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Diminutives in Action: A cognitive account of diminutive verbs and their suffixes in Croatian

This paper deals with a semantic analysis of diminutive verbs in Croatian, focusing on diminutive verbs formed by diminutive suffixes. In order to account for the semantic properties of diminutive verbs, a cognitive linguistic framework is adopted and a radial category model of diminutive verb semantics is proposed. Phenomena specific to verbal semantics, such as pluractionality, are also discussed in relation to diminutive semantics. Contrary to Jurafsky (1996), the semantics of diminutive verbs is accounted for in terms of two conceptual metaphors MORE IS UP (LESS IS DOWN) and GOOD IS UP (BAD IS DOWN) that motivate the formation of diminutive meanings. The central position of the radial category is given to the category of verbs of *diminished physical intensity*, and two other categories are proposed, verbs of *dispersive actions* and *pejorative verbs*. The classification is based on an inventory of diminutive verbs built upon the data from the Croatian Derivational Verb Database.

1. Introduction

Diminutives are a widespread linguistic category that crosscuts various word classes, such as nouns, adjectives, pronouns and verbs. Descriptions of diminutives within the literature focus either on their morphological specificities (Haas 1972), their syntactic behaviour (Munro 1998), or on their semantic and pragmatic properties (Jurafsky 1996, Dressler and Merlini Barbaresi 1994, Taylor 2003). Diminutives are also a basic part of grammar descriptions of the languages of the world.

Semantic analyses of diminutives usually take as their starting point the meaning of 'small', or 'small in size' (see Jurafsky 1996, Taylor 2003). On the other hand, diminutive forms can add various meanings to the base word form,

such as pejorative meanings (e.g. *odvjetničić* 'bad, petty lawyer') or affectionate meanings (e.g. *dušica* 'lit. little soul; sweetheart'). The plethora of meanings associated with the morphosemantics of diminutives requires an account of their semantics in terms of a) motivations between various meanings and mechanisms employed in their formation and b) functions performed by diminutives within the language system.

Jurafsky (1996) proposes such a model of diminutive semantics based on an analysis of diminutive meanings in over 60 languages and across word classes. By adopting the theoretical and methodological framework of cognitive linguistics, Jurafsky describes the category of diminutives as a radial category (Lakoff 1987), a complex polysemous structure whose meanings are centered around the prototypical meaning 'small'¹ and motivated by cognitive mechanisms such as metaphor, inference and generalization². Because of the complexity of diminutive meanings the radial category model is well suited to capture all the connections between these meanings. Furthermore, it unifies the principles of diminutive meaning formation by using widespread cognitive mechanisms that affect this formation – namely metonymy and metaphor (Lakoff 1987, Taylor 2003, 2005, Janda 2011, Jurafsky 1996). Conversely, studies of diminutive semantics with respect to metaphor and metonymy help to observe the workings of these mechanisms on the level of word formation and thus enrich their description with novel linguistic material.

Jurafsky's analysis, however, seems rather problematic as the basis of a comprehensive account of the meanings of diminutive verbs. Namely, the question that arises is what would the concept 'small' or 'reduced in size' refer to when applied to diminutive verbs, which refer to actions and not objects. As we will argue in the paper, although the radial category model provides an appropriate basis for the description of diminutive verbs, it has to be adjusted to take into account verb specific semantic properties, as well as take into account the relation between diminutive verbs and notions such as pluractionality, iterativity and durativity. Diminutive verbs in Croatian interact with these notions in specific ways (e.g. *lupnuti* 'to hit lightly – PERF' / *lupkati* 'to hit lightly and repeatedly – IMPERF'), pointing to the fact that diminutive

1 As a central pragmatic meaning Jurafsky (1996) also lists the concept 'child', which is, according to Jurafsky, closely experientially connected to the concept of 'smallness' and helps to motivate various diminutive uses, e.g. in terms of marginality or affection.

2 In Croatian such a model was used for the description of nominal diminutive lexemes (Bosanac, Lukin, Mikolić 2009). In their research Bosanac, Lukin and Mikolić showed the complexity of nominal diminutives as one aspect of the morphosemantic richness and productivity of Croatian. As the prototypical meaning of Croatian nominal diminutives Bosanac, Lukin and Mikolić point out the meaning 'small' as well, alongside other categories, namely 'large', 'affectionate', 'pejorative', 'lexicalized' and 'contextualized' diminutives.

verb morphology has consequences with respect to their aspectual and telic characteristics (see also Tovena 2011), often resulting in a blend having both diminutive and grammatical properties (e.g. suffix *-nu-* has a perfective and diminutive meaning, for example *gutati* 'to swallow – IMPERF.' / *gucnuti* 'to take a small sip – PERF.').

Furthermore, whereas nominal diminutives are relatively well described in many languages, little attention has been given to diminutive verbs so far³. There are a few reasons for the scarce data on diminutive verbs. Firstly, whereas nominal diminutives are widespread, many languages do not have diminutive verbs. Secondly, in languages with diminutive verbs, such as German, French and Russian for example, their use is colloquial or restricted to child-centered speech (see Dressler and Merlini Barbaresi 1994) and is described mainly through these pragmatic properties⁴. And thirdly, broad descriptions of diminutive semantics, such as the ones proposed by Jurafsky (1996) or the morphopragmatic model proposed by Dressler and Merlini Barbaresi (1994) tend to provide a general overview of diminutives, thus leaving out specificities pertaining to diminutive verbs alone⁵.

Hence, the goals of this paper are twofold. The first is to provide a semantic classification of diminutive verbs in Croatian within a cognitive linguistics framework which will take into account a) the polysemous structures formed by the diminutive verbs with respect to the underlying conceptualization patterns, b) their interaction with the traditionally grammatical notions of perfectivity, pluractionality and iterativity. Diminutive verbs in Croatian are a morphologically productive category that subsumes numerous suffixes as well as prefixes with diminutive meaning. Such a classification does not exist for diminutive verbs, and we believe it provides a model for the analysis of diminutive verbs in other Slavic languages and can be used to revise a general model of the semantics of diminutives. Secondly, the analysis of diminutive verbs aims to shed light on the role metonymy and metaphor play in word formation as well as their influence in terms of the interplay between semantic and grammatical categories⁶.

3 Some exceptions are Tovena 2011, Makarova 2012 and Panocová 2011.

4 As we will show, this is not the case with Croatian diminutive verbs.

5 Jurafsky, for example, lists only one example of diminutive verbs from the Creek language.

6 Many studies of diminutives can be related to a broader field of Evaluative Morphology (see Stump 1993, Panocová 2011, Körtvélyessy and Stekauer 2011). However, in our description of the data from Croatian we will concentrate on an analysis from a cognitive linguistic framework, since we believe it provides a unifying model for a fine-grained semantic analysis of diminutive verbs in Croatian.

2. Diminutive verbs – definitions

Diminutive verbs are not a widespread language phenomenon as opposed to their nominal counterparts. Detailed morphological analyses were conducted in certain Native American languages (Munro 1998, Le Sourd 1995) and Arabic (Watson 2006). It is important to note, however, that in the literature on the so called *diminutive verb forms* on Native American languages such as Passamaquoddy (Le Sourd 1995) diminutive verb suffixes actually affect the meaning of the adjoining noun in the subject or object position, as in the example (1) from Le Sourd (1995):

- (1) *mehci – né – hs – o*
 end– die – DIM –AI – (3)
 “The little one is dead”

No such diminutive verb forms are found in Indoeuropean languages, and henceforth we will only use the term *diminutive verbs* for those verbs whose semantic properties are modified by diminutive verbal suffixes. Such diminutive verbs are reported for Italian, German and in some studies Czech, Russian and French (see Dressler and Merlini Barbaresi 1994; Makarova 2012; Taylor 2003; Panocová 2011). Their meanings can denote ‘actions of little importance’, e.g. Italian *giochicchiare* ‘to do sports lightly or with interjections’, or ‘less intense actions’ e.g. German *hüsteln* ‘cough lightly’, Italian *sonnecchiare* ‘to sleep lightly, to snooze’ (Dressler and Merlini Barbaresi 1994). Taylor (2003) also lists pejorative meanings such as Italian *dormicchiare* ‘sleep poorly’. In Czech and Russian the use of diminutive verbs is usually restricted to the so called *diminutivum puerile* speech situations, and as such is defined by different contextual circumstances than uses of diminutive verbs in Italian or Croatian (see Makarova 2012 for Russian and Dressler and Merlini Barbaresi 1994 for Czech).

2.1. Croatian diminutive verbs

Croatian grammars discuss diminutive verbs primarily as a morphological phenomenon (Silić and Pranjković 2007, Barić et al. 2005). As the most common suffixes they list *-ka-*, *-ca-*, *-cka-*, *-uc-*, *-uck-*, *-k-*, *-uš-*, *-nu-* among others, e.g. *svjetlucati* ‘to glimmer’, *pjevuckati* ‘to sing lightly’, *grickati* ‘to nibble’, *pjevušiti* ‘to hum’, *gricnuti* ‘to nibble once’ (Silić i Pranjković 2007). Silić i Pranjković (2007) define diminutive verb meaning as a type of Aktionsart and describe diminutive verbs as those verbs that denote an action smaller than a regular action. They however list pejorative verbs as an unrelated type of Aktionsart. Barić et al. (1994) on the other hand provide a more in depth analysis

of diminutive verbs, classifying them into four categories: a) diminutive pejorative, e.g. *vodati* 'to lead around aimlessly', b) frequentative *lijetati* 'to run around, to fly about', c) diminutive e.g. *svjetlucati* 'to glimmer', *pjevuckati* 'to sing lightly', *grickati* 'to nibble' and d) pejorative e.g. *piskarati*, 'to write poorly', *smijuljiti se* 'to smirk; to snigger'. Although they classify diminutive verbs more extensively, they do not provide any motivation between the four categories and rely on a restricted set of examples in their description.

3. Diminutive verbs – existing semantic analyses

There are three existing approaches, among other approaches to diminutives in general, which are relevant for our analysis of diminutive verb meaning formation. They are important because they discuss diminutive verbs, and not only nominal diminutives, and they propose different mechanisms allowing for the development of diminutive meanings. Those are a) *lambda abstraction specification* (Jurafsky 1996), b) *metaphor* (Taylor 2003)⁷ and c) *pluractionality* (Tovena 2011). These approaches are, however, based on scarce data concerning diminutive verbs, with the exception of Tovena's (2011) study on pluractional verbs in Italian. In this section we will discuss each of these approaches and point out major advantages and disadvantages they provide in the description of our own data.

3.1. Lambda abstraction specification

Jurafsky (1996) radial category model of diminutives is based on four kinds of semantic shifts from the central meaning 'small' – *metaphor*, *conventionalization of inference*, *generalization* and *lambda abstraction specification*. Each of these semantic shifts, according to Jurafsky, results in different types of diminutive meanings and all of them contribute to the semantic complexity of the diminutive category. Figure 1. from Jurafsky (1996) illustrates this complexity⁸:

7 Although Jurafsky (1996) discusses metaphor as a mechanism for nominal diminutives, he explicitly excludes in his account of diminutive verbs (see discussion below), therefore we will consider Taylor's (2003) account as representing the metaphor approach to diminutive verb meanings.

8 Thus to account for the formation of marginality meanings of diminutive, for instance, Jurafsky proposes the conceptual metaphor CATEGORY CENTRALITY IS SIZE, where marginal members are denoted by the use of diminutive suffixes. One example of inference is, for example, affectionate meanings of diminutives, where the connection between 'small beings', such as children and pets, and positive feelings is conventionalized in the form of diminutives.

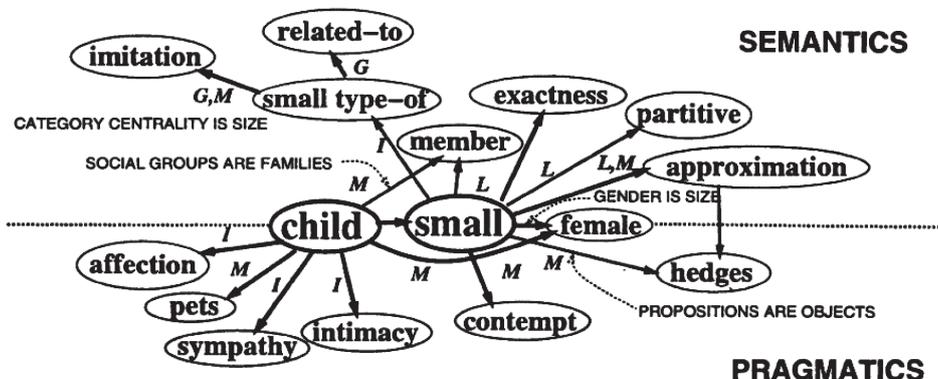


Figure 1. A schematic representation of the radial category of diminutives from Jurafsky (1996)

To account for the meaning of diminutive verbs, in other words predicates and not entities, Jurafsky introduces *lambda abstraction specification*, and defines it as a mechanism that “takes one predicate in the form and replaces it with a variable...this process takes the original concept ‘small (x)’ and replaces it with ‘lambda (y) smaller than the prototypical exemplar (x) on the scale (y)’” (Jurafsky 1996:555). In other words, lambda abstraction specification is an operation that replaces the scale of size with a variable scale, temporal duration for instance, and reduces its value. Such is Jurafsky’s example from Creek (in: Munro 1998) in (3) as compared to (2):

(2)
Iilan istoci hiic- to-os
 Aaron – baby – see – AUX – DEC
 ‘Aaron saw the baby’

(3)
Iilan istoci hiic- os - to-os
 Aaron – baby – see – DIM –AUX – DEC
 ‘Aaron glanced at the baby’

Jurafsky accounts for the ‘see’ > ‘glance’ examples in (2) and (3) in terms of a lambda operator that reduces the temporal duration of the event of ‘seeing’ to that of ‘glancing’, thus operating on the level of diminutive predicate semantics. Jurafsky explicitly discards the possibility of metaphorical shifts in such cases, with the argument that it would be necessary to posit a different metaphor for each metaphorical transfer, leading to a non-unified account of diminutive verbs, among other things⁹.

There are, however, a few major issues with the notion of lambda abstraction specification as a semantic mechanism. Firstly, it is a notion introduced

9 Jurafsky discusses partitive and approximative meanings in the same class of diminutives as diminutive verbs.

by Jurafsky, without a firm grounding in cognitive linguistic theory or other descriptions of radial category models (e.g. Lakoff 1987, Evans and Green 2004, Raffaelli 2009). As such it provides little explanatory value in comparison to other cognitive mechanisms such as metaphor and seems to take place as a “filler term” in Jurafsky’s model¹⁰, used to account for semantic shifts from the domain of size to other scalar domains. Since domain shifts are usually the defining properties of the existence of metaphor (see Taylor 2003, Evans and Green 2004, Raffaelli 2009), the question that arises is why not use metaphor as the explanatory mechanism for diminutive verb meanings. As our data from Croatian will show, there are regularities among diminutive verb meanings that can easily be analyzed as instances of metaphorical transfer and reveal groups of diminutive verbs that draw upon the same metaphorical transfer, such as diminutive verbs of diminished physical intensity, e.g. *lupkati* ‘to hit lightly’, *skakutati* ‘to hop, to jump lightly’, *bockati* ‘to poke lightly’ and so forth. Furthermore, there is no way to account for pejorative meanings of diminutive verbs such as *piskarati* ‘to write poorly’ via lambda abstraction specification, whereas pejorative meanings are easily incorporated into the radial category through the workings of the conceptual metaphor GOOD IS UP (see below).

3.2. Metaphor

In his study on polysemous categories in morphology and syntax, Taylor (2003) discusses the case of diminutives as a category whose extended uses are “instances of metaphorization, in that the notion of smallness is transferred from spatial to non-spatial domains” (Taylor 2003:127). Thus the diminutive is used to express a reduction on some scale via metaphor, and this shift from the central diminutive meaning is central for the polysemy of diminutives. Although Taylor does not discuss diminutive verbs in great detail, he states that they usually designate an action of intermittent or poor quality in Italian, e.g. *parlare* ‘speak’ > *parlucchiare* ‘speak a language poorly’, *dormire* ‘sleep’ > *dormicchiare* ‘snooze’. We will show that such verbs are productive in Croatian as well, e.g. *piskarati* ‘to write poorly’, *dremuckati* ‘to snooze’. Furthermore, we will examine Croatian diminutive verbs as instances of metaphorical transfer, in line with Taylor’s research.

3.3. Pluractionality

In her paper on diminutive verbs in Italian, Tovena (2011) examines diminutive meaning in its relation to the notion of pluractionality. Pluractionality is defined as the morphological expression of number inherent to the verb, i.e. it is concerned with the plurality of phases, an event being fragmented into multiple smaller subevents happening repeatedly or in distinct places (Tovena 2011, Součková 2011). In the Italian example (4) of the diminutive verb *man-*

10 On the contrary, lambda abstraction is used within the framework of Generative Grammar and other formal semantic approaches, see for example Heim and Kratzer (1998) or Bittner (1994).

giucchiare 'nibble' < *mangiare* 'eat', Tovena (2011) describes the diminutive action as reduced in engagement on the part of the Agent, thus resulting in smaller bites and a lack of continuity – producing a pluractional reading of the act of 'eating' ('nibbling').

- (4) *mangiuccia* *la* *mela*
 eat DIM.3.SG the ART apple
 'she is nibbling at the apple'

In this regard, Tovena's analysis departs from previously mentioned analyses in that it gives a new perspective on diminutive verb semantics and their event structure. However, pluractionality is a distinct category in its own right and is not connected with diminutives in many languages (see Součková 2011, Cusic 1981). Thus Tovena does not provide a model of diminutive verb semantics, but discusses one of the emerging phenomena related to diminutive morphology. Also, pluractionality is the result of diminutive morphology and not the mechanism behind it, which leaves open the question of what kind of semantic shifts affect pluractional readings of diminutive verbs. Hence pluractionality cannot be disregarded in our analysis as well, and the challenge it poses is to incorporate it as one aspect of diminutive verb semantics in Croatian, e.g. *žmiriti* 'to keep eyes closed' > *žmirkati* – DIM 'to blink'.

4.1. Inventory of diminutive verbs – Croatian Derivational Verb Database (CroDeriV)

Since scarceness of data seems to be a major caveat in the existing approaches to diminutive verb semantic analyses, it was necessary for our current research to collect as many instances of diminutive verbs as possible in Croatian. Therefore our primary task was to build an inventory of diminutive verbs to allow for a broad overview of the lexical data¹¹.

As the starting point for the inventory of diminutive in Croatian we used the Croatian Derivational Verb Database (henceforth CroDeriV). CroDeriV is a novel lexical and morphological resource of Croatian, consisting of approximately 14 000 verb lemmas which are segmented according to their derivational and conjugational affixes as well as infinitival endings, e.g. *iz-rez-uck-a-ti* 'to chop up into small pieces' (see Šojat, Srebačić and Štefanec 2012). Search queries of verbs allow for extraction of verbs with common suffixes and prefixes among the numerous lemmas. To create an inventory of diminutive verbs we used the list of diminutive suffixes from Barić et al., altogether 18 diminutive suffixes (see Appendix 1).

Alongside diminutive suffixes there are two diminutive prefixes, *po-* and *pri-*, e.g. *poigrati se* 'to play around (a little)', *prigristi* 'to have a small snack' listed in Silić and Pranjaković (2007). These prefixes, however, we decided to exclude from our present analysis because they are highly polysemous and very often do not form diminutive verbs, e.g. *posložiti* 'to arrange', *pribjeći* 'to resort to'. Since they are not typical diminutive verbs in Croatian, i.e. they are not formed with typical diminutive verbal suffixes (see above), the diminutive

¹¹ Data from the inventory will be available alongside CroDeriV.

meaning arising from these prefixed verbs is most likely a result of the semantic shifts in the meaning of the prefixes themselves, and thus should be explored extensively in a separate analysis.

We will also treat the suffix *-nu-* only peripherally in our analysis. Firstly, it is listed as a conjugational suffix in CroDeriV, which points to its properties as both a conjugational and derivational suffix (see Srebačić and Šojat 2012, Težak and Babić 1994). Out of 899 verbs taken from the CroDeriV only 97 had diminutive properties¹². Secondly, it is the only diminutive suffix that forms perfective diminutive verbs and as such has diminutive properties different from other verbs in our inventory, e.g. *lupkati* – DIM; IMPERF 'to hit lightly and repeatedly' versus *lupnuti* DIM; PERF 'to hit lightly once'.

Our search resulted in a list of 209 diminutive verb candidates, after manually checking the list in order to exclude non-diminutive verbs with seemingly isomorphic suffixes, such as *-ar*, e.g. *brodariti* 'to sail, to build ships', which is actually derived from the nominal agentive suffix *-ar* (see Barić et al. 1994). Verb formation would thus be *brod* 'ship' > *brod-ar* 'shipbuilder' > *brodar-iti* 'to sail, to build ships'.

We also set aside prefixed verbs formed with diminutive suffixes, e.g. *skakutati* 'to hop' > *do-skakutati* 'to hop (to a goal)', since these prefixes affect mainly the perfective / imperfective reading of the verb, but do not alter the basic diminutive meanings formed by suffixation, e.g. *sječakati* 'to chop' > *na-sječakati* 'to chop up'. The only prefixed diminutive verbs we included were verbs whose non-prefixed form was not lexicalized and thus not attested in Croatian, but the use of the prefixed form is quite common and thus relevant to include in our analysis, e.g. *mucati* 'to stutter' > **muckivati* (non-lexicalized) > *za-muckivati* 'to be stuttering (a little and repeatedly)'. After manually checking diminutive verb candidates we extracted 124 basic diminutive verbs from CroDeriV. These verbs are all formed with diminutive suffixes, they are non-prefixed¹³, and form the basis of our diminutive verbs inventory. A sample of this inventory is shown in Table 1.:

Diminutive verb	Derivational suffix	Conjugational suffix
bacakati se	ak	a
čituckati	uck	a
bježakati	ak	a
bljeskati	k	a
bockati	k	a
cjepkati	k	a
piskarati	kar	a

Table 1. A sample of the diminutive verbs inventory. Columns 2. and 3. represent derivational (diminutive) suffixes and conjugational suffixes, respectively.

¹² This is probably the reason why Babić (1991), in his seminal work on derivation in Croatian, analyzes it only as a perfective Aktionsart suffix without listing its diminutive properties.

¹³ With the exception of prefixed lexicalized verbs such as *zamuckivati* 'to stutter a little'.

4.2. Inventory of diminutive verbs – analysis

After obtaining the inventory of diminutive verbs in Croatian, we proceeded with the analysis of the verbs. Since our primary goal is to determine what aspects of verbal meanings are altered by diminutivization, the first step in our analysis was to cross-reference diminutive verbs with their non-diminutive counterparts. Hence we added non-diminutive verbs to each of the diminutive verbs in our list, e.g. *bockati* 'to poke' < *bosti* 'to stab, to poke'; *bacakati se* 'to throw oneself around' < *bacati se* 'to throw oneself'.

Although some diminutive verbs have undergone a high degree of lexicalization, i.e. they denote separate actions from their non-diminutive counterparts, e.g. *sjeći* 'to cut' > *sjeckati* 'to chop', *ljubiti* 'to kiss' > *ljubakati* 'to flirt', as noted in their English equivalents, we did not treat them separately in our analysis. This is because their diminutive morphology is quite transparent and the connection between the diminutive and non-diminutive action is still quite strong.

We also examined each of the contextual usages¹⁴ of diminutive verbs to establish the properties of the events and situations they denote, which differ in many ways from their non-diminutive pairs, e.g.

(5) *Bacakao se kao riba na suhom.*
 throw.DIM.3.SG.PST himself.REFL like fish.NOM.SG on dry land
 'He was throwing himself around like a fish on dry land'

(6) ?? *Bacao se kao riba na suhom.*
 throw.DIM.3.SG.PST himself.REFL like fish.NOM.SG on dry land
 'He was throwing himself like a fish on dry land'

In example (5) the diminutive verb *bacakati se* 'to throw oneself around' denotes a dispersive action of rapid irregular movements, such as fish perform when on dry land, whereas the non-diminutive *baciti se* 'to throw oneself' requires a direction in which the entity is thrown, e.g. *baciti se za lopticom* 'to throw oneself (jump) after the ball' and hence example (6) sounds rather odd in comparison to (5).

With regard to contextual usages, it must be noted that many diminutive verbs developed additional senses different from their basic sense. The verb *sjeckati* has the basic sense of 'chopping (vegetables) into small pieces', e.g. *sjeckati luk* 'to chop onions', but has other metaphorically motivated senses such as *sjeckati igru* 'to distort the continuity of ball passes in a football match' or *sjeckati epizode svoje omiljene serije* 'to cut/chop episodes of a favourite TV show'. The verb *trčkarati* 'to run around' can be used in examples denoting actual 'running', e.g.

(7) *Psić je trčkarao po vrtu*
 puppy.NOM.SG be.AUX run.DIM.3.SG. around garden.LOC.SG
 'The puppy was running around the garden'

or in the sense of 'performing multiple tasks in many places', e.g.

¹⁴ Examples of usage were taken from the Croatian National Corpus and the Croatian Language Repository, although most of the examples actually come from Google searches, since there is a strong tendency to use diminutive verbs in colloquial speech, and not standard registers such as administrative or literary language, which make up most of the corpus data (see <http://www.hnk.ffzg.hr> and <http://riznica.ihj.hr>).

- (8) *Cijeli dan trčkaram po gradu i skupljam potrebnu dokumentaciju*
 whole.ACC.SG day.ACC.SG run.DIM.1.SG.PRS. around town.LOC.SG. and
 collect.1.SG.PRS necessary.ACC.SG documentation.ACC.SG
 'I am running around town all day collecting the necessary documentation'

The variety of senses of diminutive verbs is hard to capture within the limits of one paper, therefore the diminutive senses discussed are mostly the prototypical senses of both diminutive and base word forms, e.g. *sjeći* 'to cut (an object with a blade)' > *sječati* 'to chop (an object with a blade)'

To further establish all the properties of diminutive verb meanings, we decided to formulate salient semantic features that are present in diminutive verbs and affect the conceptualization of the diminutive actions as opposed to non-diminutive verbs. Our semantic feature analysis discovered regularities across the 124 diminutive verbs. Namely, the relevant diminutive properties could be subsumed under five general semantic features affected by diminutivization. Those are:

- a) physical intensity of an action, e.g. *bockati* 'to poke'
- b) spatial directionality, e.g. *bacakati se* 'to throw oneself around'
- c) directionality of attention, e.g. *čituckati* 'to read unattentively'
- d) continuity of an action e.g. *bljeskati* 'to flash'
- e) segment size of Patients / Themes undergoing an action e.g., *sječati* 'to chop into small pieces'
- f) quality of an action e.g. *piskarati* 'to write poorly'¹⁵

These features are presented in Table 2, a sample of the inventory:

Diminutive verb	Base verb	Semantic features
<i>bacakati se</i> 'throw oneself around'	<i>bacati se</i> 'to throw oneself'	directionality
<i>čituckati</i> 'to read unattentively'	<i>čitati</i> 'to read'	attention
<i>bježakati</i>	<i>bježati</i> 'to run away'	directionality
<i>bljeskati</i> 'to flash'	<i>bliješiti</i> 'to shine'	continuity
<i>bockati</i> 'to poke'	<i>bosti</i> 'to stab'	physical intensity
<i>cjepkati</i> 'to chop into small pieces'	<i>cijepati</i> 'to chop'	segment size
<i>piskarati</i> 'to write poorly'	<i>pisati</i> 'to write'	quality

Table 2. A sample of the diminutive verbs with non-diminutive verbs added for comparison in column 2. and salient semantic features noted in column 3.

¹⁵ These features were introduced to make fine-grained semantic distinctions necessary for our analysis. Although some of these features can be subsumed under the labels of distributiveness (directionality dispersion) or frequentativeness, because of their use outside diminutive morphology and semantics we find that they do not specify precisely what conceptual content is being affected by diminutive morphology in the case of diminutive verbs. As such they have to be treated as particulars to our analysis.

Thus our inventory was expanded by a kind of componential analysis of semantic features (see for example Nida 1976, Žic Fuchs 1991), however, it is important to note that we do not consider these semantic features as semantic components proper, i.e. they are not discrete units, they often tend to overlap and they are not semantic primitives, as they would be in componential approaches to semantics. Thus they only represent the notational tool in our inventory. For instance, the verb *skakutati* 'to hop' contains both diminished physical intensity and segment size (smaller jumps) as its features which overlap in its diminutive semantics. In accordance with the notion of the radial category model, we will show how diminutive verbs form a complex network of meanings with highly motivated and complex semantic structures.

5. Croatian diminutive verbs – radial category model

The radial category model proposed for diminutive verbs has to meet some requirements in order to be consistent with the data on Croatian diminutive verbs and relevant aspects of diminutive semantics in general. Therefore it has to be able to account for the connection between diminutive verb meanings and the prototypical meaning 'small in size'. On the other hand, it has to establish the connections between different groupings of diminutive verbs based on either metaphorical or metonymic transfers. Based on the salient semantic features observed in our inventory we propose a classification of diminutive verbs according to three categories:

- 1) **verbs of diminished physical intensity**, e.g. *bockati* 'to poke', *lupkati* 'to hit lightly', *jeckati* 'to weep lightly', *pjevušiti* 'to hum'¹⁶
- 2) **verbs of dispersive actions**, with two subcategories:
 - a. **dispersive spatial directionality**, e.g. *trčkarati* 'to run around', *bježakati* 'to run away (aimlessly)'
 - b. **dispersive attention directionality**, e.g. *čituckati* 'to read unattentively', *birkati* 'to choose unattentively'
- 3) **pejorative diminutive verbs**, e.g. *piskarati* 'to write poorly', *crtkarati* 'to draw poorly'

This classification is based upon three relevant semantic features that are instances of metaphorical transfers, those of *physical intensity*, *directionality of action* and *quality*. As previously mentioned, the two remaining features, those of *continuity* and *segment size*, affect the radial category in a somewhat different manner, overlapping with other semantic properties of verbs to produce pluractional readings (see below). The three categories are also gradable in the sense that there are fuzzy boundaries between them, thus for instance, the verb *vucarati se* 'to wander around; to vagabond' denotes an action that is both dispersed in direction but also pejorative because of the negative connotations one ascribes to an aimless action such as this one, see example (7)

¹⁶ Also, most of the perfective diminutive verbs formed with suffix *-nu-*.

- (7) ...*vucarao* *se* *ulicama* *bez* *cilja*,
 wander.DIM.3.SG.PST REFL street.INST.PL. without goal.GEN.SG.
odlazio s tuluma na tulum neprestano se opijajući i jedva čekajući ljeto.
 'he was wandering around the streets aimlessly, going from one party to
 the next, drinking constantly and waiting for summer to come.'

It is thus important to note that specific encyclopedic knowledge of certain actions plays an important part in the resulting diminutive verb semantics.

5.1. Intensity and the MORE IS UP (LESS IS DOWN) conceptual metaphor

Turning to the metaphorical transfers present in the formation of these categories, there is a shift from the domain of SIZE (connected to diminutive entities) to the domain of INTENSITY (related to the intensity levels of an action). Since SIZE is a scalar domain as is the domain of INTENSITY (see also Taylor 2003), what these two domains share in their configuration is the possibility of diminutive semantics to affect the points on the scale that are profiled by diminutives. Scalar domains and many concepts pertaining to them are based on the UP–DOWN image schema and furthermore are conceptualized via the conceptual metaphor MORE IS UP (LESS IS DOWN) (see Taylor 2003, Lakoff & Johnson 1980, Evans and Green 2004). As Taylor (2003:137) points out, this mapping is present in many areas of our experience, and using the example of the English adjective *high* shows how people talk about *high prices*, *high blood pressure*, *high speed* and *high temperatures* because the conceptual metaphor MORE IS UP (LESS IS DOWN) maps the UP–DOWN schema to the domains of prices, blood pressure, speed and temperature, respectively.

The most prototypical category of diminutive verbs affected by this mapping is the category of *verbs of diminished physical intensity*. Physical intensity is a very basic property of many actions, such as 'jumping', 'coughing', 'poking', 'scratching' or 'singing', and the conceptual metaphor MORE IS UP (LESS IS DOWN) modifies these actions according to their physical intensity levels, resulting in the actions of *skakutati* 'to hop', *kašljucati* 'to cough lightly', *bockati* 'to poke', *češkati* 'to scratch lightly' or *pjevušiti* 'to hum', respectively.

Usage examples also confirm the lack of physical intensity through the types of Agents performing diminutive actions. It is quite often found that small animals, e.g. sparrows or frogs, move by 'hopping' (*skakutati* 'to hop'), or that woolen clothes produce the specific itching of the skin described as 'poking' (*bosti* 'to poke'). Also, the use of intensifiers such as *jako* 'strongly, very, hard' is quite restricted, again typical only of small Agents, as in example (8):

- (8) ... *beba* *me* *počela* *jako* *lupkati*...
 baby.NOM.SG. 1.SG.ACC start.3.SG.PST. strongly kick.DIM.INF
 ...'the baby started to strongly hit (kick) me' [baby kicking inside a
 mother's belly]...

This obviously indicates that the lack of physical intensity of the action constrains the usage of intensifiers such as *jako* 'strongly', since it would be contradictory to speak about hitting somebody hard and lightly at the same time.

Physical intensity may be experienced in various ways depending on our knowledge of the action denoted by a verb. For instance, physical intensity can be equated with the physical force of impact or pressure, such as *lupati* 'to hit' > *lupkati* 'to hit lightly' – DIM or *češati* 'to scratch' > *češkati* 'to scratch lightly' – DIM, but also instances where the entire action requires physical force and engagement (and thus physical intensity) on the part of the Agent, such as *šepati* 'to limp' > *šepuckati* 'to limp lightly', *pjevušiti* 'to hum' – DIM < *pjevati* 'to sing'.

Furthermore, physical intensity can be related not only to the intensity with which Agents perform actions, but also how those actions are perceived by Experiencers. A subgroup of diminutive verbs with a diminished sound amplitude illustrates this point, e.g. *pjevušiti* 'to hum' or *šuškati* 'to rustle', *pucketati* 'to crackle'.

An analysis of the distribution of the number of verbs in each of these categories points to the fact that the first group, *verbs of physical intensity* is the primary category within the radial model. It is the most productive and numerous group in our inventory, comprising 65% out of 124 diminutive verbs as shown by the percentages presented in Figure 2. This also points to the prototypical status of this category in terms of a radial category center.

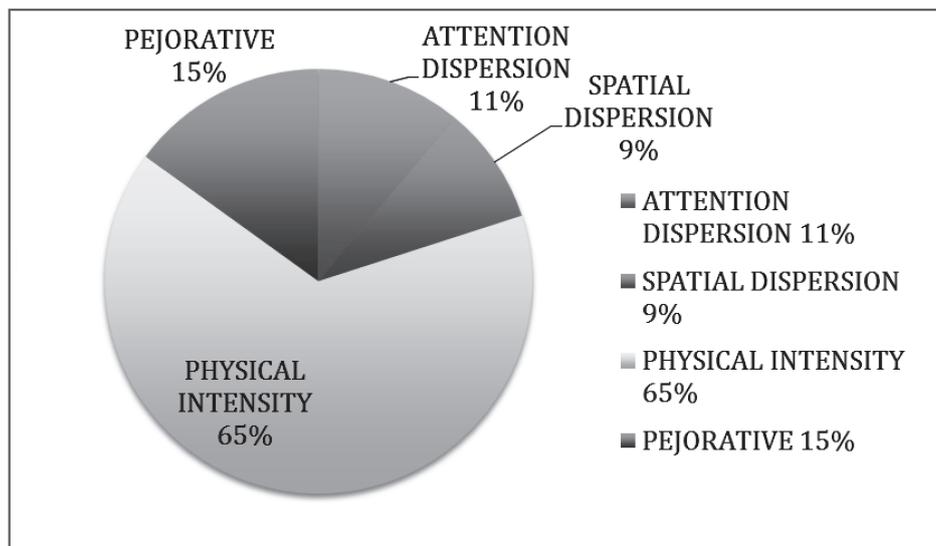


Figure 2. Analysis of the distribution of different categories of diminutive verb meanings within the inventory of Croatian diminutive verbs.

5.2. Dispersion of action

The second category of diminutive verbs is comprised of two subcategories, *verbs of dispersed spatial directionality* and *verbs of dispersed attention directionality*. The two categories reflect the types of verbs that undergo diminutivization, one group being comprised out of verbs of physical activity with a PATH schema affected by diminutive semantics, and the other being verbs of mental activities with a constraint on the direction of, for instance, perception directionality, e.g. *gleduckati* 'to look/watch (unattentively)'. If compared, the two groups show a modification to the PATH schema in terms of its dispersion, in the first case it is a spatial PATH, and in the second it is a metaphorical PATH, construed as a lack of continuity of an action. Therefore, a metaphorical link between the two subcategories can be established on the basis of the PATH schema.

5.2.1. Spatial directionality

The absence of the PATH schema is clearly illustrated if these diminutive verbs are compared to their non-diminutive pairs in V+Prep constructions coding the direction of the action. Diminutive verbs typically do not occur with prepositions coding a particular PATH, e.g. *prema* 'towards', *na* 'on', *u* 'in', but do occur with prepositions with a distributional meaning, e.g. *po* 'around' and *uokolo* 'around'. Note the following examples:

- (9) **Bacakao se na pod od očaja.*
 throw.DIM.3.SG.PST REFL on floor.ACC.SG from despair.GEN.SG
 'He was throwing himself around *on – DIREC the floor in despair'
- (10) **Vozikali su se prema kući.*
 drive.DIM.3.PL.PST be.AUX REFL toward home.DAT.SG
 'They were driving around *toward their home'
- (11) **Seljakali su se u novi stan.*
 move.DIM.3.PL.PST be.AUX REFL in new.ACC.SG apartment.ACC.SG
 'They were moving around *to their new apartment.'

Contrary, non-diminutive verbs are perfectly acceptable in these sentences:

- (12) *Bacao se na pod od očaja.*
 throw..3.SG.PST REFL on floor.ACC.SG from despair.GEN.SG
 'He was throwing himself on the floor in despair'
- (13) *Vozili su se prema kući*
 drive..3.PL.PST be.AUX REFL toward home.DAT.SG
 'They were driving towards their home'
- (14) *Selili su se u novi stan.*
 move..3.PL.PST be.AUX REFL in new.ACC.SG apartment.ACC.SG
 'They were moving to a new apartment'

However, their usage with a distributive preposition is quite common, e.g.:

- (15) *Bacakao se po podu.*
 throw.DIM.3.SG.PST REFL around floor.LOC.SG
 'He was throwing himself on the floor'
- (16) *Vozikali smo se uokolo cijelu noć.*
 drive.DIM.3.PL.PST be.AUX REFL around whole.ACC.SG
 night.ACC.SG
 'We were driving around all night'
- (17) *Seljakali smo se po gradu sve dok nismo našli pravi stan.*
 move.DIM.3.PL.PST be.AUX.1.PL REFL around town. LOC.SG PART.
 until be.NEG.1.PL find.1.PL.PST right.ACC.SG apartment.ACC.PL
 'We were moving around town until we found the right apartment.'

Although physical intensity is not a salient feature of this category it may be related to an INTENSITY schema in the following way: less intense actions will not have a proper path of completion or the same result as more intense actions. This is also illustrated in the category of *verbs with dispersed attention directionality*.

5.2.2. Dispersed attention

Diminutive verbs of this category mostly denote some kind of mental activity, e.g. *čituckati* 'to read a little', *gleduckati* 'to watch a little', where the lack of attention blocks the completion of an action, implying also a lack of intensity of these actions. Formation of perfective forms of these verbs is therefore sanctioned, e.g. **pro-čituckati* 'to read a little – PERF' versus *pro-čitati* 'to read – PERF', since the verb *čituckati* 'to read a little' implies a manner of reading with discontinuous attention given to a text, for example reading in short time spans or skipping pages of a book.

The lack of a particular goal of these actions is present in other diminutive verbs such as *maštariti* 'to fantasize, to day-dream', *sanjariti* 'to day-dream, to muse' or *birkati* 'to choose unattentively', as opposed to non-diminutive verbs which show a tendency towards more particular goals, e.g.

- (18) *Maštarim po cijele dane.*
 day-dream.DIM.1.SG.PRS for whole.ACC.PL day.ACC.PL
 'I'm day-dreaming daily'

where the diminutive verb is used intransitively, contrary to a tendency to use the non-diminutive verb *maštati* 'to imagine, to fantasize' with a LOCATIVE case specifying the object of imagination, e.g.

- (19) *Maštam o tebi cijeli dan.*
 fantasize.1.SG.PRS about you.LOC.SG. whole.ACC.SG day.ACC.SG
 'I'm fantasizing about you the entire day'

The two categories of diminutive verbs discussed so far can point to a distinction made by Talmy (1985, 1991, 2000) between Manner and Path conflating verbs. In Talmy's analysis of lexicalization patterns of verbs denoting a motion event it is suggested that verbs encode either a Path or a Manner by which the movement is carried out, e.g. *I ran into the room* (Manner), as opposed to *I went into the room (running)* (Path). Although Talmy discusses the Path / Manner distinction in terms of a typology of motion events across languages with respect to the relation between semantic structure and verb forms, we believe that the distinction is useful in our own analysis¹⁷. It primarily accounts for the regularities of semantic features affected by diminutive semantics between the categories of *verbs of diminished physical intensity* and *verbs of dispersive actions*. Since intensity is an important part of the manner by which an action is performed, it would seem that diminutives primarily affect manner components of a verb. This is supported by the fact that 65% of diminutive verbs in our inventory denote diminished physical intensity. The same could be said of *pejorative verbs*, which profile poor quality (or 'poor manner') of performing an action. However, if a Path component of the verb is affected by diminutive semantics, the result is the modification of the PATH schema and thus a verb of dispersed action.

5.3. Pejorative verbs

Pejorative meanings are commonly associated with diminutive semantics on the basis of a reinterpretation of the notion of 'small' as 'insignificant' or 'low in quality' (Jurafsky 1996, Taylor 2003). In his analysis of the conceptual metaphor MORE IS UP (LESS IS DOWN), Taylor (2003) also discusses the reinterpretation of this metaphor in terms of quality, resulting in the conceptual metaphor GOOD IS UP. Using the analysis of the adjective *high*, the GOOD IS UP metaphor results in expressions such as *to hold someone in high regard*, and the opposite, BAD IS DOWN, is realized in expressions such as *he hit the low point in his life*. Hence the UP-DOWN schema is applied to the domain of quality, and metaphorical transfers of diminutive semantics often result in derogatory or pejorative meanings.

The same metaphor GOOD IS UP (BAD IS DOWN) holds for pejorative diminutive verbs, which denote either actions of poor quality, e.g. *piskarati* 'to write poorly', or derogatory actions such as *moljakati* 'to beg, to importune', *ljubakati* 'to flirt / sleep around'. The suggested semantic shift would include

¹⁷ It is important to note that most of the *verbs of dispersed spatial directionality*, for example *trčkarati* 'to run around aimlessly', would have base verbs, e.g. *trčati* 'to run', which would be typical examples of Manner verbs in Talmy's typology. However, obviously the Path component is affected, and thus Talmy's distinction cannot be the sole criterion by which to analyze diminutive verbs in Croatian. Furthermore, many of these verbs are not motion verbs.

a metaphorical transfer from the domain of INTENSITY to the domain of QUALITY via the reinterpretation of the metaphor MORE IS UP (LESS IS DOWN), as explained by Taylor (2003). However, it is important to stress that this category is highly pragmatically motivated, since the contexts in which these verbs are used have negative connotations as a whole, e.g.

- (20) *Ovi mladi danas ništa ne rade,*
 this.DET youth.NOM.PL today nothing NEG do.3.SG.PRS
samo se znaju ljubakati.
 only REFL know.3.SG.PRS flirt.DIM.INF
 'Youth today doesn't do anything, all they know is how to flirt around'

The radial category of diminutive verbs based on metaphorical transfers is illustrated in Figure 3. As previously mentioned, the three categories have fuzzy boundaries and their meaning depends on contextual effects as well as encyclopedic knowledge connected to conceptualizations of particular actions.

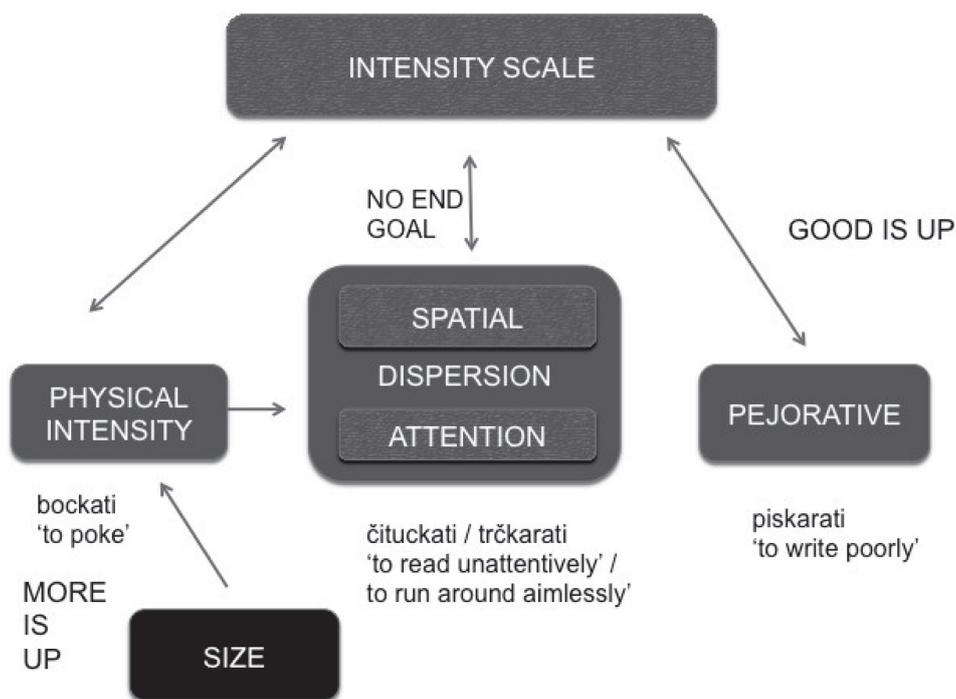


Figure 3. Radial category of diminutive verbs in Croatian. The SIZE domain refers to the prototypical nominal diminutives denoting the concept 'small', which are introduced via the MORE IS UP (LESS IS DOWN) conceptual metaphor into verbal semantics and the domain of PHYSICAL INTENSITY, producing the INTENSITY SCALE schema. SPATIAL and ATTENTION DISPERSION box represent the second category of diminutive verbs where

the PATH schema is affected, and lesser intensity is reinterpreted in actions producing NO END GOAL. Pejorative verbs are formed by reinterpreting MORE IS UP (LESS IS DOWN) conceptual metaphor as GOOD IS UP (BAD IS DOWN). Bidirectional arrows point to the interaction and gradability of these categories (see above).

5.4. Pluractionality

Pluractional readings are quite common among Croatian diminutive verbs. As stated previously, pluractionality affects the way in which subevents of event denoted by the verb are construed, as repeated and less intense segments of an action. Attenuation as a main property of diminutive semantics seems to go hand in hand with the features of reduced segment size and lack of continuity, and these features can be compared to what Croatian grammars call *frequentative* (or iterative) verbs (see Barić et al. 2005). The features of reduced segment size and lack of continuity, however, overlap with other features of diminutive semantics that imply that pluractionality is a consequence of diminutive semantics in Croatian¹⁸.

Firstly, many of these verbs, such as *grickati* 'to nibble' < *gristi* 'to bite', *skakutati* 'to hop' < *skakati* 'to jump', *kašljucati* 'to cough lightly' < *kašljati* 'to cough', denote events which are experientially comprised out of a series of subevents, i.e. bites, jumps, or coughs. The attenuation achieved by diminutive semantics is therefore spread out over these subevents, and each of them is a reduced version of a non-diminutive subevent. Hence 'a jump' becomes 'a hop', 'a bite' becomes 'a nibble' and so forth. On the other hand, the imperfective Aspect here plays an important role in motivating pluractional readings as well. Since the action is ongoing (in terms of imperfectivity) and the subevents are 'small', they have to be frequent and repetitive. In other words, the smaller repetitive segments are profiled through the use of diminutive semantics. This is the reason why pluractionality, and not only iterativity is discussed in terms of diminutive verbs. Iterativity is property that can be exhibited by any number of verbs independent of diminutive morphology¹⁹. Iterative verbs are defined by Barić et al. (2005) as verbs whose action is repeated periodically, e.g. *odnositi* 'to carry away', *pogledavati* 'to be looking from time to time'. The examples they give are different from diminutive verbs because the segments of the action are not necessarily profiled (*odnositi* 'to carry away') or they can occur with pauses in between (*pogledavati* 'to be looking from time to time').

Diminutive semantics affects another group of diminutive pluractional verbs, those that mainly profile a lack of continuity, e.g. *žmiriti* 'to keep eyes closed' > *žmirkati* 'to blink', *svijetliti* 'to shine' > *svjetlucati* 'to glimmer, to

18 This is not always the case. In some languages pluractionality is a property marked by its own morphosyntactic properties. Also, it is important to note that pluractionality is not in any case inherently related to diminutive meanings, on the contrary, in many languages it has augmentative meanings, see Součková 2011.

19 For a detailed discussion on the difference between pluractionality and iterativity see Součková 2011.

shimmer', *bliještati* 'to shine, to flare' > *bljeskati* 'to flash repeatedly'. The events are also comprised out of less intense and repetitive subevents, however, the non-diminutive action is always continuous.

Pluractionality is thus closely related to diminutive semantics, but it is a different process from the metaphorical transfers discussed in relation to the radial category of diminutive verbs. It affects the meaning of diminutive verbs in a different way from the mechanism of metaphor, profiling the number and segment size of subevents as relevant properties of their semantics. Hence it would be possible to discuss pluractionality as a result of a relation of contiguity between the action and its subevents, an activation of the relevant properties of quantity as well as intensity and future work may reveal the characteristics of the mechanisms involved in terms of metonymic transfers, activation zones or mass vs multiplex conceptualizations (see Janda 2008, Taylor 2003).

Most of the pluractional readings of diminutive verbs belong in the category of *verbs of diminished physical intensity*, and therefore the most central and largest group of diminutive verbs.

An analysis of the percentage of diminutive verbs exhibiting pluractional readings is shown in Figure 4.

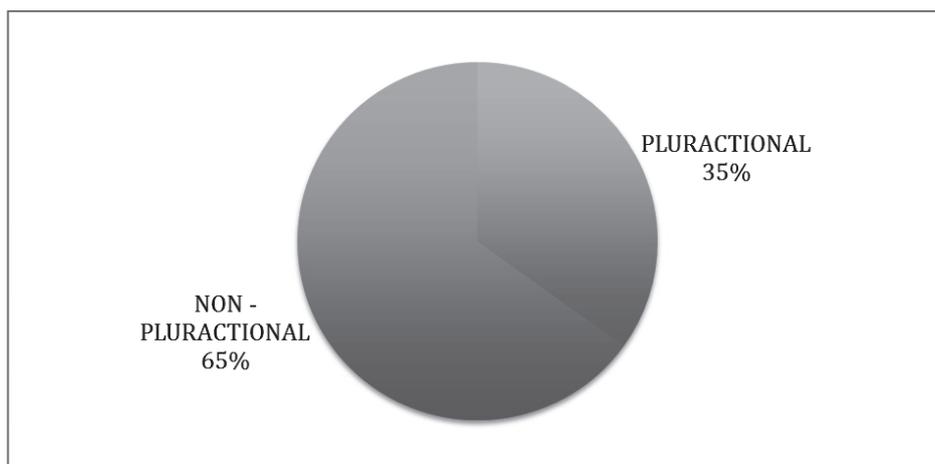


Figure 4. Distribution of pluractional and non-pluractional diminutive verbs in the inventory of Croatian diminutive verbs.

6. Conclusion

The goal of this paper was to provide an account of diminutive verb semantics in Croatian. Diminutive verbs are not a widespread language category, and their existing descriptions focused on the semantics of diminutives in general (Jurafsky 1996), leaving out specificities pertaining to verb semantics. Within the existing semantic approaches to the semantics of diminutives, the radial category model, couched within the framework of cognitive linguistics, provides a firm grounding for the analysis of various diminutive meanings. The

model proposed by Jurafsky (1996), however, does not provide an explanatory basis for the description of diminutive verbs in Croatian, namely because the central meaning 'small in size' cannot be applied to actions, but also because it uses *lambda abstraction specification* as the main mechanism for semantic shifts of diminutive verbs. Contrary to Jurafsky, our analysis proposed particular metaphorical transfers as the basis of diminutive meanings, the MORE IS UP (LESS IS DOWN) and the GOOD IS UP (BAD IS DOWN) conceptual metaphors, and proposed three categories of diminutive verbs: *verbs of diminished physical intensity*, *verbs of dispersive actions* and *pejorative verbs*. The three categories have fuzzy boundaries and form the radial category model of diminutive verbs in Croatian. Furthermore, a major objection to existing analyses of diminutive verbs was scarceness of data, so the goal of this research was to provide an inventory of diminutive verbs in Croatian based on the data obtained from the Croatian Derivational Verb Database (CroDeriV). Such an inventory allows for a clear overview of the data, the expansion of the semantic analysis applied as well as a frequency analysis of the distribution of various semantic features. Another phenomenon related to diminutive verb semantics is pluractionality, which seems to be a consequence of profiling segment size of subevents of imperfective diminutive verbs. Mechanisms involved in the production of pluractional readings of diminutive verbs seem to depend on a relation of contiguity between the main event and its subevents, and the nature of this relation needs to be further investigated in future work.

Future work may also involve expanding the analysis to other languages with diminutive verbs, in order to allow for a cross-linguistic comparison of diminutive verb semantics and expand models of diminutive semantics in general.

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Appendix 1. An inventory of diminutive suffixes along with conjugative suffixes and infinitival endings as listed in Barić et al. (2005)

–akati
–arati
–ariti
–esati
–ikati
–iti
–jakati
–karati
–kati

–ketati
 –kivati
 –nuti
 –ucati
 –uckati
 –uljiti
 –ušati
 –ušiti
 –utati

Deminutivi na djelu: kognitivnolingvistička analiza deminutivnih glagola tvorenih sufiksacijom u hrvatskome

U radu se raspravlja o deminutivnim glagolima u hrvatskome unutar teorijskog okvira kognitivne lingvistike, s naglaskom na deminutivne glagole tvorene sufiksacijom. Semantička analiza deminutivnih glagola temelji se na modelu *radijalne strukture*, koji u analizu deminutiva uvodi Jurafsky (1996). Međutim, nasuprot Jurafskyevu modelu koji gradnju značenja deminutivnih glagola, za razliku od drugih vrsta riječi, analizira kao postupak operacije *lambda-apstrakcije* u radu se zagovara djelovanje dviju konceptualnih metafora na oblikovanje glagolskih značenja, VIŠE JE GORE (MANJE JE DOLJE) i DOBRO JE GORE (LOŠE JE DOLJE). Kako bi se dobio pregled mogućih značenja deminutivnih glagola, stvorena je baza deminutivnih glagola, izgrađena prema podacima dobivenima iz leksikona hrvatskih glagola CroDeriV. Baza deminutivnih glagola dostupna je kao dio CroDeriV baze glagola. Na temelju baze deminutivnih glagola izdvojena su semantička obilježja relevantna za oblikovanje deminutivnih značenja u domeni glagolskih radnji. Šest obilježja na koja utječu deminutivni glagolski sufiksi jesu: *fizički intenzitet*, *prostorna usmjerenost radnje*, *usmjerenost mentalne pozornosti*, *veličina odsječaka radnje*, *kontinuitet* i *kvaliteta radnje*. Na temelju ovih semantičkih obilježja izdvajaju se četiri kategorije deminutivnih glagola te se raspravljaju njihove specifične karakteristike i stupnjevitost ovih kategorija u radijalnoj strukturi. Prototipnu kategoriju radijalne strukture deminutivnih glagola čine *glagoli umanjenoga fizičkog intenziteta*, dok su druge dvije kategorije *glagoli neusmjerenih radnji (prostornih i mentalnih)* te *pejorativni glagoli*. Također se raspravljaju obilježja specifična za glagolske kategorije, poput iterativnosti, distributivnosti i durativnosti, koja utječu na semantiku deminutiva na različit način od imenskih deminutiva. Tako se uvodi pojam *plurakcionalnosti*, odnosno segmentacije radnje na manje i brojnije odsječke, kao pojam relevantan za opis značenja deminutivne semantike glagola.

Key words: diminutive verbs, semantics of diminutive verbs, suffixation, radial category, pluractionality, Croatian language

Ključne riječi: deminutivni glagoli, deminutivna semantika glagola, sufiksacija, radijalna kategorija, plurakcionalnost, hrvatski jezik