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FORCE-MOTION SCHEMAS IN METAPHORS OF MOTION

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Abstract

The goal of the paper is to investigate the role of motion in *Force Dynamics*, a framework developed by Talmy (1976, 1988, 2000) and adopted by, for example, Sweetser (1982, 1991), Johnson (1987), Pinker (1989, 1997), Jackendoff (1990) and Brandt (1992). To this aim, descriptions of force-dynamic schemas (gestalts) by Johnson (1987) and Talmy (2000) were analysed to prove that both authors often use the word *force* metonymically to refer to motion or, more specifically, to the moving object, its velocity or trajectory, which accounts for vagueness and sometimes even inaccuracy of description. The conclusions of our study were then applied to the analysis of 50 metaphors of motion, which showed that all of them can be characterised by just four force-motion schemas, differing from one another in terms of continuity, application of forces, as well as spatial and temporal constraints of motion.

1. Introduction: Force-motion schemas

One of the key concepts of cognitive linguistics is what Johnson (1987) calls *gestalts of force* and Talmy (2000) describes as *force dynamic schemas*. Both Johnson and Talmy often use the noun *force* metonymically to refer to various other entities, like a moving object, motion, velocity and trajectory. I would like to begin with considering several descriptions of force gestalts from Johnson's *Body in The Mind* (1987).

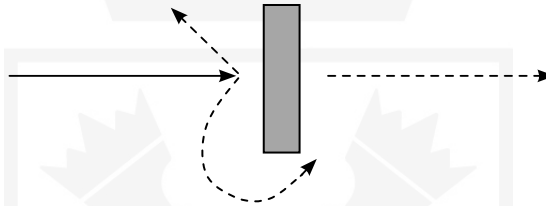
1. *Compulsion*. [...] in such cases of compulsion, the force comes from somewhere, has a given magnitude, moves along a path and has a direction. We can represent this image-schematic gestalt with the visual image below. Here the dark arrow represents

an actual force vector and the broken arrow denotes a potential force vector or trajectory (Johnson 1987: 45)



The force “moves along a path” – this is in fact a description of a moving object on which the force acts. Johnson describes an object moving along a straight line trajectory and uses the word *force* metonymically. The force cannot “move” by itself, but an object on which a force acts does move. “The broken arrow denotes a potential force vector or trajectory” – here is another proof that Johnson describes forces in the context of motion, the arrow can denote either force or trajectory.

2. *Blockage*. [...] the relevant gestalt can be represented as a force vector encountering the barrier and then taking any number of possible directions (Johnson 1987: 45)



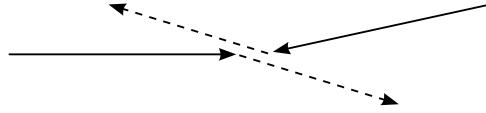
A force vector “encountering a barrier” is another metonymy where the noun *force* is used to denote the moving object. It is the moving object that encounters the barrier which then exerts a force on it, causing it to change its trajectory. The phrase “and then taking any number of possible directions” also refers to the motion of the object, not force, because after the brief encounter with the barrier the force does not act, it is exerted only during the brief moment of contact. It is therefore the object or, more precisely, its velocity which can be “taking any number of possible directions.” We can see then that Johnson uses *force* metonymically to denote either the moving object or its velocity.

3. *Counterforce*. A third cluster of gestalts focuses on the head-on meetings of forces. Football linemen are most familiar with this force gestalt. Here, two equally strong, nasty and determined force centers collide face-to-face. (Johnson 1987: 46)



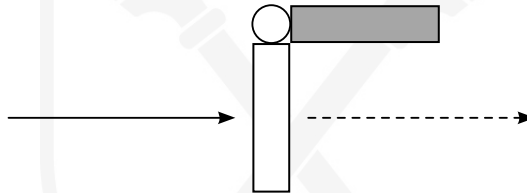
“head-on meetings of forces” is yet another metonymy - the objects on which the forces act meet and collide and “the two equally strong, nasty and determined” football players are an example of that.

4. *Diversion*. A variation on the previous gestalt is one in which a force vector is diverted as the result of the casual interaction of two or more vectors. The appropriate schema shows two colliding forces with a resultant change in force vectors (Johnson 1987: 46)



The above description of the *diversion* schema contains three metonymical expressions in which the phrases *force* or *force vector* are used metonymically for the moving object:

- a. “the force vector is diverted” (the moving object is diverted)
 - b. “interaction of two or more (force) vectors” (interaction of moving objects)
 - c. “two colliding forces” (two colliding objects)
5. *Removal of restraint*. [...] The relevant schema is one that suggests an open way or path, which makes possible an exertion of force. [...] the diagram is meant to suggest that, either because some actual barrier is removed by another [force, J.W.] or because the potential barrier is not actually present, the force F_1 can be exerted (i.e. there is nothing blocking it) (Johnson 1987: 46)



But of course applying a force (for example pushing an object) is possible whether the barrier is present or not, therefore by “exertion of force” Johnson means motion. It is motion that is made possible by removing the barrier. The phrase “there is nothing blocking it” is also metonymical because it is not the force which is blocked but the object. In fact, the force is usually exerted against the barrier when it is present. We can imagine, for example, someone pushing against a blocked door. When the door is opened, the force (pushing) stops and motion begins. Again, we can see that Johnson uses the word “force” to describe the moving object and its motion.

Similar metonymies, where the word *force* is used to denote other elements of the motion event, can be found in Talmy (2000: 466), who describes the prototype of a force dynamic schema:¹

¹ Cf. Woźny 2010.

- two forces opposing each other 180 degrees head on – not coming at each other at some other angle so as to yield a resultant off in a new direction
- a force acting along a straight line – not along a curved line.

But forces do not “come at each other” – the moving objects, on which the forces act, do. Similarly, a force cannot “act along a curved or straight line” but it can act on an object whose trajectory is a curved or straight line. Therefore, we can conclude that both Johnson and Talmy speak of *force and motion schemas*² but often refer to the parameters of motion (velocity, trajectory) indirectly.

The inseparability of force and motion, apparent in the above descriptions of Johnson and Talmy, is also the essence of Newtonian Mechanics. The first law of mechanics describes motion in the absence of forces, the second defines force as vector proportional to acceleration, which of course is a parameter of motion, and the third law speaks of the symmetry of forces:

$$\vec{F} = 0 \Leftrightarrow \vec{v} = \text{const.} \quad (\text{i})$$

$$\vec{F} = m\vec{a} \quad (\text{ii})$$

$$\vec{F}_{AB} = \vec{F}_{BA} \quad (\text{iii})$$

We can paraphrase the above formulas as: “force usually involves motion” and, since the equations and logical operators used in laws (i)–(iii) are symmetrical, we can add: “motion usually involves force.” Of course, we have to be aware that the conceptualisation of force and motion encoded in language cannot be fully equated with Newton’s precise mathematical formulas:

For linguistic purposes, what counts is not the actual physical nature of events, but how they are conceptualized by ordinary speakers, at least as reflected in conventional means of linguistic expression. (Ronald Langacker 2010, personal communication)

For example, Talmy (2000: 456) suggests that the difference between conceptual force dynamics and physics lies in the privileged status of one of the participants of forceful interaction (*Agonist*) over another (*Antagonist*):

So natural is this linguistic, and perhaps also common sense conception that it may have escaped special attention during our exposition. Yet, it is at variance with one of the more familiar principles of physics, that two interacting objects [...] must be exerting *equal* force against each other. If one of the objects exerted a stronger force [...] the pair of objects would accelerate in the direction of the force.

² Which is consistent with the following statement by Johnson (1987: 43): “Our experience of force usually involves the movement of some object (mass) through space in some direction.”

However, as a physicist, I have to admit that the above quotation exemplifies one of the most common misconceptions about the third law of Newtonian Mechanics expressed by formula (iii). For example, let us imagine two sumo fighters pushing against each other. In accordance with formula (iii) the forces each of them exerts against his or her opponent are equal. If we stopped here, we would have to conclude (like Talmy) that none of them can win. But we have also to take into account that each of the fighters pushes not only against their opponent but also against the ground, which pushes them back with equal force. The stronger fighter exerts a greater force against the ground and wins because the two forces acting on him in opposite directions (the reaction of the ground and the force exerted by the other fighter) are not equal. So, as we can see, Newtonian Mechanics does allow us to describe a stronger entity. While I agree in general terms with Talmy and Langacker that there are differences between the conceptualisation of force and motion by common people and the notions of physics, the above example demonstrates that there are also similarities between the two, and one of them is the inseparability of force and motion expressed by Newtonian laws (i)–(iii).

The above examples and arguments can be summarised very simply in the following way: Force dynamic schemas (force gestalts) involve both forces and motion (velocity) and should be explicitly described as such.³ Section 3 contains a study of force-motion schemas inherent in a random corpus sample of 50 metaphors of motion, which is a practical application of the above conclusion.

2. Force-motion schemas in metaphors of motion

In this section we will describe the force and motion schemas in metaphors of motion. A starting point of such investigation must be collecting a corpus of motion metaphors. We started our enquiry with the *Conceptual Metaphor Home Page* (<http://cogsci.berkeley.edu/lakoff/sources/>, 29.10.2012), prepared by George Lakoff and his students at the University of Berkeley. The following sentences were listed as examples of CHANGE IS MOTION (LOCATION) metaphor:

1. He went from innocent to worldly.
2. She was nearly insane.
3. He slipped into a depression.
4. His hair went gray.
5. He went from laughing to crying.
6. She was nearly crying.
7. He went back to/returned to polishing the silver.
8. Over the years, she has gone from pigtails to perfume.
9. He went from all smiles to all frowns.

³ Talmy (2000: 413–417) includes the binary parameters of <rest> and <motion> in his description but only as either a result of interaction or as what he calls “intrinsic force tendency.”

Six of the nine examples contain a form of the verb *to go* (examples 1, 4, 5, 7, 8 and 9), five of which contain the past form *went*. This prompted us to continue our search in the *British National Corpus*, where we found, rather to our surprise, that the verb *went* is used metaphorically in as many as 41% of corpus texts containing this lemma. Therefore, collecting a random sample of 50 metaphorical expressions with MOTION as the source domain proved to be an easy task since almost every second text analysed contained a metaphorical use of the word *went*. The 50 metaphorical expressions collected in this way are listed in the Appendix. We will now proceed to describe the image schemas of force and motion for our corpus sample of metaphorical expressions with reference to the following four factors:

- starting and finishing point (both spatial and temporal)
- velocity (magnitude and direction)
- trajectory
- forces (magnitude and direction).

The list (given in the Appendix) opens with the following example:

I was 19 when I left home and went to university. (AHC)⁴ (1)

The metaphorical motion starts at point A (not being at university) and ends at point B (being at university). The magnitude of velocity vector is hidden (not highlighted) because the following sentence would be considered strange (in its metaphorical, not literal sense):

(1a) *He slowly went to university.

The velocity (and hence force) at point B is equal zero since the motion terminates there:

(1b) *he went to university and then went a little farther.

The direction of velocity is constant:

(1c) *He went to university but changed his mind and went to the cinema instead.

The time of motion, like the magnitude of velocity, is also hidden:

(1d) *He went to university for three hours.

The trajectory of the metaphorical motion is a straight line, which of course is already entailed by the constant direction of velocity:

(1e) *He went to university but stopped at a restaurant on the way.

The forces can be applied to the object but only before the motion begins (like in the projectile motion in perfect vacuum):

(1f) *He went to university but, due to numerous obstacles on his way, changed his mind.

⁴ The three-letter code allows to identify the source text in the British National Corpus.

However, we could say

(1g) He went to university despite the opposition from his long-term girlfriend.

or even

(1h) He went to university because he was pushed by his parents.

But the force can only act before the movement from A to B begins and once it has begun, the forces are not applied. The initial forces (applied before the motion begins) may have various directions, for example:

(1i) He was strongly advised to go to Polytechnic but instead he went to university.

However, the resultant force vector must be parallel to the trajectory, which is already entailed by the constant direction of velocity and the trajectory being a straight line (or more precisely – section AB). The force-motion schema of the source domain of the metaphorical expression (1) can be summarized as follows:

force-motion schema 1 (went to university)

An object moving from point A to point B, along a straight line, with velocity of unspecified magnitude, parallel to the trajectory, in unspecified time. The forces are applied only before the motion begins, not during the motion, and the resultant force must be parallel to the trajectory.

The physical analogy for schema 1 can be that of hitting a billiard ball. The force is applied only initially and then the ball moves along a straight line until it lands in the pocket (Fig. 1).

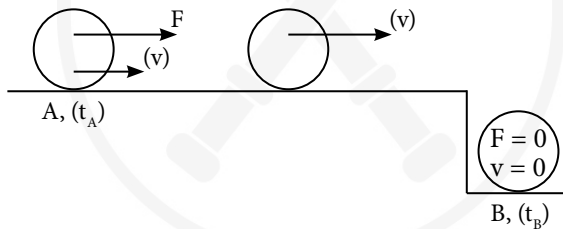


Figure 1. Force-motion schema 1 (went to university)

The parameters of motion which are hidden (unspecified) in schema 1, i.e. the magnitude of velocity and time of motion, were put in brackets in Fig. 1.

Let us consider the second item on our list of metaphorical expressions:

France’s state-owned Banque Nationale de Paris briefly considered buying parts of Bank of New England, which went bust earlier this year. (ABK) (2)

The object (the bank) moves from point A (financially viable) to point B (bankrupt). Unlike in example (1) the time of motion and the velocity are highlighted:

- (2a) The bank went bankrupt in three days.
 (2b) The bank went bankrupt (bust) very fast.

The magnitude of velocity can vary:

- (2c) The bank was going bankrupt faster and faster.

The direction of velocity is constant because the motion takes place in one-dimensional space limited by two states: not bankrupt – bankrupt. The trajectory is a straight line then and the velocity vector must be parallel to the trajectory. The forces can be applied before and during the motion:

- (2d) The economic factors caused the bank to go bankrupt.
 (2e) The bank went bankrupt in three months, pushed along by the crisis.

The forces may act in different directions but the constant direction of velocity entails the resultant force parallel to the trajectory. The force-motion schema for expression (2) can be then summarized thus:

force-motion schema 2 (went bust)

An object moving from point A to point B, along a straight line, in specified time. The magnitude of velocity can vary and the velocity vector must be parallel to the trajectory. The forces are applied before and during the motion, and the resultant force must be parallel to the trajectory. The physical analogy for schema 2 could be pushing a box across the table, along a straight line with varying velocity (Fig. 2).

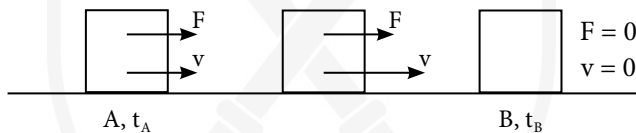


Figure 2. Force-motion schema 2 (went bust)

As we can see, there are three important differences between schema 1 and schema 2. The first two differences concern the feature of metaphors, to which Lakoff and Johnson (1980) refer as “highlighting and hiding.” The metaphor expressed by example (1) hides the magnitude of velocity and the time (duration) of the motion. The third difference concerns the application of forces during the motion. In the first schema the forces can only act before the motion begins while in the second schema, the application of forces is not limited in this way.

Let us move to the third metaphorical expression:

The interview was set, the browsing went on, and sometime after six everybody left. (ADL)

(3)

The motion begins at point A (when the interview was set) and ends at point B (sometime after six) in one-dimensional domain of time. A one-dimensional trajectory is by definition a straight line, which of course entails that direction, velocity and resultant force are constant and parallel to the linear trajectory. Unlike in the previous two schemas, the motion can also be continued and unconstrained either temporarily or spatially, which means that neither velocity nor force have to be equal zero at point B.

(3a) The browsing went on and on.⁵

The magnitude of the velocity vector can change because of the forces, which can be applied during the motion as in schema 2 :

(3b) The browsing went on very fast at first and then it slowed down, because we got tired of walking up and down the endless supermarket isles.

The motion parameters for metaphorical expression (3) can be summarised in the following way:

force motion schema 3 (the browsing went on)

An object moves from point A to point B or continuously, along a straight line, with varying magnitude velocity. The forces, also varying in magnitude, can be applied before and during the motion. The direction of both force and velocity is constant and parallel to the trajectory.

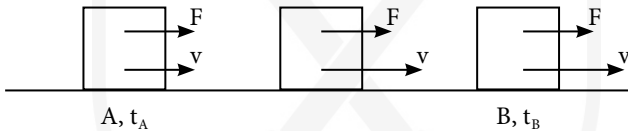


Figure 3. Force-motion schema 3

As we can see, the only difference between schemas 3 and 2 is that the motion can be continued in the former but not in the latter.

Let us turn now to the next metaphorical expression:

As time went by, she exaggerated her acquaintance with the Fang and other peoples of West Africa. (AHG) (4)

The motion in the source domain of the metaphor expressed by (4) is not constrained by starting and finishing points:

(4a) * Time went by from London to Paris.

⁵ Compare “*He went and went to university” or “*The bank went and went bust.”

Naturally, we could say

(4b) Time went by as we travelled from London to Paris.

but then *London* and *Paris* would be the starting and finishing points of our travel, not the passage (motion) of time. The magnitude of the velocity can vary:

(4c) Time went by faster and faster.

The direction of velocity is constant, which is entailed by the linear trajectory, because we say

(4d) timeline

rather than

(4e) *time curve.⁶

The motion, although metaphorically projected into the domain of time, is not temporarily constrained:

(4f) * Time went by for three days.

(4g) * Time went by from 5 to 7.

The force, parallel to the direction of motion because of the linear trajectory and constant direction of velocity, varies in magnitude and can act before and during the motion:

(4h) The increasing tedium of the task made the time go by slower and slower.

The features of motion and force for example (4) can be summarised into:

force-motion schema 4 (time went by)

An object moves continuously along a straight line. Force and velocity vectors are parallel to the trajectory and can vary in magnitude. A physical instantiation of schema 4 could be a billiard ball moving continuously along a straight line with varying magnitude of velocity (Fig. 4).

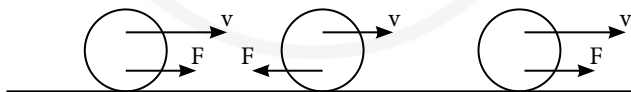


Figure 4. Force-motion schema 4

As we can see in Fig. 4, unlike in the three previous schemas, neither starting nor finishing point (spatial or temporal) are present in schema 4.

⁶ According to General Theory of Relativity the space-time is curved but it is an example of a highly specialised expression.

We will now consider the next metaphorical expression on our list:

“But if only we could have a cottage somewhere!” she went on wistfully. (BMU) (5)

It is not difficult to notice that the metaphorical (source domain) motion in the above metaphor is described by schema 3. The two metaphors share the source domain and have different target domains, which are BROWSING and TALKING respectively. Metaphorical expressions (3a) and (3b) we considered when describing force-motion schema 3 can easily be paraphrased for the domain of TALKING:

(5a) She went on and on talking.

(5b) She went on talking very fast at first and then, seeing her audience getting drowsy, slowed down.

Let us move to the next example from the Appendix:

That was the colour you went when you were buried at the bottom of the ocean. (C86) (6)

At first glance it seems that the source domain motion in (6) represents a variant of force-motion schema (2) (“the bank went bust”). And indeed we can easily paraphrase sentences (2a)–(2d) accordingly:

(6a) His face went red in 30 seconds.

(6b) She went red very fast.

(6c) His face went purple faster and faster.

(6d) The mounting emotions caused his face to go red.

However, there is one important difference from schema 2 – the motion can either terminate at point B or continue:

(6e) Her face went redder and redder.

While in schema 2 the motion definitely terminated at point B (compare: *The bank went buster and buster), here, as we can see from (6e), the motion can be continued, which means that it represents force-motion schema 3 because the only difference between the two schemas is the possible continuity of motion.

The next item on the list of motion metaphors is

Prussia-Germany went through a chaotic period of social and economic transformation. (BN2) (7)

The above sentence is an example of a time metaphor, like (4); however, in the latter the time was moving, while in (7) the time is stationary. “A chaotic period of social and economical transformation” can be visualised as a dense medium, the moving object (Prussia-Germany) has to go through. Unlike in schema 4, the motion can be constrained both spatially and temporally, because the spatial boundaries of the source domain are metaphorically projected into the domain of time:

(7a) Germany went through a difficult period from 1922 (point A, t_A) until 1927. (point B, t_B).

However, in contrast with schema 2, the motion can continue after reaching point B:

(7b) Germany went through a chaotic period of social unrest to enter a more peaceful era of economic prosperity.

The target domain (time) entails straight line trajectory, which of course constraints the direction of both force and velocity - both vectors must be parallel to the trajectory of motion. The forces, parallel to the direction of motion, can act during the motion:

(7c) Germany rather easily went through the difficult period, helped on the way by its powerful economy.

As we can see, the force-schema in (7) is coherent with schema 3 (Fig. 3). Interestingly, when we compare Figures 4 and 3, we can see that the force-motion schemas for the moving and stationary time metaphors are significantly different. Schema 4 describes continuous motion with varying velocity, while schema 3 describes motion which can be spatially and temporally limited. The difference between the two metaphors is therefore not just a matter of choosing a reference point - each of them describes a different type of motion.

The next metaphorical expression from our list is, rather obviously, another example of schema 3:

I went on and on at her: draw me, draw me, draw me, Mummy! (C8E) (8)

To prove it, we will paraphrase sentences (3a) and (3b):

(8a) She went on and on talking.

(8b) She went on and on talking very fast at first and then slowed down.

The next example in the Appendix represents force-motion schema 2:

In 1989 then guitarist Kris Dollimore went down with chickenpox on the day of a big show with UB40 at Aston Villa football ground. (CAD) (9)

We will prove it by paraphrasing sentences (2a)-(2d) accordingly:

(9a) He went down with flu in three days.

(9b) He went down with flu very fast.

(9c) She was going down with flu faster and faster.

(9d) His lack of hygiene caused him to go down with flu.

The straight line motion, with specified velocity in specified time definitely terminates at point B:

(9e) *He went down and down with flu.

We can therefore conclude that (9) does indeed represent force-motion schema 2.

After analysing each of the remaining 41 examples of our random sample of 50 metaphorical expressions in a similar fashion, we found that each of them represents one of the four force-motion schemas described above and visualised in Figs. 1–4. The number of the schema for each of the corpus sample texts is indicated in square brackets in the Appendix. Tables 1 and 2 summarise our findings so far. Table 1 presents the distinguishing features of the four force-motion schemas. All four schemas describe linear motion with the direction of force and velocity parallel to the trajectory and in each case the magnitude of force and velocity vectors may vary; however, what distinguishes the schemas is highlighting or hiding of certain parameters of motion, the application of forces during the motion, the presence of terminal points (starting and finishing) and continuity. The last two features are not mutually exclusive because, as we saw above, in schema 3 the motion can be either temporally and spatially constrained or continuous. Table 2 contains examples and the frequency of occurrence in our sample of 50 metaphorical expressions for each schema. The frequency of occurrence is also presented in graphical form in Fig. 5.

| Force-motion schema | Hidden parameters | Continuity | Starting and finishing point | Application of forces during the motion |
|--|--------------------------------------|------------|------------------------------|---|
| <p>1 An object moving from point A to point B, along a straight line, with velocity of unspecified magnitude, parallel to the trajectory, in unspecified time. The forces are applied only before the motion begins, not during the motion, and the resultant force must be parallel to the trajectory.</p> | <p>yes – time – velocity</p> | <p>no</p> | <p>yes</p> | <p>no</p> |
| <p>2 An object moving from point A to point B, along a straight line, in specified time. The magnitude of velocity can vary and the velocity vector must be parallel to the trajectory. The forces are applied before and during the motion, and the resultant force must be parallel to the trajectory.</p> | <p>no</p> | <p>no</p> | <p>yes</p> | <p>yes</p> |
| <p>3 An object moves from point A to point B or continuously, along a straight line, with varying magnitude of velocity. The forces, also varying in magnitude, can be applied before and during the motion. The direction of both force and velocity is constant and parallel to the trajectory.</p> | <p>no</p> | <p>yes</p> | <p>yes</p> | <p>yes</p> |

| Force-motion schema | Hidden parameters | Continuity | Starting and finishing point | Application of forces during the motion |
|---|-------------------|------------|------------------------------|---|
| 4 An object moves continuously along a straight line. Force and velocity vectors are parallel to the trajectory and can vary in magnitude. | no | yes | no | yes |

Table 1. The distinguishing features of the force-motion schemas

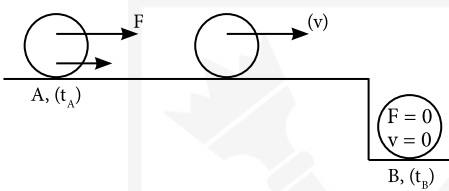
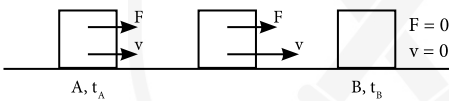
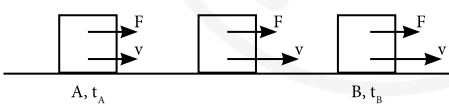
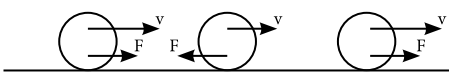
| Force motion schema | Examples | Freq. [%] |
|--|---|-----------|
| 1  | he went to university the cry went up he went on a killing spree she went skiing it went back to 16 th century he went into a spasm | 36 |
| 2  | the bank went bust they went as far as he went down with flu | 6 |
| 3  | the browsing went on he went red it went through a period they went about their work he went hungry she went silent | 56 |
| 4  | as time went by | 2 |

Table 2. The frequency of occurrence of the four force-motion schemas

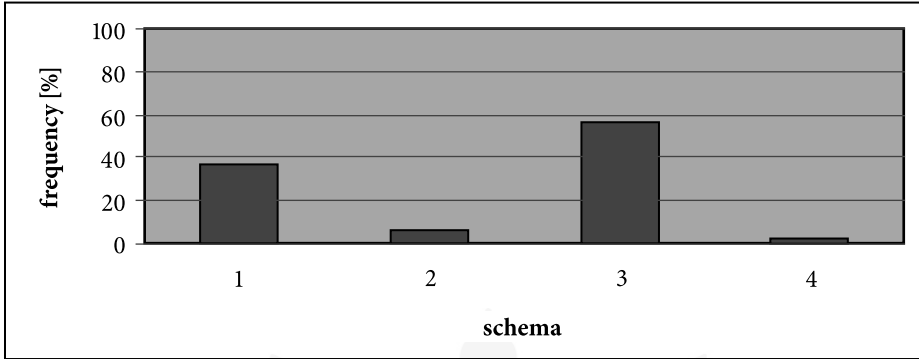


Figure 5. The frequency of occurrence of the force-motion schemas

3. Summary and conclusion

In section one we argued that force gestalts or force dynamic schemas involve both forces and motion as inseparable factors of equal status and therefore deserve to be called *force-motion schemas*. Section two contains an analysis of force-motion schemas in 50 metaphorical expressions containing the verb *went*. We found that the source domains of all metaphorical expressions can be characterised by means of just four force-motion schemas. The schemas differ from one another in terms of continuity of motion, application of forces, spatial and temporal constraints (Table 1); however, each of them reflects linear motion with varying magnitude of velocity and force. Schemas 3 and 1 are characterised by the greatest frequency of appearance (Tab. 2, Fig. 5) and together account for 92% of all the metaphorical expressions considered. The most frequently appearing schemas can be characterised as follows:

force motion schema 3 (the browsing went on)

An object moves from point A to point B or continuously, along a straight line, with varying magnitude of velocity. The forces, also varying in magnitude, can be applied before and during the motion. The direction of both force and velocity is constant and parallel to the trajectory.

force-motion schema 1 (went to university)

An object moving from point A to point B, along a straight line, with velocity of unspecified magnitude, parallel to the trajectory, in unspecified time. The forces are applied only before the motion begins, not during the motion, and the resultant force must be parallel to the trajectory.

Appendix

The list of 50 random metaphorical expressions containing the verb *went*. The number of the force-motion schema for each of the examples is given in square brackets.

1. I was 19 when I left home and went to university. (AHC) [1]
2. France's state-owned Banque Nationale de Paris briefly considered buying parts of Bank of New England, which went bust earlier this year. (ABK) [2]
3. The interview was set, the browsing went on, and sometime after six everybody left. (ADL) [3]
4. As time went by, she exaggerated her acquaintance with the Fang and other peoples of West Africa. (AHG) [4]
5. "But if only we could have a cottage somewhere!" she went on wistfully. (BMU) [3]
6. That was the colour you went when you were buried at the bottom of the ocean. (C86) [3]
7. Prussia-Germany went through a chaotic period of social and economic transformation. (BN2) [3]
8. I went on and on at her: draw me, draw me, draw me, Mummy! (C8E) [3]
9. In 1989 then guitarist Kris Dollimore went down with chickenpox on the day of a big show with UB40 at Aston Villa football ground. (CAD) [1]
10. This went on for five whole days. (CAV) [3]
11. Snip, snip, snip they went and soon the bird had a beak and a neck. (CAX) [1]
12. If he went on courting her in absentia it was because he had no choice. (CBN) [3]
13. Messrs Hoult and Cowan also went through the report with Mr Barnes. (CBY) [3]
14. He went on to predict that many drivers would be "seduced" by "the purity of Pininfarina's elegant lines." (CFT) [3]
15. Even when Shaun and Bez went as far as editing Penthouse for the day, papers tutted and sighed but still printed pictures of the pair grinning like village idiots. (CGC) [2]
16. "Dinna imagine it's the local baby talk," Reid went on. (CHG) [3]
17. Throughout the press the cry went up of "extremist take-overs" and "packed meetings." (CHU) [1]
18. At his back he could hear the ring of footsteps, an occasional raised voice, calm, confident and unhurried, as the unseen professionals went about their work behind the grille. (CJF) [3]
19. Charles Starkweather, the rebel without a cause who, in 1957, went on a casual killing spree with his fourteen-year-old girlfriend in tow, ended up on screen as Kit Carruthers in *Badlands*. (ECU) [1]
20. Once she went wrong. (EDN) [1]
21. His father died, two years later she remarried and went to live in France. (EDN) [1]
22. Thus a great deal of psychometric expertise went into constructing questionnaires and interview schedules that would yield clear-cut dimensions along which parents could be ranged. (EEK) [3]

23. The workshop then went on to examine whether the government had a credible community economic development policy and whether the various initiatives which it had set up represented such a strategy. (EFD) [3]
24. They often went on excursions, always talking away nineteen to the dozen. (EFJ) [1]
25. After leaving school at sixteen, she went on a government course, painting and decorating, but after it finished she was unemployed. (EGo) [1]
26. Before Flavia could find her bearings, she went on, "Only what involves them is sacred?" (F9R) [3]
27. Looking back, I fancy that when I went skiing I always hoped that the snow was covering some kindly grass, certainly not something as hard and painful as the areas of Pierre-Saint-Martin. (FA2) [1]
28. What they found liberating was Surrealism's sanctioning of an art based on personal reality; and in their quest to express this interior landscape these women went directly to source: to their own bodies. (FBF) [1]
29. The Factor named a price, Antinou countered and so it went on for quite a while. (FR3) [3]
30. Er another brother in the in twenty six, he he took another course of action, he he he cleared off and er he went to he went to live in Australia. (FYJ) [1]
31. A lot of what went on was based on gossip, most of it spread by members themselves. (GoP) [3]
32. Perhaps Betty had asked some people in and they were enduring one of those breaks in conversation, but the silence went on. (GoX) [3]
33. But everybody went silent and serious. (G3P) [3]
34. Those at the north end of Normangate Field remained essentially agricultural in character throughout the second century, after which they apparently went out of use. (H7Y) [3]
35. He had not brought his writing tray or materials but mentally he went through each of the deaths he had investigated, trying to fix a pattern, with little success. (H98) [3]
36. "As for enjoyment," he went on tauntingly, his breath mingling with hers as he bent his head again, "tell me you're not enjoying this, Maria." (H9L) [3]
37. Oh, a at nineteen forty eight they split up the electric supply and the three was nationalised and erm it, it just went out of the control of the local councils. (HDL) [3]
38. The term "minister" as a somewhat vague diplomatic title went back to at least the mid-sixteenth century. (HY5) [1]
39. Mr Harris, who's now in a hospice, hit financial problems when his building firm went bankrupt. (K25) [2]
40. Well that's what I mean, if I went to live in Gambia. (KCF) [1]
41. "My colleague, Dr Mackintosh, has told me that you will not talk to him," Lange went on. AC3 [3]
42. For the discomfort, the upset that you went through with having to listen to her. (KCN) [3]

43. Other great cities went in the same direction, without any questions being asked in central government, or by the opposition, about the electoral system. (AHN) [3]
44. The things she had heard Jack say after a favourite that he had carefully arranged to get well stuffed, as he put it, promptly went and won. (BP7) [1]
45. And the players I'd been working with previously went along with me, from using my modified equipment to using my custom-built equipment. (C9J) [3]
46. My recollection of what happened then is hazy, except that at some stage I went into spasm, with the two of us locked tight in a tangle of arms and legs. (CAH) [1]
47. I went through one series against Pakistan playing in four Tests without getting a wicket. (CBG) [3]
48. This went to the very heart of an ideal that, although lacking cohesion, was encapsulated in Labour's programme and no other. (CCR) [1]
49. The interview took place on a Friday afternoon in the Royal Palace and was as bad as any I can remember: the king was bad, I was bad, the room was gloomy, nothing went right. (CDS) [1]
50. Highly-paid photographers went hungry as the NME used kitsch '50s postcards. (CHA) [3]

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