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Are Metaphorical Paths and Roads Ever Paved?

Corpus Analysis of Real and Imagined Journeys

Abstract

This paper provides a corpus linguistic analysis of verbs included in English *path*-, *road*- and *way*-sentences. My claim is that many of the differences between metaphorical and non-metaphorical patterns including these terms are related to a qualitative difference between real and imagined journeys. Both non-metaphorical and metaphorical instances go back to our experiences with real-world paths, roads and ways. *Path* and *road*-sentences are connected with motion along the specific artifacts that these terms refer to. *Way*-sentences refer to motion through space. Differences between prototypical and un-prototypical paths, roads and ways, however, and a close connection between prototypical instances and metaphorical meaning, result in differences between non-metaphorical and metaphorical patterns. They explain why the source domain verbs in metaphorical *path*- and *road*-sentences are more restricted than the verbs in the non-metaphorical sentences. They show why metaphorical ways, but hardly ever metaphorical paths and roads, are paved.

Keywords: metaphor, lexical patterns, embodiment, simulation, affordances

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1. Introduction

Non-metaphorical and metaphorical *path*-, *road*-, and *way*-instances¹ are typically connected with motion. In the non-metaphorical sentence in 1) below, people and vehicles move in two directions, from one side of the road to the other, and along the road:

- 1) They crossed the road to face the oncoming traffic.

In non-metaphorical sentence 2), someone moves up a paved path:

- 2) On his way up the paved path between walls of rose bushes he picked up a piece of old iron pipe with his gloved hand.

Sentence 3) implies metaphorical motion on the part of a winning team along a *paved way*.

- 3) A Steve Quirk hat-trick paved the way for Formby JSC's 9-1 win over Holborn Boys.

Road, path, and way are all basic English terms (see *Macmillan English Dictionary for Advanced Learners, Second Edition* (Rundell & Fox, 2007, (MEDAL)) and useful components in metaphorical language structured by conventional motion metaphors (e.g. ACTION/TIME/CHANGE IS MOTION, LIFE/A PURPOSEFUL ACTIVITY/A RELATIONSHIP IS A JOURNEY, and PURPOSES ARE DESTINATIONS etc.). The *paved way* (in sentence 3) is a good example of the many metaphorical uses of these terms. As many as 267 instances of the 269 of the collocation (i.e. co-occurrence of lexical items) *pave-way*² in the *BNC* are metaphorical.

However, not all *path-*, *road-*, and *way-*phrases are used metaphorically. Neither the *crossed road* (in sentence 1) nor the *paved path* (in sentence 2) is metaphorical. Analyses of the collocations *cross-road*, *pave-path* and *pave-way* in the *BNC* show that this is not a coincidence. None of the 529 instances of *cross-road*³, and none of the 7 instances of *pave-path*⁴ in the whole corpus are metaphorical. Given the close connection between MOTION, ACTION, and *path, road* and *way*, we would expect metaphorical instances of *crossed roads*, and *paved paths* and *ways* to be frequent too, but this is not the case. Although *paved ways* are typically metaphorical, *paved paths* are not.

The tendency for certain lexical patterns including these terms to be metaphorical, and others to be non-metaphorical, is also evident from comparative analyses of the collocations *cross-way* and *pave-road* in the *BNC*. Just like *paved paths*, *paved roads* are all non-

metaphorical (15 instances). Similar to *crossed roads*, *crossed ways* tend to be non-metaphorical (30 out of 31 instances of *cross-way*).

Of all the paths, roads and ways that are either crossed or paved, only the *cross-path* instances are evenly distributed between non-metaphorical and metaphorical uses (20 are metaphorical, and 19 non-metaphorical). This paper addresses the issue why some lexical patterns including *path*, *road* or *way*, but not others, are typically metaphorical.

Two major cognitive linguistics explanations have been offered to explain why certain elements, but not others, are mapped from the source domains to the target domains of complex metaphors. Grady (1997) argues that complex metaphors (e.g. THE ARGUMENT/THEORY IS A BUILDING metaphor) are composed of primary metaphors (e.g. LOGICAL STRUCTURE IS PHYSICAL STRUCTURE and PERSISTING IS REMAINING ERECT). Only elements motivated by the experiential bases of one or more primary metaphors are mapped from the source domain of a given complex metaphor. Lakoff and Turner (Lakoff and Turner 1989, Lakoff 1990, Turner 1996) propose the invariance hypothesis/principle, which states that conceptual material that is mapped from source to target is *invariant* and preserves its basic structure when mapped to a target domain. Only entailments that are coherent with the image-schematic structure of the target domain can be mapped, or there will be a clash in the target domain (see Kövecses 2002, Turner 1996). Everything else is blocked by the principle.

The systematic ways in which MOTION is used to talk about ACTION in metaphorical *path*-, *road*- and *way*-sentences indicate that the primary metaphor ACTION IS MOTION may indeed have motivated these uses. In these sentences, forward motion is typically connected with an action

or process, and with progress. Accordingly, end of motion is connected with end of action etc. (see also Johansson Falck 2007). Moreover, considering the high frequency of expressions that are structured in line with conventional conceptual motion metaphors such as LIFE/A PURPOSEFUL ACTIVITY/ A RELATIONSHIP IS A JOURNEY, PURPOSES ARE DESTINATIONS, our habits of talking about our lives, activities, and purposes in terms of journeys, and destinations etc. are also likely to be involved in our metaphorical uses of *path-*, *road-* and *way-*sentences.

However, neither Grady's theory nor the invariance hypothesis explains why *pave-way* and *cross-path*, but not *cross-road/way* and *pave-path/road* are used metaphorically.

Grady's focus is on distinguishing between those elements that may be motivated by the experiential basis of a given primary metaphor, and those that may not (e.g. why the framework of a building, but not its windows, is mapped onto the target domain of an ARGUMENT/THEORY). Nothing is said about elements that do not have this qualitative difference yet differ with respect to how often they are used metaphorically. The verb-noun combinations *pave-path/road/way* and *cross-path/road/way* are all related to MOTION. But only *pave-way* and *cross-path* are included in metaphorical language motivated by the primary metaphor ACTION IS MOTION.

The invariance principle focuses on how well various source domain elements match given target domains. There may indeed be something in the image schematic structure of *paved paths/roads* and *crossed roads/ways* that clashes with the target domains that *paved ways* and *crossed paths* go together with. Much research would be needed, however, to define these clashes.

In this paper, I argue that metaphorical expressions are connected with mappings that include people's embodied experiences with specific concepts referred to in the language (cf. e.g. Gibbs 2006, Gibbs and Matlock 2008, see also Müller 2008). Mappings at this fairly specific level of generalization must be considered if we want to explain why there are differences between metaphorical and non-metaphorical patterns. Cameron and Deignan (2006) have previously shown that stable patterns including non-literal expressions "*metaphores*" emerge as discourse participants interact with their discourse environment, and as a number of different factors interact (see also Zinken 2007). Moreover, corpus linguistic research has shown that lexical items may be related in a number of different ways. They may *collocate* (see above) and/or *colligate* (i.e. co-occur with certain grammatical categories). They may be associated with something negative, or something positive (i.e. have a certain *semantic prosody*) or they may have a *semantic preference* and collocate "not [only] with another lexical item, but with a series of semantic items which belong to a semantic set" (Partington, 2004, p. 150). Some of these patterns may be the result of people's experiences with language and the cumulative effects that these encounters with lexical items have (see Partington 2004, p. 132).

Here I intend to show that some of the patterns at the level of verbal metaphor go back to our embodied experiences with the concepts referred to in the language. Metaphorical *path-*, *road-* and *way-*sentences differ because real-world paths, roads and ways differ. This paper also suggests that some of the differences between metaphorical and non-metaphorical *path-* and *road-*sentences are related to variation between what actually happens on these artifacts, and what we think happens there. The verbs that are used in non-metaphorical *path-* and *road-*

instances refer anything that can possibly happen on, or along these artifacts, and thus displays a great deal of variation. Metaphorical language including *path* or *road* is connected with properties that are central to a particular kind of path or road and with fewer kinds of actions, and thus includes fewer verb categories. The more properties that can be associated with the typical path, road or way, the larger the difference between our real and imaginary journeys along paths, roads or ways. Non-metaphorical *way*, which is primarily connected with motion through space, refers to a much less clearly defined concept than *path* and *road*. Accordingly, the source domain verbs in the metaphorical *way*-instances and the verbs in the non-metaphorical *way*-instances do not differ the way the verbs in the non-metaphorical and metaphorical *path*- and *road*-sentences do.

My analysis of the usage patterns of verbs included in *path*-, *road*- and *way*-sentences will show that each of these nouns favors its own set of verbs, and these are not just the cumulative effects of people's experiences with lexical items (cf. Partington 2004, p. 132). Each of these sets is related to what we know about real-world paths, roads or ways.

The usage patterns of these verbs also suggest that many of the differences between non-metaphorical and metaphorical meanings go back to a difference between non-prototypical and prototypical actions on paths or roads.

2. General method and material

My material consists of *path-* *road-* and *way-*instances from the *BNC*. 1000 random instances of each term were extracted from the corpus together with a context consisting of 3-5 lines of text. These instances were then divided into metaphorical and non-metaphorical uses (including both literal and metonymic instances) by means of a slightly modified version of *the Metaphor Identification Procedure (MIP)* (Pragglejaz Group 2007). Here the source text of a given instance was only consulted when necessary for the distinction between metaphorical and non-metaphorical meaning. The use of *MIP* to identify non-metaphorical/metaphorical meaning necessarily requires manual analyses and coding of lexical data, but it guarantees consideration of the context of verbal metaphors. Indeed the context-dependent quality of metaphorical meaning (see e.g. Müller 2008) makes it hard to analyze metaphor by means of purely corpus driven approaches (cf. Deignan 2005).

At a next stage, the verbs used together with *path*, *road* or *way* were analyzed. The focus was on verbs that provide information about a) what happens on the path, road or way, or b) what the path, road or way does. Here too manual coding was used to get as rich information as possible about the context of the verbs. Any verb that occurred more than once, and any verb (e.g. *prepare*) that seemed to belong to the same semantic category as another verb (e.g. *make*, *construct*), were further analyzed. Isolated examples were left out of the analysis. Throughout the process the goal was to identify the verb categories in the data, and not to find instances of a pre-determined set of categories. The verbs categories that emerged from the

data were then compiled in tables and their contexts further analysed. An obvious drawback of the manual classification conducted here is that it necessarily allows errors based on the human factor (e.g. certain semantic categories may not be discovered, or certain verbs may be missed). However, the process of coding the verbs manually includes taking a larger part of the context into consideration. It provides information about the context and the function of the verbs that would have been hard to obtain by means of automated generations of lists.

Finally, complementary analyses of collocations of *path*, *road* and *way* in the *BNC* were made to test the tendencies suggested by the usage patterns of the verbs included in the 3 times 1000 random instances. In this way strong tendencies were distinguished from accidental.

The usage patterns of the verbs were then compared with data related to people's conceptions of paths, roads and ways. Dictionary data (from *MEDAL*) and a corpus linguistic study of non-metaphorical and metaphorical *path*-, *road*- and *way*-instances from the *BNC* (see Johansson Falck in press) were used to find out how paths, roads, and ways are described.

3. What's in a non-metaphorical and metaphorical *path*, *road* or *way*?

The data related to people's conceptions of paths, roads and ways shows that *path*, *road* and *way* refer to related, but slightly different concepts.

In their non-metaphorical senses, both *path* and *way* can be artifacts that people travel on from one place to another or the direction in which someone or something is moving. *Path*, however, typically refers to an artifact that people move along on foot, and *way* to somebody's or something's motion through space. A *road* is 'a way that leads from one place to another, especially one with a hard surface that cars and other vehicles can use' (*MEDAL*) (see Figure 1 below).

[INSERT FIGURE 1 ABOUT HERE]

The more detailed descriptions of paths show that there are many similarities between non-metaphorical and metaphorical paths. They may both be referred to as *clear* and *easy* to move along, but they are more often *narrow*, *winding* and *difficult*. There are frequently obstacles (e.g. *bushes*, *pebbles*, and *stumbling-blocks*) on, along or near them, and they are often in need of preparation or construction. Metaphorical paths are typically more difficult than non-metaphorical paths, but the descriptions of metaphorical paths are fairly short (they are e.g. *not easy*, *narrow*, and *crooked*). Non-metaphorical paths, by contrast, are often described in varied, detailed and colourful ways:

- 4) The path was narrow — only the width of a boot — but it was clear of the marram that grew everywhere around.

Roads are typically seen as efficient means of transportation with few obstacles, and they are described by much fewer terms than paths. This is true of both non-metaphorical and metaphorical roads.

Very little is also said about what ways are like, but both non-metaphorical and metaphorical *ways* are referred to as *long/longer* and there may be quite a few obstacles along them. Metaphorical *way* is fairly often connected with easy, successful or pleasant motion. It seems to represent a possibility for us to do something. In that sense, metaphorical *way* may have a 'positive' semantic prosody (see e.g. Stubbs (1995); Stefanowitsch & Gries (2003)), but more data would be needed to establish this.

Both non-metaphorical and metaphorical *path* and *road* then, but not *way*, are described in ways that remind us of the artifacts that these terms refer to. The use of *way* in the sense of motion through space seems to have metonymic origin (LOCATION OF MOTION FOR MOTION). Most non-metaphorical and metaphorical uses of this term are connected with this specific sense. With very few exceptions (e.g. *The way now worked left across the slabby walls*), only the compounds including *way* (e.g. *highway*, *freeway*) and the proper names (e.g. *King's Way*) are associated with an artifact.

In the following, the above descriptions of paths, roads and ways will be compared with the patterns of verbs used together with *path*, *road* or *way*. As shown in Figure 2 below, the non-metaphorical and metaphorical instances of each term are unevenly distributed. The majority of the *path*- and *road*-instances are non-metaphorical, and the *way*-instances tend to be metaphorical. These groups necessarily include a larger and more varied number of verbs than

the metaphorical *path*- and *road*-instances, and the non-metaphorical *way*-instances. My analyses show, however, that there are also important qualitative differences between these groups, and these are coherent with the ways in which non-metaphorical and metaphorical paths, roads and ways are described.

[INSERT FIGURE 2 ABOUT HERE]

4. Path

Table 1 below, is a summary of the main verbs categories in the (659) non-metaphorical and (284) metaphorical *path*-sentences in my data. An analysis of the verbs showed that not just non-metaphorical *path*, but also metaphorical instances of this term, are intimately connected with what we know about real-world paths. The similarities between the actions that take place on, or along, these two types of paths are striking. For instance, people can move on foot (e.g. *walk*, *tread*) on both non-metaphorical and metaphorical paths (see 1a, Table 1). They can *cross* them (see 1b, Table 1), *make*, or *provide* paths in one way or the other (see 3, Table 1), or there may be different kinds of obstacles on the paths, which are e.g. *blocked*, or *littered* etc. (4, Table 1). Quite a few verbs (see 5, Table 1) indicate that paths are hard to find (e.g. they are *found*, or *traced*, or someone or something is *guided* along the path), and several instances refer to *seeing* or *looking* (see 6, Table 1) at paths, or at people moving along paths.

[INSERT TABLE 1 ABOUT HERE]

Not just the verbs (from 1a and b, and 3-6 Table 1 above and) included in the non-metaphorical instances then, but also those included in the metaphorical instances, refer to actions that typically take place on real-world paths. The close connection between our embodied experiences of motion along a real path, and metaphorical *path*-instances is further emphasized by the contexts in which these instances are used. The *path* in sentence 5) below, is one out of many that are hard to move along, and the *path* in 6) goes through typical real-world path terrain.

5) Power sharing was not an easy path to tread.

6) Such arguments would not hold sway in a University, let alone in an Oxbridge College, but economic pressures may force their librarians along a path beaten by professional colleagues in another part of the wood.

However, a more detailed analysis of the verbs in my material shows that there are also differences between real and imagined journeys along paths. On the one hand, there seems to be a close connection between *walk*, which refers to something that we can do on many different kinds of surfaces, and the non-metaphorical path. On the other hand, *tread*, which refers to something that we do when there is reason to be cautious (see *MEDAL*)) and the surface is more problematic, is intimately connected with metaphorical paths. The most frequent manner verb in the non-metaphorical *path*-instances is *walk*, and the most frequent

manner verb in the metaphorical *path*-instances is *tread* (see 1a, Table 1, above). The usage patterns of the verbs in my data are in line with that of the collocations *walk-path* and *tread-path* in the *BNC*. 22 out of 27 *tread-path*-instances⁵ are metaphorical, and 112 out of 118 *walk-path*-instances⁶ are non-metaphorical.

Just like *tread*, *beat* is more closely connected with rough surfaces. We do not typically talk about beating a surface unless it is rough or uneven enough to be affected by people's motion on or along that surface. Accordingly, this verb is used together with metaphorical *path*-instances much more often than with non-metaphorical. All the *beaten path*-instances in my material (see 1a, Table 1, above), and 33 out of 34 instances⁷ of the collocation *beat-path* in the *BNC*, are metaphorical instances.

Unlike *tread* and *beat*, but like *walk*, *drive* is used together with non-metaphorical *path*. There are no *drive*-instances in the metaphorical *path*-contexts, but as many as 6 instances in the non-metaphorical *path*-contexts (see 2, Table 1, above). Metaphorical paths, which are generally too rough for walking, are even less apt for driving. *Drive*, which refers to something we typically do in a vehicle and on a smooth surface, is very far from representing prototypical motion along a path. The less prototypical an action seems to be for the context of a path, the less likely the verb that refers to this action is to be included in a metaphorical *path*-sentence.

The usage patterns of the manner verbs in 1a and 2 above do not seem to be accidental, but the result of a natural connection between manner of motion and location of motion. The uses of *walk*, *drive*, *tread* or *beat* together with *path* are in line with how non-metaphorical and

metaphorical *paths* are described (see section 3 above); in short, with the fact that non-metaphorical paths are varied and metaphorical paths are rough (see above). Both non-metaphorical and metaphorical paths represent a certain environment or context where only certain things can happen. Metaphorical paths, however, more so than non-metaphorical ones, are closely connected with certain prototypical properties. This, in turn, seems to explain why the verbs in the metaphorical *path*-instances are more limited than the verbs in the non-metaphorical *path*-instances. The tendency for *beaten* and *trodden paths* to be metaphorical, and *paths* on which we *walk* and *drive* to be non-metaphorical, seems to go back to a difference between what we **think** paths are like, and what they **really** are like. The more typical a given action on a path is, the more likely we are to imagine this kind of action in that environment. Accordingly, the more likely we are to imagine a certain action on or along a path, the more likely the verb referring to this kind of action is to be used in a metaphorical *path*-sentence.

The connection between metaphorical *path*-instances and what is typical of paths, also seems to explain why all *stand/stood*-instances are used together with non-metaphorical *path* (see 2, Table 1, above), and why as many as 17 out of 19 instances of the collocation *stand-path*⁸ in the *BNC* are non-metaphorical. According to Gibson (1979), things in the world around us tend to be connected with what they are meant for. On this line of reasoning, paths should be more closely connected with action that includes, or is related to motion from A to B along the path, than action that is not. Accordingly, verbs that refer to motion, manner of motion, or change of direction etc. should be more frequent in language about imaginary paths than verbs

that do not. This is completely in line with how seldom *stand* is used together with metaphorical *path*. Interestingly enough, the two *stand*-instances that are indeed found in metaphorical *path*-instances are both indirectly related to motion. As in sentence 7 below, where *stand* refers to someone who stands *in the path of true love*, they refer to obstacles in a moving figure's way.

- 7) 'Far be it from me to stand in the path of true love,' he said lightly. 'Perhaps I'm quite wrong and Pickles is serious.'

The connection between paths and their function, then, provides us with an explanation for why *stand* is not often used in metaphorical *path*-contexts. Language that refers to motion along real paths, by contrast, is not necessarily restricted in this way. It can refer to anything that can possibly happen on a path. Accordingly, a number of *stand*-instances are included in the non-metaphorical *path*-sentences (above).

To summarize the analysis of the verbs in 1-6, Table 1, above, it suggests that there are very many similarities between non-metaphorical and metaphorical *paths*, and between these two kinds of *paths* and real-world paths. 1b and 3-6, in Table 1 above, show that the same kinds of verbs are included in non-metaphorical and metaphorical *path*-sentences (we e.g. *cross*, *provide* and *block* both non-metaphorical and metaphorical paths). The verbs in 1a and 2, however, indicate that metaphorical paths are usually rougher and more difficult to move along

than non-metaphorical paths. The frequency differences between *path*-collocations including these verbs seem related to this qualitative difference. Whereas non-metaphorical sentences to a larger extent describe what actually happens on a real path, and can thus be fairly varied, metaphorical *path*-sentences are restricted to, or at the very least favor, what we conceive of as typical paths and as typical motion on real-world paths. The differences between the verbs in the two groups are coherent with the tendency for non-metaphorical paths to be described in much more varied ways than metaphorical paths (see above, see also Johansson Falck in press). In addition, imagined journeys along paths, but not necessarily journeys along real paths, seem to focus on the function of paths of taking us from one place to another, from A to B.

The rest of the verbs in Table 1 above (see 7-11), also refer to action that is likely to take place on real-world paths. We thus *take or follow* paths (see 7 and 8). They *lead* somewhere (see 10). We can *choose* between them (9), and *be* on them (11) etc. Differences in frequency between non-metaphorical and metaphorical instances including these verbs, however, do not seem to go back to the difference between non-metaphorical and metaphorical paths discussed above. From 7, we see that a larger proportion of the metaphorical paths are passively followed than the non-metaphorical. 27 out of 659 non-metaphorical paths are *followed*, and 1 *pursued*. 26 out of 284 metaphorical paths are *follow[ed]* and 6 *pursu[ed]*. Similarly, 9 suggests that we choose between metaphorical paths more often than between non-metaphorical paths. There is only 1 instance of this verb in the 659 non-metaphorical *path*-contexts, and 6 instances in the 284 metaphorical ones. It is not entirely clear why this is so, but given that the metaphorical *path* may metonymically represent any kind of activity, and that the non-metaphorical path

simply refers to a path, it is not very surprising that we are engaged in *following*, or *choosing* between metaphorical paths more often than non-metaphorical paths.

The verbs in 10 show that non-metaphorical paths fictively move much more often than metaphorical paths. They *lead*, *run*, *emerge*, and *zig-zag* etc. and they do so fairly often. The metaphorical paths do nothing but *lead*. The difference reflects a tendency for metaphorical paths to focus on a figure that moves along the artifact, and not on an artifact that fictively moves.

5. Road

The connection between artifact and both non-metaphorical and metaphorical meaning is also implied by the verbs included in the 751 non-metaphorical and 49 metaphorical *road*-instances (see Table 2 below). The actions that take place on the metaphorical road, take place on the non-metaphorical road too, and they are all typical actions on real-world roads. We thus *move*, *go*, and *travel* on, or along, both kinds of road (see 6, Table 2), we *head* somewhere on them (see 6), we can *be* on the road to something (see 9), and we *reach* something by moving along them (see 6).

Here too, the verbs in the non-metaphorical instances are more varied than those in the metaphorical ones (cf. *path*). Given the much higher frequency of non-metaphorical *road*-instances this is not very surprising (see Figure 2 above). The differences, however, do not only

seem to be related to this difference in frequency. My data suggests that there are important qualitative differences between the verbs included in the two groups and these are coherent with how metaphorical and non-metaphorical roads are described (see section 3 above). Just like metaphorical *path*, metaphorical *road* is associated with a given prototype. It is an artifact meant for fast and efficient motion from one place to another. Accordingly, the verbs in the metaphorical *road*-sentences (e.g. *go (down)*, *move* (see 6), *be (on)* (see 9), refer to motion through space without really specifying what that motion is like. The lack of information about manner in these fairly schematic verbs goes with the speed with which we move along roads. The faster we travel the less likely we are to pay attention to the details of that travel. Neither *walk*, which is the absolutely most frequent verb in non-metaphorical *road*-sentences (26 instances), nor *drive*, which seems to refer to prototypical motion on a road, is used together with metaphorical *road*, and none of the 220 *walk-road* instances⁹ and 99 *drive-road* instances¹⁰ in the *BNC* are metaphorical. This can be compared with the uses of collocations including *road* and either one of the verbs *go* and *set*. These too suggest that schematic verbs are more likely to co-occur with metaphorical *road* than manner verbs. 31 out of 180 *go-road* instances¹¹ in the *BNC* are metaphorical, and so are 2 out of 6 *set-road* instances¹².

The verbs in the non-metaphorical *road*-instances refer to anything that can be done on, or near any kind of road. The categories include manner verbs (e.g. *drive*, *cycle* (see 1a), *walk* and *wander*, (see 2)), verbs that refer to being located somewhere on, or near the road (e.g. *stand*, *stood*, *live*, *die*, (see 2)), to building or preparing the road (e.g. *built*, *paved* (see 3)), to blocking it (see 4), to changing direction (e.g. *cross*, *turn* (see 1b)), to following the road (see 7),

and to looking at (something on) the road, or concentrating on the road while driving (e.g. *watch, see, concentrate* (see 5)). Moreover, there are quite a few fictive motion verbs (e.g. *lead, go, run, pass, climb, end* and *bring* etc. (see 8)) in the non-metaphorical *road*-sentences, but only one fictive motion verb (i.e. *carry*) in the metaphorical sentences (cf. *path* above).

[INSERT TABLE 2 ABOUT HERE]

The tendency for *park, stop, stand* and *live* to occur in non-metaphorical *road*-contexts is in line with the distribution of the *road*-collocations in the *BNC* including either one of these verbs. All the roads in the 42 *stand-road* instances¹³ but 1, all the roads in the 42 *stop-road* instances¹⁴, and both the *stay-road* instances¹⁵ are non-metaphorical. Verbs that do not refer to what roads are primarily meant for, that is, taking people or things from A to B along the road, seem to be unusual in metaphorical instances. Not even verbs that refer to changing the direction of motion along the road, or to motion from one side of the other (e.g. *turn* and *cross*, see 1b) are frequent in metaphorical *road*-instances. The strong tendency for *crossed roads* to be non-metaphorical was discussed above. Accordingly, there are no metaphorical instances of *turn* in my data, and none of the 240 *turn-road* collocations¹⁶ in the *BNC* are metaphorical.

The view that the road is primarily an efficient means of transportation may also explain why verbs that refer to building or repairing the road, and verbs that refer to blocking the motion along the road are not often used metaphorically. The above tendency for *paved roads*

to be non-metaphorical (see section 1), is in line with a similar tendency for *build*, *construct* and *repair* to be included in non-metaphorical *road*-contexts (see 3, Table 2 above). The usage patterns of the 81 instances¹⁷ of the collocation *build-road*, the 23 instances¹⁸ of *construct-road*, and the 21 instances¹⁹ of *repair-road*, which are all non-metaphorical, also suggest that when thinking of the road in metaphorical ways we do neither have an artifact that needs reparation, nor an artifact that is being built in mind. Similarly, none of the *blocked roads* in my data are metaphorical (see 4, Table 2), and only 3 out of the 128 instances of the collocation *block-road*²⁰ in the *BNC* are metaphorical.

To conclude, the *road*-material discussed so far suggests that similarities between the uses of verbs included in non-metaphorical and metaphorical *road*-sentences go back to what we know about real-world roads. We are engaged in the same kind of activities on these two types of roads as on real roads. But the verbs in the metaphorical *road*-instances are more restricted. Only those that are connected with what seems to be the most central features of the road (see section 3 above) occur in the metaphorical instances. Again, differences between non-metaphorical and metaphorical patterns are related to differences between what actually happens in the real world, and what we tend to associate with this world. Although several different things may be done on, along, or near a road, only motion from A to B along the road seems to be relevant for the metaphorical mappings.

The connection between the function of the road, or the affordances that the road offers (see Gibson 1979), and metaphorical uses of *road* seems strong. Unless we consider what roads are typically meant for, we are left with no obvious explanation for why metaphorical

road-instances are almost exclusively used together with verbs that focus on motion from a source, A, at the beginning of the road, to a goal, B, at the end of the road. Indeed, the traditional cognitive linguistics view that metaphorical sentences like these are motivated by primary and complex motion metaphors (e.g. ACTION IS MOTION, PURPOSES ARE DESTINATIONS and LIFE IS A JOURNEY) provides us with an explanation for why these sentences are all based on the idea that moving means acting. Mappings at these levels of abstraction, however, do not explain why we, in our metaphorical uses of *road*, consistently stick to motion along the road. Other directions of motion (e.g. a change in the direction of motion along the road, or motion from one side of the road to another) might equally well have been used in metaphorical language motivated by the primary metaphor ACTION IS MOTION. A close connection between roads and their function, however, means that our imagined journeys on metaphorical roads are likely to follow the direction that vehicles on a road typically travel. My data clearly shows that the direction of motion in metaphorical *road*-instances is more or less identical with that of vehicles on a road. Moreover, verbs connected with being located on or near the road, rather than with motion along the road, are not used metaphorically, unless they refer to blocking the way for someone who travels along the road. Once again, there is an intimate relationship between metaphorical meaning and central properties. Peripheral properties, on the other hand, are not as important a part of our imagined journeys.

From 7 (Table 2) above, we see that there are quite a few instances of *follow* in the non-metaphorical *road*-sentences, but none in the metaphorical ones. There seems to be a tendency for metaphorical roads to be about motion whose direction the figure decides (the

figure e.g. *goes, moves, or heads*), and for non-metaphorical *road*-sentences not to be restricted in this way. In the non-metaphorical instances figures may either *follow* the road or decide where they are heading. Metaphorical *path*-sentences (see 8, Table 1 above), by contrast, are often about a figure that *follows*, or *pursues* a path. In a similar way, the verbs in 5, Table 2, (e.g. *see, watch, concentrate*) and the contexts in which these verbs are found show that the non-metaphorical *road*-instances, but not the metaphorical instances of *road*, sometimes refer to seeing the road or to seeing people who move along the road. They may also refer to people who concentrate on the road while driving. The paucity of verbs that refer to someone watching the road, or someone who moves along the road, on the other hand, is in line with the tendency for both metaphorical *path*- and *road*-instances to focus on the moving figure alone (see the discussion of *path* above), but it is not clear from my material how these differences can be explained.

6. Way

The term *way* is typically associated with a much more abstract concept than non-metaphorical *path* and *road*. One reason for this is that *way* tends to be used metaphorically. There are 201 non-metaphorical *way*-instances in my data, and 777 metaphorical *way*-instances (see figure 2 above). Another reason is that non-metaphorical *way* typically refers to the abstract concept of someone or something's motion through space. It does not generally

refer to a concrete artifact unless is it part of a compound noun (e.g. *highway*, *freeway* and *King's Way*, cf. the descriptions of *way* in section 3 above).

Table 3 below is a summary of the verbs in the *way*-instances in my data. These fall into a fairly limited number of categories. Some of the verbs in these categories focus on the very motion through space (e.g. *be* [on one's way] (see 10), *come*, *go*, *take*, *head* (see 6, Table 3), *lead*, *follow* etc. (see 7). Others refer to making a way through space (e.g. *work*, *make*, *push*, and *elbow* etc. see 3), or to finding or knowing the way (e.g. *find*, *know*, *lose* etc. see 4). Some *way*-sentences include verbs that refer to sight (e.g. *look*, *view*, *see* etc. see 5). These tend to be related to manner (e.g. *the way we see things*). The focus on someone or something's motion through space in the majority of these sentences is emphasized by a frequent use of possessive pronouns to indicate whose motion *way* refers to. For instance, ***your*** [non-metaphorical] *way* (sentence 8), and ***its*** [metaphorical] *way* (sentence 9):

8) You round the Point to make ***your*** way south to Douglas.

9) Over coffee, the conversation worked ***its*** way back to NCPR.

[my emphasis]

Similar *path*- and *road*-instances tend to be used together with the definite or indefinite (we e.g. *walk along a/the path/road*).

The abstract, and hence less precise quality, of the concept that *way* typically refers to, has several important consequences. First, it means that *way* can refer to motion that takes people or things in any conceivable direction, and at any speed possible (people or things can e.g. *walk*, *ramble* or *catapult* while on their way). This is reflected in a lot of variation within the group of manner verbs (see 1a, Table 3 below) (cf. *path* and *road*). Second, it gives us a certain freedom with respect to the target domain verbs that we can use together with metaphorical *way*. From 9 (Table 3 below), we see that the target domain verbs are quite varied. Third, it substantially reduces our possibilities to use *way* together with fictive motion verbs. The type of fictive motion focused on here involves a stationary figure (e.g. a path or road) along which a conceptualizer may simulate movement (see Matlock 2004, Langacker 1987, Talmy 2000). But since non-metaphorical *way* does not usually refer to a stationary figure along which we can mentally scan, but to a figure's motion through space, it is generally not connected with fictive motion. There is only one fictively moving non-metaphorical *way*-instance in my data (see 8, Table 3) and none in the metaphorical instances. This exceptional *way*-instance refers to a physical artifact (cf. *path* and *road*), and it can thus work left, move around, and head into the sun:

10) The way now worked left across the slabby walls, moving round into the subtle, hidden corners, heading into the sun.

[INSERT TABLE 3 ABOUT HERE]

Not very many differences were found between the categories of verbs in the non-metaphorical and metaphorical *way*-sentences. Table 3 suggests that verbs that refer to change of direction (e.g. *change* and *turn*, see 1b, Table 3), and verbs related to location (i.e. *stand* and *see* 2), can only be used in metaphorical *way*-instances. But a comparison with the collocations *turn-way*, *change-way*, and *stand-way* in the rest of the *BNC* shows that this is not the case. Interestingly enough, all the *stand*-instances in the metaphorical *way*-sentences refer to being in the way of something's or someone's actions or progress (e.g. *stands in the way of effective action* or *stood in the way of progress*). In that sense, their usage is similar to that of *stand* in the metaphorical *path*- and *road*-sentences; they are all indirectly related to motion. The biggest difference between the verb categories included in non-metaphorical and metaphorical *way*-instances is related to the large number of target domain verbs (see 9) in the metaphorical *way*-instances. These are naturally not found in the non-metaphorical instances.

On the whole, then, the verbs in the non-metaphorical and metaphorical *way*-sentences are very similar. The abstract quality of the concept connected with *way* does not only give us a certain freedom with respect to manner of motion along the way, and with respect to the target domain verbs that we can use together with metaphorical *way*, it also reduces the differences between non-metaphorical and metaphorical language. The abstract quality of *way* makes it hard for us to pinpoint what properties a prototypical way would have other than referring to travel through space. This, in turn, means that we are not restricted by properties connected with of a certain type of way when we imagine what someone's or something's motion along the way is like. In this way, the differences between real and imagined journeys

along the way become less clearly defined, and the differences between non-metaphorical and metaphorical language reduced.

In sum, both the kinds of verbs included in the *way*-sentences and their overall frequencies largely correlate with the abstract notion of the concept associated with *way*. Not only our embodied experiences of moving along artifacts such as path and road constitute specific source domain experiences that are frequently used in metaphorical language, so do our experiences of moving through space while on our way. Put simply, metaphorical *way*-instances go back to simulated motion along ways. The variation within the groups of target domain verbs and manner verbs is coherent with the few limitations posed by the abstract concept associated with *way*. The abstract quality of this concept also explains the focus of the verbs on motion through space, on making way through space, and on finding the way through space. Sinclair et al. (1970/2004) have shown that very frequent words such as *way* and *point* tend to be part of fixed phrases, and that their meaning is generally related to the phrases in which they occur. These phrases are often used metaphorically (see Stubbs 2009). High frequency, however, may not be the only reason why these words are often used in fixed phrases. My data suggests that metaphorical uses are more closely connected with prototypes than non-metaphorical uses, and this is coherent with the finding that metaphorical language a) tends to be more fixed than literal language and b) typically forms more restricted collocations (see Deignan 2005). The large proportion of metaphorical *way*-instances seems to be more than just a usage pattern that is typical of very frequent terms. It may be part of **the reason** why *way* is generally used in fixed phrases.

7. Why verb patterns in metaphorical and non-metaphorical *path-*, *road-* and *way-*sentences differ

The previous sections showed that both non-metaphorical and metaphorical *path-*, *road-* and *way-*instances are intimately connected with what we know about paths, roads and ways. Their function of taking us from one place to another is particularly important. Since paths, roads and ways are all meant for motion, sentences including these terms tend to be about motion too. However, because paths, roads and ways differ, they still provide different contexts for our actions. In each of these contexts, certain specific things are more likely to happen than others. *Path-*, *road-* and *way-*instances are clearly used with their own set of verbs. These sets, are far from random, but reflect a correlation between what is being done and what the context of a given action is like. In other words, differences between the contexts of the journeys along paths, roads or ways give rise to differences between the verbs included in *path-*, *road-* and *way-*sentences. The more clearly defined the context of our actions is, the more restricted will the actions in these context be. Manner verbs that refer to action that takes place in the context of the concrete artifacts path or road are thus more restricted than those that refer to action that takes place in the context of someone or something's abstract way through space.

However, even though non-metaphorical and metaphorical instances of each term go back to people's experiences with the same real-world concept, there are still differences

between the patterns of the verbs included in these instances. Many of these differences go back to a qualitative difference between real and imagined journeys. Real journeys along real paths, roads or ways are connected with what paths, roads and ways are really like. They take place in contexts that may have a variety of different properties. Some of these may be typical, yet others may be quite unusual. The close connection between real journeys and what paths, roads and ways are actually like explains why the verbs in the non-metaphorical *path-*, *road-* and *way-*sentences differ. Imagined journeys along imaginary paths, roads or ways, on the other hand, are connected with what we think paths, roads or ways are like. When we imagine what motion along these must be like, we simply stick to features and actions that we expect in the contexts provided by paths, roads or ways. The connection between imagined journeys and what we think paths, roads and ways are like provides an explanation for why the source domain verbs included in metaphorical *path-*, *road-* or *way-*instances are less varied than the verbs in the non-metaphorical instances.

The biggest differences between the source domain verbs in the metaphorical instances and the verbs in the non-metaphorical instances are found in the *path-* and *road-*material. One important reason for this seems to be that the concrete artifacts that *path* and *road* refer to are more closely connected with a number of specific properties than the abstract concept connected with *way*. The more specific properties that may be associated with a prototypical context, the more restricted will the actions that we imagine in that context be. Accordingly, the bigger the difference between prototypical and un-prototypical paths, roads or ways, the bigger the differences between the source domain verbs in their metaphorical instances and

the verbs included in their non-metaphorical instances. Prototypical and un-prototypical paths and roads differ more than prototypical and un-prototypical ways. The biggest differences between the source domain verbs in the metaphorical instances and the verbs included in the non-metaphorical instances are found in *path*- and *road*-material.

In addition to reducing the differences between real and imagined journeys along ways, and between non-metaphorical and metaphorical *way*-meaning, the abstract quality of the concept associated with *way* gives us the freedom to use *way* together with a large variety of target domain verbs. The possibilities to combine these verbs with *way* are not narrowed down by a number of specific *way*-properties. This seems to explain why the target domain verbs included in the metaphorical *way*-sentences are both much more frequent and more varied than those included in metaphorical *path*- and *road*-sentences²¹.

The title of this paper asks the question if metaphorical paths and roads are ever paved. Analyses of the verbs in the *path*- and *road*-instances in my data, and of the collocations *paved-path* and *paved-road* in the rest of the *BNC* indicate that paved metaphorical paths are unusual, and that metaphorical roads are never paved. At the same time, analyses of 1000 random *way*-instances and the collocation *pave-way* show that metaphorical ways are often paved. Neither Grady's theory of primary metaphor, nor the invariance hypothesis, explains why we tend to talk about paving ways in metaphorical ways, but not about paving metaphorical paths and roads. Metaphorical *path*-, *road*-, and *way*-instances are equally likely to have been motivated by the primary metaphor ACTION IS MOTION. Grady's theory, then, does not distinguish between metaphorical uses of *path*, *road* or *way*. Although there may indeed be something connected

with our experiences of paved paths or roads that clashes with certain target domains, the invariance principle does not really help us define what these clashes are.

This paper, however, shows that metaphorical uses of *path*, *road* and *way* are all intimately connected with our embodied experiences of paths, roads and ways. More specifically, our experiences of certain prototypical kinds of paths, roads and ways are in focus. Metaphorical paths are typically rough and we often have to deal with obstacles along the path to be able to move from A to B. But the typical roughness of the metaphorical path clashes with the idea of paving this kind of path. This clash likely explains why we do not tend to imagine dealing with the surface of a metaphorical path in this particular way. Metaphorical roads, on the other hand, do have a hard surface and are likely to be paved. But metaphorical roads are primarily fast and efficient means of transportation, and we do not typically imagine having to deal with their surface to be able to move along on them. Unlike *path* and *road*, *way* generally refers to motion through space. We are often engaged in making way through space, and the vagueness of the concept associated with *way* allows us to do so in many different ways. We can thus pave the metaphorical way as often as we like, even if non-metaphorical ways are not typically concrete enough to be paved. Uses of the phrase *pave the way* show that *pave* is much more frequent in metaphorical than in non-metaphorical *way*-sentences. All the instances in my corpus are metaphorical, and so are 96 out of 97 instances of the collocation *pave-way* in the rest of the *BNC*, and 147 out of 148 instances of *paved-way*.

This paper also addressed the question why people sometimes cross metaphorical paths, but typically not metaphorical roads or ways. My analyses have shown that metaphorical

path-, *road*- and *way*-sentences all focus on the motion of the figure from A to B along the path, road, or way. Figures in the context of artifacts move in the direction that people or vehicles typically move. Other directions of motion are only mentioned if they interfere with the motion of the figure. The focus on motion from A to B along an artifact seems to result in a correlation between how wide an artifact is and how likely we are to cross that artifact in a metaphorical context. The narrower an artifact is the more likely is someone or something that crosses that artifact to inhibit the motion of a figure that moves along the artifact. The more likely someone or something that crosses an artifact is to inhibit the motion of a figure, the more likely we are to talk about this artifact in metaphorical ways. The frequencies of *cross* in metaphorical *path* and *road*-sentences seem to go back to this correlation. The tendency is also evident from how the prepositions in *path*- and *road*-sentences are used. The usage patterns of the collocations *across-road* and *across-path* shows that we are extremely unlikely to cross the metaphorical road, but that we sometimes cross the metaphorical path. None of the 701 instances of *across-road*, and 4 out of 102 *across-path* instances are metaphorical.

The paucity of *cross*-instances in the metaphorical *way*-instances in my data, and the extremely low frequency of metaphorical *cross-way*-instances in the *BNC* are in line with the use of *way* to refer to motion through space. When used in this very abstract sense, a *way* can neither be narrow nor wide, and is very hard, if not impossible, to cross. There is simply nothing there in front of the moving figure to cross.

The tendency for us to refrain from *crossing* metaphorical *ways*, is further substantiated by the 372 *across-way* instances in the *BNC*. None of these are metaphorical.

The categories of verbs discussed in this paper (see Tables 1-3 above) may be compared with the frequencies of each individual verb (see tables 4-5 in the appendix). Patterns that are evident from category-by-category analyses of verbs are clearly less difficult to spot when the focus is on individual verbs. Moreover, isolated verbs that are infrequent but nevertheless part of important tendencies (because they belong to a given category of verbs that is often used together with a given noun) appear unimportant in a verb-by-verb analysis (see all the verbs in Table 4 that are only used once). Corpus linguistic investigations typically focus on highly frequent instances of isolated terms that are part of a given construction. Terms with few instances are generally not considered. My analysis has shown that much can be learned from analyses based on categories of terms and from considering their contextual use. There may be only one instance of the verb *clear* in the non-metaphorical *path*-instances in my data, but the category of verbs that refer to making or building a path is very large (see 3, Table 1.)

8. Conclusion

This paper has shown that *path*-, *road*-, and *way*-instances are all related to motion. Metaphorical instances of these terms are all structured in line with the primary metaphor ACTION IS MOTION and with several other motion metaphors. The experiential bases of metaphor, however, do not only result in systematic mappings at the levels of primary and complex metaphor, it also affects what terms are used in metaphorical language and how they are used. Both non-metaphorical and metaphorical instances are related to our experiences with real-

world paths, roads and ways. But there are several ways in which paths, roads and ways differ, and in which real and imagined journeys differ, and this leads to systematic differences at the level of language. Without considering what role our embodied experiences of the concepts referred to in the language really play, it is hard to know if, let alone why, metaphorical ways, but not typically metaphorical paths and roads, tend to be paved.

More generally, my study suggests that patterns at the level of language are far from unrelated to systematic mappings at other levels of organization and from how we understand the world. The dynamic ways in which mappings at various levels of organization interact is a challenging but important field of study for future metaphor research.

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Corpus:

The *British National Corpus (BNC)*, XML Edition (2007)

Figures and Tables:

Figure 1. Image-schematic structure of paths, roads and ways. *Path* and *road* typically refer to artifacts separate from a moving figure (the grey shaded arrow) and *way* to the motion of a figure through space. Paths tend to be more narrow roads. Obstacles on these are thus more likely to inhibit people's motion than obstacles on roads. Roads are typically efficient means of transportation.

figure obstacle

Figure 2. Distribution of non-metaphorical and metaphorical *path*-, *road*- and *way*-instances in percent (number of instances within brackets).

Table 1. Summary of the main categories of verbs in the (659) non-metaphorical and (284) metaphorical *path*-sentences.

A	Verb categories in the <i>path</i> -data	Verbs from non-metaphorical <i>path</i> -sentences	Verbs from metaphorical <i>path</i> -sentences
1a	Verbs referring to prototypical manner of motion on paths	walk/ing/ed (7/9/12), climb (5), run/ran (2/3) threading, treading	tread/ing /trodden (2/1/3), beat(ing/en) (3), walking
1b	Verbs referring to direction of motion	criss-cross (5), cross/ed (2/1), turn (5), descend (4)	cross (2)
2	Verbs referring to non-prototypical motion/being located	driven/drove (3/3), stands/stood (1/2)	

3	Verbs referring to making a path etc.	provide/s (1/2), make/ing (1/2), constructing/ed, (1/2), build/t (1/1), improving, upgrading, expanded, waymarked (2), drew/drawn (1/1), marks/ing (1/1), lit, opening up, force, cleared, cut (3), hacking, slash/ing (1/1), carves, dig, ploughed, sweeping (1/1), greasing	provide/s/ing (1/3/1), make, were prepared make easier, light , ease (2), marked, , is illustrated, is indicated open, set (2), chart (3), force, forge, (2), cuts, beating, smooth (2), strews/n (1/2), paved
4	Verbs connected with obstacles	block/ing/ed (1/1/3), littering, crowded, covered, came in, moved into, fell into (2), shuffled into herded into, was thrown into running into, strays into, bumping into, protruded on to, planted themselves in, flattened	block (2), littered, placed putting (sth in the) (2/1), cast (into sb's), encountered
5	Verbs connected with finding/losing a path	find/found (0/2), traced/ing (1/1), retrace (2), looked for discloses, shows points/ing (1/2), guided, lighting, misled, stray(s) (2)	find, found (2/3) seek, search trace/d (1/1), marked (the beginning of), guide, directed, strays(ing) (1/1)
6	Verbs connected with sight	see/saw (4/3), look, the path (that their eyes travelled around), saw (sb. on path), watching (while on path)	look/s (1/1), saw
7	Verbs connected with self-directed motion	take/took (9/2), continue (3) come/came/coming (5/6/6)	continue/s/d (3/2/1), take/taking (4/5), steer/ed (1/1), set out (4), set off, came
8	Verbs connected with following the path	follow/s/ing/ed (15/1/3/8), lead/ing/led/ (1/5/3), pursue	follow/ing/ed (16/3/7), pursue/d (3/3), lead/led (1/3)
9	Verb that refer to choosing	choose	choose/chosen (3/3)
10	Fictive motion verbs	lead/s/ing/led (1/8/6/5), follows/ed (6/1), continue, enter/s (1/1), emerges, leaves (2), passes/ing (1/1), came (2), goes (4), running/ran (3/2), travels, descends/ing (4/1), dips/dipped (2/2), falls, flattened out, ascends (2), rises/rose (2/2) climb/s/ing (1/1/3), winds/ing/wound 1/1/4, zig-zags/ged (2/1), wriggles, meandering, swinging, bends/ing (1/1) turns/ing (1/1), rounded, crosses/ed (2/1), criss-crossing, recrosses	leads/led (2/1)
11	Other verbs	be/is/are/am/was/were (1/1/2),	be/is/was/are/am/were (0/1/1/0/0/2)

Table 2. Summary of the main categories of verbs in the (751) non-metaphorical and (49) metaphorical *road*-sentences.

A	Verb categories in the <i>road</i> -data.	Verbs from non-metaphorical <i>road</i> -sentences	Verbs from metaphorical <i>road</i> -sentences
1a	Verbs referring to prototypical manner of motion on roads	drive/drove/driven/driving (3/6/1/4), cycle (2)	
1b	Verbs referring to direction of motion	cross/es/ing/ed (4/2/1/8), turn/s/ing/ed (8/1/1/9)	
2	Verbs referring to non-prototypical motion/being located	walk/s/ing/ed (4/1/6/15), parks/ed (4/2), stop/ped (3/5), stand/ing (2), stood (1), live (3), dying/died (1/1), was found (dead), (accident) happened, collided, wander (2),	
3	Verbs referring to building/repairing a road	build/ing (1/1), construct, pave/d , repair	
4	Verbs connected with obstacles	blocking/ed (2/1)	
5	Verbs connected with sight	look/ing/ed (1/1/2), overlook, see (4), watch, concentrate (2)	
6	Verbs connected with self-directed motion	go/went/gone (7/5/1=13), come/came 7/4=(11), reach/ed (by/the) 4, move/d (2/7), travel (2), heading (3), pass (5), get/got off/back/across (3/1), closed (7)	go (5) down (4) off along, set (out on)(3), move (down/away from), heading (up) reached, travelled
7	Verbs connected with following the road	follow/s/ing/ed (2/1/1/5)	
8	Fictive motion verbs	leads/ing/led (3/3/2), go/es (1/3), passes/ing/ed (2/1/1), runs/ran (2/1), came, entered, curves, swung, turns, lost itself in sand and got out, begins to level off, drops [you down into], starts to climb, climbs, sweeps, , is followed, had come to an end, ends, brings	carried
9	Other verbs	(be/is/are/was/were/been) (1/1/1/3/2), use (4)	be/is on --- to

Table 3. Summary of main categories of verbs in the (201) non-metaphorical and (777) metaphorical way-sentences.

A	Verb categories in the way-data.	Verbs in non-metaphorical way-sentences	Verbs in metaphorical way-sentences
1a	Verbs referring to manner of motion	walk/ing (3/1), thread (2), stretching (2), inching (2), jerked, wends, run/ran (1/2), diving	walk, rambles, arcing, catapulted
1b	Verbs referring to direction of motion		change/ed (2/2), turning
2	Verbs referring to being located		stand [in sb's way] (5)
3	Verbs referring to making way	work (2), make/made (4/10), give/gave (3/2), pushed/ing (3/4), forced (2), dig, fight, elbowed, win, ploughed	works/ed (5/12), give/s/ing/gave/given (7/1/4/2/4), (make/made (3/0), prepare/d (1/2), pave/paved (1/2), pushed (1/0), forced, fight, barged, shoved, elbowing, ploughing, negotiate
4	Verbs connected with finding/losing a	find/found (7/0), know (2), lost, feel/felt (1/1), groped, smell, seek	find/ing/found (16/1/2), know/ing/knew (5/1/1), point/ed (4/2), show/ed (1/1), lost (2)
5	Verbs connected with sight	looks/ed (1/1), take a look, noticed, watch	see /saw/seen (5/1/2), viewing/ed (3/1), look/ing/ed (1/1/1), take a[n honest] look
6	Verbs connected with self-directed motion	go/goes/went (9/1/2), get /got (3/0), take/s /took/taken (0/0/1/1), heading, coming (1), continue, travelling/ed (1/2)	come/s/ing/came (13/0/3/0), go/went/going/gone (10/4/3/0), take/takes/took/taken (2/3/0/2), get/got (2/5), heading (2), continue
7	Verbs connected with following the road	lead/led (2/5), follow	lead/led (3/2), follows [them]/ing (1/1)
8	Fictive motion verbs	worked left	
9	Target domain verbs		use/s/ed/ing (something in/as) a way (5/3/8/0), think/s/ing/thought (7/0/0/3), speak/ing (5/1), act/s/acted/acting (3/0/2/1), treat/s/ed/ing (4/1/3), express (3), talk/ed (1/1), affect/s/ed (1/1/1), do/ing/did/done (6/0/1, had (3)
10	Other verbs	be/am/is/are/was/were (2/0/2/2/3/2)	be/is/was/been (6/55/43/5)

Appendix.

Table 4. Summary of the verbs in the non-metaphorical and metaphorical *path-*, *road-* or *way-* sentences.

Verbs from (659) non-metaphorical <i>path-</i> sentences	Verbs from (284) metaphorical <i>path-</i> sentences	Verbs from (751) non-metaphorical <i>road-</i> sentences	Verbs from (49) metaphorical <i>road-</i> sentences	Verbs from (201) non-metaphorical <i>way-</i> sentences	Verbs from (777) metaphorical <i>way-</i> sentences
walk (28) follow (27) come (17) take (11) lead (9)	follow (26) take (9) choose (6) continue (6) pursue (6) tread (6)	walk (26) turn (19) cross (15) drive (14) go (13)	go [down] (5) go [off along] (4) set [out on](3)	make (14) go (12) be (11) find (7) lead (7) push (7)	be (109) find (19) give (18) go (17) work (17)
see (7) drive (6) block (5) climb (5) run (5) turn (5) criss-cross (5) be (4) descend (4) construct (3) continue (3) cross (3) clear (3) make (3) point (3) provide (3) stand (3) find (2) mark (2) build (2) draw (2) light (2) retrace (2) slash (2) stray (2) sweep (2) trace (2)	find (5) provide (5) be (4) lead (4) set [out] (4) beat (3) chart (3) strew (3) put [sth. in the path] (3) block (2) cross (2) ease (2) forge (2) look (2) set (2) smooth (2) steer (2) stray (2) trace(2)	come (11) follow (9) move (9) be (8) stop (8) close (7) park (6) pass (5) get [back/across](4) look (4) reach (4) see (4) use (4) block (3) heading (3) live (3) stand (3) build (2) concentrate (2) cycle (2) die (2) travel (2) wander (2)		give (5) walk (4) get (3) run (3) travel (3) feel (2) force (2) inch (2) know (2) look (2) stretch (2) take (2) thread (2) work (2)	come (16) use [something] in/as a way (16) think (10) see (8) treat (8) do (7) get (7) know (7) take (7) act (6) point (6) speak (6) lead (5), stand [in sb's way] (5) change (4) view (4) affect (3) express (3) have (3) look (3) make (3) pave (3) prepare (3) follow

waymark (2)					[them] (2) head (2) lost (2) show (2) talk (2)
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bump [into] carve choose come [in] cover crowd cut dig disclose expand fall [into] flatten force grease guide hack herd [into] improve litter look look [for] mislead move [into] open up plant [themselves in] plough protrude [on to] pursue see [sb. on the path] shuffle [into] run[into] show stray [into], thread tread be thrown [into] upgrade watch [while being on path]	beat cast (into sb's) come cut direct encounter force guide illustrate indicate light [open] litter make make [easier] mark mark [the beginning of] pave place[sth in the] prepare search see seek set [off] walk	collide construct be found (dead) [accident]happen[s] overlook pave repair watch	be[on --- to] head [up] move reach travel	come continue dig dive elbow fight follow grobe head jerk lose notice plough seek smell take a look watch wend win	arc barge catapult elbow fight force negotiate plough take a[n honest] look push ramble shove turn walk continue
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Table 5. Summary of the fictive motion verbs included in the *path*-, *road*- and *way*-sentences.

Verbs from (659) non- metaphorical <i>path</i> -sentences	Verbs from (284) non- metaphorical <i>path</i> -sentences	Verbs from (751) non- metaphorical <i>road</i> - sentences	Verbs from (49) non- metaphorical <i>road</i> - sentences	Verbs from (201) non- metaphorical <i>way</i> -sentences	Verbs from (777) non- metaphorical <i>way</i> -sentences
lead (20) follow (7) wind (6) climb (5) descend (5) run (5) dip (4) go (4) rise (4) cross (3) zig-zag (3) ascend (2) bend (2) come (2) enter (2) leave (2) pass (2) turn (2)	lead (3)	lead (8) go (4) pass (4) run (3),			
continue criss-cross emerge fall flatten [out] meander recross round swing travel wiggle		bring come curve come to an end end enter [be] followed [begin to] level off lose[itself in sand and get out] swing turn drop [you down into] start [to climb], climb sweep	carry	work left	

Notes:

¹¹ Italicized items refer to terms (e.g. *path* refers to the term *path*). Throughout this paper, phrases such as *path-*, *road-* and *way-* instances/sentences/phrases refer to separate terms, and not to synonyms. That is, they refer to instances of *path*, *road* or *way*, or to instances/phrases including either one of the terms *path*, *road*, or *way*.

² These instances include all the combinations of *pave*, *paves*, or *paved* and *way*.

³ These 529 instances include all different forms of the verb *cross* (e.g. *cross*, *crosses*, *crossing*, *crossed*) used together with *road*. The frequency of these collocations, like those of the other collocations discussed in this paper, is based on a 3-word-window (both to the left, and to the right). *Cross-road* instances that were not about the verb *cross*, but about e.g. the noun *cross*, and compounds such as *Charing Cross Road* were not considered relevant for this study and excluded from my material. Other collocations that are part of this study were analyzed in the same way, that is, instances that were not about the nouns *path*, *road*, or *way* and collocating verbs were excluded from the study.

⁴ All these *pave-* instances were in the past tense (i.e. *paved*).

⁵ These include 15 instances of *tread*, 10 of *treading*, and 2 of *treads* used together with *path*.

⁶ These include 49 instances of *walked-path*, 42 instances of *walk-path*, 24 instances of *walking-path*, and 3 instances of *walks-path*.

⁷ These include 15 instances of *beating*, 15 of *beat*, and 4 of *beaten* used together with *path*.

⁸ These include 7 instances of *standing*, 8 of *stood*, and 4 of *stand* and *path*.

⁹ These include 89 *walk-road* instances, 64 *walking-road* instances, and 67 *walked-road* instances.

¹⁰ These are all in the present tense; *drive-road*.

¹¹ These are all in the present tense; *go-road*.

¹² These are all in the present tense; *set-road*.

¹³ These include 16 *stand-road* instances, 7 *stands-road* instances, and 19 *standing-road* instances.

¹⁴ These include 10 instances of *stopping*, 29 of *stopped*, and 3 of *stops* and *road*.

¹⁵ These include 1 *stayed-road* instance, and 1 *stay-road* instance.

¹⁶ These include 113 instances of *turn-road*, 31 of *turns- road*, 29 of *turning-road*, and 67 of *turned* and *road*.

¹⁷ These are 25 *build-road* instances, and 56 *built-road* instances.

¹⁸ These are 17 instances of *constructed-road*, 3 of *constructing-road*, and 3 of *construct-road*.

¹⁹ These include 10 instances of *repair-road*, 4 of *repairing-road*, 5 of *repairs-road*, and 2 of *repaired-road*.

²⁰ None of the 42 *blocks-road* instances and 12 *blocking-road* instances is metaphorical. 1 out of 35 *blocked-road* instances and 2 out of 39 *block-road* instances are metaphorical.

²¹ Tables 4 and 5 are summaries of the verbs discussed in this paper. These include lists of the verbs that co-occur with each of the nouns in decreasing order.