# Why *similar to*, but *different from*? Günter Radden and Elizabeth Matthis, Universität Hamburg

We would like to dedicate this article to Ekkehard König on the occasion of his 60<sup>th</sup> birthday.

#### 0. Introduction

The prepositions used for describing similarity and difference have a spatial basis. The abstract notions of similarity and difference are in general understood in terms of the metaphors similarity is closeness and difference is distance. These complementary metaphors also apply to a number of randomly selected languages. A major challenge of this paper is to discover the cognitive motivation for these metaphors and to explain the particular use of prepositions in English. A notorious case of seemingly erratic prepositional usage is that of *from, to* and *than* with *different*. These prepositional variants are often claimed to be interchangeable. However, this paper argues that these prepositions convey differences in meaning which derive from conceptual schemata typically associated with them.

### 1. Metaphorical understanding of similarity and difference as space

Notions of similarity and difference are often understood metaphorically in terms of space. Similarity is metaphorized as closeness, difference as distance. These two complementary metaphors are illustrated in the examples under (1) and (2):

#### (1) similarity is closeness

- a. Maroon and crimson are *close* in color, but they are by no means identical.
- b. Buying land on the moon *borders* on the absurd.
- c. Ben is *nearly* as tall as me.
- d. The cotton shirt is *approximately* the same price as the rayon shirt.

Sentence (1a) may be interpreted spatially or metaphorically. In the former reading, maroon and crimson are located close to each other on the color spectrum. In the latter reading, the two colors are understood as being similar to each other. Sentence (1b) would only be interpreted metaphorically in the sense 'buying land on the moon is similar to being absurd.' The adverbs *nearly* and *approximately* in sentences (1c) and (1d) involve spatial closeness on a scale, but can also be seen as metaphors of similarity. This can be illustrated by rewording the same statements as *Ben's height is similar to mine* and *The price of the cotton shirt is similar to that of the rayon shirt.* The similarity is closeness metaphor is also found in the etymology of many words expressing similarity such as *nearly, next to, approximate(ly), approach* and *affinity* and is at the base of the words *same* and *similar* ('at the same time, simultaneous' = temporal closeness).

- (2) difference is distance
  - a. Red and green are *far apart*.
  - b. The difference between red and green is *vast*.
  - c. Your idea of friendship and my idea of friendship are worlds *apart*.
  - d. Hard work *separates* the men from the boys.

Like sentence (1a), sentence (2a) may be understood either spatially or metaphorically, while sentences (2b-d) are only understood metaphorically in the sense of indicating a difference. The difference is distance metaphor also accounts for expressions such as *far from the truth*, *widely different, generation gap* and *poles apart*. It is also found in the etymology of many words expressing difference such as *different* (from *differre* 'bear apart'), *distinguish*, *separate*, *deviate*, *diverge* and *depart from*. All of these words derive from roots meaning 'separate.'

In the metaphorical mapping, states of similarity or difference are metaphorized as situations of closeness or distance, as in *His performance is nearly perfect* and *His view is widely different from mine*. By entailment, changes to states of similarity or difference are metaphorized as motion towards closeness or distance, as in *His performance is approaching perfection* and *His view diverges from mine*. States of similarity and difference are, however, also expressed by using the motion prepositions *to* and *from*. Thus, we find the following correspondences between the spatial situations described in (3) and the metaphorical ones described in (4):

- (3) a. Fred's house is *close to* Gerald's house.
  - b. Fred's house is *far away from* Grant's house.
- (4) a. Fred's house is *similar to* Gerald's house.
  - b. Fred's house is *different from* Grant's house.

In these sentences, the Goal preposition *to* and the Source preposition *from* make us see the scene as motional. We trace a mental path from one entity to the other. These situations are similar to those analyzed by Langacker (1991:157-160) as subjective motion, in which motion verbs are used to describe states as in *The roof slopes steeply upward*. Here the conceptualizer is thought of as mentally moving along a path. Subjective motion is different from physical motion. In physical, or objective, motion, the mover permanently changes his position leaving one position behind when reaching the next position. In subjective motion, the positions along which the conceptualizer mentally moves are added in such a way that they are still present in the conceptualizer's mind and not left behind. This dynamic view of a static situation is achieved by what Langacker calls summary scanning. Summary scanning results in a summary view of a path as a whole in "oriented space," i.e. in conceived directionality.

This paper argues that these two aspects of subjective motion, summary viewing and oriented space, provide the conceptual foundation for both the spatial understanding of closeness and distance and their metaphorical extensions, similarity and difference. When we view the whole path, we automatically perceive its length or the distance between its endpoints, i.e. summary viewing provides a natural basis for spatial distance and metaphorical distance. When we scan a scene, we automatically impose directionality on the path taken by our eyes. As will be seen below, directionality is an essential aspect distinguishing closeness from distance and, metaphorically, similarity from difference.

#### 2. Closeness and distance in oriented space

Let us first look at the spatial situations described in (3a) and (3b), which can be diagrammed as shown in Figure 1.

Closeness					
Fig	Fig	Grd	Fig	Fig	Grd
				~	

(a) Fred's house is close to Gerald's house. (b) Fred's house is far (away) from Grant's house.

# Figure 1: Closeness and distance in oriented space

Following standard practice, we will describe the moving entity as the figure (Fig) and the stationary entity as the ground (Grd). The different sizes of the houses indicate that the smaller figure is to be located with respect to the larger ground. The houses drawn in dotted lines represent the end-point and starting-point of the conceptualizer's subjective motion, respectively, and the arrows indicate the direction of subjective motion.

In the spatial situation (3a), *Fred's house is close to Gerald's house*, the Goal preposition *to* leads us to mentally move along a path from the figure, Fred's house, to the ground, Gerald's house, and focus on the end-point of the path. The path mentally covered is short, and the houses are thus in close proximity. The spatial arrangement in (3b), *Fred's house is far (away) from Grant's house*, describes a complementary situation: the Source preposition *from* has us mentally move along a path from the ground, Grant's house, to the figure, Fred's house, and focus on the starting-point of the path. The path mentally covered is long, and the houses are thus distant from each other.

The method English uses to describe spatial situations of closeness and distance is fairly wide-spread across languages. Tables 1 and 2 list the construals for spatial closeness and distance found in a random selection of languages. The focus here is on the spatial marking irrespective of whether it is coded by a preposition, a postposition or another spatial gram accompanying an expression of closeness or distance. The static notions of 'be at/near/ by/on' and 'be with' are described as Place and Accompaniment, respectively, and the dynamic notions of 'close to/onto' and 'away from' are described as Goal and Source, respectively.

'Closeness'	Languages		
Place/Accompaniment	German, Danish, Dutch, Afrikaans / Korean		
Goal	English, Italian, Spanish, Russian, Persian, Hungarian, Turkish, Japanese		
Source	French, Spanish, Chinese, Japanese		
no spatial marking	Polish, Serbo-Croatian, Persian, Finnish		

Table 1: Construals of 'spatial closeness' in different languages

Spatial closeness is coded in different ways: as a Place, as a Goal, as a Source and without any additional spatial marking apart from the proximity expression. The predominant pattern is that of marking closeness by means of a Goal marker, i.e. to see it as subjective motion to the ground entity. Two of the languages listed, Spanish and Japanese, construe closeness either as a Goal or as a Source and therefore appear twice in Table 1.

Let us now look at the way distance is coded in these languages:

'Distance'	Languages

Goal	Kurdish, Arabic			
Source	German, Dutch, Afrikaans, Danish, English, Italian, Spanish, French, Polish, Russian, Serbo-Croatian, Persian, Hungarian, Finnish, Turkish, Japanese, Chinese, Korean			
no spatial marking	Persian			

Table 2: Construals of 'spatial distance' in different languages

In contrast to the wide range of expressions for spatial closeness, spatial distance is coded highly consistently across languages by means of a Source marker, i.e. it is seen as subjective motion away from the ground entity. The only languages in our corpus that do not conform to this pattern are Kurdish and Arabic, which use the same Goal marker for both closeness and distance. One of the languages, Persian, has either a Source marker or no spatial marking. From a cognitive view of language, these observations pose several questions:

- (i) Why are static situations of spatial closeness or distance conceived of as subjective motion?
- (ii) Why is the direction of subjective motion reversed with closeness and distance?
- (iii) Why is the Source construal for distance more uniform across languages than the Goal construal for closeness?
- 2.1 Static situations as subjective motion

Why are static situations of spatial closeness or distance conceived of as subjective motion? One would expect that a static spatial situation describing the closeness or distance of two objects is expressed by means of a static construction. This is in fact the way the languages listed under Place/Accompaniment in Table 1, German, Danish, Dutch, Afrikaans and Korean, describe situations of closeness. 'My house is close to your house,' for example, is rendered in German as in (5) and in Korean as in (6), i.e. the two houses are seen as being in a near-contact or comitative relation, respectively:

Mein	Haus	ist	nah	an	Dei	nem	Haus.
	my-NOM	house	is	close	on	your-DAT	house

(6) na-uy cip-un ne-uy cip-kwa kakkap-ta I-GEN house-TOP you-GEN house-COM ('with') close-DECL

These spatial conceptualizations seem to be motivated in a straightforward fashion by our perceptual experience: objects that are close together are in the same visual field and, hence, may be perceived simultaneously. But even within the same visual field, they may be perceived successively by letting one's eye travel from one object to the other. In this case, the static situation is subjectively construed as motional and either the Goal or Source marker is chosen in describing the situation.

Situations of 'distance' are never conceived of in a static way but only dynamically in terms of subjective motion. This fact may also be explained on perceptual grounds: objects which are at a greater distance from one another are not in the same visual field and hence

cannot be perceived together. In order to see both of these objects, the observer needs to scan the path from one location to the other location. Let us now consider the issue of directedness in subjective motion.

# 2.2 Direction of subjective motion

Why is the direction of subjective motion reversed with closeness and distance? Spatial situations which are scanned allow for two directions of scanning: from the figure to the ground or from the ground to the figure. As a rule, the direction of scanning is fixed. For example, in English, we can neither speak of \*X is close from Y nor of \*Y is far to Y. We should expect to find a cognitive motivation for this asymmetry.

Let us first look at the preferred direction associated with closeness. In the languages listed in Table 1, closeness is predominantly expressed by means of a Goal marker as in English *close to* or in Russian *blizkiy k* 'close onto.' The use of a Source marker with closeness is much rarer, and in at least French and Spanish, the "all-purpose" preposition *de* has taken over so many functions that it is no longer uniquely associated with its original sense of 'source.' When we conceive of objects which are close together, we thus typically scan from the figure to the ground. This preferred viewing arrangement may also have a perceptual basis: although the two objects are in the same visual field, they are of course not equally in focus at the same time. The viewer begins his or her subjective motion from the more salient entity, the figure, and scans over to the less salient entity, the ground. Since the viewer has both objects in his or her visual field, s/he may from the very beginning focus his or her gaze on the ground as the goal, which gives rise to the situation illustrated in Figure1a.

The preferred direction associated with distance leads from the focused ground to the figure. In the languages listed in Table 2, the use of a Source marker is almost the only option available for coding situations of distance. This linguistic situation might have the following perceptual analog: Objects which are far apart form each other are typically not in the same visual field, and hence we may not be able to scan from the figure to the ground because the distant goal may not be visible as a target. A much safer strategy to use would be to scan in the direction from the ground to the salient figure as illustrated in Figure 1b. Here the observer takes the viewing position of the ground. In language, this is typically achieved by choosing a deictic alignment in which the speaker appears as the ground as in (7a), which is in fact felt to be a more natural description than a description in which the speaker functions as the ground as in (7b).

- (7) a. He (Fig) lives far from **me** (Grd).
  - b. **I** (Fig) live far away from him (Grd).

The construal chosen in (7a) with the speaker as the ground is remarkable because in our normal alignment of figure and ground the speaker tends to identify with the salient figure. The cross-linguistically preferred directionality of scanning from the ground to the distant figure may thus have its motivation in a folk model of a viewpoint taken when looking at distant objects.

# 2.3 Distance as Source

Why is the Source construal for distance, i.e. *Figure is far from Ground*, more uniform across languages than the Goal construal for closeness, i.e. *Figure is close to Ground*? The Source pattern for distance apparently seems to be better motivated than the Goal pattern for

closeness. One reason may be seen in the natural direction of scanning especially for distant objects as discussed above. Another motivating factor favoring the *Figure is far from Ground* construal may be an interactional aspect. Let us illustrate this aspect by way of the following pair of sentences:

- (8) a. How *close* are we *to* the airport now?
  - b. How *far* (*away*) are we *from* the airport now?

In a situation involving humans and objects or other humans, the human will typically interact with the object(s) or other human(s). Thus, the "*close to*"-question in (8a) suggests that we are heading towards the airport and want to reach it soon, i.e. we want to "interact" with the object, which is within reach. An "*away from*"-question, by contrast, has the opposite effect: (8b) suggests that we are heading away from the airport and no longer want to "interact" with the distant object.

It is only a short way from spatial closeness and distance to metaphorical closeness and distance. The spatial expressions *close to* and *far (away) from* may be extended to describe metaphorical closeness, i.e. similarity as in (9a), and metaphorical distance, i.e. difference as in (9b):

- (9) a. This is *close to* the truth.
  - b. This is *far from* the truth.

Like closeness and distance in oriented space, judgements of similarity and difference are thus understood in terms of subjective motion; and as with spatial closeness and distance, the directionality of scanning tends to be fixed: the figure is *similar to the ground* and not *\*similar from the ground*, and the ground is *different from the figure* and not *\*different to the figure*. In the following, we will first look at the conceptual impact of judgements of similarity and then examine in what way metaphorical extensions from oriented space to 'similarity' and 'difference' are motivated.

3. Judgements of similarity and difference vs. acts of comparison

Judgements of similarity or difference are similar to acts of comparison. Langacker (1987:101-109) describes acts of comparison by the schematic form S > T = V, where S refers to the standard of comparison, T to the target of comparison, > to the operation of scanning in a particular direction and V to a value for the vector of scanning in some domain. Whenever we compare two entities, we thus have in mind a standard entity and a target entity, and by mentally moving from the standard entity to the target entity, we register discrepancies between the two entities in some domain, and the degree of divergence between the entities compared can be expressed as the "value" of comparison. To what extent is Langacker's model of acts of comparison compatible with judgements of similarity or difference?

Acts of comparison and judgements of similarity/difference are similar in that they both require the conceptualizer's scanning from one entity to another, i.e., they both involve directed motion. Acts of comparison and judgements of similarity/difference are, however, different in at least the following respects.

First, acts of comparison are based on specific frames of reference or dimensions which are typically expressed explicitly as in *Henry is as tall as Leopold* or *Henry is taller* 

*than Leopold*. Here, the two people are compared with respect to the dimension of height, and the "discrepancy value" between their heights may be measured by means of their different positions on the scale of height. This is not the case with judgements of similarity or difference. We typically judge two things as being similar or different on a fairly global basis. Thus, we can be unspecific about a judgment of similarity as in (10a), but we can hardly do so with an act of comparison as in (10b). Conversely, we may ask for the frame of reference with similarity judgements by saying *In what way?* as in (10c), but we cannot do so with comparisons as in (10d):

(10)	a.	Sheila looks <i>like</i> her sister, but I just can't say why.	(similarity)
	b.	<sup>?</sup> Sheila is taller <i>than</i> her sister, but I just can't say why.	(comparison)
	c.	Sheila looks <i>like</i> her sister. – In what way?	(similarity)
	d.	Sheila is taller <i>than</i> her sister. – <sup>?</sup> In what way?	(comparison)

Second, acts of comparison lead to the discovery of discrepancies between the two entities compared. If no discrepancies between two events are registered, an act of comparison leads, as a limiting case, to recognition. Judgments of similarity or difference, on the other hand, are based on recognizing sameness or no sameness in two events. We do not go about comparing all kinds of things in order to find two entities which are similar or different. Instead, we judge things as being similar or different on the basis of their global gestalt.

Third, following Langacker, acts of comparison involve a directed path from the standard of comparison to the target. The kind of comparison Langacker seems to have in mind is a conscious act by which the conceptualizer first activates a standard model and then matches it against some target as, for example, in looking for some item in a shop. Acts of comparison, however, are also triggered by a stimulus which is compared to a standard entity. This situation typically applies to recognition by means of identification criteria. Aitchison (1994: 65) illustrates the impact of identification criteria with the following delightful example: A farmer put a ring through a cow's nose and people automatically wrongly identified it as a "bull." Here, the appearance of a particular thing was compared to the appearance of the prototypical "standard" member of a category, and, in this case, people's similarity judgements obviously resulted in a faulty categorization.

Acts of comparison and judgements of similarity or difference are, thus, closely related but clearly different cognitive processes. We will describe the schematic meaning evoked by an act or expression of comparison as "comparison schema." In the following section we will also specify the schematic meanings associated with the notions of 'similarity' and 'difference.'

Up to this point we have looked at the cognitive process leading to judgments of similarity and difference. We will now look at the spatial metaphors used in different languages to express notions of similarity as opposed to difference and attempt to account for them in terms of a folk model of similarity and difference. As a final step, we will also try to account for the different prepositions used in English to denote the notion of difference.

4. Metaphorical construals of 'similarity' and 'difference'

The complementary metaphors similarity is closeness and difference is distance are widely attested across languages. The distribution of the Goal and Source patterns is even more

systematic with these metaphorical usages than with the literal spatial usages listed in Tables 1 and 2. In the random sample of languages chosen, similarity and difference are expressed in terms of space as shown in Tables 3 and 4 (other non-spatial construals are not listed). We will look at spatial construals of 'similarity' first.

'Similarity'	Languages
Place/Accompaniment	Dutch, Afrikaans / Chinese, Korean
Goal	Danish, French, English, Italian, Spanish, Polish, Russian, Greek, Persian, Hungarian, Turkish, Hebrew, Japanese
Similarity	German, Danish
Comparison	Finnish
no spatial marking	Spanish, Russian, Serbo-Croatian, Persian

As with 'closeness,' the preferred coding of 'similarity' is not as a static situation, but as a dynamic situation of subjective motion. The preferred direction is that of the figure's motion to the ground as the goal—the direction from a Source does not even occur in this corpus. Instead, forms marking the Place, Accompaniment, Goal, Similarity, Comparison and spatially unmarked forms are used.

Let us compare these data to the forms used to construe the notion of 'difference.'

'Difference'	Languages			
Accompaniment	Persian, Chinese, Japanese, Korean			
Goal	English, Turkish			
	English, Danish, Dutch, Afrikaans, French,			
Source	Italian, Spanish, Polish, Russian, Serbo-			
	Croatian, Greek, Hebrew, Hungarian			
Comparison	English, German, Danish, Dutch, Afrikaans,			
	Finnish			

Table 4: Construals of 'difference' in different languages

As with 'distance,' the notion of 'difference' is exclusively coded in a dynamic way, and the preferred direction is away from the focused ground, the Source, to the figure. The Goal is only focused upon in Kurdish, which uses the Goal preposition for both similarity and difference, and English, which, as will be discussed below, uses *different to* as a variant of *different from*. Like some other languages, English makes also use of the comparison schema as in *different than*. Chinese and Korean are interesting in that they split up the conceptual space in a different way: they use the same Comitative marker for both 'similarity' and 'difference' and other markers for 'closeness' and 'distance.' The overwhelming metaphorization of 'difference' as 'source' is also supported by sign languages. In American Sign Language, the sign for 'different' is made in the following way: "Beginning with both extended index fingers crossed in front of the chest, palms facing forward, bring the hands apart from each other with a deliberate movement.c

How can these preferred metaphorizations of 'similarity' and 'difference' be

represented and explained conceptually? A situation of similarity as in example (4a), *Fred's house is similar to Gerald's house*, is metaphorically conceived of as a figure's motion towards a ground, i.e. its goal. We may think of this metaphorical conceptualization as follows: the conceptualizer moves an image of Fred's house to an image of Gerald's house and finds global commonalities in both houses, which allows him to subsume both of them as members of the same category of house. At the same time, the conceptualizer notices slight differences between the houses so that they are not judged to be identical. To indicate that the houses are similar, but not identical, the speaker might have said, *The houses are nearly the same*, which means the conceptualizer stopped before reaching the identity stage.

A situation of difference like in sentence (4b), *Fred's house is different from Grant's house*, is conceived of as a figure's motion away from a ground entity, i.e. its source. We may think of this metaphorical conceptualization in the following way: The images of the two houses are first compared and then judged not alike enough to be members of the same category. Then, as a result, the figure entity is metaphorically pushed away.

Figure 2 is a simplified illustration of these two processes. As in Figure 1, the arrows indicate the direction of the conceptualizer's subjective motion and the houses drawn in dotted lines represent its end-point and starting-point.

Similarity

Difference

Fig Fig Grd Fig Fig Grd

(a) Fred's house is similar to Gerald's house. (b) Fred's house is different from Grant's house.

#### Figure 2: Similarity and difference

Not surprisingly, the conceptual schemas of similarity and difference resemble those of closeness and distance in oriented space. Their metaphorical correspondences are listed under (11).

- (11) a. Similar things correspond to close things.
  - b. Different things correspond to distant things.
  - c. Judgements of similarity/difference correspond to motion.
  - d. Judgements of similarity correspond to motion toward a goal.
  - e. Judgements of difference correspond to motion away from a source.

Similar things tend to be close to each other. Grady (1997:129) conjectures that this mapping is motivated by our experience of finding similar objects near each other in our environment: blades of grass cluster together in a lawn, rocks cluster together on the ground, and clouds cluster together in the sky. Further motivating factors might be that "it is easier to make comparisons and perceive similarity when objects are close together" and that visual backgrounds "are likely to be more similar for objects near each other than for two which are separated by a greater distance." By analogy, we may expect different things to be distant from each other.

Judgements of similarity or difference are mental processes and, like other mental processes, are metaphorized as motion: thinking is moving. In judging whether two things are similar or not, the conceptualizer does not move himself but rather, as in spatial closeness and distance, remains at his position and only performs a subjective, i.e. mental act of motion. As

in the case of spatial distances, the directionality in the process of subjective motion is important. In judging two things to be similar, we mentally move to the ground thing, and in judging two things to be different, we move away from the ground thing. But, unlike things which are spatially close or distant, things which are similar or different are seen as being moved by an internal force: Similar things are attracted to each other, while different things are repelled from each other. The proverbial expression *Birds of a feather flock together* exemplifies the folk view that similar things are attracted to each other—the Goal preposition *to* in *together* lends further support to this view. The proverbial expression *Oil and water don't mix*, by contrast, demonstrates the folk view that different things separate themselves from one another. These two complementary folk models might be described as "attraction schema" and "repulsion schema," respectively.

The attraction and repulsion schemata represent idealized metaphorical conceptualizations of similarity and difference. The attraction schema is not only found in expressions denoting similarity but also in expressions denoting related concepts; it is even used with notions of identity. Table 5 lists groups of symmetric adjectives in English that are construed with the Goal preposition *to*. They all involve notions of similarity, in the case of identity "complete" similarity.

Attraction schema	Expressions
Similarity:	similar to, close to, next to, comparable to
Association:	linked to, tied to, connected to
Relation:	related to, parallel to, equivalent to, proportionate to, corresponding to, akin to
Complementarity:	<i>complementary to, senior to, junior to, superior to, inferior to</i>
Opposition:	opposed to, contrary to
Identity:	equal to, identical to

Table 5: Attraction schema with English predicates of similarity and related concepts

The repulsion schema underlies predicates denoting 'difference' and related concepts such as 'distinction' and 'separation' or 'division' as shown in Table 6.

Repulsion schema	Expressions
Difference:	different from, differ from
Distinction:	distinguish from, distinct from, apart from
Separation:	separate from, diverge from, depart from

Table 6: Repulsion schema with English predicates of difference and related concepts

English seems to reflect these two folk models perfectly in its use of *to* and *from* with predicates denoting 'similarity' and 'difference.' There are, however, some inconsistencies. First, the negated forms of *similar*, i.e. *not similar* or *dissimilar*, are not, or not only construed with the Source preposition *from*, but also, and more commonly, with the Goal preposition *to* as in the following examples.

(12) a. Japanese has a grammatical category of tense which is not too *dissimilar to* that

of English.

b. [...] the study of the properties of objects in the social sciences is quite *dissimilar to* equivalent studies in physics or chemistry [...]

The negation of *dissimilar* in sentence (12a), which results in the positive meaning 'fairly similar,' might be responsible for the use of the proposition *to*. This does not, however, apply to sentence (12b) and similar sentences with *dissimilar*, which seem to sound more natural with *to* than with *from*. Thus it is not the semantics of *dissimilar* that accounts for the prepositional construal but the presence of the form *similar*. The same applies to the reverse situation: the negation of *different*, i.e. no(t) *different*, does not necessarily affect the use of the preposition *from* as in *I'm no different from any man*.

A more complicated situation arises in varieties of English in which *different* may also be construed with *to* or *than*. The remainder of this paper will focus on explaining the distribution and motivation of these three prepositions with *different*.

# 5. *Different* with *from, to* and *than*

In different varieties of English two or three of the following forms may be used:

- (13) a. Your hair is *different from* my hair.
  - b. Your hair is *different to* my hair.
    - c. Your hair is *different than* my hair.

The use of the Source marker *from* in (13a) reflects the repulsion schema. On the basis of our cross-linguistic data, this construal is expected to be the normal and unmarked usage. The use of the Goal marker *to* with the notion of 'difference' in (13b) is an exception across languages. It makes us see the difference between things in terms of the attraction schema. The use of the preposition *than* in (13c) makes us see the difference between things in terms of the comparison schema, even though the particular dimension is not stated explicitly. We may, for example, understand the difference between *your hair* and *my hair* in (13c) in the sense of 'your hair is blonder than my hair' or 'your hair is more curly than my hair,' etc. The use of the comparison schema in conceiving of difference is, as shown in Table 4, not unique to English but is also found in other languages such as German, Dutch, Danish and Finnish.

The preference speakers of English have for one of the prepositional alternatives with *different* seems to be determined by at least three factors interacting with each other: (i) the prescriptive tradition, (ii) geographical distribution and (iii) the schematic meaning associated with each preposition.

The prescriptive tradition

The prescriptive tradition is probably still an important factor in the speaker's choice of the preposition with *different*. According to prescriptivists, *from* is the "correct" preposition to go with the original meaning of the prefix *dis*- 'away from.' Arguments given in favor of *different from* rely on "logic": "[...] logic supports established usage: one thing differs *from* another, hence, *different from*" (Strunk and White 2000: 44). By the same token, "*than* is sometimes defended with the argument that *other* and *otherwise*—logically equivalent to *different* and *differently*—are idiomatically followed by *than*" (Barzun 1966: 167). Even if contemporary dictionaries no longer "prescribe" *different from*, the notion of *from* being the

correct form still seems to be very much present in people's minds. An amusing illustration of this prescriptive attitude is found in H.F. Ellis' short story *Preparing for the West* (1982: 320):

'How's it go then?' he said. 'How d'you find it?'
'Find it?' I asked.
'All this,' he said. 'New York. Different to London, eh?'
'Yes, indeed. Yes. Oh yes. Different from London certainly.' I agreed, taking care not to stress the corrected preposition. [...]

People's awareness of the prescriptive rule may contribute to their preference for the preposition *from* in more formal contexts and in the written form. A study on prepositions used with *different* in New Zealand English found that *from* is the predominant preposition used in written discourse but not in spoken discourse, where also *to* and *than* are widely used. A similar situation applies to the United States: *than* is much more frequently used with *different* in spoken English than in written English.

5.2 Georgraphical distribution

Prepositional use with *different* is often associated with geographical distribution, both on the national scale of British, American and Commonwealth English and on the regional scale of dialectal differences within these larger areas. Corpus studies on the distribution of the prepositions with *different* show that *from* is the preferred preposition in present-day British and American English both in their written and spoken modes. Speakers of British English use both different from and different to and, more rarely, also different than. Speakers of American English allow for two prepositional variants: different from and different than. Different to is very rare or not used at all in America. Reference grammars and dictionaries are well aware of this difference between British and American usage. For example, Murphy's English Grammar in Use observes that British English has both different from and different to as in The film was different from (or to) what I'd expected (p. 260), while American English has both different from and different than as in It was different from (or than) what I'd expected (p. 283). But neither American English nor British English nor Commonwealth English are homogeneous with respect to the prepositional alternatives used with different. In the United States, for example, the use of than with different is almost twice as common on the West Coast as on the East Coast.

5.3 Schematic meanings associated with prepositions

Speakers generally assume that, within one such geographical variety, the prepositional variants with *different* are interchangeable. For example, both *Your hair is different from mine* and *Your hair is different than mine* are equally acceptable to speakers of American English and apparently convey the same meaning. In our view, however, each of the prepositions expresses a meaning of its own. The meanings associated with *from, to* and *than* in conjunction with *different* relate to the conceptual schemata discussed above: The Source preposition *from* evokes the repulsion schema; in conjunction with *different, from* is therefore expressions and evokes the attraction schema; in conjunction with *different, to* is found in similarity expressions and evokes the attraction schema; in conjunction with *different, to* is therefore assumed to apply to differences that are slight or non-existent. *Than* is used in comparative constructions and evokes the comparison schema; in conjunction with *different, than* is expected to be used to describe differences that apply to one dimension only.

In his or her use of language, the speaker has to opt for one of the prepositional construals. Provided that all other variables are held constant, the speaker's choice of the preposition is in all likelihood determined by the specific meaning associated with 'different.' Our basic assumption was that the prepositions *from*, *to* and *than* are not used interchangeably but rather express subtle differences in meaning. In order to test these assumptions, we carried out a small empirical investigation.

### Empirical investigation on the use of prepositions with different

We tried to delimit the meanings of the particular prepositions following *different* based on judgements by native speakers. We developed a questionnaire of thirteen test sentences with *different* in which native speakers were to fill in the preposition they would use in each case. To distract the subjects' attention from the issue of *different*, we included seven more sentences with other adjectives, which are not considered in this study. The questionnaire is attached as Appendix 1. The numbers of the sentences refer to those of the questionnaire.

The sentences in our survey were selected to convey situations which fit each of the three conceptual schemata: situations conveying substantial differences were chosen as examples of the repulsion schema, situations conveying slight differences were chosen to fit the attraction schema, and situations conveying differences along one dimension were assumed to evoke the comparison schema. The aim was to test if native speakers associated the conceptual schemata with the respective prepositions. Our informants were 23 British, 18 American and 6 Australian speakers of English so that we were also able to elicit geographic differences in prepositional usages. Due to the interaction of the factors—prescriptive, geographic and semantic—which jointly play a role in the use of these prepositions, usage was expected to be highly divided.

The results of the empirical investigation are presented in the following sections. Since we are only interested in the usages of the three prepositions, we have disregarded a few other responses (*in, with, when, or* and *it's*) and computed the frequencies of the three prepositions relative to each other. We will first discuss the overall values of the prepositions with *different* in American, British and Australian English and then the use of the prepositions with respect to the conceptual schemata.

# 6.1 Overall values of prepositions used in American, British and Australian English

		American English	British	British English		n	sum	
from	105	(45%)	140	(46%)	43	(49%)	)	288
to	0	(0%)***	106	(35%)** *	20	(29%)	)	132
than	126	(55%)** *	56	(19%)** *	19	(22%)	)	201
sum	231		302		88			

The results of the responses by American, British and Australian speakers on the choice of the prepositions following *different* are listed in Table 7.

Table 7: Frequencies of responses to prepositions following different

The distribution represented in Table 7 deviates highly significantly from the distribution that would be expected on the basis of pure chance ( $^{2}$ =135.43; df=4; p < 0.001 \*\*\*). However, it is important to note that the overall significance results from four of the nine cells only. A configuration frequency analysis shows that the observed frequencies for *to* and *than* in American and British English deviate strongly from the expected values: In American English, *to* does not occur at all although, according to chance distribution, it should have occurred 49 times. On the other hand, *than* occurs 126 times although only 74 occurrences were expected. In British English, *to* was found 106 times, while 64 occurrences were expected, whereas *than* occurs much less often than was to be expected: 56 instances instead of 97 were obtained. These results confirm the general tendencies observed for American and British English: absence of *to* and widespread use of *than* in American English and little use of *than* and widespread use of *to* in British English. No significant differences were found in the usages of *from* in British and American English or in the distribution of the three prepositions in Australian English.

# 6.2 Use of prepositions with respect to the conceptual schemata

In this section we will briefly discuss the test sentences used for each of the three conceptual schemata and the preferred prepositional choices of each of the three geographical groups of native speakers. The results of the correlation frequency analysis of the three variables—schemata, prepositions and geographical varieties—are summarized in Appendix 2.

# 6.2.1 Repulsion schema

The repulsion schema is associated with substantial global differences. The four test sentences listed in Table 8 were chosen as examples of substantial differences and received the following ratings by the speakers of the three geographical varieties.

					American		British	1	Austra	ılian
#	Test sentenc es	from	to	than	from	to	than	from	to	than
(3)	Sounds waves are very differe nt water waves.	12	0	7	18	4	1	4	2	0

		50	0***	23	65**	36	4***	16	8	2
(16)	are rather differe nt those of other people. Third World countri es are differe nt one another	16	0	2	19	4	0	5	2	0
(9)	Their lives	11	0	7	15	7	1	2	3	1
(6)	Her new hairsty le is differe nt anythin g I have ever seen.	11	0	7	13	8	2	5	1	1

Table 8: Sentences illustrating the repulsion schema and their ratings

Sentence (3) conveys a contrast between two apparent members of a category. Due to their common inheritance within a taxonomy, members of a category are in general taken to be very similar rather than different. Water waves and sound waves, however, do not belong to the same category 'waves' because water waves are literally waves while sound waves are only metaphorically waves. The contrast between the literal expression and the figurative one needs to be emphasized to offset the apparent similarity suggested by the term *waves*. The use of the preposition *from* is an appropriate choice to magnify their substantial difference.

Sentence (6) makes a statement about a new hairstyle that is unlike any hairstyle the speaker has seen before. It is as if the speaker is flipping through his or her mental log of hairstyles in the attempt to find one to compare with this one, but comes up with nothing—the new hairstyle lacks a grounding entity for comparison. The high ratings for *different from* probably reflect the substantial difference the subjects saw between two things that have nothing in common to compare.

Sentence (9) also expresses a global difference, but the difference can be interpreted as substantial or slight depending on the emphasis given to the intensifier *rather*: putting stress on *rather* underscores a large difference, whereas not stressing it lessens the apparent difference. This would account for the slightly lower overall percentage of *from*.

Sentence (16) describes a reciprocal situation. In comparing any two countries, we

mentally switch our vantage points and direction of viewing and see each of two entities once as a figure and once as a ground. Conceptually a reciprocal situation may thus be said to have a "doubling effect," which may account for the high ratings of *from*.

The speakers of all three geographical varieties are unanimous in their preference of *from* with the repulsion schema in these sentences; the ratings of the British speakers are even significantly higher than expected (p < 0.001). Conversely, *to* and *than* are less frequently chosen than expected; in British English the value for *than* is even significantly lower than expected (p < 0.01). The subjects' predominant, in part significant, choice of *from* conforms with our expectation.

# 6.2.2 Attraction Schema

The attraction schema is associated with the notion of 'similarity' and slight differences. We hypothesized that *different* should therefore also be construed with *to* in situations of slight differences in varieties that have *different to*, e.g. British and Australian English, but not American English. Sentences which we expected might best match such situations are ones which negate *different* and thus semantically convey the notion of 'similarity.' Thus, the use of *to* in *I am no different to you* is semantically equivalent to *I am similar to you* and may lead subjects to opt for *to*. In American English, *no different* is expected to evoke the comparison schema rather than the repulsion schema, i.e. be used with *than*. The test sentences listed in Table 9 were chosen to test the impact of negation on the choice of the preposition following *different*.

	#	Test sentences		American			British		Australian	
		from	to	than	from	to	than	from	to	than
(4)	Your reactio n was no differe nt anyone else's.	8	0	10	7	15	3	4	3	0
(7)	It was Christ mas but no differe nt any other day except that the shops were closed.	8	0	10	10	11	2	3	1	3

(14)	His accent is no differe nt the way he behave s.	8	0	8	13	8	2	3	2	0
(15) (20)	I am no differe nt you. He is not at all differe nt the other kids.	5 13	0 0	13 4	8 11	13 13	2 0	4 4	32	0 1
		42	0***	45	49	60***	9***	18	11	4

Table 9: Sentences illustrating the attraction schema and their ratings

Our expectations about the choice of prepositions with the attraction schema are well confirmed in British English, where the values of *to* are significantly higher (p < 0.001) and those of *than* significantly lower than expected (p < 0.001). In British English, the attraction schema as expressed by *to* is thus clearly distinguished from the comparison schema as expressed by *than*. In American English, *than* occurs only slightly, but not significantly more frequently than *from*; in Australian English, *from* is also only slightly, but not significantly more frequent than either *to* or *than*.

Sentence (20) is the only test sentence that does not conform to the overall pattern—in fact without this sentence a much clearer preference for *than* with the attraction schema in American English would emerge. Since American English does not have the option of *to* and the sentence does not exhibit the comparison schema, *from* is the natural choice. However, in British Enlglish the sentence does conform, although not significantly, to the attraction schema.

We also tested a further sentence with *no different*: (19) *Our job now is no different it was seven years ago*. This sentence contains the element of comparison and will therefore be presented together with the sentences displaying the comparison schema.

#### 6.2.3 Comparison schema

A type of situation that we assumed exemplifies 'difference' in the sense of the comparison schema is that of a comparison of the same referent at different times. Three of the sentences in our survey describe such a situation, in which an entity's present state is compared to an earlier state; one of the sentences, sentence (11), expresses earlier and later times as part of different referents. We expected that the preposition to be used with such situations should be

	#	Test	sentences	5	American		British		Australian	
		from	to	than	from	to	than	from	to	than
(1)	She looks differe nt before.	2	0	16	8	2	14	2	1	5
(11)	The situati on of an older woman is differe nt that of a younge r woman	9	0	9	12	10	2	2	3	2
(13)	He is fundam	2	0	16	4	6	12	2	2	3
(19)	entally differe nt he used to be. Our job is no differe nt it was seven years	0	0	17	2	5	16	3	1	3
	ago.	13***	0***	58***	26	23	44	9	7	13

than. The sentences and the subjects' responses to these sentences are listed in Table 10.

Table 10: Sentences illustrating the comparison schema and their ratings

Sentence (1) compares the same referent in time with respect to its appearance. The difference between the earlier and later state might be explicated in terms of a comparative statement such as 'she looks better than before,' and the comparison schema and the preposition *than* are obviously well-suited to express this situation of difference.

Sentence (11) seems to present a conflicting situation to the subjects: The comparative adjectives *older* and *younger* evoke the comparison schema and *than*, while the different referents may suggest a greater difference and, hence, favor the use of *from*. The fact that, although the referents are different, they are both women and thus belong to the same

category, could lead to the use of *to*. This would explain why the ratings show that this sentence evokes the comparison schema far less readily, especially in British English.

Sentences (13) and 19 also fit the comparison schema. They involve a comparison of the same referent in time, but the ground is not expressed as a noun phrase, but as a sentence. According to prescriptive school grammar, the use of *than* should be avoided. Many subjects felt insecure about which form to use and opted for complex expressions (*from what, from how, from the way, to what, to how*). These sentences obviously presents a conflicting situation between the comparison schema and the prescriptive factor. One British informant even refused to fill in the gap and crossed out the sentence with an "X" as if to say that sentence could not exist. The negation of different in sentence 19 would explain the use of *to* by some informants (esp. British, see 6.2.2).

In American English, sentences (1), (13) and (19) are clear cases of the comparison schema with *than* occurring significantly more frequently (p < 0.001) and *to* and *from* significantly less frequently than expected (p < 0.001). *Than* is also predominantly, though not significantly, more frequently found in British and Australian English in these sentences. Sentence (11) is the exception in this group, with a significant preference for *from* in British English answers, a tie in American English and no significant preferences in Australian English.

#### 6.3 Discussion

The results of the empirical investigation confirm our assumption that the prepositions used with *different* are not interchangeable but carry meanings associated with their respective conceptual schema. Several prepositional usages significantly diverge from the expected values, others only display such tendencies. Significant results were found in British and American English, not in Australian English, which is probably due to our small number of informants.

Speakers of British English use all three prepositions with *different*, and the overall usage of *to* is significantly higher than expected, while that of *than is* significantly lower. Moreover, British speakers associate most of the prepositions with one of the types of difference: substantial global differences significantly correlate positively with *from* and negatively with *to*, and slight differences correlate positively with *to* and negatively with *than*. However, no significant correlations were found for the comparison schema in British English.

Speakers of American English only use *from* and *than* with *different*, and the overall usage of *than* is significantly higher than expected. American speakers tend to prefer *from* with substantial differences and *than* with slight differences, but not at any level of significance. They do, however, associate the comparison schema with prepositions: especially differences related to the same referent over time significantly correlate positively with *than* and negatively with *from*.

### 7. Conclusion

We presented evidence for a metaphorical understanding of similarity and difference in terms of closeness and distance, respectively. The spatial basis is, amongst others, reflected in the use of spatial prepositions or other spatial markers. A number of randomly selected languages were compared with respect to the types of spatial marker used for closeness and distance on the one hand and similarity and difference on the other hand. Cross-linguistically, the predominant way of expressing these static notions is dynamically in terms of directed subjective motion: both closeness and similarity tend to be expressed by means of a Goal marker as in *close to* and *similar to*, and both distance and difference are almost exclusively expressed by means of a Source marker as in *far from* and *different from*.

These linguistic patterns point to a folk model in which we see close and similar things as being attracted and distant and different things as being repulsed. We described these two aspects of this folk model as the "attraction schema" and "repulsion schema," respectively. A notion closely related to similarity and difference is that of comparison. While judgements of similarity or difference involve global aspects of the things compared, acts of comparison highlight the property of comparison as in *X* is taller than *Y*, i.e. they involve one specific dimension. We referred to this situation as the "comparison schema." Typically, each of these conceptual schemata is associated with its own preposition: similarity with to, difference with *from* and comparison with *than*.

English is unique among the languages studied in that the expression *different* may be construed with the Source preposition *from*, the Goal preposition *to* and the Comparison preposition *than*. In the past, the issue of the choice of the preposition with *different* has mainly been looked at from the prescriptive point of view and as a matter of geographical variation—apart from that, the prepositions following *different* are generally claimed to be interchangeable. While not disregarding these factors, we chose to assume that the prepositions used with *different* convey different meanings and that their choice is determined by the conceptual schemata associated with them: thus *different from* is expected to convey the idea of substantial difference, *different to* the idea of slight difference or even similarity, and *different than* difference with respect to a specific dimension.

These assumptions were empirically tested by presenting a questionnaire including thirteen sentences with *different* to American, British and Australian informants and asking them to fill in the preposition that came to mind. The test sentences were chosen according to the three conceptual schemata associated with the prepositions *from*, *to* and *than*. The results based on 47 responses largely confirm our assumptions: *different from* is the favored choice for substantial global differences in all three varieties and significantly so in British English, *different to* is the most frequently chosen preposition with slight global differences and significantly so in British English, and *different than* is widely chosen in all three varieties for differences along a specific dimension and significantly so in American English.

#### References

- Aitchison, Jean. <sup>2</sup>1994. *Words in the Mind: An Introduction to the Mental Lexicon*. Oxford: Blackwell.
- Barzun, Jacques, ed. 1966. Wilson Follett: Modern American Usage. New York: Warner.

Ellis, H. F. 1986. Preparing for the West. In Humorous Stories. London: Octopus Books.

- Grady, Joseph. 1997. Foundations of Meaning: Primary Metaphors and Primary Scenes. Doctoral Dissertation, UC Berkeley.
- Ikegami, Yoshihiko. 1987. 'Source' vs. 'Goal': a case of linguistic dissymmetry. In R. Dirven and Günter Radden, eds., *Concepts of Case*, Tübingen: Narr, pp.122-146.
- Jäkel, Olaf. 1997. Metaphern in abstrakten Diskurs-Domänen. Frankfurt/Main: Lang.
- Kammer, Michael P., and Charles W. Mulligan. 1953. *Writing Handbook*. Loyola University Press: Chicago, Illinois.
- Kennedy. Graeme. 1998. An Introduction to Corpus Linguistics. London & New York:

Longman.

Lakoff, George, et al. 1994. Master Metaphor List. Berkeley, CA: University of California..

Lakoff, George, and Mark Johnson. 1999. Philosophy in the Flesh. New York: Basic Books.

- Langacker, Ronald W. 1987. Foundations of Cognitive Grammar. Vol. 1: Theoretical Prerequisites. Stanford: Stanford University Press.
- Langacker, Ronald W. 1991. *Concept, Image, and Symbol: The Cognitive Basis of Grammar.* Berlin, Mouton de Gruyter.
- Milroy, James, and Lesley Milroy. 1999. Authority in Language: Investigating Standard English. London, New York: Routledge.
- Murphy, Raymond. <sup>2</sup>1944. English Grammar in Use: A Self-Study Reference and Practice Book for Intermediate Students. Cambridge: Cambridge University Press.
- Random House American Sign Language Dictionary, compiled by Elaine Costello. 1994. New York: Random House.
- Strunk, William Jr., and E. B. White. 2000. *The Elements of Style*. Needham Heights, MA: Allyn and Bacon, 4<sup>th</sup> edition.
- Sweetser, Eve E. 1987. Metaphorical models of thought and speech: a comparison of historical directions and metaphorical mappings in the two domains. *Berkeley Linguistics Society* 13: 446-459.
- Tversky, Amos. 1977. Features of similarity. *Psychological Review* 84: 327-352.

Appendix 1 Questionnaire

We are doing some work on prepositions and would really appreciate your help. Please fill in the gaps with the preposition that first comes to mind. We are interested in your native speaker intuition and not grammar. Thanks!

- 1. She looks different before.
- 2. Are the chairs identical the set in the living room?
- 3. Sound waves are very different \_\_\_\_\_ water waves.
- 4. Your reaction was no different anyone else's.
- 5. I often use English \_\_\_\_\_ work.
- 6. Her new hairstyle is different \_\_\_\_\_ anything I have ever seen.
- 7. It was Christmas but no different \_\_\_\_\_ any other day except that the shops were closed.
- 8. He is not typical \_\_\_\_\_ Indians in Britain.
- 9. Their lives are rather different \_\_\_\_\_ those of our people.
- 10. Diplomats are immune \_\_\_\_\_ punishment.
- 11. The situation of an older woman is different \_\_\_\_\_ that of a younger woman.
- 12. He doesn't know his head \_\_\_\_\_\_ a hole in the ground.
- 13. He is fundamentally different he used to be.
- 14. His accent is no different the way he behaves.
- 15. I am no different \_\_\_\_\_ you.
- 16. Third World countries are different one another.
- 17. Microsoft seems to be immune \_\_\_\_\_ foreign competition
- 18. My thoughts are identical \_\_\_\_\_ yours.
- 19. Our job now is no different \_\_\_\_\_ it was seven years ago.
- 20. He is not at all different \_\_\_\_\_ the other kids.

Please fill in the following to help us with our statistics. What country are you from? (e.g. Canada, Australia, etc.) \_\_\_\_\_\_ Is English your native language? \_\_\_\_\_\_ Have you ever lived in another English-speaking country for more than 6 months? \_\_\_\_\_\_ If yes, where? \_\_\_\_\_\_

Appendix 2

Results of a configuration frequency analysis of conceptual schemata, prepositions and varities

constellation of variables		observed frequency	expected freque	expected frequency		
Attraction	to	British	60	245	0 ***	
Comparison	than	American	58	232	0 ***	
Repulsion	than	British	4	301	0 ***	
Attraction	than	British	8	373	0 ***	
Comparison	from	American	13	333	0 ***	
Attraction	to	American	0	187	0 ***	
Repulsion	to	American	0	151	0 ***	
Comparison	to	American	0	153	0 ***	
Repulsion	from	British	65	431	0.001 **	
Comparison	from	British	26	435	0.002	
Attraction	than	American	45	285	0.002	
Repulsion	from	American	50	329	0.002	
Repulsion	than	Austrian	2	88	0.007	
Comparison	than	British	44	304	0.01	
Attraction	than	Australian	4	109	0.016	
Attraction	to	Australian	11	71	0.107	
Comparison	than	Australian	13	89	0.112	
Comparison	from	Australian	9	127	0.185	
Repulsion	from	Australian	16	126	0.196	
Repulsion	to	Australian	8	58	0.222	
Repulsion	to	British	23	197	0.257	
Comparison	to	British	23	200	0.273	
Attraction	from	British	49	534	0.291	
Attraction	from	Australian	18	156	0.3	
Comparison	to	Australian	7	58	0.364	
Attraction	from	American	42	409	0.451	
Repulsion	than	American	23	230	0.529	
Sums		621	621			