Introduction: The problem. Levin (1993, ‘verb classes’), Levin and Rappaport Hovav (1995), Maienborn (1994), Talmy (1985, in his study of lexicalisation patterns), as well as many others, deal with the phenomenon of verbs that lexically do not provide a path slot but nevertheless combine with a path-PP. Most prominent examples of this effect can be found, in Levin’s (1993) classification, in the Verbs of sound emission (example: ‘rumble into the driveway’) and in the Verbs of body-internal motion (example: ‘wobble over the road’). Levin proposes that such verbs “may take on a meaning that involves directed displacement when they are found with a directional or goal prepositional phrase.” Due to Levin, “in the presence of such a prepositional phrase, the verb takes on an extended sense that might be paraphrased as ‘go by V-ing’”. As a consequence, in Levin’s theory these verbs change from activity verbs (in the Vendler sense) in absence of a goal phrase to accomplishments when a goal-phrase is added.

This effect however exclusively appears within a very restricted set of verbs and scenarios (and in parallel, Levin’s class of Verbs of body-internal motion contains only a few verbs): not in all examples, combination with a path-PP results in a semantically good sentence. It is additionally the case, as shown in (1) below, that the decrease of acceptability is a gradual phenomenon, where only some sentences come out as fully unacceptable (cf. ex. (2)). Levin’s (1993) analysis does not offer a rule-based selection of cases where this effect appears.

(1) a. Peter wackelte über die Straße. (Peter was wobbling over the road)
b. ?Peter zitterte über die Straße. (Peter was shaking over the road)
c. ???Peter vibrierte über die Straße. (Peter was vibrating over the road)

(2) a. ???Peter friert über die Straße (‘Peter is being-cold over the road’)  
b. ???Gunda liest in die Küche. (Gunda is reading into the kitchen) ((Maienborn 1994))

An analysis. For simplicity, the problem at hand is reduced to two central questions: how does, semantically, the path anchor to the meaning of the verb? And, in which cases does this happen?

Maienborn (1994) argues against a notion of pure modification and proposes instead a mechanism where the verb becomes a temporary motion verb. This mechanism is triggered by the path-PP. As can be seen in (2-b), however, this mechanism needs to be restricted: “Das in Frage stehende Prädikat muss auf eine essentielle Eigenschaft der Fortbewegung Bezug nehmen” [The predicate in question has to refer to an essential characteristic of translational motion.] (Maienborn (1994), p. 240).

This proposal makes up the basis of the model proposed in the current paper. We argue that if a verb encodes information about any kind of motion or any related subevent like sound emission caused by this motion, and if this effect is not purely internal but has a visible effect onto the resulting path, then it is possible to semantically superimpose this effect on a path that is introduced by a PP, and reversely, to treat the PP temporarily as an argument of the situation representation.

This explains the differences of acceptance in (1) along the following lines: The motion
induced by the manner pattern must have an influence on the translation movement: the local of path of ‘wobbling’ and the global path ‘over the road’ must interact (This effect has been called Path Superimposition). The more of the pattern motion effect is visible, the better is the sentence.

**Our model: generative concepts, and modification.** In order to formally model this basic assumption, we adopt basic ideas and formalisms of the Conceptual Semantics framework (Jackendoff 1990, Jackendoff 1989, Jackendoff 1991, among others), to which we then introduce formal and theoretical updates. We argue that it is not the verb that, in case, adapts its own lexical meaning and introduces a path-slot in order to deal with a Path-PP; but the Path is introduced via processes of conceptual unification and modification; and thus the decision about the well-formedness of such utterances is a matter of conceptual interpretation.

All in all, ‘compositional concept formation’ (Jackendoff (1989, among others) argues for ‘generative concepts’) is claimed to be responsible for Path Superimposition effects, which we model as follows: The Path, denoted by the PP, calls for a motion concept; however, the Path-PP does not find a suitable conceptual slot in the only present verb V. Therefore the Path is subsumed by an empty (underdetermined) implicit motion event representation □PATHMOVENT (to be spelled out, for the ‘wobble’ example, as ‘Peter moves on the Path denoted by the PP, in a way which is not further described’). If the motion subevent referred to by V-ing is conceptually related to the overall motion situation, it is introduced to □PATHMOVENT via modification / unification processes.

We develop and demonstrate this conceptual formalism, starting out from Jackendoff’s Conceptual Semantics framework, which we both extend and adapt, and describe in detail the conceptual modeling process along German and English examples as in (3).

(3) a. . . . Lastzüge, die über schlechte Straßen scheppern und Expreßzüge, die durch die Stadt donnern. ( . . . trucks that (go-making-rattling-noise) over bad roads, and express trains that (go-making-rumbling-noise) through the city) (Berliner Zeitung 1998)

b. Da rasseln und scheppern die Trabbis und Wartburgs die Straße entlang, . . . (Trabbis and Wartburgs [i. e. ancient east German car brands] (go-making-rattling-noise) and (go-making-rumbling-noise) along the road, . . . ) (http://www-public.tu-bs.de:8080/~wittram/reisen/DDR90/Kapitel/DDR2307.html, )

References


