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Abstract

This chapter examines the hypothesis that translation equivalents may be employed to cast light on the semantic network of a lexeme in its original language. The lexemes investigated are amid(st) and among(st), which are commonly taken to overlap in meaning. The data consist of all tokens of both prepositions in the English language original texts that are common to both the English-Norwegian Parallel Corpus and the English-Swedish Parallel Corpus. A particular question addressed is how the various senses of among(st) are related to each other (amid(st) is always used to code a SETTING). All tokens of among(st) are first sorted into semantic classes using normal corpus linguistic methods. The translations into Norwegian and Swedish of the various senses are then examined with an emphasis on the similarities and differences between them. The basic hypothesis is that the senses that are translated in similar ways in a particular language are felt to be more closely related by users of that language than senses that are translated in very different ways. The results lend some support for the hypothesis that translation equivalents can be used as a basis for a semantic classification of polysemous lexemes.

1. Introduction¹

The increased availability of parallel and translation corpora has led, in recent years, to something of an explosion in the area of corpus-based contrastive studies. Given this general increase in interest in such corpora on the part of researchers, it is perhaps surprising that they have not formed the basis for more contrastive work on prepositions, which are often taken to be the most intractable of parts of speech, causing innumerable problems for foreign and second language learners. Some exceptions are Schmied (1998), Paulussen (1999), Garretson (2004), Cosme and Gilquin (2008) and Egan (2012). With the exception of Paulussen's (1999) dissertation, these studies of prepositions have been based on parallel texts and translations between two languages. The data in Paulussen (1999), in contrast, comprise translations between three languages: English, French and Dutch.

The present study also makes use of data from three languages, to wit English original data and Norwegian and Swedish translation data. It is part of a larger study covering various codings of the semantic notion of betweenness (Egan and Rawoens 2013). More specifically, the data for our study comprise two English prepositions, *amid(st)* and *among(st)*, and their translations into two languages, Norwegian and Swedish. According to Lindstromberg (2010: 89), these two prepositions "have quite specialized meanings which are mostly applied metaphorically". However, when it comes to differences in meaning between the two, Lindstromberg offers little in the way of explanation. Indeed in a section entitled "AMID(ST) VS AMONG(ST) and IN THE MIDST OF, IN THE MID-DLE (OF)" (2010: 94) he makes no mention whatsoever of "among(st)", despite the promise contained in the heading. Moreover, while Quirk et al. (1985) distinguish the meanings of *between* and *among*, pointing out that the latter relates to what they term "nondiscrete objects", they merely state of *amid(st)* that it "like among, can apply to an indefinite number of entities" (Quirk et al. 1985: 680).

In general, the great advantage of linguistic studies based on translation corpora is the fact that these corpora reveal which lexemes or constructions in language a are felt by competent users of both languages to correspond most closely to a given lexeme or construction in language b (e.g. Dyvik 1998, 2004, Noël 2003, Garretson 2004, Johansson 2007). In our study we exploit the competence of these language users to shed light on the structure of the English forms as these are refracted through the prisms of both Norwegian and Swedish. The reason our study is based on translations into just these two languages is the existence of corpora, described in Section 2, that contain translations of the same set of texts into both languages.

The chapter is structured as follows. In Section 2 we present our aims, our data and the methodology employed. Section 3 describes first the semantics of amid(st) and then gives details of the translation equivalents employed by the Norwegian and Swedish translators respectively. Section 4 follows a similar procedure for among(st). Finally, Section 5 contains a summary and some conclusions.

2. Aims, data and methodology

One of the aims of this study, as originally conceived, was to tease apart the various senses of amid(st) and among(st). As it transpired, all the tokens of amid(st) in our data code a single sense, a SETTING, as will be seen in Section 3. Among(st), however, is used to encode a variety of predication types. In Section 4 we concentrate on the distinctive features of the preposition on the one hand, and on the similarities and differences between the Norwegian and Swedish translations on the other.

Our basic hypothesis is that the senses of a lexeme, in this case a preposition, which are usually translated by one and the same lexeme (or construction) are likely to be more closely related within the semantic network of the original lexeme than those translated by different lexemes. This is in line with Garretson's contention that "... if we take as our default assumption that similar forms will be used to translate similar meanings, we must expect that related meanings will be expressed with the same form more often than unrelated meanings will" (Garretson 2004: 23).

The data used are taken from the following two corpora: the English-Norwegian Parallel Corpus (ENPC) (Johansson 1998, Johansson et al. 2002) and the English-Swedish Parallel Corpus (ESPC) (Aijmer et al. 1996: 79–80). Both of these corpora contain fiction and non-fiction texts (extracts of roughly 10,000 words taken from various works). Given the fact that the two corpora cannot be searched at the same time, we first extracted the sentences containing *among(st)* and *amid(st)* from the source texts in each of the corpora separately.² Since not all source texts in the ENPC and the ESPC are identical, we then decided to use the English originals common to both corpora and their respective translations only – the extent of the overlap is roughly half the corpus (see also Hasselgård 2007 on the fiction part). Each author analysed the English original texts and classified all tokens of *amid(st)* and *among(st)* independently before comparing classifications and discussing tokens which we had analysed differently, with a view to arriving at a consensus.

The corpus search yielded us a set of 186 tokens in total, 16 for amid(st) and 170 for among(st). We classified all the original English tokens of amid(st) and among(st) in the corpus data in terms of the semantics of the prepositional expressions. For instance what cognitive linguists refer to as the 'landmark' (Langacker 1987: 216, Lindstromberg 2010: 6) of the preposition may code a SETTING, as in 'the cat among the pigeons', or it may code an AGENT, as in 'the discussion among the partners'. We should point out that whereas Lindstromberg employs the term 'Subject' for the head of the phrase containing a prepositional postmodifier, we will stick to 'Trajector', which is more common in the cognitive literature (see, for instance, Langacker 1991: 5).

AGENTS, like EXPERIENCERS and THEMES code participants in a process. Such participants may be coded as subjects or objects in clauses paraphrasing the predication containing the prepositional phrase. Thus the phrase 'the discussion among the partners' entails the clause 'the partners discuss(ed)', in which 'the partners' is the agentive subject. The two other types of participant, EXPERI-ENCERS and THEMES, will be introduced in Section 4. A fourth type of landmark does not imply a processual relationship but rather a stative one, with the landmark corresponding to the predicative in a copular construction, as in 'Among world leaders, Obama stands out as...', which entails the clause 'Obama is a world leader'. We have used the term PROPER INCLUSION for this sort of landmark. As for tokens with SETTING landmarks, like 'the cat (was) among the pigeons', these do not code a participant in a predication but rather the circumstances in which the proposition in question holds. These types of constituents were labelled 'circonstants' by Tesnière (1959) as opposed to the more central 'actants' and as fulfilling 'circumstantial roles' by Halliday (1970) as opposed to the more central 'participant roles' (see Matthews 1981: 123). SETTINGS do not belong to the core of a proposition. In the words of Radden and Dirven:

The nucleus of a sentence is set off against the setting and, just like the conceptual core, is based on an all-pervasive figure/ground configuration. This means that the notion of setting refers to the background against which a situation is set. Setting elements provide information such as where and when the event happened, why it happened, the conditions under which it happened, etc. To provide this type of information, the speaker uses lexical resources, which specify the factors surrounding a situation in more detail. (Radden and Dirven 2007: 50).

The speaker may also use grammatical (or lexico-grammatical) resources to code SETTINGS. This is the case in our study, where they are coded by amid(st) and among(st) phrases.

Next, for the classification of the Norwegian and Swedish translations, we began by adopting Johansson's model (Johansson 2007: 24) in which translations are distinguished according to whether they resemble the originals syntactically. Translations which mirror the syntax of the original are labelled "congruent", whereas translations which differ syntactically are labelled "divergent". The difference may take the form of a paraphrase, for example. We further subdivided the congruent translations according to whether they employ the most frequently used preposition (i.e. Norwegian *blant* and Swedish *bland* for English *among*, for example) or an alternative preposition or combination of particle and preposition. A small number of tokens were not translated into one or other language, or not translated into either of them. These tokens were listed separately.

In the case of among(st), discussed in Section 4, statistical calculations were employed to establish whether the forms of translation of the various semantic classes into Norwegian and Swedish differ significantly from those of the other classes. Our calculations were based on our three main translation categories, translation by the default preposition, by an alternative proposition or by a syntactically divergent form. We employed the Fisher Exact Test with two degrees of freedom for all calculations, since some of our raw numbers were smaller than five. We then compared the results of our two sets of calculations. The degree of (dis)similarity between them may be taken as a measure of support for the basic hypothesis that translation equivalents may be of use in sketching the semantic network of polysemous lexemes.

3. The semantics of *amid(st)*

There are, in all, 15 phrases containing *amid* and a single phrase containing *amidst* in our data. These all denote a SETTING, either spatial (7 tokens), as in (1) or circumstantial (9 tokens), as in (2). We restrict the term 'spatial' to landmarks that are both concrete and static. While a handshake, as in (2), may be concrete in the sense that one can feel the pressure exerted by the hand, it is necessarily

ephemeral. Nevertheless the landmark still codes a SETTING, as defined in the previous section, since it codes the background against which the leaving of Celia takes place.

- (1) It was next to a corner site *amid* other dwellings of similar restrained elegance [....]. (JH1)
- (2) As the meeting broke up, Celia left first, *amid* smiles and friendly hand-shakes. (AH1)

Etymologically, *amid* has evolved from the complex Old English preposition *on middan*, meaning 'in the middle of'. The earliest examples of the prepositional construction in the OED contain a complement in the genitive or dative and all code a SETTING, either spatial or circumstantial, as indeed do all the later cited examples.

When we look at the translations of amid(st) into the two target languages, we find a variety of forms used, an overview of which is presented in Figure 1. The possible translations into Norwegian and Swedish are categorised using the model described earlier with congruent and divergent translations.

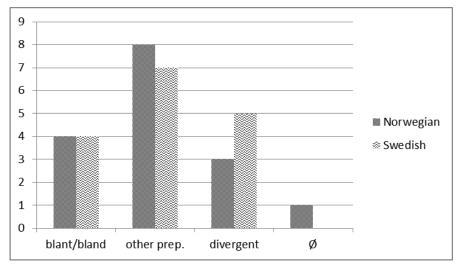


Figure 1: Amid(st) translated into Norwegian and Swedish

In the group of congruent translations, the most frequent single translation equivalents in our corpus in Norwegian and Swedish are *blant* and *bland* respectively. Both of these prepositions are descended from Old Norse *bland* (related to the verb *blandan*, meaning 'mix, combine') which was used in the prepositional phrase *i bland* (lit. 'in mixture with', also used in the sense 'have sex with') to mean 'among/together with'. Although no longer used in present-day English, the phrase *i bland* was borrowed by Middle English as *in bland* as in the examples (3) and (4) from the OED. The sentence in (3) is a description of a woman's cheeks.

- (3) Bobe quit and red *in-blande*. (c 1340 Gaw. and Gr. Knt. 1205) 'Both white and red intermixed'
- (4) In batail [...] *in-bland* with be Grekis. (a 1400 Alexander (Stev.) 2786) 'In battle [...] together with the Greeks'

It should be noted that the group of congruent translations containing both Norwegian *blant* and Swedish *bland* in our translation data is relatively small. There are in fact only three instances, one of which is cited as (5). In addition, one occurrence of *blant* in the Norwegian translations corresponds to a divergent translation in Swedish (in which the predication is encoded in a temporal clause). In another case we find *bland* in Swedish and the preposition *under* (= under/during) in Norwegian.

It was next to a corner site *amid* other dwellings of similar restrained elegance (JH1)
 Norw.: Det lå vegg i vegg med et hjørnehus, *blant* andre boliger av samme beherskede eleganse
 Swed.: Huset låg närmast en hörntomt *bland* andra bostadshus av lika behärskad elegans

As is obvious from Figure 1, both Norwegian and Swedish translators prefer to employ other prepositions than *blant/bland*, or combinations of particles and prepositions. These represent roughly half of the instances in the translation data: eight for Norwegian, seven for Swedish. The prepositions and combinations of particles and prepositions employed are listed in Table 1.

Table 1:Congruent translations equivalents with prepositions other than
blant/bland

	Norwegian	Tokens	Swedish	Tokens
Congruent: other prep.	midt i	2	under	2
	midt under	2	efter	1
	etter	1	i	1
	i	1	mitt i	1
	under	1	mot	1
	midt oppe i	1	trots	1

The Norwegian data contain four tokens of compounds containing *midt* (= middle), which is cognate with *amid*, two of *midt* i (= in), as in (6), one of *midt oppe* i (= up in), as in (7), and one of *midt under* (= during). As for the remaining four

tokens in this group, we find the prepositions *etter* (= after), i (= in) and *under* (= under).

(6) Amid the pressures of their professional lives, Andrew and Celia found time to look at houses for sale. (AH1)
 Norw.: Midt i all travelheten (= In the middle of) [...]
 Swed.: Trots yrkeslivets påfrestningar (= Despite..) [...]

In the Swedish translations we find only one token where the preposition *mitt* is used, viz. *mitt i*, as illustrated in (7). The other prepositions used in the translations are *efter* (= after), i (= in), *trots* (= in spite of), *under* (= under) and *mot* (= against).

(7) ...amid the birthday foliage of a high-backed seat. (JC1)
 Norw.: midt oppe i bladverket til en høyrygget fødselsdagsstol
 Swed.: mitt i den festliga grönska som prydde en stol med högt ryggstöd.

A final point worth noting is that both Norwegian and Swedish contain a number of divergent translations, three and five respectively. Most of these contain a form meaning something like 'surrounded by'. In (8), for instance, we find a divergent translation in the Norwegian *omgitt av* and in the Swedish *omvärvd av* in (9).

- (8) The first waves of landing craft, packed with sodden men, bucketed towards the beaches through the surf *amid* the rippling flashes and explosions of fire [...] (MH1)
 Norw.: .. *omgitt av* kaskader av lynglimt og eksplosjoner (=surrounded by)
 Swed.: .. *till ackompanjemang av* ett pärlband mynningsflammor (= to the accompaniment of)
- (9) ... a hysterical woman in a provocative nightdress, shrieking *amidst* a lot of flames [...] (MD1)
 Norw.: .. *midt i* flammene
 Swed.: .. *omvärvd av* lågor (=surrounded by)

To sum up, the low number of occurrences of amid(st) in our material does not allow us to draw any firm conclusions about its semantics on the basis of the translations into Norwegian and Swedish. However, what we can say is that the relatively small number of occurrences among translations of amid(st) of *blant/bland*, both of which are the most commonly used translation equivalents of among(st), as we shall see in the next section, may point to a difference in the semantics of the two English prepositions in our study.

4. The semantics of *among(st)*

There does not appear to be any semantic difference between the two forms *among* and *amongst*. Indeed, the OED does not contain any separate definitions of *amongst*, referring the reader to the definitions of the sub-senses of *among*. For our own part, we did not encounter any semantic differences in our material, the difference being primarily stylistic (according to Lindstromberg (2010: 93), "*AMONGST* is a slightly more literary variant"). For this reason we decided not to distinguish between the two forms in our analysis.

Whereas all tokens of amid(st) in our data encode SETTING (cf Section 3), among(st) is used to encode a variety of predication types. Etymologically, among(st) has evolved from the complex Old English preposition 'on zemang, meaning 'in the company of'. The earliest examples of the prepositional construction in the OED contain a complement in the genitive or dative and all code a SETTING, either spatial or circumstantial. In Middle English the phrase came to be used to code other sorts of relationships, including a now obsolete temporal one. We distinguish six predication types in our material according to the thematic role coded by the landmark of the preposition. The most common of these, with 95 tokens (out of a total of 170 tokens), is the SETTING sense, either spatial or circumstantial, illustrated here by (10) and (11) respectively.

- (10) They wander *amongst* the fruits of the earth and sea. (BO1)
- (11) She felt guilty about missing church that day, but if God were everywhere, surely He was here *among* so much natural beauty and peace. (GN1)

The second most common sense, instantiated by 26 tokens, we labelled THEME, by which we mean a participant that is "affected by an action or neutrally involved in a situation" (Radden and Dirven 2007: 269). According to this definition PATIENTS, labelled 'incremental themes' by Dowty (1991: 567), comprise a subset of THEMES. The distinction between more and less PATIENT-like THEMES is not germane in the context of our study, as all our THEMES involve participants who are 'neutrally involved' in the words of Radden and Dirven. Thus in (12) the rural under 25's are said to be unemployed, without there being any indication of who may have made them so.

(12) Unemployment *amongst* the rural under 25's is reckoned, currently, at around 60 per cent. (FW1)

There are 32 tokens in which the landmark of the preposition codes the trajector of a process denoted by the trajector of the preposition, in a manner similar to a subjective genitive. These may be divided into tokens where the landmark codes an AGENT, as in (13) in which it is the secretaries who are engaged in gossiping,

and tokens where it codes an EXPERIENCER, as in (14), in which it is the painters who feel envy.

- (13) But there the gossip *amongst* the secretaries and clerks was way off mark. (JC1)
- (14) But I only make enough to generate envy, *among* other painters, not enough so I can tell everyone else to stuff it. (MA1)

Nine tokens of the AGENT category are reflexive. In example (15), the function of the reflexive prepositional phrase is to limit the process coded by the verb, in this case talking, to a restricted number of participants, commensurate with the trajector of the process.

(15) What old men want is peace and informality, and the chance to talk *amongst* themselves like smutty boys. (JC1)

There is one relatively common type of predication, represented by 15 tokens, which contains a copular verb. In these the landmark of the preposition codes a category to which the trajector belongs. As explained in Section 2, we have used the term PROPER INCLUSION for these tokens (compare 'category inclusion' in Radden and Dirven 2007: 273). One of these is cited as (16).

(16) Kate and Peter must have been *amongst* the few children who had to plead with their parents to be allowed to attend prayers and assembly and scripture lessons. (MD1)

Finally, there were two tokens which did not fit comfortably into any of these five categories, although they shared characteristics with several of them. In (17) there are various possible permutations of the distribution of the six bathrooms across the three apartments. We have labelled this usage DISTRIBUTION.

(17) When we cleared out his stuff he had three apartments, with six bathrooms *among* them, and every bathtub was piled high with bundles of pictures and sketches and books and manuscripts and whatnot. (RDA1)

Table 2 shows the number of tokens per semantic category (predication type) of *among(st)*, in descending order of frequency.

Table 2:Tokens of *among(st)* per semantic category

Predication type	Number of tokens
SETTING	95
Тнеме	26
Agent	22
PROPER INCLUSION	15
EXPERIENCER	10
DISTRIBUTION	2
Total	170

4.1 Norwegian and Swedish translations of *among(st)*

We turn now to the Norwegian and Swedish translations of among(st).³ Figure 2 contains details of these in terms of the four options we mentioned in Section 2: i.e. translation by the default prepositions *bland/blant*, congruent translations containing another preposition, translations containing a divergent syntactic form, and non-translation of the predication.

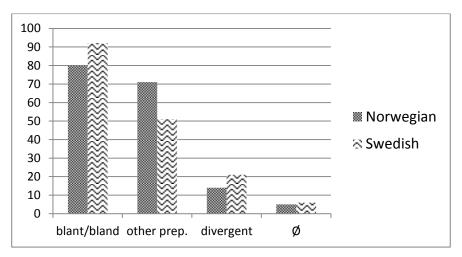


Figure 2: *Among(st)* translated into Norwegian and Swedish

We see in Figure 2 that both Norwegian *blant* and Swedish *bland* are the single most common translation equivalents utilised by the two sets of translators. This is of course why we have chosen to single them out in our analysis. Swedish *bland* is more common than Norwegian *blant*, which is represented by a dozen fewer tokens. Norwegian, on the other hand, has some 20 more tokens which contain an alternative preposition, while Swedish has more divergent tokens.

Finally there are only a handful of originals that the translators into both languages have opted not to translate.⁴

Figure 2 may, however, give a false impression of the degree of overlap between the options chosen by the two sets of translators. Indeed, so great appears to be the overlap that one might question one of the premises for our study, which is that we are engaged in comparing two different sets of translations. Perhaps Norwegian and Swedish are not dissimilar enough to provide fruitful data for comparison? Or perhaps some translations into language a are based not so much on the original texts as on prior translations into language b? However Figure 2 is deceptive in this respect. The actual extent of the overlap may be seen in Table 3, which shows how often the same sort of option is employed for one and the same original by two translators. This information is displayed in graphic form in Figure 3, with the Norwegian tokens on the x axis and the Swedish tokens on the y axis. The small handful of non-translated tokens are mentioned in Table 3 but have been omitted from the figure, since our main interest here lies in comparing forms that are actually used. In any case the numbers involved are so small as would render their representation in the figure indecipherable.

	of individual tokens				
	Norw. blant	Norw. other prep.	Norw. divergent	Ø	Total
Swed. bland	57	28	5	2	92
Swed. other prep.	15	34	2	0	51
Swed. divergent	6	6	б	3	21
Ø	2	3	1	-	6
Total	80	71	14	5	170

Table 3:Correspondences between Norwegian and Swedish translations
of individual tokens

One can see from a glance at Table 3 and Figure 3 that while the majority of tokens of Norwegian *blant* correspond to Swedish *bland* (i.e. 57 instances), there is a sizable minority of 23 tokens where this is not the case. As for tokens containing other prepositions, only half of these in Norwegian (i.e. 34 out of 71) correspond to prepositions other than *bland* in Swedish. On the evidence of Figure 3, we can safely conclude that we are dealing with two different sets of translations, albeit into quite similar languages.

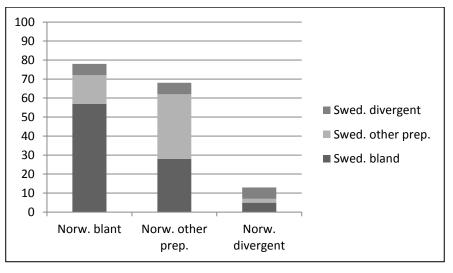


Figure 3: Correspondences between Norwegian and Swedish translations of individual tokens

4.2 Translations of SETTINGS coded by *among(st)*

We now turn our attention to translations of the various types of predication coded by among(st). Of 92 tokens encoding a SETTING that are translated into both languages, 33 (36%) are translated by both Norwegian *blant* and Swedish *bland* as in (18) and (19).

- A dying fly buzzed its last song up on the ceiling, *among* the net of cobwebs. (BO1)
 Norw.: ... *blant* spindelvevene ...
 Swed.: ... *bland* härvan av spindelnät ..
- (19) I was obviously going to have a musical time *among* the radiators and stopcocks. (PM1)
 Norw.: ... *blant* radiatorer og kraner.
 Swed.: ... *bland* element och flottörer.

40 SETTING tokens are translated into Norwegian and 33 into Swedish by prepositions other than *blant/bland*. Of these 21 are translated in this way into both languages and, of these 21 instances, 13 are translated by cognate prepositions in Norwegian and Swedish, such as i (= in) in (20) and *mellom/mellan* (= between) in (21).

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- It was in the East End, down *among* the dockland, that he had first started ... (FF1)
 Norw.: ... nede *i* havnestrøket
 Swed.: ... nere *i* hamnkvarteren
- (21) Sometimes fallow deer can be seen *among* the trees. (RR1)
 Norw.: ... *mellom* trærne
 Swed.: ... *mellan* träden

Example (20) is unusual in English in so far as the landmark of *among* is both concrete and singular. Moreover, it is not modified by a plural noun, as is *net* in (18). Mass nouns, both abstract and less often concrete, are often encountered as landmarks of *among(st)*, as in (11). However (20) is the only token in our material with an unmodified singular concrete noun. This usage may well be idiolectal. In any case both the Norwegian and Swedish nouns corresponding to 'Dockland(s)' in English are singular, and both translators have chosen to interpret these as containers within the boundaries of which the activity denoted by the verb is situated. In the case of (21) both translators choose not to employ *blant/bland*, the prepositions corresponding most closely to *among*, which would preserve the original's emphasis on the location of the deer, but rather to use the equivalent of *between*, which emphasizes rather the path of perception, with the result that the translations may be paraphrased as 'if you look between the trees, you will see the deer'.

4.3 SETTINGS coded by *amid(st)* and *among(st)* compared

We saw in Section 3 that *amid(st)* is used exclusively to encode SETTINGS, both spatial and circumstantial. Since among(st) is also commonly used to code SET-TINGS, the question arises as to the similarities and differences between the two prepositions. One difference is that while *amid(st)* is almost equally likely to code a spatial as a circumstantial SETTING, the latter type is only half as common as the former in the case of *among(st)*. This difference between the prepositions is not, however, statistically significant. Another possible difference, mentioned in the literature, relates to the number of objects which make up the landmark of the preposition. Thus Hickmann and Robert (2006: 4) write that the landmark of among consists of 'several objects', the landmark of amid of 'numerous objects'. This statement seems to imply that the greater the number of objects comprising the SETTING, the more likely the language user is to employ *amid*. We return to this contention below, but first we compare the translation equivalents of both prepositions in Norwegian and Swedish. These are given in Figure 4, which contains percentages rather than raw numbers, to better enable comparison between the two, given that *among(st)* is six times more common than *amid(st)*.

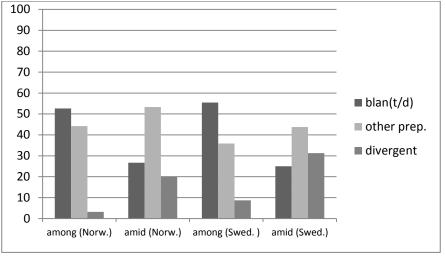


Figure 4: Translations of SETTING *amid(st)* and *among(st)* into Norwegian and Swedish (percentages)

The evidence presented in Figure 4 shows that the *among(st)* SETTING tokens follow the pattern for among(st) as a whole, shown in Figure 2, in so far as blan(t/d)is the most popular form in both languages, followed by other prepositions and finally divergent constructions.⁵ Furthermore, if we distinguish between spatial and circumstantial settings, we may further note that in the case of among(st), approximately 50% of both types are translated by *blant* in Norwegian and *bland* in Swedish. This is in marked contrast with *amid(st)*, where just one of the nine circumstantial SETTINGS is translated by by blant in Norwegian and none whatsoever by bland in Swedish. If we restrict our attention to the spatial SETTING tokens and try to distinguish between those whose landmarks consist of a restricted number of items and those containing an unrestricted number, we find that in all tokens of *amid(st)* the landmark consists of 'numerous objects', to borrow the term used by Hickmann and Robert (2006). Examples (5) and (8) are typical in this respect. On the other hand, while the landmark of *among(st)* may also consist of an unrestricted number of objects, as in (10), there are also quite a few examples, such as (22) and (23) where the number of items is bounded, though the exact limits are not given by the context.

(22) He kissed the tips of his fingers, speckling his beard with white, and poked *among* the papers on his table, raising puffs from every pile. (PM1)
 Norw.:... *igjennom* papirene på bordet (= through the papers)
 Swed.:... *bland* papperen på bordet

I sit by myself in the back of the car, *among* the suitcases and the cardboard boxes of food and the coats.... (MA1)
 Norw.:... *blant* koffertene og...
 Swed.:... *bland* kappsäckarna och...

Since both amid(st) and among(st) are used to encode SETTINGS, one may ask whether there is any difference in the types of situation that they typically frame. Figure 5 contains percentage details of how often they are used to frame Vendler's (1967) four situation types.

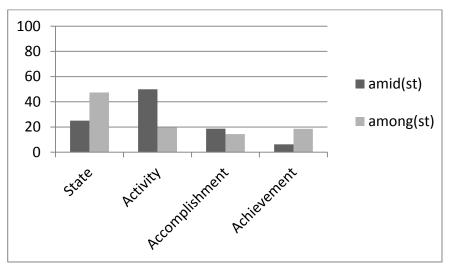


Figure 5: Percentage figures for types of situation the SETTING for which is coded by *amid(st)* and *among(st)*

As shown in Figure 5, amid(st), though it can be used to code the SETTING of all four types of predication, is most likely to be used with Activities, as in (6) and (8). It typically encodes the background for some ongoing situation.⁶ Among(st), on the other hand, is more likely to occur with a State, as in (10) and (24). And when it is used to locate a State, it is more likely to be translated into Norwegian by *blant* (70%) and Swedish by *bland* (65%) than the other predication types.

Whole families stayed out in the night, huddled *amongst* the ragged ends of their clothes and mattresses. (BO1)
 Norw.: ... *blant* fillete rester av klær
 Swed.: ... *bland* sina trasiga stycken av kläder

4.4 Translations of other predication types

Having dealt with tokens coding SETTING, we turn now to the second most frequent type of predication, in which the landmark of among(st) codes the THEME of a predication coded by a nominal, in cases where the prepositional phrase fulfils a postmodifying function, as in (12), or a clause where it has more of an adverbial function, as in (25). Figure 6 compares translation strategies employed for THEME predications by both sets of translators with those employed for SET-TINGS.

(25) Those of us who made such vows were known *among* the Living as abiku, spirit-children. (BO1)
 Norw.: *Blant* de levende ...
 Swed.: ... *bland* de levande ...

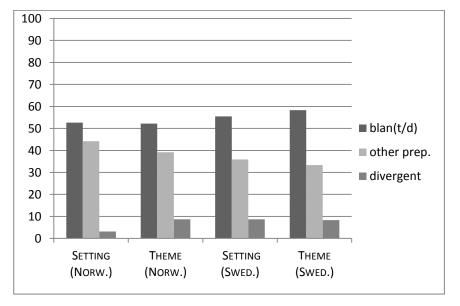


Figure 6: Translations of THEME predications compared to SETTING

Figure 6 shows that in both languages there is very little difference between the way SETTING phrases are translated and the way THEME phrases are translated (p=0.447 in Norwegian and 0.885 in Swedish). This indicates that they may be closely related in the semantic network of all three languages. One point worth noting is that translations of THEME phrases exhibit a greater degree of resemblance across languages than do SETTING phrases, with 15 of the 22 phrases translated into both Norwegian and Swedish containing cognate prepositions, 11 *blant/bland* as in (26), 2 *av* (=of) as in (27), 1 *med* (=with) and 1 *mellom/mellan* (= between).

- (26) Among the many things he knew toward the end of his life was that there were many more he did not. (JH1)
 Norw.: Blant de mange ting
 Swed.: Bland de många saker
- (27) Look, you were one person *among* many whom she knew and talked to ... (MW1)
 Norw.: Du var jo en *av* mange
 Swed.: Du var en *av* många

Not only is THEME translated in a similar fashion to SETTING in both languages. In addition, there is also no significant difference in either language between the coding of THEME phrases and those of EXPERIENCER, as in (28), PROPER INCLU-SION, as in (29), and AGENT, as in (30) – (32).

- (28) There is a growing fear *among* development planners [...] (LT1) Norw.: *Blant* utviklingsplanleggerne Swed.: *Bland* utvecklingsplanerare
- (29) Among them was the Rembrandt self-portrait [...] (JH1) Norw.: Blant dem var det selvportrettet Swed.: Däribland var Rembrandts självporträtt (= Among them...)
- (30) She imported priests of Baal, who quickly acquired a following *among* the northerners [...] (KAR1)
 Norw.: ... *blant* beboerne i nord.
 Swed.: ... *bland* nordborna.
- (31) There were arguments and even brawls every day. Among the refugees.
 (BR1)
 Norw.: ... Mellom flyktningene.
 Swed.: ... Bland flyktingarna.

Reflexive phrases, such as (15) and (32), which we categorised as a sub-set of AGENT phrases, stand out as the only phrase type which is not translated by *blant/bland* in either language.

(32) So by a general consensus the party, as it were, metaphorically turned its back on her and talked *among* themselves. (MD1)
 Norw.: ... samtalte seg *imellom*. (= between themselves)
 Swed.: ... pratade *med* varandra. (= with one another)

The translations of AGENT phrases not only resemble those of THEME phrases in both languages, they are also similar to those of EXPERIENCER phrases in both.

Moreover they also resemble translations of SETTING and PROPER INCLUSION predications in Swedish and, to a lesser extent, in Norwegian.

4.5 Elements of a network for *among(st)*

Having now described how the most common types of *among(st)* predications are translated into Norwegian and Swedish, we proceed to compare the forms used by both sets of translators for the five most common senses in terms of whether they employ the default prepositions *blant* and *bland*, whether they use an alternative preposition, or whether they use an alternative construction. As mentioned in Section 2 we employed the Fisher Exact Test for all our calculations. Our results are presented in Tables 4 and 5 for Norwegian and Swedish respectively.

Table 4:P-values with 2 degrees of freedom for 3 sorts of translation
into Norwegian of 5 subtypes of *among(st)*

	EXPERIENCER	INCLUSION	SETTING	THEME
Agent	0.885	0.01	0.035	0.394
EXPERIENCER		0.013	0.018	0.205
INCLUSION			0.002	0.069
SETTING				0.447

Table 5:P-values with 2 degrees of freedom for 3 sorts of translation
into Swedish of 5 subtypes of *among(st)*

	EXPERIENCER	INCLUSION	SETTING	THEME
Agent	0.1	0.752	0.039	0.174
EXPERIENCER		0.095	0.16	0.06
INCLUSION			0.094	0.279
SETTING				0.885

If we were to apply a probability level of p=0.05 to the data in the Tables 4 and 5, we would end up with five significant differences in Norwegian and two in Swedish. However, employing such a measure would involve a 40% risk of attributing significance to a non-significant comparison in one of the ten cases in each table. This is because we have in both cases carried out ten calculations on the same data set. If we wish to avoid this risk, we have to adjust the significance level, as pointed out by Gries (in progress) with reference to the network for *through* in Egan (2012). Applying the Bonferroni Correction for multiple tests on the same data set yields a significance level of 0.005 rather than 0.05, which

means that the only significant difference we would be left with is that between SETTING and PROPER INCLUSION in translations into Norwegian.

Does this then mean that Tables 4 and 5 cannot be mined for any information at all about the network of senses of *among(st)* in English? We would suggest that, interpreted with care, the p-values in these tables may indicate some plausible cross-linguistic similarities in the construal of the semantic relationships involved in the various sorts of predications. For instance, the mutual p-value for THEME and SETTING is the highest for both of these sorts of landmarks in both sets of translations, indicating a possible closer relationship between a landmark that encodes a neutral role in a predication (THEME) and one that just codes background information (SETTING) than between either of these and the more actively involved AGENT and EXPERIENCER. The latter two, on the other hand, share a very high mutual p-value in Norwegian and the second highest for both in Swedish. The final thematic role, PROPER INCLUSION, patterns most closely with THEME in Norwegian and AGENT in Swedish. It is also the sense that exhibits the greatest difference in p-values between the two sets of translations.

To sum up, the values in the table point to a distinction between two pairs of conceptually linked among(st) landmarks, THEME and SETTING on the one hand and AGENT and EXPERIENCER on the other, with PROPER INCLUSION patterning differently in the two sets of translations.

5. Summary and conclusions

In this chapter we have examined all tokens of the two prepositions amid(st) and among(st) found in the texts that occur in both the ENPC and the ESPC, with a view to investigating whether the translation equivalents in the two languages can shed any light on the semantics of the original items.

We saw in Section 2 that all tokens of amid(st) in our material occur in phrases coding a SETTING, either spatial or circumstantial. Perhaps surprisingly, they are most often translated into Norwegian and Swedish by prepositions other than *blant/bland*. SETTING is also the most common of six functions coded by *among(st)* phrases. Unlike *amid(st)* tokens, these are most often translated into Norwegian and Swedish by the prepositions *blant/bland*. SETTINGS coded by *among(st)* differ from those coded by *amid(st)* in that they are more likely to be spatial rather than circumstantial. They are also more likely to occur with a State, whereas *amid(st)* is more likely to be used for the background of an Activity. At the end of Section 4 we showed how the similarities between translations into both languages may be used to group the various types of landmark complements of *among(st)* into two pairs, THEME and SETTING on the one hand and AGENT and EXPERIENCER on the other. The fifth type of landmark, PROPER INCLUSION, patterns differently in the two sets of translations.

Although much work remains to be done on the semantics of (other) prepositions as reflected in translations into these two and other languages, we would conclude by stating our conviction that the degree of overlap between the network for *among(st)* based on translations into Norwegian and Swedish provides some support for the hypothesis that translation equivalents can shed light on the semantic network of polysemous lexemes.

Notes

- ¹ We wish to thank two anonymous reviewers for their comments and suggestions. Thanks are also due to Gregory Garretson for his comments on an earlier draft of this paper. In addition Gudrun would like to thank the Swedish Institute for a research grant offered for a research stay at Uppsala University in October 2012 and Thomas would like to thank the research group *Arena for Kultur- og Språkfag* at Hedmark University College for financial support.
- ² The corpora are accessible via an online search tool to holders of an access account. For a description of the works included in the respective corpora see http://www.hf.uio.no/ilos/english/services/omc/enpc/ENPCmanual.pdf (for ENPC) and http://www.sol.lu.se/engelska/corpus/corpus/espc.html (for ESPC).
- ³ Since there are only two tokens of our final category DISTRIBUTION in our material, their translation equivalents cannot be subjected to statistical analysis. They are therefore not mentioned in the discussion of the translations of the various types of predication. They are however included in the numbers in Figures 2 and 3 and Table 3.
- ⁴ One anonymous reviewer points out that in some cases, such as 'among other things', translation by *blant/bland* is the only available option. This phrase occurs three times in our material. In all three cases it is translated by *bland annat* in Swedish. It is twice translated by *blant annet* in Norwegian and omitted from the third translation. Given the small number of occurrences of such fixed phrases in the corpora we chose not to single them out for separate analysis.
- ⁵ One should of course note that SETTING tokens account for over half the total number of tokens in Figure 2, so one is here comparing a subset of data with the whole set.
- ⁶ One anonymous reviewer rightly points out that given the small number of tokens of *amid(st)*, 16 in all, there is a danger that one text could skew the proportions completely. Indeed six of the 16 tokens come from the same original text, MH1. Three of these code Activities, two Achievements and one an Accomplishment. The four stative uses occur in four different texts.

Corpora

English-Norwegian Parallel Corpus:

http://www.hf.uio.no/ilos/english/services/omc/enpc/

English-Swedish Parallel Corpus:

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

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