suggests that frequency ought to play a role. Part of his reason for positing a different central schema for English *over*, illustrated in Figure 3, is its status as a "recurring basic-level image schema grounded in experience".

Mats Johansson

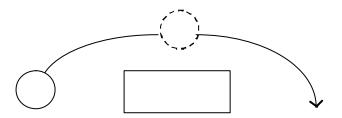


Figure 3. Dewell's central schema (1994:353)

While Dewell certainly does not suggest that frequency is a uniquely determining factor in positing a certain schema as central, the idea that frequency matters has some plausibility in cognitive semantics. That is, if we take seriously the idea that semantic structure has its basis in our concrete, physical experience of the world and our interaction with it, then recurring experiences ought to have a special status in the acquisition of meaning. Assuming that this is so, it is plausible, although by no means necessary, that basic senses of linguistic items should also be highly frequent.

On the assumption that frequency matters, then, studying a corpus may shed some light on what is the central member of the *over* and *över* categories. Moreover, as the rest of this paper aims to show, comparing cognates in closely related languages is useful as a discovery procedure, sometimes uncovering senses which might be overlooked otherwise.

2 *Över* and *over*: frequencies in original texts and translations

This section presents some facts about the distribution of *over* and *över* in the original texts and their translations. Starting with original texts, Table 2 gives the frequencies of *over* and *over* in the corpus.

	n	f	
SO över	1080	22.2	
EO over	614	11.7	

 Table 2. Frequency of over and över in ESPC (f=frequency per 10,000 words)

As table 2 shows, SO *över* was almost twice as common as EO *over*. These figures suggest one of two things. First, there may simply be some sense or senses of Swedish *över* that are very common in the corpus, possibly as a result of the subject matter of the Swedish texts. Alternatively, it may be the case that Swedish *över* has wider applicability than English *over* and may therefore be used in senses and/or contexts where English would prefer another preposition or some other construction altogether. Obviously, if correct, the latter explanation leads to interesting further questions about the exact nature of the differences in meanings between *over* and *over*. Before I explore this possibility, a few words must be said about the dangers involved in basing explanations solely on the basis of data from original texts.

A serious problem involved in contrastive studies, especially if they are oriented towards comparing the senses of lexical items or the expression of meaning more generally, is that texts in different languages never express exactly the same content. So, even with a very fine-grained division into genres, registers, etc., it will not be the case that, say, an English detective story and a Swedish detective story will express identical content. Hence a comparison of original texts alone from two languages will rarely be a particularly firm basis for generalizations.

One way of overcoming these limitations is to use a corpus that contains both original texts in the languages compared and translations. In this way, claims based on a comparison of original texts may be substantiated through the study of their translations. This idea can be spelled out as the working principle in (5):

(5) Translation Mirror Principle (TMP) Statistical similarities and differences in a comparison of a corpus of original texts from L1 and L2 represent genuine similarities and differences between L1 and L2 to the extent that they are mirrored, in a significant way, in translations from L1 into L2 and from L2 into L1.

What this says, for example, is that if some linguistic element E is more common in a corpus of original L1 texts than in a corpus of L2 texts, then it is to be expected that translations from L2 into L1 will retain element E to a higher extent than translations going the other way, from L1 into L2.

The formulation of the principle allows for the situation where differences that are not mirrored may still be real. This may be the case where translations are affected by interference from L1 on L2. Whether a stronger formulation is possible is an empirical issue, but a tentative assumption would be that the 'dual mirroring' requirement of the last clause may provide a check on interference effects, thus allowing for a biconditional version of the principle. (For further examples of the applicability of the TMP see Johansson 2002.)

Applied to the *över/over* frequencies, the TMP would support the assumption that SO *över* is more frequent than EO *over* if Swedish translators consistently chose *över* to translate *over* whereas English translators chose *over* to translate *över* much more rarely. The translations of *över* and *over* are presented in Tables 3 and 4.

	ET over		ET othe	ET other Prep.		Other
	n	%	n	%	n	%
SO över	362	33.5	444	41.1	274	25.4
Table 4. Translation	ons of EO over					
Table 4. Translation			ST othe	r Prep.	Other	
Table 4. Translation	ons of EO over ST över n	- %	ST othe	r Prep. %	Other n	%

Table 3. Translations of SO över

Although the figures are not clear enough to warrant any far-reaching conclusions, they nevertheless support the conclusion, suggested by Table 2, that Swedish *över* is more common than English *over*. Thus, in accordance with the TMP, Swedish translators chose *över* as a translation of English *over* significantly more often than English translators chose *over* to translate Swedish *över*.

While these figures do not clearly rule out the possibility that the clear differences noted in the comparison of original texts may reflect differences in the content of texts included in the corpus, they still indicate that our second assumption, namely that Swedish *over* has wider applicability than English *over* is on the right track. The rest of this paper, will be devoted to a more detailed analysis of the data, in particular the cases where Swedish *över* was not translated by *over*. Specifically, I will concentrate on cases where some preposition

Mats Johansson

other than *over* was chosen by the translator. The reason for limiting the discussion in this way is partly practical and partly due to structural differences between the two languages (such as the ungrammaticality in English of structures where prepositions are followed by *that*-clauses). Moreover, many of the non-prepositional translations are the result of 'restructuring' (where the translator simply chose to render the original structure in a completely different way), or plain omission.

3 Non-matching prepositional translations $SO \rightarrow ET$

Lakoff (1987) took what he called the *above-across* sense to be the central meaning of *over*. A number of writers following Lakoff have attempted to specify more clearly the properties of *over* that sets it apart from *above* and *across*. We will return below to some discussion of how the three prepositions may be different. For now, we just note that SO *över* appears to incorporate both these prepositional meanings. Thus, part of the explanation of the differences in frequency noted in Table 2 appears to be that some uses of SO *över* has wider applicability than EO *over*. In fact, by far the most frequent prepositional translation (excluding translations with *over*) is *across*. Table 5 gives the frequencies of the 10 most common mon*over* prepositional translations of SO *över*. (The figure for *over* is included for comparison)

P	n	% (of P)	% (of non- <i>over</i>)
over	362	44.9	
across	118	14.6	26.6
of	71	8.8	16.0
on	61	7.6	13.8
above	42	5.2	9.5
about	32	4.0	7.2
at	14	1.7	3.2
in	14	1.7	3.2
throughout	10	1.2	2.3
through	9	1.1	2.0
for	9	1.1	2.0
		47.0	85.8

 Table 5. Top 10 prepositional translations of SO över

The combined frequency for *across* and *above* accounts for roughly 20% of all the prepositional translations in the data and for over one third of the instances where some preposition other than *over* was used. The discussion in the following sections is organized around the translations of *över* by prepositions other than *over*. The treatment is necessarily selective and incomplete, and serves mainly to point out some of the differences between *over* and *över*.

3.1 The *across* translations

The following examples illustrate some of the uses of SO *över* where the translator chose *across* as the translation.

(6)	Farquhar fick ett kraftigt slag över	Farquhar took a vigorous swipe across
	munnen och min skjorta revs sönder av	the mouth, and my shirt was torn to
	soldaterna. <lh1.3.s113></lh1.3.s113>	shreds by the soldiers. < LH1T.3.s107>

The data in (6) illustrate a case where $\ddot{o}ver$ indicates contact between trajector (in this case the instrument used for hitting) and landmark. Moreover, $\ddot{o}ver$ in this case is oriented on the horizontal axis rather the vertical. (For Lakoff 1987, this type of 'rotation' is a property exclusively belonging to 'cover' senses). Thus, a tentative image schema for this sense would be as in Figure 4 (a) or (b), depending on whether horizontal/vertical orientation is relevant or not:¹

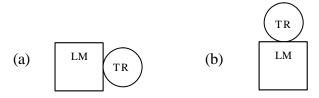


Figure 4. The 'on' sense of över

It should be noted that this sense of *över* is not an instance of Lakoff's 'cover' schema, which is also neutral with respect to horizontal/vertical orientation. Rather, (7) is an instance of what we might call an 'on' sense of *över*. In fact, as table 5 indicates, *on* is also a common translation of SO *över*. One example is given in (8):

(7)	Victoria drämde till honom över ryggen	Victoria walloped him on the back so he
	så att han for framstupa över soffan.	fell flat on his face on the sofa.
	<gt1.2.3.s16></gt1.2.3.s16>	<gt1t.2.3.s17></gt1t.2.3.s17>

Clearly, the Swedish original in (8) does not mean that the blow covered the victims entire back, although it retains an element of co-extensiveness of landmark and trajector in one dimension, brought out more clearly by *across*. Thus, in (6) and (7) the indication is that the trajector is of a kind that reaches all the way across the landmark. However, it is not clear whether this is, in fact, necessary. The relative acceptability of (8), which is perfect for some speakers, indicates that the trajectory may have a more limited extension.

(8) ?Victoria drämde till honom över ryggen med en hammare.'Victoria walloped him across the back with a hammer'

A similar use of English *over* is illustrated in (9):

(9) ?Victoria hit him over the head (with a hammer).

¹ The choice is not arbitrary, but relates to the issue, briefly addressed by Lakoff (1987), of whether prepositional meanings are fully specified or not. The same issue arises with respect to the whether the sense is static or dynamic. See Kreitzer (1997) for some discussion.

This appears to be parallel to Swedish *över*. However, as we expect, horizontal orientation is much less acceptable, and (9) seems restricted to cases where contact is made from above the landmark. Thus, the acceptability of (10) seems to vary with the likelihood of the hitting coming from above the target.

(10) Victoria hit him over the back/chest/legs/knees/soles of his feet

Summarizing the discussion so far, Swedish has what I will refer to as an 'on' sense of *över* with properties different from English *over*. Although instances of 'on' senses of *over* occur (as in *hit over the head*), it appears that they do not occur in 'rotated' senses. Moreover, I would speculate that most cases of *over* in this sense might be reducible to 'cover' or 'across' senses. In other words, hitting someone over the head typically implies that several blows are administered, so as to ultimately cover the victim's head, alternatively that a weapon is used which goes across the victim's head.

A second 'across' meaning of *över* is illustrated in (11):

(11)	Någon hade rivit henne över bröstet så att	Someone had scratched her across her
	hon blödde.	breast so it was bleeding.
	<ap1.2.s21></ap1.2.s21>	<ap1t.2.s22></ap1t.2.s22>

In (11), as in (6) and (7), there is contact between trajector and landmark. Moreover, this is not a 'cover' sense, but is still most naturally interpreted as vertically oriented. This sense is not available for English *over*. Thus, substituting *over* for *across* in (11) would force a reading where the scratch marks appear above the breast, but not on it. Comparing (6) and (7) on the one hand and (11) on the other, the difference might be described in terms of the type of contact between landmark and trajector, where the contact is extended in (11) but momentary in (6) and (7). However, the approach here is to say that it is the *shape* of the trajector that is different. For (6) and (7) I claim that the trajector is a point, whereas for (11) it is a line. Thus, a tentative image schema for (11) would be as in Figure 5.



Figure 5. Riva någon över bröstet 'scratch sb. over the chest'

Notice that Figure 5 is not understood as a path schema. We do not, for example, expect to find instances where this sense of *över* can be transformed to one with end-point focus. The slightly paradoxical claim is that even though a natural conceptualization of scratching is expressible in terms of a path, this does not appear to be how speakers construe it. The same remarks apply to (12).

(12) (a) Han drog ett streck över tavlan.
'he drew a line across the board'
(b) Pennan är över tavlan.
'the pen is across the board'

The end-point reading of (12b) would be one where the pen appears at the end of a line that has been drawn. Clearly, however, this meaning is unavailable.

A third 'across' sense of *över* is found in examples like the following:

(13) Det var ofint av den att käka middag precis där vi brukade vada över och *låtsas* att där fanns stora boaconstrictorormar som gäspande lurade i det vaggande vattengräset.
 <RJ1.2.s108>

English *over* implies that the trajector is not submerged into the landmark, hence *across* is strongly preferred in cases like this. For *över* there is no such restriction. Potential English counterexamples to this claim (*wim over to the other side, wade over to me*) are of the adverbial kind discussed by Kreitzer (1997). He suggests that adverbial uses of *over* do not specify a landmark at all, but merely indicate movement of a trajector from one position to another. Thus, adverbial *over* freely combines, and sometimes must occur, with a preposition specifying the landmark, as in (14):

(14) (a) Move over to the other side.(b) *Move over the other side

The same use of *över* is exemplified in (15):

(15) Hon har ett kusligt sätt att flytta över samma förutsägelser på vuxna. <RJ1.2.s699>

3.2 The *on* translations

Just as with cases translated by *across*, *över* occurs with vertical orientation in senses that are not covering senses. The following example illustrates this use:

(16)	Vaniljglassen som rinner över kostymens	I remember the sorrow and
	blå linnetyg. <ms1.7.s38></ms1.7.s38>	disappointment which made me strong and made my hand land on the sleeve of
		my father's suit, and the vanilla ice-cream running on the blue linen material.
		<ms1t.7.s33></ms1t.7.s33>

In fact, (16) is best regarded as another instance of an 'across' sense, despite the translation by *on*. A further example is given in (17).

(17)	Med precision och smak tillverkade en	With skill and artistry a woman wove a
	kvinna en trasmatta som skulle ligga	rag rug that would lie obliquely on the
	snett över golvet i finrummet och som	floor in the best room, and give that cool
	skulle ge detta svala rum ett intryck av att	room the impression that this house was
	detta hus var ett välskött, arbetsamt och	a well-run hard-working Christian home
	kristligt hem och skulle så förbli i	and would remain so forever.
	evighet. <sc1.4.s67></sc1.4.s67>	<sc1t.4.s66></sc1t.4.s66>

What I would like to propose in the light of these examples is that English *on* and *across* show a degree of distributional overlap, in the sense that they may both be used to portray the same real-world situation. However, this does not mean that they overlap in terms of

construal. In other words, the same situation may be differently construed with different construals resulting in different prepositional encodings.

A large group of *on* translations are of the kind illustrated in (18).

(18)	Farsan, som är smått road av min hobby,	My dad, who finds my hobby rather
	släpar hem statistik över kända och	amusing, brings home statistics on all
	okända fenomen. <pp1.1.s162></pp1.1.s162>	kinds of familiar and unfamiliar
		phenomena. <pp1t.1.s162></pp1t.1.s162>

This use of *över* is clearly metaphorical. I would suggest that the source of the metaphor is a 'cover' sense of *över*. Thus, in both Swedish and English, statistics and figures in general may be conceived of as covering (parts of) reality, as in (19):

(19) (a) CPS statistics cover only charges that go to trial. (Sunday Times July 1995)
 (b) Statistiken/Siffrorna täcker bara första halvåret.

In the group of *on* translations there are some examples *över* following a verb or noun expressing an emotional state:

(20)	Jag var begeistrad över hans	I was very keen on his proportions and
	proportionering och över att han inte	on his not just being a Functionalist.
	enbart var funktionalist.	<ce1t.2.3.s12></ce1t.2.3.s12>
	<ce1.2.3.s12></ce1.2.3.s12>	

Again, it is clear that the sense is metaphorical, at least on the hypothesis that this is not a separate, unrelated sense of *över*. We return to the question what the concrete source of this metaphor might be immediately below.

3.3 The *about* translations

The last example discussed in the previous section raised the issue of what a concrete source for the metaphorical sense of *över* found after emotional predicates. The largest group of examples of this kind were translated by *about*. Examples are given in (21) - (23):

(21)	En föreläsare som inte vågar vara känslig och känslosam över sitt objekt råkar lätt ut för att förminska och förhåna det. <sco1.2.1.s378></sco1.2.1.s378>	A lecturer who does not dare be sensitive and emotional about his subject can easily start reducing and scorning it. <sco1t.2.1.s361></sco1t.2.1.s361>
(22)	Den svenska regeringen är oroad över informationen om irakisk militär aktivitet nära gränsen till Kuwait. <lhw1.4.s16></lhw1.4.s16>	The Swedish Government is concerned about information on Iraqi military activity close to the border with Kuwait. <lhw1t.4.s15></lhw1t.4.s15>
(23)	Det var en sak som Asplund var ledsen över, Fridmans Kentaur. <ce1.2.4.s36></ce1.2.4.s36>	Asplund was terribly upset about that, Fridman's Centaur. <ce1t.2.4.s36></ce1t.2.4.s36>

Clearly, there is some relation between these uses and the following:

(24)	Och han grubblade mycket över detta.	He worried a lot about this.
	<tl1.3.1.s8></tl1.3.1.s8>	<tl1t.3.1.s11></tl1t.3.1.s11>

Lakoff (1987:439) suggests that the metaphor involved in phrases like *think over* is THINKING ABOUT SOMETHING IS EXAMINING IT. In other words, if you think something over, you turn it over in your mind. The source therefore would be the sense illustrated by (25):

(25) Roll the log over

For Swedish, this account is problematic since it is not clear that the concrete sense in (28) exists at all. The verbatim translation is only possible in the sense 'roll the log over here', and not in the intended sense 'turn the log over (180 degrees)':

(26) *Rulla över stocken.

A second possible source might be a 'cover' sense. Thus, thinking about/examining something is equal to having one's thought travel over it to ultimately cover it, parallel to (27).

(27) Bill walked all over the field

The metaphor would then be something like MENTAL ACTIVITY IS A JOURNEY, related to, and perhaps superordinate to AN ARGUMENT IS JOURNEY, discussed by Lakoff & Johnson (1980:90). Possibly the same metaphor can be extended to account for (24-26).

3.4 The *above* translations

One difference often claimed to differentiate between *over* and *above* (eg by Taylor 1988, Kreitzer 1997) is that *over* often implies that the trajector "affects" the landmark, whereas *above* implies that there is no interaction between trajector and landmark. Thus, although some real-world situations may fit either construal, contexts where an affective relation is implied strongly favor *over*:

- (28) (a) The lamp hangs over the table.
 - (b) The lamp hangs above the table.
 - (c) Move the lamp down over the table!
 - (d) *Move the lamp down above the table!

In (28a) and (28b), either construal is possible, whereas in (31c) and (31d), where we understand the speakers reason for wanting the lamp to be moved is that he/she needs some light, only *over* is possible. Contexts like this, however, are hard to come by, and the corpus data indicates that the distinction may be more complex. Thus, even in cases where an affective relation seems to be highlighted, *över* is sometimes translated by *above*.

(29)	Det väldiga matsalsbordet reser sig över	The huge dining-room table towers
	mitt huvud, jag stöder ryggen mot ett av	above me as I sit with my back against
	de bukiga benen. <ib1.2.s75></ib1.2.s75>	one of its bulging legs. <ib1t.2.s65></ib1t.2.s65>

(30)	Två för befälet med ett ord eller två,	Two are in command, using just a word
	hovtraktören över köket, hovfuriren över	or two. In the kitchen, it is the
	betjäningen. <gapg1.18.s3></gapg1.18.s3>	Restaurateur to the Court and above the
		servants, the Steward of the Royal
		Household. <gapg1t.18.s3-4></gapg1t.18.s3-4>

In (29), the narrator's intention appears to be to depict the table as something covering his entire field of vision, either as a protective cover or as some threatening large object. Either way, it is hard not to conceive of the table as affecting the narrator. In (30), an instance of the CONTROL IS UP metaphor (Lakoff & Johnson 1980:15), it is again difficult not to regard individuals higher in rank as affecting their subordinates. Be that as it may, the importan point here is that *över* is largely neutral with respect to this distinction. Thus, in contexts where *over* seems impossible due to the lack of a proper relation between trajector and landmark, *över* is fine.

- (31) (a) *There are birds somewhere over us. (Kreitzer 1994:308)
 - (b) Det är fåglar nånstans över oss.

3.5 Assorted interesting cases

A fairly large group of non-*over* prepositional translations of *över* involve *of*. Here I will mention only one group, exemplified by (32) and (33).

(32)	En lista över Franklins talanger <arp1.5.h1></arp1.5.h1>	A List of Franklin's Talents <arp1.5.h1></arp1.5.h1>
(33)	Stånden förde sina egna förhandlingar i särskilda lokaler, hade egna talmän och upprättade protokoll över sina förhandlingar men konfererade sinsemellan. <aa1t.9.s7></aa1t.9.s7>	The Riksdag still consisted of four Estates which held their deliberations in separate chambers, had their own speakers, kept minutes of their meetings but conferred with each other from time to time. <aa1t.9.s7></aa1t.9.s7>

Lists and minutes are objects representing whatever they are lists or minutes of. We normally expect them to cover the group of objects, events etc that they represent. Hence, we are dealing here with metaphorical extensions of a cover schema. Similarly, maps and models metaphorically cover whatever they are maps or models of:

(34)	Han skulle just slå bort tanken när han av en händelse kom att fästa blicken på ett porträtt i olja som hängde på långväggen mitt emot hans arbetsbord, bredvid kartorna över Sverige och Stockholmsområdet. <jg1.1.s235></jg1.1.s235>	Chivartshev wanted to wipe away the thought of what that was, but it occurred often enough whenever he happened to fasten his eyes on the oil portrait that hung on the long wall right across from his desk, next to the maps of Sweden and
		Stockholm. <jg1t.1.s229></jg1t.1.s229>

(35) Dessa har olika bilder (modeller) över vad de menar med företag, såväl i allmänhet som i konkreta fall.
 <BB1.2.s52>

These stake-holders all have different pictures (models) of what they mean by companies, in general as well as in specific cases. <BB1T.2.s55>

Apparently, this sense of *över* is not encoded by English *over*. The traditional wisdom (e.g. Brorström 1973) on the use of *of* in cases like these is that Swedish allows a much wider range of heads in attributive/postmodifying prepositional phrases (PPs), whereas English mostly uses *of*. This has been empirically confirmed for English by Biber et al (1999) who found that *of* accounted for 60-65% of all heads of attributive PPs. Furthermore, they found that six prepositions accounted for 90% of all attributive PPs, and that other prepositions are rare in this function. While I am not aware of a similar count for Swedish, it seems fair to assume that the distribution of prepositions used would be less skewed. Why English *of* has monopolized this function to the extent it has is unclear.

As a final example of prepositional mismatches between Swedish and English consider (36):

(36) En stor del av Bergslagens stångjärn gick över Göteborg för vidare befordran till Nederländerna. <AA1.6.s31> Much of the iron from the Bergslagen district was exported via Gothenburg to the Netherlands. <AA1T.6.s31>

At first sight this may be dismissed as a garden variety example of the basic schema in Figure 3, repeated here:

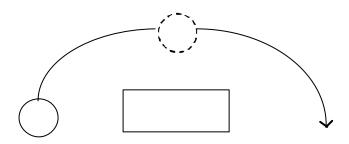


Figure 3. Dewell's central schema for over (1994:353)

However, a more accurate depiction of the sense would be as in Figure 6, with the trajector making momentary contact with the landmark.

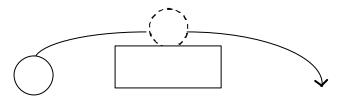


Figure 6. The 'via' sense of över

The sense occurs in English originals as well (here interestingly enough translated as via).

The war filters in over the radio, remote
and crackly, the voices from London
fading through the static. <ma1.2.2.s63></ma1.2.2.s63>

Kriget sipprar in via radion, avlägset och knastrande, och rösterna från London försvinner i störningarna. <MA1T.2.2.s63>

In the light of examples like this, it appears that the schema in Figure 6 represent a separate sense of *over* in English, too. I would suggest that phrases like *trip over*, *stumble over* are also examples of this sense of *over*. In fact, a strong version of Lakoff's (1990) Invariance Hypothesis, given in (38), would seem to require there to be a concrete source for the meaning of *over* in (37).

(38) Metaphorical mappings preserve the cognitive typology (that is, the image-schema structure) of the source domain.

Hence, if Figure 6 adequately represents the sense of *over* in (37), then we would also expect it to represent some concrete sense, exemplified in *trip over*, for example.

4 Discussion

Although I have not proposed an explicit structure for Swedish *över*, the observations above do point to a couple of directions that the specification of such a structure might take. First, in comparison with English *over*, *över* has a wider range of "contact" senses. Moreover, the possibility of rotation of the basic vertical relation between trajector and landmark is fairly great for *över*, whereas rotation of *over* is basically limited to cover senses. In fact, the possibility of rotation has been a main motivation for treating cover senses of *over* separately. Thus, even Kreitzer (1994:313), who assumes only three basic senses, as compared to 6 in Lakoff's (1987) analysis, feels the need to separate cover senses because of their 'egocentric' nature, i.e. because the absolute vertical relation between trajector and landmark is absent. One way of interpreting the Swedish data would be to assume, essentially following Kreitzer, that there are only two basic senses of *över*: one static and one dynamic. Since rotation occurs in both cover and non-cover senses, there is no obvious reason to ascribe special status to the cover senses. Instead I would propose that they originate in a basic (static or dynamic) image schema to which they are related by the transformation of image schema components.

5 References

- Aijmer, Karin, Altenberg, Bengt and Mats Johansson. 1996. Text-based contrastive studies in English. Presentation of a project. In *Languages in Contrast*, ed. Karin Aijmer, Bengt Altenberg & Mats Johansson, 73-85. Lund: Lund University Press.
- Biber, Douglas, Johansson, Stig, Leech, Geoffrey, Conrad, Susan & Edward Finegan. 1999. Longman Grammar of Spoken and Written English. London: Longman.
- Brorström, Sverker. 1973. The engelska prepositionerna. 10th ed. Stockholm: Esselte.
- Brugman, Claudia. 1981. The Story of Over: Polysemy, Semantics and the Structure of the Lexicon. New York: Garland Publishing.
- Dewell, Robert, B. 1994. Over again: Image-schema transformations in semantic analysis. *Cognitive Linguistics* 5-4: 351-380.

- Johansson, Mats. 2002. Clefts in English and Swedish: a contrastive study of *IT*-clefts and *WH*-clefts in original texts and translations. Unpublished Ph. D. Dissertation, Lund University.
- Kreitzer, Anatol. 1997. Multiple levels of schematization: A study in the conceptualization of space. *Cognitive Linguistics* 8-4: 291-325.
- Lakoff, George & Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, George. 1987. Women, Fire and Dangerous Things: What Categories Reveal About the Human Mind. Chicago: University of Chicago Press
- Lakoff, George. 1990. The invariance hypothesis: is abstract reason based on imageschemas? *Cognitive Linguistics* 1-1: 39-74.
- Taylor, John, R. 1988. Contrasting prepositional categories: English and Italian. In *Topics in Cognitive Linguistics*, ed. Brygida Rudzka-Ostyn, 299-326. Amsterdam: John Benjamins.
- Taylor, John, R. 1995. *Linguistic Categorization: Prototypes in Linguistic Theory*. 2nd ed. Oxford: Oxford University Press.