DISPERSED MOTION METAPHORS OF EMOTION IN SLOVENE. A COGNITIVE GRAMMATICAL ANALYSIS OF THE PREFIX RAZ- IN VERBS OF EMOTIONAL EXPERIENCE

AGNIESZKA BĘDKOWSKA-KOPCZYK
University of Bielsko-Biała

ABSTRACT

This article analyzes Slovene constructions with verbs of emotional experience formed by the prefix *raz-* ‘in different directions, apart’. The author argues that the prefix metaphorically extends its spatial (physical) meaning and denotes metaphorical motion resulting in the emergence of an emotional state (i.e., the first stage of the emotion scripts) and the occurrence of a physical reaction (i.e., the third stage). The author discusses not only metaphorical extensions of the prefix but also how its spatial meanings are mapped onto the course of an event of emotional change. The author also reflects on types of causation implied by the experiencer-object and experiencer-subject of emotions, and on verbs of physical reaction that are prefixed by *raz-*.

[1] INTRODUCTION

Recent findings in experimental psychology (e.g., (Richardson et al. 2001); (Craford et al. 2006)) confirm that the conceptualization of emotional states is spatially shaped and underlain by sensorimotor experience. At the lexical level, this is reflected in expressions of emotional states that are based on the metonymy MOTION STANDS FOR EMOTION (e.g., Slovene *biti ganjen* ‘be moved’ and English *be moved, be touched*). At the syntactic level, the sensorimotor basis of emotions is embodied in constructions with prepositional phrases (e.g., Slovene *zaljubiti se v koga*, literally ‘to fall to love in somebody-ACC’, *tresti se od strahu*, literally ‘to tremble from anger-GEN’, and English *fall for somebody, tremble with fear*), as well as in constructions formed by verbs accompanied by spatial particles, such as Slavic prefixes and English verb-particles (e.g., Slovene *vzradostiti se*, literally ‘up-happy-VERB’ and English *cheer up*).

In this article I propose a systematic analysis of Slovene constructions formed by verbs of emotional experience that are prefixed by *raz-* (‘in all directions’,

‘apart’) and attempt to account for the metaphorical shift of *raz-* from the spatial domain to the emotional domain.¹ The analysis includes the following verbs of emotional experience: verbs of emotion (experiencer-object and experiencer-subject) and verbs denoting physical experience caused by emotions. In the physical realm, the prefix denotes movements on a dispersed path (spread motion) that can result in dispersion or separation; for example, *razpršiti* ‘to spread’ and *raziti se* ‘to go in various directions’, respectively. The prefix’s meaning of dispersion in some verbs can also express expansion (enlargement), as in *razrasti se* ‘to grow in all directions’. I argue that, in verbs of emotional experience, the prefix metaphorically extends the spatial senses and denotes a mental change of the figural entity. Thus, emotional processes reflected in verbs prefixed by *raz-* are conceptualized in terms of the metaphor CHANGE IS MOTION. The aim of this analysis is to show that in verbs of emotion (e.g., *razveseliti se* ‘to rejoice’) the prefix expresses the metaphorical spread and expansion of an emotional state, whereas in verbs of physical reactions (e.g., *razpočiti se od jeze* ‘to explode with anger’) the prefix expresses metaphorical separation of the affected participant’s body parts. Because many verbs discussed in the article denote an emotional change by virtue of metaphorical or metonymical extension of their meanings derived from the physical domain, this article also discusses (spatial and ontological) metaphors and metonymies that interrelate with spatial metaphors implicated by *raz-*. This study also attempts to identify how the spatially-based senses of the prefix correlate with their function as modifiers of the course of events denoting emotional change (in terms of Aktionsart).² Moreover, I examine *raz-* in verbs of emotional experience, taking into account the entire construal of the change event. Thus, the degree to which participants of the change event are specified in terms of causality is also investigated in this article.

This analysis is part of an extensive study on how emotion scripts are represented in prefixed verbs in Slovene. The reference grammar of Slovene (Toporišič 2000) lists eight prefixes that can combine with verbs of emotion: *vz-* (as well as *z-* and *s-*), *raz-*, *o(b)-*, *pre-*, *po-*, *za-*, *na-*, and *u-*. In (Będkowska-Kopczyk 2012a,b), it is shown that the prefixes *vz-* and *o(b)-* embody different types of sensorimotor experience associated with the emergence of emotions. In verbs of anger, happiness, fear, and love, *vz-* ‘up, upwards’ metaphorically extends the spatial sense of upward movement of psycho-physical sensations inside the human body. On the other hand, in verbs denoting shame, fear, happiness, outrage, and irritation, the prefix *o(b)-* ‘around’ indicates that emotional processes are conceptualized

[1] The data for the analysis was excerpted from the internet edition of *Slovar slovenskega knjižnega jezika* (SSKJ). The occurrences and meanings of the verbs were checked against the corpuses of written and spoken Slovene *Gigafida* (henceforth Gf) and *Nova beseda*.

[2] The notions of aspect and Aktionsart are not conceived as being in the same category in this article. *Raz-*, as a grammatical morpheme, makes all of the verbs analyzed in this article perfective. As a modifier of the course of a change event, the prefix is considered to interrelate with the semantics of a base verb.

in terms of circular motion; that is, metaphorical movement of emotion around people. The schematic representations of both prefixes mapped onto the emergence of emotions contribute two different types of information: (i) upward motion is associated with the accessibility of emotions: emotions become accessible (see the metaphor VISION IS UP, (Šarić 2012)), and (ii) circular motion is associated with the entirety of the emotional process; that is, the emergence of emotions is perceived to completely affect the referent coded as experiencer. Regarding the emergence of emotions, this study proposes that the notion of dispersed movement instantiated by *raz-* is associated with the rapid increase and intensity of an emotional state.

Studies dealing with other Slavic languages (e.g., (Klikovac 2004); (Przybylska 2006); (Janda & Nessel 2010); (Zlatev et al. 2012)) offer evidence supporting the thesis that prefixed verbs of emotional experience are motivated by the metaphor CHANGE IS MOTION. Some of these studies are discussed further in this article.

The structure of this article is as follows: Section [2] discusses the meanings of *raz-* as defined in reference grammars of Slovene and in *Slovar slovenskega knjižnega jezika* (Standard Slovene Dictionary, henceforth SSKJ). Section [3] presents a theoretical account of the cognitive approach to prefixes and the state of the art related to the properties of the prefix *raz-* in verbs of emotion in some Slavic languages. In Section [4], I discuss types of motion events, including the category of self-contained motion, which is considered relevant for the analysis of Slovene *raz-* in verbs of emotional experience. The analysis is conducted in Section [5]. Section [6] presents conclusions.

[2] RAZ- IN LINGUISTIC STUDIES, REFERENCE BOOKS, AND THE STANDARD SLOVENE DICTIONARY

Raz- and its Slavic cognates originate from Common Slavic **orz-* ‘apart, from’ (Snoj 1997, 524).³ Bajec (1959) identifies two main spatial meanings of *raz-*: separation and spreading. The author links these two senses, giving priority to the former: “what has been separated from an object is becoming further from it and spreading in all directions” (Bajec 1959, 122). The third identified sense of *raz-* is defined as ‘undoing the result of a previous action’ and, according to the author, it does not relate to the previous two. Bajec (1959, 122) points out that in verbs denoting physical spreading *raz-* also implicates intensification of the action expressed by the base verb (an augmentative sense). This also applies to verbs of emotional experience such as *razdražiti* ‘to agitate’, *razhuditi* ‘to make angry’, and *razveseliti* ‘to rejoice’. The author notes that *raz-* can also give an inchoative meaning to verbs

[3] *Odzadnji slovar slovenskega jezika* (Slovene Reverse Dictionary; henceforth, OSSJ) annotates 798 verbs prefixed with *raz-*. Note that among the Slavic languages only Slovene has a cognate preposition *raz* ‘from, off’ (Bajec 1959, 121); however, the preposition is considered archaic. This is reflected in the corpus *Nova beseda*, which attests *raz* mostly in literary texts from the nineteenth and early twentieth century.

of emotion. However, as he claims, this meaning very often combines with the augmentative one. This claim is illustrated by two examples: *razvneti* ‘to fire up’ and *razsrditi se* ‘to become angry’:

... ogenj se razvnel, pomeni, da je prišlo vnemanje do konca, to pa je začetek plamenenja; razsrditi se pove, da je srd dospel do tiste stopnje, ko izbruhne [... *ogenj se razvnel* (literally: ‘fire has been fired up’) means that the fact of setting fire is perceived as accomplished and this results in the beginning of the flaming; *razsrditi se* (‘to become very angry’) tells us that anger has reached such a level that it can explode] (Bajec 1959, 123).

Slovenska slovnica (Slovene Reference Grammar) by Toporišič (2000, 221) ascribes the following spatial and abstract senses to *raz-*:

- (i) separation, movement in various directions, as in *razgnati* ‘to disperse something (e.g., a crowd)’
- (ii) undoing the result of a previous action, as in *razpakirati* ‘to unpack’
- (iii) noticing, explaining, as in *razpoznati* ‘to recognize’ and *razložiti* ‘to explain’, respectively.

Toporišič (2000) also recognizes three meanings of *raz-* referring to the course of action: augmentative, inchoative, and resultative. The augmentative sense is explained as developing an activity to a high level of intensity, as in *razgreti* ‘to warm up’. The inchoative and resultative senses are presented by the author in one gloss (i.e., gloss 4 in (Toporišič 2000, 221) and are illustrated by several verbs, including such verbs of emotion as *razveseliti se* ‘to rejoice’ and *razhuditi* ‘to become angry’, and verbs that refer to manifestations of emotions, such as *razjokati se* ‘to begin to cry’. However, the author does not explicitly define which aspectual meaning of *raz-* (i.e., inchoative or resultative) is ascribed to the particular verbs given as examples. Toporišič (2000) probably means that *raz-* carries both senses, which would be consistent with Stevanović, who argues that *raz-* includes three senses: (i) an active beginning of an action or going into the state (inchoative sense), (ii) the end of the action (resultative sense), and (iii) intensity of the state or action denoted by the base verb (intensive sense⁴). As he writes:

Examples like *rasplakati* (burst out crying), *razbuktati* (burst into flames) and so on convey another meaning of the prefix RAZ-. They do not

[4] In this article, the terms “intensive” (Stevanović 1970) and “augmentative” (Bajec 1959) are treated as synonyms.

only mean an active beginning of an action but they also mean going into the state marked by the base verb and they often mark the end of the action: *razljutiti se* (become angry), *raširiti* (spread). At the same time it expresses the intensity of the verb: *rasplamsati*, *razbjesniti se* (enrage), *razletjeti* (fly apart). (Stevanović 1970), cited in (Hanić 2009, 167).

SSKJ identifies eight senses of *raz-* as a verbal prefix, out of which seven correspond to the textbook definitions discussed above. In verbs of emotion, *raz-* is assigned an inchoative and augmentative meaning (“the beginning of a state, usually to a large extent,” glossed as 1č in SSKJ). The dictionary mentions two senses of *raz-* that have not been identified in the reference grammar: “expressing a fact that some things are not together or in their original position anymore”; that is, changing from a compact to a dispersive state, as in *razsuti* ‘to scatter’ (glossed as 1b in SSKJ), and ‘reaching a desired goal’, as in *razbrati* ‘to understand’ (glossed as 1d).

To conclude, in Slovene linguistics the prefix *raz-* is recognized as conveying three spatial meanings: separation and spreading (Bajec, Toporišič, SSKJ), and changing from a compact state to a dispersive one (SSKJ). Only the first two senses are considered to be related to each other and only by Bajec (1959). As I show in Section [5], these three senses are interrelated.

As concerns temporal characterization of the course of action, all Slovene linguistic sources ascribe *raz-* the sense of intensity; however, these works are not consistent in relating this temporal sense with the meanings of emotion verbs. Only Bajec and SSKJ associate the notion of intensity (augmentative sense) with the beginning (inchoative sense) of an emotional state denoted by the verb. As already observed, Toporišič interprets *raz-* in verbs of emotion as combining the meaning of inchoativeness (the beginning) and resultativeness (the accomplishment). Later in this article I show that in verbs of emotion the inchoative, resultative, and augmentative senses correlate with the spatial meaning of *raz-*.

The other senses of the prefix in question that are recognized in Slovene linguistics—that is, ‘undoing the result of a previous action’ (Bajec, Toporišič, SSKJ), ‘noticing, explaining’ (Toporišič), and ‘reaching a desired goal’ (SSKJ)—seem to emerge from the meanings of the base verbs, and not from the meaning of *raz-*. This means that these sources do not consistently differentiate between the meaning that comes from the verb, the meaning that comes from the prefix, and the degree of overlap between the two. A more systematic study would show that, in verbs that are used as illustrations of these senses, the prefix metaphorically extends its spatial meanings (e.g., separation in *razpakirati*).

[3] COGNITIVE APPROACHES TO PREFIXES IN SLAVIC LANGUAGES

In contrast, in the framework of cognitive linguistics (e.g., (Janda 1986, 2007); (Przybylska 2006); (Šarić 2012)) it is suggested that prefixes, similarly to prepositions and cases, are polysemous and all their usages are semantically motivated. Cognitive approaches to prefixes in Slavic languages make use of a radial category (Lakoff 1987). Accordingly, prefixes form semantic networks of spatial (physical) and abstract sub-meanings (or subcategories; (Janda & Nesset 2010)) organized around the prefixes' prototypical meaning, which is spatial in nature. The abstract sub-meanings of prefixes are motivated by metaphorical and metonymic extensions of the prototype. The sub-meanings bear a family resemblance (Wittgenstein 1953) to the prototype.

The combinations of prefixes and verbs of emotion (e.g., *raz-* 'in all directions' and *jeziti* 'to anger' in *razjeziti* 'to make angry') are considered to form abstract argument structure constructions in which *raz-* denotes the core event-structure schema consisting of a spatial configuration between a *trajector* (TR) and a *landmark* (LM). A TR/LM organization in linguistic expressions is an instance of the more general perceptual phenomenon of figure-ground organization between two or more participants in the given scene (Langacker 1987).⁵ The TR is the focal (i.e., most prominent) participant in a profiled relationship, whereas the LM is the relationship's less salient participant. It must be stressed that, in the scenes evoked by prefixed verbs, the prefix and the base verb establish two different kinds of relationship (or configuration); thus the prefix and the base verb may have different TRs and/or different LMs (Nesset 2010). For example, the TR/LM relationship profiled by transitive *raz-* verbs (e.g., *razpršiti* 'to scatter around') provides the conceptual basis for the notion of subject and object.⁶ In (1), the verb *razpršiti* profiles a causative relation between the TR specified by the clausal subject ("explosion") and the LM specified by the object ("metal pieces"), which is undergoing a change of location. On the other hand, the TR/LM relationship profiled by *raz-* provides the conceptual basis for the spatial and temporal organization of the scene participants in terms of a figure/ground (or *locatum/relatum*) configuration. The TR of *raz-* in *razpršiti* is elaborated by the new (dispersed) location of the metal pieces, whereas the point of reference of their new location (LM) is their previous (concentrated) location.

[5] As noted in (Talmy 2000b, 136), Langacker's notions of trajector and landmark are highly comparable to Talmy's notions of Figure and Ground. Although I refer further to Talmy's framework, I use Langacker's terms because they better illustrate the spatial configurations evoked by Slavic prefixed verbs; see (1).

[6] Langacker (1991) accounts for the conceptual structure of subject/object alignment via the notion of an action chain: the transitive verbs profile a causative relation between the sources of energy (clausal subjects) and the objects that are the consumers of energy (clausal objects).

- (1) Eksplozija je razpršila železne
 Explosion-SG.NOM be-3RD.PRS. RAZ.scattered-3RD.SG.PST metal
 delce (Gf)
 pieces-PL.ACC
 ‘The explosion scattered around metal pieces.’

The meanings of prefixes integrate with the meanings and grammatical features of verbal constituents (see (Šarić 2012); (Endresen et al. 2012)). As noted in (Tchizmarova 2012), Slavic prefixed verbs resemble English verb-particle combinations in that the “verb contributes to the source domain (literally, metonymically, or metaphorically) and the prefix is the expression of a cognitive image schema (CONTAINMENT, VERTICALITY, etc.), instantiated either literally or metaphorically” (Morgan 1997, 329), cited in (Tchizmarova 2012, 227). Thus, constructions comprising *raz*-verbs of emotion, such as *To ga je razveselilo* ‘It made him rejoice’, are assumed to be examples of spatial metaphors due to the spatially-based meanings of the prefix denoting a dynamic image schema indicating dispersed motion.

The prefix *raz*- (and its Slavic cognates such as *roz*- in Polish) has been the subject of several cognitive studies – (Klikovac 2004) for Serbian; (Belaj 2004) for Croatian; (Przybylska 2006) for Polish; (Hanić 2009) for Bosnian; and (Janda & Nessel 2010). All of these studies reflect on the prototypical (or schematic) senses identified for the physical meaning of *raz*- and *inter alia* on metaphorical sub-meanings of *raz*- in verbs of emotion. The limited scope of this article makes it impossible to discuss all of these studies in detail; therefore, I focus only on the prototypical senses of the prefix and their extensions relevant for verbs of emotional experience.

Klikovac (2004) defines the central sense of *raz*- as movement from the center to the periphery, in different directions, and from upwards to downwards. These meanings have physical and metaphorical sub-meanings. In verbs denoting intensive emotions defined as “expansive” states, such as anger and joy, *raz*-metaphorically extends the physical meaning of increasing in volume; that is, a three-dimensional spread of an entity. This meaning is motivated by two inter-related cross-domain mappings: INTENSITY IS SIZE and EMOTION IS SUBSTANCE. The latter metaphor can be further elaborated as EMOTION IS A HOT SUBSTANCE (see the metaphor ANGER IS HOT FLUID IN A CONTAINER (Lakoff & Kövecses 1987)) and EMOTION IS SUBSTANCE IN MOTION (Klikovac 2004, 176). Increasing in volume is defined as the central sense of *raz*- in Bosnian by Hanić (2009, 168), who suggests that the metaphor EMOTIONS ARE FLUIDS IN A CONTAINER refers not only to the concept of anger, but also to other intensive emotions, such as joy, being upset, and sadness (Hanić 2009, 170). On the other hand, Klikovac (2004) claims that in verbs denoting emotions associated with emotional infirmity, such as sadness, longing, and painfulness, *raz*- denotes a two-dimensional increase in size. According to Be-

laj (2004), the change from a compact state to a dispersive one motivates all uses of *raz-* in Croatian. In verbs of emotion, *raz-* denotes that a referent is undergoing a physical or metaphorical spread. The referents are either body parts whose physical spread is caused by an emotion (e.g., *raspaliti se* ‘to become inflamed’) or an emotion, which metaphorically spreads itself (e.g., *razbjesniti (se)* ‘to become mad’; (Belaj 2004, 8)).

Przybylska (2006, 218) links the schematic meaning of Polish *roz-* with a notion of centrifugal movement (see also (Klikovac 2004)) and with a change from a compact state to a dispersive one (see also (Belaj 2004)). According to the author, in verbs of emotional experience *roz-* extends the notion of movement “in an imaginative space.” The author places *roz-*verbs of emotion into three semantic groups. The first group comprises verbs implying metaphorical motion that “illustrates an occurrence and gradual increase of some feature” linked with the “loss of a proper structure of personality” in a person that experiences the emotional state (e.g., *rozdrażnić* ‘to make agitated’). The second group includes verbs that imply metaphorical motion related to a change from “a passive to an active state” (e.g., *rozłościć* ‘to make angry’). The last group includes verbs in which metaphorical motion is related to a change from “a normal activity to an activity beyond measure” (e.g., *rozemocjonować się* ‘to become emotional’; (Przybylska 2006, 218–220)).

Janda & Nessel (2010) define the prototypical meaning of Russian *raz-* as *APART*; that is, departing from a common point in different directions (see also (Klikovac 2004); (Przybylska 2006)). The subcategory *APART* is metonymically extended to *SPREAD*, denoting that the edges of an object move away from each other, and to *SWELL*, denoting that the boundaries of an object move apart in a three-dimensional expansion (see “increasing in volume” in (Klikovac 2004)). *SPREAD* and *SWELL* motivate the sub-meaning of *EXCITE* (as in *razgoret’* ‘to warm up’), because “excitement tends to spread and things that are excited often swell” (Janda & Nessel 2010, 492). *Raz-* in verbs of emotion, such as *razveselit’ sja* ‘to cheer up’, metaphorically extends the sub-meaning of *EXCITE* to the domain of emotions (*METAPHORICAL EXCITE*). Moreover, Janda & Nessel (2010, 493) argue that both excitement and metaphorical excitement can lead to the new state. Thus, they form the next subcategory, *INGRESSIVE*, which refers only to the initial state or beginning of emotions. *Raz-*verbs of physical acts such as *razplakat’ sja* ‘to burst into tears’ and abstract verbs such as *razvolnovat’ sja* ‘to become upset’ also belong to this subcategory (for more verbs, see (Janda & Nessel 2010, 491; 496)).

In the following analysis I differentiate between *raz-*verbs that express emotions literally due to extensions of their physical meanings. This analysis provides further insight into metaphor and metonymy that interrelate with spatial conceptualization of emotion events represented by the prefix, as well as temporal characterization of change events in the domain of emotion.

[4] MOTION EVENT

We assume that the schematic meaning of Slovene *raz-* is based on a spatial notion of dispersed movement on a three-dimensional PATH,⁷ resulting in separation (in verbs of motion; e.g. *razbežati se* ‘to run in different directions’), distribution (in verbs of action; e.g., *razpršiti* ‘to disperse’, ‘to scatter around’), or increase in intensity (in verbs denoting processes undergone by physical referents; e.g., *razgoreti se* ‘to burst into flames’). In all these types of verbs, the prefix denotes a change from a compact state in space to a dispersive one. Its schematic meaning is mapped onto the aspectual one of the active and intensive beginning of an action or state, and its end.

Verbs combined with *raz-* depict dynamic situations involving motion events.⁸ Thus, before I account for the metaphorical senses of this prefix in verbs of emotional experience, in this section I discuss various types of motion events.

According to Talmy (2000b), two types of motion events can be distinguished: a translational one and a self-contained one. In the former, “an object’s basic location shifts from one point to another in space”; in self-contained motion, “an object keeps the same, or ‘average,’ location” (Talmy 2000b, 35). Talmy associates self-contained motion with oscillation, rotation, dilation, wiggling, local wandering, or rest. The spatial meaning of *raz-* interrelates with the meanings of verbs it combines with, and can express both translational and self-contained dispersed motion. In verbs of motion and action, the prefix implies translational motion because the moving objects are dislocated from a spatial source. On the other hand, in verbs expressing physical processes the prefix denotes self-contained motion because the object (e.g., fire in *razgoreti se* ‘to burst into flames’) does not shift from the source but undergoes motion within its boundary. This type of motion can be perceived as resulting in an increase in size (in a three-dimensional space; e.g., *razgoreti se* ‘to burst into flames’, *razrasti se* ‘to grow’) or changing of shape (in a two-dimensional space; e.g., *razliti se* ‘to spill all over something’). The following analysis shows that, in verbs denoting the occurrence of an emotion, *raz-* implies metaphorical self-contained motion; that is, motion within the boundaries of the experiencer participant’s body.⁹ In contrast, in verbs denoting physical reactions (metaphorical exploding), the prefix implies metaphorical translational motion resulting in separation of the experiencer participant’s body parts.

[7] Peña Cervel (2003, 137–139) considers two parameters of the image schematic notion of path. They are dimensionality and directionality. Accordingly, the author distinguishes among one-, two- and three-dimensional paths and among horizontal, vertical, and circular paths.

[8] Note that motion is inherent to the meaning of many base verbs that combine with *raz-*; for example, *bežati* ‘to move fast’, ‘to escape’ or *pršiti* ‘to disperse’.

[9] Zlatev et al. (2012) specify this type of motion as non-translocative unbounded motion.

Both translational and self-contained motion can be further specified as self-agentive, caused, or non-agentive, cf. Mandler (1992) and (Talmy 2000a,b).¹⁰ Self-motion is defined as an object's self-induced motion resulting from the moving entity's will and intention, whereas caused motion is explained as being instigated by an external causative factor.¹¹ In the physical space, self-motion is denoted by *raz*-verbs of motion with the clitic *se* 'self', which assign the semantic role of agent, such as *razbežati se* 'to run in different directions'. The moving objects are coded by the verbs' nominative complements or inanimate objects whose motion is perceived to be driven by an inner force or engine (e.g., planets, vehicles). Caused motion is denoted by transitive verbs such as *razpršiti* 'to disperse'; the moving objects (assigned as patient) are coded as the verbs' accusative complements denoting objects distributed by people or natural forces. On the other hand, *raz*-verbs with the clitic *se* 'self' denoting processes, such as *razgoreti se* 'to burst into flames', denote a third type of motion that is neither self-motion (i.e., volitional) nor caused motion. I specify this type of motion as non-agentive (Talmy 2000a, 41) because the participant is not perceived as being actively involved in the process; that is, the figural entity neither has control over the ongoing process resulting in the physical change nor contributes to the energy developed in the ongoing process—the process is perceived as “happening by itself” (Dirven & Verspoor 2004, 80).¹² The verbs combine with nominative noun complements denoting objects such as fire, plants, and liquids that are perceived as undergoing a process of dispersed motion. The objects are assigned the role of patient (or an “Undergoer” in the sense of (Talmy 2000a)). *Raz*-verbs with the clitic *se* 'self', such as *razbežati se* 'to run in different directions' and *razgoreti se* 'to burst into flames', can form constructions that imply both self- and non-agentive motion. I claim that in verbs that imply self-motion (a volitional activity; e.g., *razbežati se*) *se* 'self' is a marker of reflexiveness, whereas in verbs that imply non-agentive motion (e.g., *razgoreti se*) the clitic is a marker of middle constructions that depict a non-volitional change of state (Maldonado 2008).

[5] ANALYSIS

According to cognitive psychologists (Fehr & Russell 1984) and linguists (Kövecses 1986, 2000); (Radden 1998), the conceptualization of emotions can be accounted

- [10] Talmy (2000a) distinguishes nine types of causation, among which there are six types of causative situations; these are: an Agent and Author causation, inductive causation, resulting-event causation, causing event causation, and instrument causation. The limited scope of this article makes it impossible to discuss all of these types in detail here; however I refer to a few types in the analytic part of this article.
- [11] As Zlatev et al. (2012, 421) observe, the notion of causality “concerns the (naïve) human Lifeworld and not our scientific understanding of the universe.” Therefore, many inanimate objects, such as vehicles and planets, are perceived to display self-motion.
- [12] According to Talmy's framework, such processes can be defined as an “autonomous event” (Talmy 2000a, 517).

for by means of an abstract schema (a prototype and script), in which emotion events are laid out in a causal and temporal sequence. Emotion scripts comprise at least three stages that can be described as (i) the emergence of an emotion, (ii) an emotion state, and (iii) physiological and behavioral responses triggered by the emotion. The verbs analyzed in this section reflect either the first or third stage, or both stages at once.

[5.1] *raz-* in verbs expressing occurrence of emotions

SSKJ lists twenty-four verbs prefixed by *raz-* that reflect the first stage of an emotion script. The verbs denote the emergence of the following intensive emotional states:

- (i) anger and wrath: *razjeziti (se)*; *razhuditi (se)*; *razjariti (se)*; *razpeteliniti se*; *razpištoliti se* ‘to make/become angry’; *razbesneti (se)*; *razsrditi (se)*; *raztogatiti (se)*; *razkuriti (se)*; *razkačiti (se)* ‘to make/become very angry’
- (ii) happiness: *razveseliti (se)* ‘to make/become happy’
- (iii) sadness: *razžalostiti (se)* ‘to make/become sad’
- (iv) being upset: *razžaliti* ‘to upset’
- (v) (positive or negative) emotional agitation, such as *razveneti se*, *razdražiti (se)*, *razburkati (se)*, *razburiti (se)* ‘to stir up, agitate / to become stirred up/agitated’¹³

Among these verbs, I distinguish two classes: 1) verbs that occur only in emotional contexts and contain the name of an emotion in their roots, such as *jeza* ‘anger’ in *razjeziti (se)*, the name of a process, such as *kačiti* ‘to make very angry’ in *razkačiti (se)*, or a property, such as *jar* ‘angry’ in *razjariti (se)*, and 2) verbs that occur in non-emotional contexts, such as *razkuriti (se)*. These verbs express an emotional change due to metaphorical extension of their concrete meaning derived from the domain of physical processes (see the metaphor EMOTIONAL PROCESSES ARE PHYSICAL PROCESSES, (Klikovac 2004)). These verbs in the physical realm denote making something hot: *razkuriti (se)*, bursting into flames: *razvneti se*, stirring up water: *razburiti se* and *razburkati se*, and a physical stimulation: *razdražiti (se)*. The metaphorical cross-domain mapping between the domain of physical processes and emotional processes gives rise to the polysemy of these verbs and enables them to function in emotional contexts. Two other verbs—*razpeteliniti se*

[13] Seven verbs are marked as either ‘obsolete’ or ‘literary’ in SSKJ; they are: *razgneviti*, *razjaditi*, *razljutiti*, *razgaditi*, *razgorčiti* ‘to make angry’, *razradostiti* ‘to make happy’, and *raztožiti* ‘to make sad’. These verbs are not attested in *Gigafida* nor are they recognized as being used contemporarily by native speakers of Slovene. With the exception of *razgorčiti*, they occur in *Nova beseda* but mostly in literary texts originating from the first half of the twentieth century.

and *razpištoliti se*, which are derived from the nouns *petelin* ‘rooster’ and *pištola* ‘handgun’—denote only an emotional change. However, their meanings seem to be underlain by the cross-domain mappings A MAN IS A ROOSTER and A MAN IS A HANDGUN and metonymy: BEHAVIOR OF A ROOSTER STANDS FOR BEHAVIOR OF AN ANGRY MAN and LOUD SOUNDS OF A HANDGUN STAND FOR BEHAVIOR OF AN ANGRY MAN.

Verbs of emotion, like other verbs of mental experience, assign the semantic role of experiencer. As regards the clausal position of the experiencer, there are two types: experiencer-object (experiencer in the object position) and experiencer-subject (experiencer in the subject position; (Croft 1991)).¹⁴ Raz-verbs of emotion in transitive use, such as *razjeziti* ‘to make angry’ and *razjariti* ‘to make very angry’ in (2) and (3), respectively, are experiencer-object:

- (2) je dodal Tomo Šokota, ki je
 be-3RD.SING.PRS added-3RD.SG.PST Tomo Šokota, who be-3RD.SING.PRS
 Domžalčane pred tekmo
 Domžale resident-3RD.PL.ACC before game-SG.INST
 razjezil z izjavo (Gf)
 RAZ-anger-3RD.SG.PST with statement-SG.-INST
 ‘added Tomo Šokota, whose statement before the game made the Domžale residents angry.’
- (3) Baskervilla je pasje tuljenje tako
 Baskerville be-3RD.SING.PRS dog’s howling-SG so
 razjarilo (Gf)
 RAZ.anger-3RD.SG.PST
 ‘The dog’s howling made Baskerville so angry.’

In terms of an action chain, which is based on the billiard-ball model (Lan-gacker 1991), the verbs establish a causative relationship between an active and passive scene participant (i.e., the verb’s TR and LM). The active participant (the TR, agent) is perceived as a cause of anger due to transmitting a force to the passive participant (the LM, experiencer). The force is being extended into the mental domain (Croft 1991, 215–219). The active participant can be either a human instigator, as is the man called Tomo Šokota in (2), or an event; that is, howling that is triggered by the non-human instigator; namely, the dog in (3). It must be noted that the human instigator in (2) can be an involuntary agent or, in terms of Talmy (2000a), an Author (i.e., an entity whose “volitional act initiated the causal sequence (or led to the final event)” but whose act was non-intentional with regard

[14] In (Belletti & Rizzi 1988), the category of experiencer-object verbs is further divided into transitive verbs completed with the accusative experiencer object and intransitive verbs that have a dative or oblique experiencer object. The latter type does not occur in the verbs discussed in this article.

to the preceding event; (Talmy 2000a, 514).¹⁵ The cause that triggers emotion in (3) is an event that is explained in Talmy's framework as the "causing event"; that is, the very event that the speaker's attention is focused on (Talmy 2000b, 71).

Raz-verbs of emotion with the clitic *se* 'self', such as *razveseliti se* 'to rejoice' in (4) and *razburiti se* 'to become stirred up' in (5), assign an experiencer to the subject:

- (4) Daril sem se razveselil. (Gf)
 Gift-PL.GEN be-1ST.SG.PRS self RAZ.rejoice-3RD.SG.PST
 'I became happy because of the gifts.'
- (5) Razburil se je, ko mu
 RAZ.agitated-3RD.SG.PST self be-3RD.SG.PRS when he-SG.DAT
 je policist rekel, naj pihne v
 be-3RD.SG.PRS policeman-SG.NOM tell-3RD.SG.PST to blow-3RD.SG in
 alkotest. (Gf)
 sobriety test-SG.ACC
 'He became angry when the policeman told him to take the sobriety test,
 and he hit him.'

The cause of emotions can be expressed in many different ways in constructions formed by such verbs. For instance, in (4) the cause (the gifts) is coded by a complement in the genitive case. In (5), the man's agitation is perceived as being caused by an event (i.e., the policeman's request to take the sobriety test); the cause is expressed by a temporal relative clause. Another example (6) shows that experiencer-subject verbs of emotion expressing anger, such as *razjeziti se* 'to become angry', can occur in constructions with the preposition *na* and a noun expressing an object of emotion in the accusative:

- (6) Razjezi se na Nikki, ki mu je
 RAZ.Angry-3RD.SG.PRS self at Nikki-ACC who he-DAT be-3RD.SG.PRS
 vse prikrivala. (Gf)
 everything-ACC keep from-3RD.SG.PST
 'He got angry at Nikki, who kept everything from him.'

Whereas the prefix metaphorically denotes the emergence of emotion, the preposition extends its spatial meaning and codes the emotional relation between the experiencer and the object of the emotion.

[15] Talmy distinguishes the semantic concept of "Agent" from that of an "Author" regarding whether the subject of a syntactically causative construction can intend the final caused event or not (Talmy 2000a, 514). As concerns agency-implied transitive verbs of emotion, the first condition for agentive reading is that the stimulus is a human participant. Then it can be tested by volitional and imperative tests, as presented in (Verhoeven 2010). Such tests are, however, beyond the limited scope of this article.

In all verbs discussed so far, *raz-* denotes a change of mental state of the scene participants coded as experiencer. The prefix profiles a relationship between the participant's previous and new emotional state; the participant's state before the change is the point of reference (the prefix's LM) of the new emotional state (the prefix's TR). I argue that, in combination with verbs denoting emotions, *raz-* metaphorically extends the physical meaning of self-contained dispersed motion typical in its combination with verbs of observable physical processes (see Section [4]). The schematic representation of dispersed motion is mapped onto a change of mental state (i.e., emergence of emotions) by means of the orientational metaphor *CHANGE IS MOTION* (Lakoff & Johnson 1999). Experiencer-object *raz-*verbs of emotion have a causative meaning (transitive verbs), and thus they imply metaphorical caused motion (motion is perceived as being caused externally). Thus, the change of emotional state is perceived as caused (2)–(3). In contrast, the emotional outburst of the participant of experiencer-subject verbs that occur with *se* 'self' is perceived as a non-volitional reaction to an external cause (4)–(5) or an object (6). Thus, I claim that these verbs indicate metaphorical non-agentive motion and, consequently, the emotional change is perceived as non-agentive.

This interpretation is not consistent with approaches according to which Slavic emotion verbs with *se* are interpreted as reflexive and denoting self-instigated, volitional processes (see (Wierzbicka 1992); (Dziwirek & Lewandowska-Tomaszczyk 2010); (Zlatev et al. 2012)). If it were the case, the *raz-*verbs of emotion with the clitic *se* would imply self-motion. I adopt here the approach of Maldonado (2008), which claims that, in Spanish, the clitic *se* 'self' in verbs of mental experience (perceptual, emotional, and intellectual) is a marker of middle voice because it imposes a reading of unexpectedness and it develops an inchoative reading related to a change of state undergone by the experiencer in the event. Thus, the change cannot be regarded as volitional. I argue that metaphorical movement evoked by the prefix *raz-* in Slovene verbs of emotion with *se* implies rapidness and unexpectedness of the occurrence of an emotion. Thus, in combination with *raz-* these verbs also form middle constructions.¹⁶ Because intensive emotions emerge simultaneously with inner and outer physical changes observable by both the person and outside observers, in verbs that occur only in emotional contexts, such as *razjeziti (se)* 'to make/become angry', the schematic meaning of *raz-* is mapped onto an emergence and rapid increase in the emotional property of the scene participant coded as an experiencer; in this case, 'becoming angry'. The prop-

[16] This claim is supported also by Slovene linguists that consider Slovene verbs of emotion with *se* as implying autonomous events and marking middle voice (see discussion in (Tomišić 2011)). This refers to both imperfective and perfective verbs of emotion.

erty results from psychosomatic sensations¹⁷ associated with emotions denoted by the verbs' root. In the spatial domain, *raz-* denotes the occurrence of a rapid increase in some physical property (e.g., shining brightly in *razblesteti* 'to begin to shine brightly'). Therefore, in verbs that denote emotional states by means of the metaphor EMOTIONAL PROCESSES ARE PHYSICAL PROCESSES—such as *razkuriti* (*se*) 'to make/become very angry', *razburiti* (*se*), *razdražiti* (*se*) 'to agitate / to become agitated'—the schematic meaning of *raz-* is mapped onto an emergence and rapid increase in the physical processes associated with the given emotion; for example, becoming hot → becoming angry in *razkuriti se*. On this basis, I claim that in the verbs of emotion discussed here the spatial sense of dispersed motion correlates with the temporal sense of inchoativeness (the emergence of an emotional state).

As far as resultativeness is concerned, it cannot be claimed that the prefix marks the end of the action (Stevanović 1970). However, it expresses the fact that the event of emotional change (whether caused or non-agentive) denoted by the verb is accomplished. Thus, I argue that the schematic meaning of *raz-* also correlates with the resultative sense.

Finally, in all of the verbs of emotion discussed here, the spatial meaning of dispersed motion correlates with the sense of intensity (augmentative sense). In verbs that occur only in emotional contexts, the augmentative sense is motivated by the interrelated metonymies DISPERSED MOTION STANDS FOR EXTENSIVENESS and EXTENSIVENESS STANDS FOR INCREASE IN INTENSITY (i.e., the more extensive the property of the process, the more intensive the process). On the other hand, in verbs that in the physical domain denote observable processes of becoming hot, flaring, and stirring up, the sense of intensity is implicated by virtue of other interrelated metonymies: DISPERSED MOTION STANDS FOR INCREASE IN VOLUME and INCREASE IN VOLUME STANDS FOR INCREASE IN INTENSITY (cf. Klikovac 2004). The referents of such verbs (i.e., the verbs' TRs) are conceptualized in terms of SPREADING HEAT (*Andrej je razkuril peč* 'Andrej heated up the stove' → *poslanec je razkuril spor* 'a dispute made the members of parliament angry'), FIRE (*veter je razvnel ogenj* 'the wind flared up the fire' → *govornik je razvnel občinstvo* 'the speaker agitated the public'), and WATER (*veter je razburil morje* 'the wind stirred up the sea' → *govornik je razburil občinstvo* 'the speaker stirred up the public'). Moreover, because intensive processes are also indicated by their roots in both verbs of emotion and polysemous verbs of physical processes, the prefix reinforces the augmentative meaning of these verbs.

[17] Endresen et al. (2012, 264) analyze the abstract meaning of the prefix *vz-/voz-* 'up' in Russian verbs of emotion, such as *vspylit* ('to fly into a rage'), and they explain the meaning in terms of a metaphorical rise of the energy level triggered by emotional agitation. This interpretation is adopted in (Będkowska-Kopczyk 2012b) for Slovene *vz-* ('up, upwards') in verbs of emotion.

Note that the verbs expressing the processes in question (in addition to *razku-riti*) often occur in idiomatic constructions denoting the emergence of both intensive short- and long-term emotions. In these constructions, emotions are conceptualized in terms of spreading FIRE and WATER; cf. *razplamtiti čustva/jezo/sovraštvo* ‘to fire up emotions/anger/hate’, *razvneti čustva/jezo* ‘to fire up emotions/anger’, *razplameniti sovraštvo* ‘to fire up hate’, *razžgati ljubosumnost/sovraštvo* ‘to fire up jealousy/hate’, *razburkati čustva*; *razburiti čustva* ‘to stir up emotions’. The idioms show that in the folk model of emotions not only anger is conceptualized in terms of rapidly spreading fire,¹⁸ but also love, hate, jealousy, and emotions in general.

Summing up, I conclude that the schematic representation of *raz-* depicted by dispersed motion on a three-dimensional PATH is mapped onto the emergence of emotions and rapid increase of their intensity. The schematic meaning of the prefix combined with the verbs analyzed in this section correlates with all three senses identified by Stevanović (1970): inchoative, resultative, and intensive (augmentative).

[5.2] *raz-* in verbs denoting physical reactions caused by emotions

The prefix *raz-* occurs in three verbs: *razpočiti se*, *raznesti*, and *razgnati* ‘to explode’, which denote uncontrollable intensive physical reactions (metaphorical exploding) caused by strong emotions; for instance, anger, fear, delight, and happiness. These verbs occur in idiomatic constructions with a prepositional phrase formed by *od* ‘from’ and the emotion noun in the genitive, as in (7).

- (7) Če bi naju sedaj videla Verena May, bi jo
 If would us-ACC now see-3RD.SG.PST Verena May-NOM would she-ACC
 razneslo od zavisti. (Gf)
 RAZ.exploded-3RD.SG.PST from envy-GEN
 ‘If Verena May saw us now, she would explode with envy.’

Such constructions can be explained as underlain by the metonymy EXPLODING STANDS FOR STRONG EMOTIONS, which is an elaboration of a general metonymy EFFECTS OF A STATE STAND FOR THE STATE (Kövecses 2000, 134); however, it seems that the abstract use of these verbs is also underlain by another conceptualization of emotion events.

In the spatial realm, *raz-* in *razpočiti se*, *raznesti*, and *razgnati* ‘to explode’ instantiates dispersed motion on a three-dimensional PATH that results in separating the physical object’s parts (translational motion). The same meaning emerges also from the base verbs (cf. *počiti* ‘explode’, *nesti* ‘carry’, *gnati* ‘corral’), and thus the prefix not only makes the verbs perfective but also reinforces their meaning of separation. Because the concrete meaning of these verbs derives from the

[18] See the metaphor ANGER IS HOT FLUID IN THE CONTAINER (Lakoff & Kövecses 1987).

domain of physical processes (as it does in the case of verbs such as *razburiti se*, discussed in Section [5.1]), I argue that the metaphor EMOTIONAL PROCESSES ARE PHYSICAL PROCESSES (Klikovac (2004) motivates their extension to the domain of emotion and gives rise to their polysemy. The other metaphor that links exploding with emotional processes is THE HUMAN BODY IS AN EXPLODING CONTAINER. The schematic meaning of *raz-* (i.e., separating) is also mapped onto the occurrence of a physical reaction due to the metaphor CHANGE IS MOTION, which in the constructions formed by prefixed verbs discussed here interrelates with the metaphors and metonymy mentioned above. Moreover, it is observed that the spatially based meaning denoted by *raz-* correlates with the sense of resultativeness because *raz-* verbs indicate the final result of an action.

As regards a type of causality implied by *raz-*verbs expressing physical reactions, it has been already stated that the metaphorical exploding of the experiencer participant's body is perceived as being caused by the emotion (caused motion). In Talmy's framework, constructions formed by English prepositional phrases with *from* (e.g., *The window cracked from the wind*) indicate resulting-event causation; that is, causation implied by situations in which the main event "has resulted from another event and would not otherwise have occurred" (Talmy 2000b, 70). In Slovene, the cause-emotion is coded by an ablative construction with the preposition *od* 'from' + emotion noun in the genitive case, such as *od zavisti* 'with envy' (literally: 'from envy-GEN'), as in (7).¹⁹ In Będkowska-Kopczyk (2011, 260–261) it is shown that the prepositional phrase conveys the idea of emotions as uncontrollable causes of physical reactions. In the spatial use, Slovene phrases with *od* 'from' are perceived to encode the spatial human or non-human SOURCE or initial point of self-instigated motion. As shown in (Peña Cervel 2003, 146–148), the essential concept behind the caused motion, as in the verbs under investigation, is COMPULSION, one of the types of FORCE image schema (Johnson 1987, 145). Thus, the metaphorical extension of the source concept to the metaphorical meaning of EMOTION AS CAUSE of uncontrollable physical reactions is related to the idea of EXTERNAL FORCE, which influences people independently of their will.

The verbs *razpočiti se*, *raznesti*, and *razgnati* 'to explode' can also occur in a sentence without the prepositional phrase. I argue that, although the emotion is not explicitly expressed, the context of the utterance and information alone about physical reactions is sufficient to recognize an emerging emotion (by virtue of the metonymy EFFECTS OF A STATE STAND FOR THE STATE, (Kövecses 2000). One can also observe another regularity. In *SSKJ*, the verbs *razjeziti se* 'to become angry', *razbesneti se* 'to become very angry', *razdražiti se*, and *razburiti se* 'to become

[19] In other Slavic languages (e.g., Polish), a cause-emotion can be expressed by ablative, elative, and instrumental constructions; see the discussion on causality in Indo-European languages in the framework of localist theories in (Kempf 2007) and emotional causality in the light of ablative, elative, and instrumental constructions in Slovene and Polish in (Będkowska-Kopczyk 2011).

agitated', which, as shown in Section [5.1], typically denote the emergence of emotions, have a second meaning glossed as 'to express "big" (intensive) anger' (*razjeziti se*; *razbesneti se*), and 'to express "big" (intensive) agitation' (*razdražiti se*; *razburiti se*). This suggests that in some contexts verbs of emotion metonymically express symptoms of emotions and people's behavioral reactions related to these emotions (see discussion in (Jędrzejko & Nowakowska-Kempna 1985)).²⁰

I conclude that for the sake of economy and by means of the cognitive process of metonymy, linguistic expressions reflecting only one stage of an emotion script (either the first or the third one) are sufficient to communicate both the emergence of emotions and reactions that are typically caused by those emotions.

[6] CONCLUSIONS

In Section [5], I demonstrated that Slovene *raz-*, when contained in verbs of emotional experience, metaphorically extends the notion of movement on a dispersed path and denotes a change in the domain of emotion. I argued that in verbs of emotion (e.g., *razveseliti (se)* 'to make/become happy'), as well as verbs that denote emotional processes by the extension of their physical meaning (e.g., *razkuriti (se)* 'to make/become angry'), the prefix expresses the metaphorical spread and expansion of an emotional state that is associated with the emergence of an emotion. On the other hand, in verbs that express a physical change caused by an emotion, *raz-* expresses metaphorical separation of the experiencer participant's body (e.g., *razpočiti se od jeze* 'to explode with anger'), which is associated with the occurrence of a reaction. The spatial interpretation of metaphorical extensions of *raz-* presented in this article is consistent with the analyses of verbs of emotion prefixed by *raz-* in other Slavic languages. However, I showed that *raz-* interrelates with the meanings of the imperfective verbs it combines with in the sense that in verbs of emotion it implies self-contained motion, whereas in verbs of physical reaction it implies a translational one. Moreover, the prefix reinforces the meaning of intensive processes (verbs of emotion) and separation (verbs of physical experience) encoded by the base verbs.

I also showed that constructions formed by the prefixed verbs under investigation are underlain by interrelated metaphors and metonymies, among which the metaphor CHANGE IS MOTION and EMOTIONAL PROCESSES ARE PHYSICAL PROCESSES (Klikovac 2004) seem to play a major role in the conceptualization of an event of emotional change. The first metaphor motivates all verbs of emotional experience prefixed by *raz-* and can be elaborated as EMOTIONAL CHANGE IS DISPERSED

[20] Moreover, in narrative texts *raz-*verbs of emotion discussed in this article can also occur as speech act verbs Wierzbicka (1992, 403). Bearing in mind that verbs that denote physical responses metonymically refer to emotional states, I assume that *raz-*verbs used as speech act verbs indicate a specific manner of speaking (e.g., angrily in *razjeziti se* 'to become angry') and also metonymically represent emotional states.

MOTION. The latter metaphor motivates polysemy of verbs that extend their physical meaning to the domain of emotion.

The other concern of this article was the relation between the spatially based senses of the prefix and its function as a modifier of the course-of-change event. I showed that, in the case of verbs expressing the emergence of an emotion, the spatially-based meaning of the prefix correlates with inchoative, resultative, and intensive (augmentative) senses, whereas in verbs of physical reactions it correlates only with resultativeness. Because Slovene linguistic sources are not consistent in relating these temporal meanings to the meanings of emotion verbs, my findings can contribute to an analysis of the meaning of *raz-* in terms of *Aktion-sart*.

The last issue that this article raised is the types of causation implied by the experiencer-object and experiencer-subject of emotions, and verbs of physical reaction. I observed that constructions formed by experiencer-object verbs imply caused change, whereas those formed by experiencer-subject verbs (with the clitic *se*) imply a non-agentive change. Thus, the latter verbs form middle voice constructions. Verbs of physical reactions caused by an emotion also represent a caused change. The causing event is denoted by prepositional phrases with *od* 'from' and a noun expressing cause. All constructions analyzed in this article indicate that both the emergence of emotions and emotional responses are conceptualized as being beyond the control of the person that experiences them.

GLOSSES AND ABBREVIATIONS

In examples (1)–(7) the following glosses are used:

ACC = accusative case, DAT = dative case, FUT = future, GEN = genitive case, INS = instrumental case, NOM = nominative case, PL = plural, PRS = present tense, PST = past tense, SG = singular.

Throughout the text the following abbreviations are used:

TR = trajector, LM = landmark, and Gf = Gigafida corpus.

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SOURCES

Corpuses

- Gigafida = Gigafida corpus. Available from: <http://demo.gigafida.net> (Accessed 10 March 2013).
- Nova beseda = Nova beseda corpus. Available from: <http://bos.zrc-sazu.si> (Accessed 12 March 2013).

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AUTHOR CONTACT INFORMATION

Agnieszka Będkowska-Kopczyk
Department of Spanish Studies
University of Bielsko-Biała
ul. Willowa 2, 43–300 Bielsko-Biała
Poland
abedkowska@ath.bielsko.pl