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Metaphor variation across L1 and L2 speakers of English: Do differences at the level of linguistic metaphor matter?∗

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English and Swedish, which are both Germanic languages spoken in similar cultures in the Western World, display many similarities with regard to the conceptual metaphors reflected in them. However, the way that the same conceptual metaphor is linguistically instantiated in both languages may be somewhat different. This chapter is a corpus-based analysis of metaphorical ‘path’, ‘road’, and ‘way’ sentences in English produced by speakers with British English as their first language (L1) and Swedish university students with English as their second language (L2). The aim is to see how these L2 speakers of English deal with differences at the level of linguistic metaphor in the two languages, and find out how important this level of organization really is.

Keywords: linguistic metaphors, Swedish, English, corpus, foreign language learning.

1. Introduction

This chapter is a corpus-based analysis of metaphorical ‘path’, ‘road’, and ‘way’ sentences in English produced by speakers with British English as their first language (L1) and Swedish university students with English as their second language (L2). The aim is to see how these L2 speakers of English deal with differences at the level of linguistic metaphor, and find out how important this level of organization really is.

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In recent years, several important cognitive linguistics studies have shown how variation in more or less universal embodied experiences is provided by our cultural experiences (e.g. Kövecses 2005, Kövecses 2006). Yu (2008: 253), for instance, compares English and Chinese body-part (face) metaphors and demonstrates how culture filters our bodily experiences, and only allows some of these to map onto certain target concepts. As argued by Cameron (2008: 209), however, “claims about conceptual metaphor have abstracted away from the use of linguistic metaphor in the talk of individuals”. Accordingly, conceptual metaphor studies have received much criticism related to their top-down approach emphasizing concepts, and not words, superordinate categories instead of basic level categories, and universal, monolithic aspects of embodiment rather than nonmonolithic ones (see Kövecses 2008).

In the present chapter, I explore the thesis that language, which is intimately connected with culture, also functions as a filter. I argue that the “choice of one from many possible options in the large pool of bodily experiences” (Yu 2008: 259) does not only depend on language-external cultural understanding and interpretation; it also depends on what is encoded in language and on how what is encoded in language relates to the world around us. Even though metaphors are grounded in embodied experience, our language still shapes how these experiences are used.

The cultural and linguistic backgrounds of the speakers whose texts are part of this study are very similar (Swedish and British English are both Germanic languages spoken in similar cultures in the Western World), and so are the ‘path’, ‘road’, and ‘way’ sentences studied here at the levels of primary\(^1\) and complex metaphor.\(^2\) But at the level of linguistic

\(^1\) *Primary metaphors* are here defined as basic metaphors “motivated by tight correlations in experience” (Grady 2005: 1600)
metaphor, there are many differences both between English ‘path’, ‘road’, and ‘way’ sentences, and between these and their Swedish equivalents. The differences at the level of linguistic metaphor, and the similarities at other levels, make a comparison between metaphorical ‘path’, ‘road’, and ‘way’ sentences in English produced by these two groups of speakers very useful. Other things being equal, a study of the linguistic differences allows us to learn more about the role played by language in metaphor production.

The idea that conceptual metaphors may be described at various levels of semantic schematicity has been raised previously by e.g Clausner and Croft (1997) who investigate properties of conceptual domain mappings by comparing them to morphological derivational relations. Their study suggests that metaphors can be “grouped together and organized in a taxonomic hierarchy” (Clausner and Croft 1997: 273). They identify “a particular level of schematicity—the maximally productive level—as entrenched in the minds of speakers [but do] not exclude the possibility that more schematic representations of the metaphor are entrenched as well” (Clausner and Croft 1997: 273). On the one hand, metaphorical domains are considered to function as “generalizations over specific metaphorical expressions” (Clausner and Croft 1997: 247), and on the other, linguistic expressions are considered to be conceptual structures that influence metaphor use (Clausner and Croft 1997: 248).

2. Linguistic Metaphor and Embodied Experience

2 Complex metaphors are defined as systematic cross-domain mappings “motivated by shared features between source and target domains” (Grady 2005: 1600).

3 Linguistic metaphor is used in the sense of linguistic realizations of complex and/or primary metaphors (see e.g. Svanlund 2007 who uses the phrase “lexical metaphor”).
In a traditional cognitive linguistics analysis, the ‘path’, ‘road’, and ‘way’ instances discussed here would be analyzed as linguistic reflections of motion metaphors such as ACTIONS ARE SELF-PROPELLED MOVEMENTS, PURPOSES ARE DESTINATIONS and DIFFICULTIES ARE IMPEDIMENTS TO MOVEMENT etc. (see e.g. Lakoff and Johnson 1999: 190-192). For instance, sentences 1-3 below (all taken from the British National Corpus [BNC]) are structured in line with the primary metaphors ACTION IS MOTION and PURPOSES ARE DESTINATIONS, and the complex metaphor AN ACTIVITY IS A JOURNEY.

(1) Power sharing was not an easy path to tread.
(2) [T]hey will be well on the road to enjoying reading.
(3) We've come a long way since the U.2 fiasco.

Whatever the similarities that exist between metaphorical ‘path’, ‘road’, and ‘way’ sentences at the levels of primary and complex metaphor, the terms do not seem to be interchangeable. Sentence 1 above, is about a metaphorical ‘path’ that is ‘not [...] easy to tread,’ but can metaphorical ‘roads’ and ‘ways’ be described in this way? Can we say ‘not an easy path/road to tread’? Studies of ‘path’, ‘road’, and ‘way’ sentences show that metaphorical ‘roads’ are typically efficient means of transportation and easy, not hard, to move along (see Johansson Falck in press). When we move along these fast and efficient routes, we typically do not move the way we do when there is reason to be cautious. This means that a manner-of-motion verb like ‘tread’ does not refer to prototypical motion along a metaphorical road (see Johansson Falck 2010).

Metaphorical ‘ways,’ on the other hand, are not likely to be ‘trodden’ because these are typically connected with someone’s or something’s motion through space and not an extended
locative artefact separate from the moving figure (i.e. that person or thing that is moving along the path, see Johansson Falck in press). The connection between metaphorical ‘road’ and fast motion is also evident from the phrase ‘will be well on the road to’ in sentence 2, which discusses the future success of people learning to read. The phrase ‘will be well on the way to’ also seems to work, but how about the phrase ‘will be well on the path to’? Unlike metaphorical roads, metaphorical paths tend to be ‘narrow,’ ‘steep’ and ‘winding’ (see Johansson Falck in press) and not suitable for smooth successful rides like these. Finally, Google searches on the internet show that the phrase ‘come a long way’ in sentence 3 above, is considerably more common than ‘come a long path/road.’ ‘Way,’ which is closely connected with someone’s motion though space is likely to be more apt than ‘path’ or ‘road’ in talk about the distance covered by someone. Unlike the other two terms, ‘way’ rarely focuses on an artefact ahead of a moving figure, but rather on the distance he or she travels. Moreover, motion verbs in ‘way’ sentences suggest that the direction of motion along the metaphorical ‘way’ is less restricted than motion along the metaphorical ‘path’ or ‘road.’ It can go in any direction we like and is not primarily connected with motion away from a figure on the given artefact/route (see Johansson Falck 2010). Consequently, we are more likely to ‘come a long way’ than to ‘come a long path/road.’

While acknowledging that each individual word “names a somewhat different concept [which] has its own logic, somewhat different from the others” (Lakoff & Johnson 1999: 186), traditional cognitive linguistics analyses do not account for differences such as those above, nor do they focus on how these relate to the theory of conceptual metaphor. The cognitive linguistic view, that conceptual metaphors are experientially based and intimately connected with our bodily experiences, is not typically accompanied by analyses that provide detailed explanation of this relationship. Even though the “language and logic of moving toward, reaching, or not reaching a destination are [indeed considered to be] recruited from
the source domain of movement through space” (Lakoff & Johnson 1999: 190), analyses within this framework do not reveal how, and in what different ways, artefacts and actions connected with different kinds of movement through space help us to structure the language and logic of that motion.

Differences between metaphorically used terms similar to those above have also been discussed by Zinken (2007). His comparison between the German vehicle pairs Weg (i.e., ‘path’) and Bahn (i.e., ‘course’), Kessel (i.e. ‘kettle’) and Topf (i.e. ‘pot’), and Boot (i.e. ‘boat’) and Schiff (i.e. ‘ship’) shows that these are form-specific (i.e. systematically associated with different figurative meanings) even though they belong to the same superordinate category. On his view, the differences suggest that “form-specific lexical concepts are a factor in the development of habitual analogies” (Zinken 2007: 459). Correspondences at more abstract levels of organization may not be “a psychologically real additional layer of analogical schemas” (Zinken 2007: 461), and might as well be a “post-hoc artefact[s] of sorting utterances on the part of researcher[s]” (Zinken 2007: 461).

Zinken’s theory, however, does not explain why metaphorical ‘path’, ‘road’, and ‘way’ sentences such as 1-3 above are all coherent with the ideas that travel through space is progress, and that the distance covered in both sentence 2 and 3 indicates how much progress has been made. Even though conversational interactions may indeed be a factor in the formation of analogical schemas, they do not explain why terms that belong to the same superordinate category tend to be structured in a coherent way at the levels of primary and complex metaphor.

Kövecses (2008) responds to e.g. Zinken's criticism of the cognitive metaphor theory and maintains that metaphorical mappings are found at the superordinate level. He agrees with Zinken that words with similar meanings cannot be used metaphorically in the same way, but argues that the differences are “due to the meaning foci associated with particular source
domains as well as to the fact that the words are based on different mappings” (Kövecses 2008: 176). For instance, ‘kettle’ and ‘pot’ differ because the concept of ‘kettle’ better expresses one of the meaning foci of the source domain CONTAINER, that is, the concept of ‘pressure’, than does the concept of ‘pot’, and metaphorical uses of ‘way’ and ‘course’ differ because they are related to different mappings (i.e. the concept of way’ is related to the metaphor MEANS OF ACTIONS ARE PATHS, and the concept of ‘path’ to the metaphor SCHEDULING HOW TO ACHIEVE ONE’S PURPOSE IS SCHEDULING HOW TO REACH ONE’S DESTINATION). Kövecses provides one explanation for interactions between patterns at various levels of organization but does not fully explore the role played by basic level experiences. Moreover, he does not consider the possibility that “the linguistic expressions themselves are also conceptual structures” (Clausner and Croft 1997: 273) and that patterns at the level of linguistic metaphor may be important play too.

Interestingly, Zinken's and Kövecses' explanations are not necessarily mutually exclusive. The view that one level of organization plays a role in the processes behind metaphorical language formation of analogical schemas is not necessary in conflict with the view that other levels of organizations may play a role too (cf. Clausner and Croft above). To give an analogous literal example, people who are finding their way through a city might both use their sense of direction and street names to navigate.

My previous study of metaphorical ‘path’, ‘road’, and ‘way’ instances (Johansson Falck in press) show that these are all structured in line with the function of routes of taking us from one place to another, from A to B. The close connection between the function of paths, roads and ways and the structure of the clauses indicates that human conceptualization processes operate on a much more specific level of abstraction than that of complex conventional cross-domain mappings, and that metaphorical expressions including ‘path,’ ‘road’ or ‘way’ are shaped by people’s embodied experiences of these objects in non-
metaphorical ways. Since paths, roads, and ways all take us from A to B, they are apt
scaffoldings both for the primary metaphor ACTION IS MOTION and the SOURCE-PATH-GOAL
schema. At the same time, differences between our experiences of these routes result in
differences between the usage patterns of metaphorical ‘path’, ‘road’, and ‘way’ expressions.
Both the similarities and the differences indicate that our embodied experiences with paths,
roads and ways, and particularly their function, enable us to reason and talk about our lives,
actions and relationships in the specific metaphorical ways that we do.

A comparison between English metaphorical ‘path’, ‘road’, and ‘way’ instances and
their Swedish equivalents, however, shows that even though speakers of two different
languages may have very similar experiences of paths, roads, and ways, they do not
necessarily use these experiences in identical ways. Just like the English sentences,
metaphorical utterances including the Swedish terms ‘stig’ (‘path’) and ‘väg’ (‘road’ or
‘way’), (e.g. ‘Syftet var att hitta nya vägar att rekrytera män.’ En. ‘The aim was to find new
ways to recruit men.’ ) are indeed structured in a coherent way at the level of conventional
conceptual metaphor in line with motion metaphors like those above. These too go back to
people’s embodied experiences with paths, roads or ways. Nevertheless, there are several
important differences between English and Swedish at the level of language. Swedish realizes
the meanings of ‘path,’ ‘road’ and ‘way’ in just two different terms (‘stig’ and ‘väg’), and
does not lexicalize the difference between ‘road’ and ‘way,’ which both correspond to ‘väg.’
Metaphorical ‘path’ instances in English are almost as frequent as their non-metaphorical
equivalents (see Johansson Falck in press), but metaphorical uses of Swedish ‘stig’ are rare,
and almost always part of a compound noun (e.g. utvecklingsstig = ‘development path’).
Moreover, English ‘way’ in the sense of “[a] method for doing something” (Rundell & Fox
2007 [henceforth MEDAL]) or “[m]eans, manner” (Brown 1993 [henceforth SOEDHP]) is
not at all related to the Swedish term ‘väg,’ but lexicalized as the term ‘sätt.’ As a result,
almost all metaphorical ‘path’, ‘road’, and ‘way’ expressions in English correspond to Swedish ‘väg’ sentences, or some other expression. Very many of these other expressions include the term ‘sätt.’ It seems that even if our uses of a given term go back to embodied experiences, and even if many of these are universal, speakers of different languages do not use exactly the same experiences to structure a given concept, but may rely on related, but still slightly different, experiences to do so (cf. Hickmann and Hendriks 2010).

In this chapter, the differences between ‘path’, ‘road’, and ‘way’ sentences and their Swedish equivalents at the level of lexical metaphor, and the similarities at the levels of primary and complex conceptual metaphor, are used to contribute to our understanding of how important the level of linguistic metaphor really is.

3. Cross-linguistic influence and transfer

Ever since the beginnings of the study of linguistic relativity and the work of theorists such as Wilhelm von Humboldt (1767–1835) and Benjamin Lee Whorf (1897–1941), a huge body of research has demonstrated the influence of language on thought in the fields of second language acquisition (SLA) and linguistic relativity (see Odlin 2005). Accordingly, SLA studies have shown that when speaking an L2 we are far from free from the “binding power” (Whorf 1956) of our L1. For speakers of an L2, influence from an L1 may result in meaning transfer (i.e. “any type of semantic or pragmatic influence from the first language, or from a second language in L3 acquisition [Odlin 2008: 310]), and conceptual transfer (i.e. “cross-linguistic influence involving relativistic effects” [Odlin 2008: 306]). The transfer may either be positive and help a speaker of an L2 to use the correct form, or negative and result in mistakes (see Odlin 1989: 26). Cross-linguistic influence from an L1 that does not involve
grammatical or semantic errors in an L2 may still result in differences in cognizing (see e.g. Stutterheim 2003). This chapter, which analyses how the “thought world” (Whorf 1956: 147) of one language is carried over to that of another, deals with conceptual transfer.

My hypothesis is that when producing English metaphorical ‘path’, ‘road’, and ‘way’ sentences, the Swedish L2 speakers of English that are part of this chapter will be influenced by what goes on at the level of linguistic metaphor in their L1, and hence by how their L1 encodes people’s experiences with the man-made or natural routes that allow them to move from one place to another. This will be reflected both in the frequency of the expressions and how they are used. These differences between the L1 and L2 speakers of English speakers are expected, despite the highly advanced level 4 of the L2 Swedish speakers, the many similarities between the two languages at the level of conceptual and primary metaphor when it comes to these expressions, and the fact that ‘path,’ ‘road’ and ‘way’ are “among the most basic words in English” (Rundell & Fox 2007 [MEDAL]) and should thus be more than familiar to the students of English that are part of this study.

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4 Before their university studies, Swedish students have studied English for about 6-9 years at Grundskolan, the 9-year compulsory school, and 3 years at Gymnasieskolan, the comprehensive upper secondary school. A passing grade on the standard course at Gymnasiet is required for university studies, but many students have better grades. Younger Swedes today come into contact with a lot of English in their daily lives (e.g. through films, TV programmes, music, the internet, and travel to foreign countries). When taking up their university studies, some of the students have native competence, or close to native competence. First-term English, however, generally attracts more heterogeneous groups of students with respect to their previous knowledge of English. In second-term classes of English, there is usually a larger proportion of students who are specifically interested in languages and/or are extra talented.
Very similar usage patterns between the English L1 speakers and the Swedish L2 speakers of English, and similar frequencies of the expressions, would contradict this hypothesis.

4. General method and material

The study is primarily based on dictionary and corpus data. Data about the English terms ‘path,’ ‘road’ and ‘way’ was retrieved from MEDAL and SOEDHP, and data about the Swedish terms ‘stig’ (‘path’ or ‘track’), ‘väg’ (‘road’ or ‘way’), and ‘sätt’ (‘means, manner, method’) from the Swedish dictionary *Norstedts svenska ordbok*, (Allén 1999: 3 [NSO]), and the Swedish online dictionary *Svenska Akademiens ordbok* (Eaker & Eriksson [SAOB]). Translations of phrases including these terms were compared by means of *Norstedts stora engelska ordbok* [NSEO] (Petti 1999).

Sentences including either one of the terms ‘path,’ ‘road’ or ‘way’ were extracted from the BNC and the Uppsala Student English Corpus (USE), available at http://nora.hd.uib.no/icame/ij24/. The BNC is a 100 million word corpus of late twentieth-century British English containing about 4,000 samples from a wide range of texts (90% of these texts are written, and 10% orthographically transcribed spoken texts). USE is a 1,221,265-word corpus consisting of 1,489 essays written by 440 Swedish first-, second-, and third-term university students of English. However, the number of essays written by third-term students is small, and only essays written by first- and second-students were included in this study.
The BNC data was used to study the usage patterns of metaphorical ‘path’, ‘road’, and ‘way’ expressions produced by native speakers of British English. 1,000 random instances of each term were extracted.

Data from USE provided information about ‘path’, ‘road’, and ‘way’ expressions produced by Swedish university students. All instances from this much smaller corpus were extracted.

The corpus material was then divided into metaphorical and non-metaphorical instances (including both literal and metonymic instances) by means of a modified version of the method for identifying metaphorically used words in discourse (MIP) (Pragglejaz Group 2007). Because of the size of this material (5,557 instances), the entire text-discourse of a given instance was here only consulted when a context consisting of two to five lines was not enough to establish whether the instance is metaphorical or not.

Next, frequencies and uses of metaphorical ‘path’, ‘road’, and ‘way’ instances were analysed as well as the prepositions, verbs, and phrases that modify the head nouns ‘path,’ ‘road’ or ‘way’ (modifying phrases include both premodifiers (e.g. attributive adjectives like ‘long [path]’) and postmodifiers (e.g. relative clauses like ‘[path] of the jeep’). From prepositions and verbs we learn a lot about motion along the path, road, or way. The modifying phrases further define the paths, roads or ways.

Finally, comparisons between the usage patterns of ‘path’, ‘road’, and ‘way’ instances from the BNC and USE were made, as well as occasional comparisons with non-metaphorical instances. Dictionary data and searches of the online concordance of Svenska Akademiens ordbok (http://g3.spraakdata.gu.se/saob/konk_main.phtml), and the Swedish pages on Google, were used to check the frequencies of Swedish metaphorical ‘stig’, ‘väg’ and ‘sätt’ expressions.
Given the differences between the BNC and USE (e.g. the difference in size, and in the
distribution of spoken versus written material) the two corpora are unlikely to be highly
comparable. However, the random instances extracted from the BNC are expected to provide
information on the usage patterns of ‘path’, ‘road’, and ‘way’ in British English, and these can
then be contrasted with the usage patterns of these terms in the material written by Swedish
L2 speakers of English.

5. How often are the terms ‘path’, ‘road’, and ‘way’ used in metaphorical ways?

As a first step, the frequencies of metaphorical ‘path’, ‘road’, and ‘way’ instances in the BNC
and USE were compared. The aim was to find out which one of the terms ‘path,’ ‘road’ and
‘way’ the L1 speakers of British English and the Swedish L2 speakers of English use the most
with metaphorical senses.

The dictionary material and searches of the concordance of SAOB suggested that ‘stig’
(En. ‘path’) is seldom used in metaphorical ways. No metaphorical senses of this term were
found in the Swedish dictionaries, and in the bilingual NSEO dictionary, metaphorical ‘path’
instances (e.g. ‘he's always crossing my path’) are either translated with Swedish ‘väg’
instances (e.g. ‘han korsar ständigt min väg,’ En. ‘he keeps crossing my way’), and not ‘stig’
instances, or they are translated with some other expressions (e.g. ‘jag stöter ständigt på
honom,’ En. ‘I keep running/bumping into him’). As a consequence, the proportion of
metaphorical ‘path’ instances in USE was expected to be smaller than in the BNC material.

At the same time, the NSEO dictionary entries imply that metaphorical ‘way’
expressions are the most common translations of metaphorical ‘väg’ expressions, and that of
the two English terms for ‘väg,’ ‘way’ and ‘road.’ ‘Way,’ which primarily refers to “the
direction in which something or someone travels,” is more general and less restricted in its
uses. The other term, ‘road’ is typically “a way that leads from one place to another, especially one with a hard surface that cars and other vehicles can use” (MEDAL; see also Johansson Falck in press). For these reasons, the proportion of metaphorical ‘way’ instances, but not necessarily that of metaphorical ‘road’ instances, was expected to be higher in the USE material than in the BNC material.

Table 1 below shows the frequencies of the metaphorical ‘path’, ‘road’, and ‘way’ instances in the two corpora. The USE material was divided into two groups, material from essays written by first-term students, and essays written by second-term students, to make any differences between these two groups evident.

The distribution of ‘path’, ‘road’, and ‘way’ instances in the two USE groups was very similar; both groups used ‘path’ much less often than native speakers of British English. First-term students did so in less than 1% of the cases, second-term students in 1% of the cases, and native speakers of English in 26% of the cases. This tendency is even more evident considering that 11 ‘path’ instances in the first-term essays were produced by only 7 students5.

The Swedish students also used ‘road’ expressions in metaphorical ways slightly less often than the native speakers of British English in my material. Less than 1% of the ‘road’ instances in the first-term student essays were used in metaphorical ways, and 1% of those in

5 The number of ‘road’-instances in the second-term essays, and the number of ‘way’ instances in the USE corpus were also larger than the number of texts in which they were found, and the same may be true of ‘path’, ‘road’, and ‘way’ instances in the BNC material. The smaller the number of instances, however, the more important this tendency is. Thus, it is also relevant that the 7 instances of ‘road’ in the USE Corpus originate from 6 texts, but not as significant that the number of ‘way’-instances in this corpus is larger than the number of texts that they come from.
the second-term essays, as opposed to 4% of the ‘road’ instances from the BNC. This difference was not expected.

Both groups of Swedish students had a greater tendency than the British speakers to prefer ‘way’ in metaphorical language to ‘path’ or ‘road.’ 99% of the first-term students’ metaphorical uses of ‘path,’ ‘road’ or ‘way’ consist of ‘way’ instances, and 97% of those of the second-term students, while only 70% of all the metaphorical uses of ‘path,’ ‘road’ or ‘way’ in the BNC material are ‘way’ instances. The difference between Swedish first-term and second-term students is small but may possibly reflect a tendency for second-term students to become more similar to native speakers of English than first-term students.

Taken together, the frequency of ‘path’, ‘road’, and ‘way’ instances in my material indicate that even if ‘path,’ ‘road’ and ‘way’ are basic English terms, and the Swedish students are proficient speakers of English, they are still affected by the linguistic metaphors in their L1 in their uses of metaphorical expressions in their L2.

6. **How are metaphorical paths, roads and ways described?**

Phrases that are used to describe the ‘paths,’ ‘roads’ and ‘ways’ are shown in Tables 2, 3 and 4. Phrases related to the source domains are shown in the left-hand columns, and phrases related to the target domains in the right-hand columns. The distinction between source and target domain modifiers is based on an analysis of their contextual use. Phrases that may be used to describe the real-world ‘paths’, ‘roads’, and ‘ways’ are analysed as source domain modifiers, and phrases that necessarily modify target concepts as target domain modifiers.
As is evident from Tables 2, 3 and 4, the modifiers of ‘path,’ ‘road’ and ‘way’ are not evenly distributed. There is a tendency in the BNC to describe ‘paths’ and ‘ways’ more carefully than ‘roads’ (64% of ‘path’ instances are modified, 58% of ‘way’ instances, and 29% of ‘road’ instances). The fairly large number of phrases that provide information about ‘way’ (Table 4) may be due to a need to specify ‘way,’ which, in tending to be connected with ‘direction of motion’ seems to be least physically grounded. The more detailed descriptions of ‘path’ (Table 2) as opposed to those of ‘road’ (Table 3) may be related to the fact that motion on real-world ‘paths’ is typically slower, trickier, and more varied than on real-world ‘roads.’ The slower speed makes attention to details along the path possible, and the variation with which people or things move along the path may require more descriptions than motion along the smooth ‘road’.

The distribution of the modifiers of ‘path,’ ‘road’ and ‘way’ in USE is similar to that in the BNC material (47% of ‘path’ instances are modified, 46% of ‘way’ instances, and 29% of ‘road’ instances). The number of ‘path’ and ‘road’ instances, however, is too low for this to be a reliable tendency.

The biggest qualitative differences between the modifiers of ‘path,’ ‘road’ and ‘way’ from the BNC and USE are found in the ‘path’ and ‘road’ texts.

The modifiers of ‘path’ differ with respect to their origin, and to the richness of the information they provide. The modifiers of ‘path’ in the USE material (Table 2 below) tend to come from the target domain. The ‘path’ is referred to as ‘the path of growth,’ ‘the path of learning’ or ‘the golden path.’ The only terms that may come from the source domain are ‘straight’ and ‘right.’ The BNC material, by contrast, include both target domain terms such as ‘critical,’ ‘growth’ and ‘career path’ and phrases such as ‘not easy,’ ‘not clear,’ ‘not straight,’ ‘narrow,’ ‘crooked,’ ‘well-trodden’ and ‘clear,’ which may all be connected with the
source domain of real-world paths. From the majority of these, we may infer that motion on or along the metaphorical ‘path’ is difficult.

The modifiers of ‘path’ in the USE material (Table 2 below) provide much less information about the paths than those from the BNC. The Swedish L2 speakers of English, who are not used to using the equivalent term metaphorically in their native language, do not describe paths in detail. Both the L1 and L2 speakers of English, structure their uses in line with the ACTION IS MOTION metaphor. But unlike the L1 speakers of English, the Swedish L2 speakers refrain from using the differences between paths, roads and ways to express more subtle shades of meaning. As in the BNC texts, metaphorical ‘paths,’ ‘roads’ and ‘ways’ in the USE texts all take us from A to B, but there is no qualitative difference between them.

Table 3 below, shows that in the BNC material, metaphorical roads can be ‘long,’ ‘dangerous,’ ‘straight’ or ‘rough’ like real roads. As in real life, there are various kinds of roads (e.g. ‘lonely,’ ‘high’ or ‘different’) roads, but roads may also be described by words from the target domains (e.g. ‘electoral road’ or ‘road of different regional governments having different tax rates’). Unlike some of the phrases that modify metaphorical ‘path’ in the BNC, these phrases are not about width, but length. There are 50 instances of the collocation ‘wide’ + ‘road’ and in the BNC, and 150 instances of ‘narrow’ + ‘road.’ However, none of these ‘road’ instances are metaphorical. In the corpus there are also 185 instances of the collocation ‘long’ + ‘road,’ and 42 of these are metaphorical. Considering the focus on length, rather than width in the metaphorical BNC instances, the uses of ‘narrow’ and ‘wide’ to describe ‘road’ in the second-term USE texts seem odd. When an L1 speaker of British English says something about motion from A to B that takes place on or along something that
is narrow, or wide, that something is more likely to be a path than a road. That is, although roads may indeed be both narrow and wide in the real world, metaphorical ‘roads’ are typically fast, and easy to move along and their width less relevant (see Johansson Falck in press). Metaphorical ‘paths,’ on the other hand, which may be anything from hard to easy to move along, and described in a number of different ways, are sometimes specified as either narrow or wide. In Swedish, where ‘stig’ (‘path’) is not often used in metaphorical ways, metaphorical roads can be both narrow and wide. This is reflected by expressions such as ‘den smala vägen’ (En. ‘the straight and narrow’ (NSEO), or lit. ‘the narrow road/way’), and ‘den breda vägen’ (En. ‘the primrose path,’ or lit. ‘the wide road/way’). The uses of ‘narrow’ and ‘wide’ in the USE texts to describe the metaphorical ‘road’ are likely to be due to transfer from Swedish.

There are very many similarities between the descriptions of metaphorical ‘way’ in the USE and BNC texts (see Table 4 below). Not only were terms both from the source and target domains used in all text-groups, but the modifiers also fell into the same groups, and quite a few of the terms were identical. In both the USE and the BNC texts, ‘long’ is the most frequent source domain term connected with problematic motion, ‘best’ is the most frequent term from which we can infer that the way is easy or pleasant to move along, and ‘same’ is the most frequent term that links one specific way with another.

The only important difference between USE and the BNC texts seems to be that in the USE texts, expressions connected with ‘manner’ are not usually found in contexts including other terms related to motion.
The differences between the BNC and the USE texts were greatest among the target domain modifiers, and may be related to the topics discussed (see Golden, this volume) and/or cultural differences. A very large number of the modifiers in the texts written by first-term students describe ‘way’ as ‘negative’ (18 instances) or ‘positive’ (11 instances). Quite a few of these ‘way’ instances are ‘effective’ (10 instances) or ‘efficient’ (7 instances), ‘natural’ (14), ‘proper’ (10), ‘normal’ (8) or the opposite ‘strange’ (5). They are also ‘possible’ (10), ‘democratic’ (9), ‘Swedish’ (9) or ‘American’ (7). The most frequent terms in the texts written by second-term students are ‘certain’ (5), ‘effective’ (4), and ‘friendly’ (4). Something may be described as done in ‘a strange sort of way,’ or ‘odd’ in the BNC texts too, and the ‘way’ may be ‘possible,’ but there is no equivalent focus on either ‘negative’ or ‘possible ways,’ ‘efficiency’ or what is ‘proper,’ ‘normal’ and ‘natural’ as opposed to ‘strange.’ The large number of words belonging to the last of these groups of modifiers is interesting given certain aspects of Swedish culture communicated by the Swedish adjective ‘lagom.’ The English translations of ‘lagom,’ which is an old Swedish ideal, and, to my knowledge, is not used in any other language, are ‘just right,’ ‘just enough,’ ‘sufficiently,’ ‘in moderation’ and ‘moderately’ (NSEO). According to the ‘lagom’ norm, things are not supposed be too much, or too little, but just right in between these two endpoints, although less of something is usually considered slightly better than more of something (i.e. the focus on ‘proper,’ ‘normal’ and ‘natural’ as opposed to ‘strange’ seems related to the ‘lagom’ norm).

The terms used to describe ‘path’ and ‘road’ indicate then that Swedish students differ more from native speakers of British in their descriptions of what the ‘path’ or ‘road’ is like than in their description of the ‘way.’ Moreover, the terms imply that, unlike L1 speakers of British English, these Swedish L2 speakers of English do not make a difference between the terms related to what they know about real-world ‘paths,’ ‘roads’ and ‘ways.’ L1 speakers of Swedish, who tend not to use the term ‘stig’ metaphorically, but use ‘väg’ expressions or
completely different expressions instead, are not used to making this distinction when using these terms in metaphorical ways in their L1, and do not do so when speaking English either. Language seems to be more than just language; the semantic distinctions lexicalized in words such as ‘path,’ ‘road,’ ‘way,’ ‘stig’ and ‘väg’ influence in what ways our embodied experiences are used to understand one kind of thing by means of another.

@@Insert Table 4 here

7. How are spatial relationships including ‘paths,’ ‘roads’ or ‘ways’ described?

Since the number of ‘path’ and ‘road’ instances in the USE material is very small, and not all these instances include prepositions, the use of prepositions in metaphorical ‘path’ and ‘road’ will not be discussed in detail here. Despite the many differences between Swedish and British English with regard to how prepositions are used, the prepositions in the specific clauses discussed here are very similar in the two languages. Accordingly, no major differences were found between the English produced by Swedish L2 speakers and British L1 speakers in my material. Google searches of Swedish pages on the internet showed that ‘på’ (‘on’) is quite the most preferred preposition in both ‘stig’ and ‘väg’ expressions, and ‘till’ (‘to’) the second\(^6\). Both these prepositions were found in the ‘path’ and ‘road’ instances in USE Corpus too, and they are frequent in the BNC texts.

\(^6\) Searches of the phrase ‘på väg’ returned 8,150,000 hits (‘på vägen’ 2,440,000 hits), ‘väg till’ (En. ‘to’) 2,600,000 hits (‘vägen till’ 2,520,000), and the rest of the more frequent prepositions (‘i,’ ‘längs,’ ‘mot,’ ‘genom,’ ‘ur,’ ‘ut’, ‘vid’) between 68,100 and 1,650,000 hits.
The prepositions included in the ‘way’ instances fall into two main groups; those used together with ‘way’ in the sense of ‘manner’ or ‘manner of motion’ (see Table 5, group A below), and those used with ‘way’ in the sense of ‘direction’ or ‘motion from one place to another’ (Table 5, group B). Both ‘of’ and ‘in’ are typically used with ‘way’ in the sense of ‘manner’ (e.g. ‘a way of affirming belief,’ ‘in the way they think,’ ‘the way in which we can choose,’ etc.), and the rest of the prepositions in the direction/motion sense (e.g. ‘there are bound to be plenty of bumps along the way’ and ‘you were well on the way to the top of the money league’).

Swedish translations of phrases including ‘way’ in the sense of ‘manner’ do not include the term ‘väg’ (En. ‘way, road’), but the completely unrelated term ‘sätt’ which can also be used in the senses of ‘method’ and ‘means.’ This term is very common in Swedish. A Google search returns 22,100,000 Swedish hits for ‘sätt,’ which can be compared with 13,500,000 hits for ‘väg,’ and 3,150,000 Swedish hits for ‘stig.’ Similarly, 11,951 instances of ‘sätt’ were found in SAOB, 5,005 instances of ‘väg,’ and 607 instances of ‘stig.’ Swedes learn to translate phrases including the term ‘sätt’ with phrases including ‘way’ (e.g. ‘på annat sätt,’ “in another (in a different) way” [NSEO]) quite early on. Unlike ‘way,’ however, ‘sätt’ is not connected with motion from one place to another.

Since phrases including ‘sätt’ are this frequent in Swedish, transfer resulting in more ‘way’ instances in the sense of ‘manner’ in the Swedish texts than in the British were expected in the USE material. This was seen in texts written by both first- and second-term students. As many as 84% of the texts written by first-term students, and 86% of the texts by second-term students (see Table 4 below) included the combinations ‘way of’ [e.g. doing

Searches of the phrase ‘på stigen’ returned 29,300 hits (‘på stig’ 11,200) and other prepositions between 5 and 16,000 hits.
something], ‘in the way [that]’ or ‘way in [which].’ This can be compared with 70% of the most frequent prepositional phrases in the BNC texts.

Given that the English term ‘way,’ but not Swedish ‘sätt’ is related to motion, the manner-oriented ‘way’ instances in the USE material were expected to include fewer other terms about motion from one place to another (e.g. motion verbs, certain prepositions, certain verbal nouns etc.) than the BNC material. This was indeed the case. 21 out of 229 (9%) BNC instances of ‘the way’ were followed by a phrase referring to motion (e.g. ‘the way you walk,’ ‘the way he seemed to think out what he wanted to say as he went along’ etc.). 15 out of 407 (4%) ‘the way’ instances in the USE texts written by first-term students did so, and 3 out of 88 ‘the way’ instances (3%) in the texts written by second-term students. Similarly, 5 out of 100 ‘way of’-instances in the BNC material (5%) implied motion from one place to another (e.g. ‘Another way of making your money go further’), but only 3 out of 398 (<1%) of ‘way of’-instances in texts written by first-term students, and none of the 96 ‘way of’-instances written by second-term students. 2 out of 43 ‘the way in which’-instances in the BNC material, implied motion (e.g. ‘the way in which Mr Morrison bounced back’), but none of the 6 instances in each USE group.

The low frequencies of motion words in the Swedish material indicates that Swedes, who are not used to thinking of manner as motion, tend not think of motion when using English way instances either. One possible explanation for this is that they downplay ‘motion’ when highlighting ‘manner.’ Another is that in the ‘way’-as-manner cases, they have simply learnt to use ‘way’ as a manner adverbial marker and that this overrides the perceived metaphoricity of these expressions.

No matter which explanation is correct, the difference between Swedish speakers and British speakers of English observed here implies that the use of ‘way’ in sentences such as ‘the way in which Mr Morrison bounced back’ in the BNC material is not simply the result of
learning to associate the term ‘way’ with ‘manner,’ but also connected with what we know about ‘way’ (i.e. that a ‘way’ takes us from one place to another) and with thinking about manner as motion through space in line with the ACTION IS MOTION metaphor. The difference between the Swedish material and the British imply that the terms that are actually used in metaphorical language are important, and that uses of specific words are not simply linguistic behaviour, but connected with certain ways of thinking related to our knowledge of the world through bodily experiences and conceptual structures at a more general level of organization.

Of the prepositions used with ‘way’ in the sense of ‘direction’ or ‘motion’ (group B below), ‘to’ was the most frequent in the BNC material (B, Table 5 below). 12% of the prepositions in this material were ‘to’ instances, 4% were ‘out’ instances and 3 % ‘on’ instances. The most frequent preposition in the USE texts written by first-term students was ‘on’ (5%) followed by ‘out’ (3%) and ‘to’ (2%). The most common prepositions in the texts written by second-term students were ‘out’ (4%), ‘along’ (2%) and ‘to,’ ‘on’ and ‘by’ (all 2%). The tendency for native speakers of British English to prefer the preposition ‘to’ in talk about somebody’s or something’s motion along the way is thus not reflected by a similar tendency in the Swedish material. Instead of using ‘to’ in talk about this type of motion, Swedish first-term students seem to prefer ‘on.’ This tendency is similar both to the non-metaphorical ‘way’ instances in the BNC, and to Swedes’ uses of the Swedish equivalent ‘på,’ the most frequent preposition in Swedish ‘väg’ expressions overall on the Swedish pages on the Internet.

Both Swedes and native speakers of British English often use the expression ‘way out.’ The preposition ‘out’ is the 2nd most frequent in both the BNC material, and the texts written by 1st term-students, and the most frequent in the texts written by second-term students. Almost all the instances in the texts written by first-term students were ‘way out’ instances, and so were most of the BNC instances, and about half of the instances in the texts written by
second-term students. The Swedish expression ‘väg ut’ (‘way out’) is fairly frequent too. A Google search of the Swedish pages returns 2.5 million hits for the phrase.

@ Insert Table 5 here

In sum, both similarities and differences between the prepositions used in combination with metaphorical ‘path’, ‘road’, and ‘way’ instances in the BNC and the USE material were found. Some of the similarities may be related to similarities between Swedish and English (i.e. the English prepositions ‘on’ and ‘to’ and their Swedish equivalents ‘på’ and ‘till’ are all frequently used together with these terms), and some with the fact that these Swedish L2 speakers of English know English quite well. The differences, however, imply that what goes on at the level of language is also important. Although the Swedish students in my material are proficient and the expressions common, they are still affected by thought patterns connected with their L1. They tend not to associate ‘way’ in the sense of manner with motion as often as the L1 speakers of British English in my material do, and the more frequent Swedish focus on motion ‘on’ the path and way rather than motion ‘to’ something is reflected by more ‘on’ instances in these groups and fewer ‘to’ instances than in that of British speakers of English. The uses of ‘to’ and ‘on’ in the Swedish and English ‘road’ instances are very similar. The Swedish term ‘väg’ may refer to precisely the same kind of artefact as ‘road,’ which may, at least in part, explain the similarities. This means that the specific artefact (source domain) that motivates the metaphorical expressions is the same.

8. What do we do ‘on,’ ‘along’ or ‘near’ the metaphorical ‘path,’ ‘road’ and ‘way’?
The Swedish tendency to focus on motion ‘on’ the ‘stig’ (‘path’), and the English tendency to focus on motion ‘to’ something on the path is also suggested by a comparison between the verbs used together with ‘path’ in the BNC material and in the USE texts written by first-term students. All the most frequent motion verbs in the BNC material (e.g. ‘follow/ing/ed’ (16/3/7 instances), ‘pursue/d’ (3/3), ‘continue/s/d’ (3/2/1) and ‘lead/led’ (4/1)) except ‘tread/ing/trodden’ (2/1/3) have this focus, but none of the USE instances do. Other frequent verbs in this material are ‘take/ing’ (4/5) and ‘choose/chosen’ (3/3), which focus on decisions about courses of actions, ‘provide/s/ing’ (1/3/1), which emphasize preparations before action can be taken, and ‘find/found’ (2/3) that are about finding a given course of action. The USE material written by first-term students is similar to the BNC material in being about decisions about action. Here the most frequent verbs are ‘choose’ (3 instances), ‘decide to/what path to walk’ (2 instances) and ‘cross.’ The occurrence of 2 ‘walk’ instances in this fairly restricted material, however, suggests a different tendency in the Swedish data than in the British English. As a possible result of transfer from Swedish or from patterns including non-metaphorical ‘path,’ Swedish first-term students seem more likely to use ‘walk’ in metaphorical ‘path’ contexts than native speakers of British English. Although the BNC material is much larger than the USE material it only includes 1 metaphorical instance of ‘walk.’ Accordingly, an analysis of the collocation ‘walk’ + ‘path’ in the rest of the BNC suggests that native speakers of British English seldom use the term ‘walk’ in metaphorical ‘path’-contexts. Only 3 of 58 ‘walk’ + ‘path’ collocations are metaphorical (see Johansson Falck 2010). In contrast, Google searches of the collocations of the Swedish term ‘stig’ (En. ‘path’) show that the collocation ‘stig-gå’ (‘walk/go’) is very common in Swedish (see Table 6 below).

Unlike the verbs used together with ‘path’ in the USE material written by first-term students, those in texts written by second-term students, (i.e. ‘follow,’ ‘lead’ and ‘take’) do
not stand out as different from those in the BNC material. There are more than two instances of all these verbs in the BNC material and ‘follow’ is the most frequent.

If we consider the verbs included in metaphorical ‘road’ instances, the first-term students are slightly closer to the British L1 speakers of English than the second-term students. They use the verbs ‘be,’ ‘lead’ and ‘go,’ and second-term students the verbs ‘follow’ (2 instances), ‘choose,’ ‘pursue’ and ‘lead’ (same text). ‘Be,’ ‘go’ and ‘follow,’ but not ‘choose,’ ‘pursue’ and ‘lead’ are found in the BNC material. The difference between the two Swedish groups, however, is small and transfer from Swedish would not have interfered with the Swedish first-term students’ uses of ‘be’ and ‘go.’ In fact, given how frequent both ‘vara’ (‘be’) and ‘gå’ (‘go, walk’) are in combination with ‘väg’ (‘way’) in Swedish sentences⁷, these uses may even be the result of positive transfer. Almost all the verbs in the Swedish texts are frequent in combination with ‘väg’ (En. ‘road/way’⁸), and Swedish transfer may explain why the second-terms students, unlike the British speakers, use the verbs ‘choose,’ ‘pursue’ and ‘follow.’ The Swedish equivalent of ‘lead,’ however, is fairly infrequent⁹ in Swedish ‘väg’-sentences too, and transfer does not seem to explain why both Swedish groups

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⁷ Google searches (Nov 3, 2008) return 6,880,000 Swedish hits for ‘väg’ and ‘gå,’ and 3,630,000 hits for ‘är på väg’ (‘is on the road to’).
⁸ Google searches (Nov 3, 2008) return 3,050,000 Swedish hits for väg and välja (‘choose’), 2,130,000 for väg and följa (‘follow’, ‘pursue’).
⁹ Google searches (Nov 3, 2008) return 8,570 Swedish hits for ‘vägen leder’ (‘the way/road leads’).
use this verb. Possibly it is related to the relatively high frequency of ‘följa’ (‘follow’), which is what the figure does when the road ‘leder/bär’ (‘leads’).

In both the British and the Swedish corpora, ‘be’ is the most frequent verb in the metaphorical ‘way’ sentences (see Table 7 below). The texts are also similar in including several instances of the motion verbs ‘go’ and ‘get,’ and quite a few target domain verbs. The large number of target domain verbs means that some of the differences between the corpora are likely to be due to the topic of the texts. Interestingly enough, the Swedish focus on ‘negative’ or ‘possible ways,’ ‘efficiency’ or what is ‘proper,’ ‘normal’ and ‘natural’ as opposed to ‘strange’ (discussed earlier), is reflected by a large number of verbs in the Swedish material written by first-term students discussing how people ‘think,’ ‘see,’ ‘behave’ or ‘act,’ or how they ‘find,’ ‘feel,’ ‘express’ or ‘treat’ something. The verbs ‘think,’ ‘see’ and ‘find’ are common in the BNC material too, but, taken together, there is a stronger tendency for verbs in the USE texts written by first-term students to be about behaviour. Three related verbs were found in the USE texts written by second-term students; ‘behave,’ ‘think’ and ‘find.’

Even though Swedish does not distinguish between ‘road’ and ‘way’ and the Swedish term ‘väg’ (‘way’) typically refers to an artefact on which we can walk, the Swedish students do not seem to connect metaphorical ‘way’ with a physical artefact. None of the motion verbs used together with ‘way’ (i.e. ‘come,’ ‘get’ and ‘take’) in the Swedish material indicate that the motion takes place on an artefact that is separate from those who are travelling on or along it. Just like the L1 speakers of English, the metaphorical ‘way’ instances in the L2 material are based on the sense of the ‘direction of someone’s or something’s motion.’

In addition to the motion verbs and target domain verbs, quite a few verbs in the BNC material are about making one’s way in one way or the other (e.g. ‘prepare,’ ‘pave’ and
‘fight’), or connected with finding a way (e.g. ‘find,’ ‘point,’ ‘show’) (cf. e.g. Jackendoff 1990, Goldberg 1995). None of these verbs are very frequent in the USE material.

@@Insert Table 7 here

We may conclude that the biggest differences between the British and Swedish material were found in the metaphorical ‘path’ instances. The verbs used in combination with ‘path’ in the USE texts focus on motion ‘on’ the path to something, and not motion ‘along’ the path. In that sense, they are different from those in the BNC texts, but similar to conceptualizations involving the Swedish term ‘stig.’ No major differences were found with respect to the verbs used together with metaphorical ‘road’ and ‘way’ instances. The similarities between the ‘road’ instances in the two corpora may be due to similarities between English and Swedish. Again, Swedish students seem to be more similar to L1 speakers of British English in their metaphorical ‘way’ instances than in their ‘path’ instances. The reasons for this are not clear from the study. A tentative suggestion is that when learning an L2 we pay more attention to, or find it easier/more important to remember, expressions that are closer to those in our L1 than those connected with a different “thought world” (Whorf 1956: 147).

9. Conclusion

My analysis of the USE and BNC texts showed that there are many similarities between metaphorical ‘path’, ‘road’ and ‘way’ instances produced by Swedish university students of English, and L1 speakers of British English. The ‘path’, ‘road’ and ‘way’ instances written by the Swedish L2 speakers of English are all grammatical with no obvious errors. These uses
were probably facilitated by the fact that the terms are so common, and by the many similarities between Swedish and English at the levels of primary and complex metaphor.

More detailed analyses, however, show that there are several important differences between the two corpora. Swedish students use English ‘way’ expressions more often than British speakers, and ‘path’ and ‘road’ expressions less often than them. This tendency mirrors the pattern that Swedes tend to use ‘väg’ (En. ‘way/road’), but not ‘stig’ (En. ‘path’) in metaphorical ways. Unlike British English speakers, Swedish students do not use the differences between real-world ‘paths,’ ‘roads’ and ‘ways’ to express finer shades of meaning. Thus, Swedish students, who are not used to thinking of ‘stigar’ (‘paths’) in metaphorical ways, do not focus on the details of what is prototypical of real-world ‘stigar’ (‘paths’), that is, details that distinguish ‘stigar’ (‘paths’) from ‘vägar’ (‘roads/ways’). Instead, the Swedish students stick to the most relevant features of the mapping, (i.e. that paths are meant for motion from one place to another), and in that sense must be similar to their metaphorical uses of ‘väg’ (‘road/way’) in their L1.

Another important difference between the corpora is that Swedish students seem to be influenced by the fact that the English term ‘way’ also corresponds to the Swedish term ‘sätt,’ which, unlike ‘väg,’ focuses entirely on manner and not motion. Metaphorical ‘way’ instances used in the sense of ‘manner’ in the texts written by Swedish students include fewer terms related to motion than those from the BNC material; sentences such as “[T]he way he seemed to think out what he wanted to say as he went along” are thus less usual in the Swedish material (my emphasis).

These findings, most generally, suggest that differences between languages at the level of lexical metaphor are important for understanding cross-cultural metaphor use. Typological analyses (Talmy 2000) of literal (Özçalışkan & Slobin 2003) and metaphorical motion (Özçalışkan 2005) suggest that language-specific factors have conceptual salience for the
speakers of a language. Accordingly, Hickmann and Hendriks’ (2010) analysis of children’s acquisition of spatial language in French and English, and Ochsenbauer and Hickmanns’ (2010) analysis of children’s verbalizations of motion events in German show that children construct spatial relationships in accordance with their mother tongue from an early age on. As observed in cross-linguistic transfer research (Slobin 1993, Pavlenko 1999, see also Brown and Gullberg 2010), language specific patterns in one language influence the language patterns in another. The present study suggests that one’s native language, and the very particular ways it talks about different experiences, shapes the specific metaphors that are learned in a second language. Even if two languages, because of commonalities in embodied experience, share many primary and complex metaphors, one’s native language, and the specific lexical metaphors it includes, provide a lens that directly influences how a speaker of an L2 conceives of, and talks about, ideas and events in this language. Even if grammatical and semantic errors had been overcome by the highly advanced learners of English whose texts were studied here, differences in cognizing ‘path’, ‘road’ and ‘way’ events still persist between them and L1 speakers of British English. One obvious implication of this work for language learning and teaching is that the use of conceptual metaphor theories for pedagogical purposes (see e.g. Boers 2000, Csábi 2004, Littlemore & Low 2006) needs to be complemented by a focus on the level of lexical metaphor and how conceptualizations at this more specific level of organization relate to primary and complex metaphor.

References


**Corpora:**


*The Uppsala Student English Corpus (USE)*
Table 1. Frequencies of metaphorical ‘path’, ‘road’, and ‘way’ instances in USE and BNC.

<table>
<thead>
<tr>
<th></th>
<th>USE</th>
<th>BNC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st–term students</td>
<td>2nd-term students</td>
</tr>
<tr>
<td>path</td>
<td>11* (&lt;1%)</td>
<td>6 (1%)</td>
</tr>
<tr>
<td>road</td>
<td>7 (&lt;1%)</td>
<td>7* 1%</td>
</tr>
<tr>
<td>way</td>
<td>1995* (99%)</td>
<td>449* (97%)</td>
</tr>
<tr>
<td>Total number of metaphorical ‘path’, ‘road’, and ‘way’ instances</td>
<td>2013</td>
<td>462</td>
</tr>
</tbody>
</table>

* Some of these instances are from the same text.
Table 2. Typical modifiers of metaphorical ‘path’ in the BNC, and all the phrases that modify ‘path’ in USE. Taken together, 64% (or 182 out of 285) metaphorical ‘paths’ in the BNC were modified and 47% (8 out of 17) ‘paths’ in USE. (Frequencies of more than one instance are within brackets.)

<table>
<thead>
<tr>
<th>Source domain</th>
<th>Target domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARD to move along</td>
<td>EASY or pleasant to move along</td>
</tr>
<tr>
<td><strong>USE 1st-term students</strong></td>
<td></td>
</tr>
<tr>
<td>HARD to move along</td>
<td>EASY or pleasant to move along</td>
</tr>
<tr>
<td><strong>USE 2nd-term students</strong></td>
<td></td>
</tr>
<tr>
<td>HARD to move along</td>
<td>EASY or pleasant to move along</td>
</tr>
<tr>
<td><strong>BNC</strong></td>
<td></td>
</tr>
<tr>
<td>HARD to move along</td>
<td>EASY or pleasant to move along</td>
</tr>
</tbody>
</table>

- in the BNC
- in USE

- 1st-term student
- 2nd-term student
- student
- growth
- other
- critical
- career
- of growth, of a union with common human rights value, of working together, of cooperation
- path of learning
- of full cultural control, ‘of mind control, meditation, prayer, yoga or whatever’
Table 3. Typical modifiers of metaphorical ‘road’ in the BNC, and all the modifiers of ‘road’ in USE. 29% of (14 out of 49) metaphorical ‘road’ instances in the BNC were accompanied by a modifying phrase, and 29% (4 out of 14) metaphorical ‘road’ instances in USE. (Frequencies of more than one instance are within brackets.)

<table>
<thead>
<tr>
<th>Source domain</th>
<th>Target domain</th>
<th>Target domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARD to move along</td>
<td>EASY or pleasant to move along</td>
<td>other</td>
</tr>
<tr>
<td>HARD to move along</td>
<td>EASY or pleasant to move along</td>
<td>other</td>
</tr>
<tr>
<td>USE 1st-term students</td>
<td>same</td>
<td></td>
</tr>
<tr>
<td>USE 2nd-term students</td>
<td>narrow</td>
<td>wide</td>
</tr>
<tr>
<td>BNC</td>
<td>long (2), dangerous (2), rough</td>
<td>straight</td>
</tr>
</tbody>
</table>
Table 4. Typical modifiers of metaphorical ‘way’ in the BNC, and all the modifiers of ‘way’ in USE. 58% (451 out of 778) of metaphorical ‘way’ instances in the BNC were modified, and 46% (759 out of 1644) metaphorical ‘way’ instances in USE. (Frequencies of more than one instance are within brackets.)

<table>
<thead>
<tr>
<th>Source domain</th>
<th>Target domain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USE</strong> 1st-term students</td>
<td><strong>USE</strong> 2nd-term students</td>
</tr>
<tr>
<td>HARD to move along</td>
<td>EASY or pleasant to move along</td>
</tr>
<tr>
<td>long (13), rough</td>
<td>best (72), good (57), easy (24), better (19), easiest (18), new (9), fast (3), great (2)</td>
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<td>long (9), hard (3), rough kind of, terrible, no easy,</td>
<td>best (5), good (4), new (3), better, fast, quickest, easy, direct</td>
</tr>
<tr>
<td>long (15), difficult</td>
<td>long (9), hard (3), rough kind of, terrible, no easy,</td>
</tr>
<tr>
<td>extended, a cheap, unique uncertain</td>
<td>the way in which many keg beers are brewed and the ingredients used</td>
</tr>
</tbody>
</table>
wanted to say as he went along
Table 5. Prepositions used together with non-metaphorical ‘way’ instances in the BNC, and with metaphorical ‘way’ instances in the BNC and in USE. The columns include both the number of instances and the percentage of each preposition in a given group (shaded). The most frequent prepositions in each corpus are in bold.

<table>
<thead>
<tr>
<th>Preposition</th>
<th>BNC</th>
<th>Metaphorical way</th>
<th>Metaphorical way</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-metaphorical way (149 instances include prepositions)</td>
<td>(603 instances include prepositions)</td>
<td>USE 1st-term students (632 instances include prepositions)</td>
</tr>
<tr>
<td></td>
<td>USE 2nd-term students (308 instances include prepositions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>(way) of</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>in the way</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>way in</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>B</td>
<td>into</td>
<td>7</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>along</td>
<td>7</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>to</td>
<td>35</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>toward(s)</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>through</td>
<td>11</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>from</td>
<td>7</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>on</td>
<td>49</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>under</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>out</td>
<td>9</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>at</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>by</td>
<td>12</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>off</td>
<td>1</td>
<td>&gt;1%</td>
</tr>
<tr>
<td></td>
<td>up</td>
<td>1</td>
<td>&gt;1%</td>
</tr>
<tr>
<td></td>
<td>between</td>
<td>4</td>
<td>&gt;1%</td>
</tr>
</tbody>
</table>
Table 6. Frequencies of the English verbs ‘choose,’ ‘follow’ or ‘walk’ in combination with ‘path,’ and of the Swedish verbs ‘gå’ (‘walk’), ‘välja’ (‘choose’) or ‘följa’ (‘follow’) in combination with ‘stig.’ The English frequencies are based on the collocations of ‘path’ in the BNC. The Swedish frequencies are based on Google searches of Swedish Internet pages.

<table>
<thead>
<tr>
<th>path</th>
<th>stig</th>
</tr>
</thead>
<tbody>
<tr>
<td>...and follow</td>
<td>...and gå (walk, go) 1,230,000 hits</td>
</tr>
<tr>
<td>...and choose</td>
<td>...and välja (choose) 584,000 hits</td>
</tr>
<tr>
<td>...and walk</td>
<td>...and följa (follow) 241,000 hits</td>
</tr>
</tbody>
</table>
Table 7. Verbs used together with metaphorical ‘way’ instances. Frequencies of the verb forms are within brackets.

<table>
<thead>
<tr>
<th>Corpus</th>
<th>Motion verbs (and verbal motion nouns)</th>
<th>Other verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BNC (778 metaphorical ‘way’ instances)</strong></td>
<td>come/ing (13/3), go/went/going (10/4/3), take/s/taken (2/3/2), get/got (2/5), heading (2), continue led/led (3/2), follows/ing (1/1), walk, rambles, arcing, catapulted</td>
<td>be/is/was/been (6/55/43/5), (2), stand [in sb’s way] (5) work/s/ed (5/12), give/s/ing/gave/given (7/1/4/2/4), make (3), prepare/d (1/2), pave/paved (1/2), pushed, forced, fight, barged, shoved, elbowing, ploughing, negotiate, find/ing/found (16/1/2), see/saw/seen (5/1/2), know/ing/knew (5/1/1), point/ed (4/2), viewing/ed (3/1), look/ing/ed (1/1/1), show/ed (1/1), lost use/s/ed (5/3/8), think/thought (7/3), speak/ing (4/1/1), act/ed/ing (3/2/1), treat/s/ed/ing (3/1/1), express (3), talk/ed (1/1), affect/s/ed (1/1/1), do/done (6/1), had (3)</td>
</tr>
<tr>
<td><strong>USE 1 (1995 metaphorical ‘way’ instances)</strong></td>
<td>go/es/ ing (6/10/1=17), get/s/ing/got (4/1/12/4), take/ing/look (6/5/2)</td>
<td>be/ing/is/was (36/21/55/25=137), use/s/ed/ing (something in/as) a way (24/1/23/15), think/s/thought/thinking (18/1/4/21), see/s/ing/saw/seen (27/6/7/3/5), find/s/ing/found (21/0/2/5), feel/s/ing/feel (18/3/2/7), act/s/acted/acting (14/12/4/4), express/ing/ed (14/10/3), treat/s/ed/ing (10/2/10/4), turn/ed (out) (13/3), affect/s/ing/ed (13/11/1/4) behave/s/ing/d (10/3/3/1), change/s/ing/d (10/3/4/4)</td>
</tr>
<tr>
<td><strong>USE 2 (449 metaphorical ‘way’ instances)</strong></td>
<td>getting (6), go/ing/gone (3/1/1=5)</td>
<td>be/is/was was (14/44/1=59), change/d (10/2), behave/s/behaving (7/2/1), think/thinking (7/3), speak/s/ing (5/4/3), find/s/ing/found (6/1/1), know/s/ing (5/1/2),</td>
</tr>
</tbody>
</table>