Do Verbal Meanings Have a Radial Organization?

Figurative meanings of Hungarian verbs *eszik* ‘eat’ and *táplál* ‘feed’

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ABSTRACT

The paper presents a cognitive-functional analysis of two Hungarian verbs, *eszik* ‘eat’ and *táplál* ‘feed’, with the aim of providing a sample for an exhaustive semantic description of verbal polysemy and of relations between verbal meanings.

The hypothesis of the study was that a radial category description of the internal semantic structure of both verbs is possible. The assumption, however, was not confirmed by the analysis; not all meanings of the verb *eszik* ‘eat’ can be described as deriving from the prototypical eating situation. Some show cases of conceptual blending, while others have a source domain other than the prototypical eating situation. Nonetheless, many figurative meanings seem to be the result of metaphorical meaning shift triggered by common components we experience in the prototypical eating situation and other perceptions. These common components show resemblance on a schematic base.

Keywords: cognitive-functional analysis, verbal polysemy, radial organization, conceptual blending, semantic flexibility

1. Introduction

Verbal polysemy has puzzled linguists for a long time, and the topic is still far from coming to a completion. The holistic and complex nature of verbal meaning leads to an almost unending variability in meaning extension, which in its turn impedes a comprehensive semantic description of the word class. In the second largest Hungarian explicatory dictionary¹ there are 45 418 entries for nouns with a total of 62 322 senses

1 *Magyar értelmező kéziszótár [Hungarian Explicative Dictionary]*. Second, extended edition. Budapest: Akadémiai Kiadó, 2006. Edited by Ferenc Pusztai.

and 16 017 verbal entries with 29 914 senses. This means an average of 1.37 meanings for nouns and an average of 1.86 for verbs, and this shows that verbs are fewer in number in the language, and have more senses. Fellbaum (1990: 278) lists averages with an even higher difference in the Collins English Dictionary: 1.74 for nouns and 2.11 for verbs. These numbers and similar observations for other languages suggest that this difference is not specific to one or two languages, but to most of them, or is perhaps universal. The higher number of senses means more complexity in itself, but verbal meanings are a challenge mainly because of their holistic nature. Generally, verbs cannot be matched exactly to a perception as, for example, nouns can. Verbs correspond to complex perceptions, and refer to them in a flexible way, which gives us a higher diversity in verbal meanings both cross-linguistically and in specific languages, posing serious difficulties in the semantic description. (See also Gentner and France (1988), who have shown that verbal meanings are more easily altered based on other elements with which they appear than nouns are.)

In the paper, I present a cognitive-functional analysis of two verbs to provide a sample for an exhaustive semantic description of verbal polysemy and of relations between verbal meanings. The verb lexeme analysis is complemented with constructional observations to give a more fine-grained account.

As the object of the analysis, I have chosen the Hungarian verbs *eszik* ‘eat’ and *táplál* ‘feed’, because they are very good examples of verbal profiling, a characteristic attribute of verbal meaning (they express two different perspectives on the same event), and because they have already received some attention in linguistic analyses. Among these Newman (2009a) is a particularly relevant work for the current study. In the introductory paper of the book (2009b) he presents a cross-linguistic overview of ‘eat’ and ‘drink’, focusing on properties shared among languages in extensions from these meanings. Given those, the Hungarian extensions of the verb *eszik* ‘eat’ do not show any surprising cases. They align with the patterns appearing in other languages, being motivated by the prototypical eating situation (which naturally may vary to some degree depending on cultural practices, but the biological experiences are common nonetheless). After presenting my arguments for the present analysis (in sections 2 and 3), I will relate to the properties revealed by Newman (2009a).

My hypothesis in this study was that I will be able to provide a radial category description of the internal semantic structure of both verbs, *eszik* ‘eat’ and *táplál* ‘feed’. This would imply that the different meanings of the verbs “can be seen as forming a radial category, in which there is a central meaning and a structure of related meanings which are motivated by the central meaning” (Lakoff 1987: 291). This is the type of relationship we see between a person’s legs and a table’s or a chair’s legs. The latter ones are called *legs* because of the resemblances they show with the human legs, the prototypical element of the linguistic

category. The ground for the hypothesis was, on the one hand, the cognitive linguistics' stand regarding the nature of the relations between the meanings of a word (described either by the prototype-effect, either by family resemblance²). On the other hand, there is a vast literature on nominal meaning extension (e.g., Rosch 1978, Szilágyi 1996) which shows that in nominal semantics radial organization is mostly the case, but there are also verbal analyses which suggest this (e.g., Coleman and Kay's 1981 paper on the meaning of the English verb *lie*).

In deciding what sense of the verbs to regard as the central meaning, I have taken into account both the nature of prototypes as suggested by experiments related to frequency and order of mention, order of learning, family resemblance, verification speed and priming³, and the sense definitions of the dictionary editors. All of these suggest that the central meaning of the verb *eszik* 'eat' is the most common eating situation in which a person or an animal consumes food (also denoted as the prototypical eating situation), while the central meaning of the verb *táplál* 'feed' is the most common feeding situation in which a person or an animal gives or assures food for someone not capable of doing it herself/himself (referred to as the prototypical feeding situation). (For a more elaborated description of the prototypical eating and feeding situations see sections 2.1. and 3.1. respectively.)

The hypothesis that the meanings of these two verbs have a radial organization was not entirely confirmed by the analysis. The meaning of the verb *táplál* 'feed' does show a radial organization, but that of the verb *eszik* 'eat' does not. It seems that there are verbs whose internal semantic structure has a radial organization, but there are verbs whose semantic structure cannot be described in terms of a network of one single central (prototypical) sense and several peripheral senses.

For the analysis, I used a random sample of 2000 for the verb *eszik* and a random sample of 500 for *táplál* abstracted from the Hungarian National Corpus (Magyar Nemzeti Szövegtár; Oravecz, Váradi and Sass 2014). From these, I have manually sorted out the instances which can be considered figurative uses, that is, occurrences in which the verb does not refer to a prototypical eating or feeding activity performed by a person or animal. The differences in the sample size are due to the differing number of occurrences of the two verbs in the corpus (12 044 for *eszik* 'eat' and 1 307 for *táplál* 'feed', all instances without a verbal prefix). However, the figurative uses show an entirely different distribution; only 1% of the occurrences of *eszik* 'eat' refer to other perceptions than a prototypical eating activity performed by a person or an animal, while this ratio is 34% for the verb *táplál* 'feed'. In exact numbers, this means 117 instances for *eszik* and 442 instances for *táplál*.

2 "A family resemblance relationship consists of a set of items of the form AB, BC, CD, DE. That is, each item has at least one, and probably several, elements in common with one or more items, but no, or few, elements are common to all items." (Rosch and Mervis 1975: 574–575)

3 For a more detailed presentation see Croft and Cruse (2004).

I have used The Hungarian Explicatory Dictionary (HED, 1959–1962) as a means to widen the array of figurative meanings covered by the search results. Also, I sometimes refer to HED as a reference point in demarcating the senses of the verbs, although I mainly isolate meanings based on their shared and not shared components with the primary meaning.

In the paper, I start from the assumption that all meaning extension is motivated and I aim to show that they are motivated, first of all, by the components and the configuration of the prototypical meaning. The existing analyses concentrate mainly on metaphorical mappings between different domains, which make meaning extensions possible in particular verbs, and not specifically on changes of the verbal semantics. For example, Radden (1996) outlines a detailed analysis of the English verbs *come* and *go* in order to argue for the existence of the more general conceptual metaphor CHANGE IS MOTION. Croft (2009) uses constructional analysis to contribute to the analysis of the semantic frames of eating and feeding. Through the analysis, he identifies the conceptual domains serving as sources for metaphorical uses of the English verbs *eat* and *feed* in his corpus. In the next two sections of the paper, I put forward a detailed analysis of the figurative meanings found in the corpus sample. In section 2 I present the semantic analysis of the figurative meanings of the verb *eszik*, and in section 3 the figurative meanings of the verb *táplál*. In section 4 I elaborate at large on the corollary of the details and results of the analyses. Finally, in section 5 I summarize the aims and results of the paper.

2. Patterns and motivations in the meaning extensions of the Hungarian verb *eszik*

2.1. Primary meaning

The starting point of the analysis is the primary meaning of the verb from which the figurative meanings are derived. Based on the dictionary entry, this could be formulated as follows: *The activity of taking some food in the mouth, chewing it, and then swallowing it to take in nutrients. The activity is performed by a person or an animal, which needs it for subsistence.*

In an encyclopaedic view of meaning, besides these elements, we need to take into account the biological and socio-cultural knowledge pertaining to the activity. That is, we need to consider the biological, nutritional and socio-cultural frames of eating (see also Croft 2009).

The components of a prototypical eating situation are expressed in Hungarian by the verb *eszik* ‘eat’ and are the following:⁴

- the activity is performed by a person or animal (Eater);
- there is an entity that is consumed (Food);

4 By *prototypical eating situation*, I refer to the type of percepts that are most quickly and most generally evoked types of eating in the speakers’ minds. These are percepts associated with the basic sense of the verb.

- the activity is a means to ensure the subsistence of the Eater;
- there is a feeling/phenomenon of growth that is physiologically or visually perceptible generated by the Food;
- Food contains nutrients that are necessary for subsistence;
- the activity consists (schematically) of the adding of something into something (that can stay there for a while and can get out at a given moment); this is a regular activity that generates growth;
- what is eaten, gradually disappears from sight;
- someone can like or dislike a food.

Eating refers, in its basic sense, to an activity during which something is introduced into someone's digestive tract (through the mouth), where it accumulates, and so subsistence is assured. The belly fills and grows larger (even if only for a little while). These feelings and the encyclopaedic knowledge related to eating are a quite univocal bodily experience, and are the basis of figurative uses of the verb.

The prototypical meaning of the verb has two figure-type components: the Eater and the Food that is consumed. The Eater needs Food, which constitutes the nutrients necessary for his/her subsistence. I have taken both people and animals as possible figures of the primary meaning of the verb, because eating as described above is characteristic to both humans and animals. Using or not using cutlery, for instance, is not a relevant factor in the prototypical meaning. This is the reason I have taken both human eating and animal eating included in the primary meaning of the verb. However, we will see that there are cases in which some feature of animal behaviour is the source of meaning extension in *eszik* 'eat'. The second figure-like component, the Food has a nutritional value, and when consumed, a nutritional effect appears. During eating, Food is consumed, it runs out, and it can be to the liking or disliking of the Eater. These details may not seem important and semantically relevant at first glance, but linguistic data confirms that they are. It is mainly these details based on which figurative meanings of the verb can be exhaustively described, as it will be shown.

2.2. Figurative meanings

The perceptions that are expressed by the verb *eszik* 'eat' in the analysed data are the following:

- motor or other mechanical device consumes fuel;
- electrical device consumes energy;
- a person likes someone/something;
- someone hurts another person on purpose;
- someone/something lives on something;
- someone/something ruins something.

Also, there are proverbs and phrases which include the verb *eszik* 'eat'. I will suggest an analysis of these too, using the same approach.

- *ha a fene fenét eszik is* ‘by any means’ (literally: even if chancre eats chancre); example: *úgyis festeni fogok, ha fene fenét < eszik > is* ‘I will paint, no matter what’;
- *nem tudja, hogy eszik-e vagy isszák* ‘s/he has no idea about something’; (literally: s/he has no idea whether it is to be eaten or drank); example: *azt se tudták, hogy a kereszténységet < eszik > -e vagy isszák* ‘they had no idea what Christianity is’;
- *a tenyeréből (/kezeiből) eszik* ‘someone is totally docile to someone’ (literally: s/he eats from his/her palm/hands); example: *a kezükből < eszik > a teljes bírói kar* ‘the entire judiciary does what they say to do’;
- *nem eszik valamiből* ‘s/he will not get anything from some goods’ (literally: s/he will not eat from something); example: *Esküdözött, hogy ebből nem < eszik > az anyaszentegyház* ‘S/he swore that the holy church will not get anything from it’.

In the table below, I summarize what components are present in each use of the verb, and then I elaborate on the relations and motivations we can identify. The plus sign means that the respective component is present in that meaning of the verb and the minus sign means that it is not. The same notation is used in further tables.

	Eater (needs Food for subsistence)	Food (it is nutritive, ensures subsistence)	The phase of adding something into something (regularly)	The feeling/ phenomenon of growth	Food gradually disappears from sight	Food can be liked/ disliked
Motor or other mechanical device consumes fuel	+	+	+	+	+	–
Electrical device consumes energy	+	+	+	+	+	–
Someone likes someone/ something	+	+	–	–	–	+
Someone hurts another person on purpose	+	+	–	–	+	–
Someone/ something lives on something	+	+	+	–	–	–
Someone/ something gradually ruins someone/ something	+	+	–	–	+	–

Table 1. Meanings of the verb *eszik* ‘eat’ and the semantic components relevant in them

2.3. ‘Motor or other mechanical device consumes fuel’, ‘electrical device consumes energy’

The most frequent figurative uses of the verb *eszik* in the corpus sample refer to consuming fuel or energy. These two uses are discussed in the same subsection, because the configurations they express and their common components with the primary meaning are alike. Both uses are motivated by the fact that machines need some energy source to work, and that energy source (fuel or battery) can run out. Similar to people and animals, who need sustenance to be able to move around, to stay alive, machines need fuel or energy to function. (A specification on electrical devices is needed: there are five plus signs in the table, indicating that all those components are present in this sense of the verb, but actually some of them apply only to devices with a battery. In the case of those without a battery, the energy source does not run out, and there is no phenomenon of growth perceived, because the electricity supply is constant.)

Examples of these uses are the following:

- (1) *általában 10 liter dízel-t* < *esz-ikØ* >
 usually 10 liter diesel.fuel-ACC eat.PRES-3SG
 ‘It eats usually about 10 liters of diesel fuel.’
- (2) *Nagyon nem mindegy, hogy a processzor mennyi-t* < *esz-ikØ* >.
 very NEG all.the.same that ART processor how.much-ACC eat.PRES-3SG
 ‘It matters how much the processor consumes.’

This sense of the verb shows how much the nature of the components can change in meaning extension. There is an Eater (the machine) and a Food component (fuel or energy), but they are of an entirely different nature than people or animals and the food they consume. The common experience of growth is enough to motivate the use of the verb in expressing perceptions related to fuel or energy consumption. Later we will see that the verb *táplál* ‘feed’ can also refer to this type of perception, which suggests a more general correspondence between the construal of eating/feeding events and fuel/energy consumption.

With some arguments, like cigarettes or books, the verb can take on an ‘extensive consumption’ sense. This use was not attested in the corpus sample, example (3) is taken from the HED.

- (3) *Esz-i a cigarettá-t.*
 eat.PRES-1SG.DEF ART cigarette-ACC
 ‘S/he smokes a lot of cigarettes.’

This is interesting, because the verb basically has the same meaning as in cars eating a lot of fuel, or processors eating a lot of energy, so that the motivation for the meaning extension is the gradual disappearance of something, while adding it into some kind of container, but this addition does not ensure subsistence, it is not a need of the Eater. The source of the ‘extensive’ element of this sense is not clear. It might be simply the prototypical eating situation, in which one can eat too much, but might

also be something entirely else, which would need further investigation. Perhaps an etymological study could account for a timeline of the possible arguments, and from that, generalizations might become possible.

2.4. ‘Someone likes someone/something’

This is the only sense of the verb *eszik* ‘eat’ which seems to be motivated by the fact that someone can like or dislike some food. Interestingly, the verb can refer to liking both a person and an inanimate entity, as the examples (4) and (5) below show.

- (4) *mi-t* < *esz-ik*Ø > *egy* 23 *eves* *csaj* *egy* 16 *eves-en?*
 what-ACC eat.PRES-1SG ART of.23 years girl ART of.16 years-on
 ‘What does a 23 year old girl like in a 16 year old?’
- (5) *nem egy nagy durranas, megis a user-ek az-t* < *esz-ik*Ø >
 NEG ART big bang yet ART user-PL that-ACC eat.PRES-3PL.DEF
 ‘It is not a big deal, yet the users like it.’

In a synchronic approach, the motivation described above is the most probable scenario. However, there are other phrases/idioms with the same meaning (‘liking/loving someone’) expressed in an EATING configuration, which could have been the sources of the meaning shift leading to this sense of the verb. We can say *úgy szeretlek, majd megeszlek*, which is the equivalent of the English *I love you so much, I could eat you*. In Hungarian this can be shortened to *megeszlek*, literally meaning ‘I will eat you’, to express the same type of care. The correspondence between eating and loving/liking someone, can be grounded in specific physical experiences, and phrases like *úgy szeretlek, majd megeszlek* ‘I love you so much, I could eat you’ could have been the previous step in the meaning shift of the verb *eszik* ‘eat’ to express the liking/loving of someone. In this case, the particular meaning occurs as a shortening of a longer phrase, which is embodied in experience. In the first scenario, the motivation of the meaning extension is also a physical experience, but a different one: the fact that one can like or dislike a food. This experience could have also motivated other phrases expressing similar feelings.

The construction type associated with this sense of the verb (a subject argument and a superessive argument to the verb) seems to draw from two different constructions. Partly from the construction of the prototypical *eszik* ‘eat’, and partly from the verb *tetszik* ‘like’. Sentences (6) and (7) below illustrate this.

- (6) *Pista-nak mi tetsz-ik*Ø *rajta?*
 Pista-DAT what.NOM like.PRES-1SG on.her.SUP
 ‘What does Pista like on her?’
- (7) *Pista mi-t esz-ik*Ø *rajta?*
 Pista.NOM what-ACC eat.PRES-1SG on.her.SUP
 ‘What does Pista like on her?’

The above sentences both mean the following: ‘What does Pista like on her?’ If referring to the consuming of some particular entity, the verb *eszik* ‘eat’ needs an accusative argument. This will be the entity that is

consumed. In our example this is expressed by the pronoun *mi* ‘what’ (*mit* in the accusative case). The superessive argument is inherited from a construction of *tetszik* ‘like’, where it is an adjunct expressing some external features of entities. And finally, the dative argument of *tetszik* (*Pistának*) corresponds to the subject argument (*Pista*) of *eszik*, because (if possible) a subject argument is needed.

A combination of construction patterns is not surprising in meaning extension, what is more, constructions being interrelated and having properties inherited from other constructions, is of basic importance in constructional approaches (cf. Croft 2001, Goldberg 2006). We witness this inheritance between constructions in other senses of the verb *eszik* too (see subsections 2.6. and 3.5.).

2.5. ‘Someone hurts another person on purpose’

The meanings ‘a person hurts another person on purpose’ and ‘someone/something ruins something’ are similar to each other in that they are both motivated by the gradual disappearance of the food-like component. Although the examples found in the corpus sample refer to verbal aggressive behaviour, I believe that the ground for these uses is physical injury by biting. This behaviour is specific to some animals (e.g., dogs, foxes), and this is one of the cases which suggest that we should differentiate between HUMAN EATING and ANIMAL EATING as sources of meaning extension in the verb *eszik*. (See also Croft (2009) for the distinction of HUMAN EATING and ANIMAL EATING frames.) This suggestion is supported by the fact that both in Hungarian and in English the verb *bite* can also be used in the meaning ‘to hurt’ (e.g., *Ne félj, nem harap!* ‘Don’t worry, it doesn’t bite!’, referring to some inanimate entity, e.g., utensils or work equipment). So that, both *eszik* and *harap*, and *eat* and *bite* are motivated in this meaning by knowledge about this type of animal behaviour. Below we have two examples from the corpus.

- (8) *Az az egyetlen topic ahol nem < esz-ikØ > egymás-t.*
that ART only topic where NEG eat.PRES-3PL.DEF each.other-ACC
‘That is the only topic on which they don’t end up fighting.’
- (9) *ha a laptulaj-ok miatt, kedvé-ért*
if ART media.owners-PL because.of, mood-CAU
NEM < esz-ikØ > meg egymás-t
NEG eat.PRES-3PL.DEF prefix.PFV each.other-ACC
‘If for the sake of media owners they don’t fall out with each other.’

There are two cases in the corpus sample in which the meaning of the verb seems to have its source in some kind of animal eating behaviour (see subsection 2.9. for the other case), instead of the prototypical eating situation. The fact that there might be different sources for the meaning extensions of the verb, suggests that a radial organization of meaning is not appropriate in the semantic description of this verb. However, we should note that Newman (2009a) takes destruction as a salient component in the prototypical meaning of ‘eat’, based on our experience of smashing food with our teeth. He discusses several senses in different languages related

to causing physical and psychological torment as extensions motivated by this component. I am not entirely convinced that this could be the most appropriate motivation for these senses, because hurting by biting is more basic and more salient in animal eating behaviour than in human eating, and experiences related to animal eating can also be considered universal. This is the reason I provide a somewhat different explanation here.

2.6. ‘Someone/something lives on something’

The verbal meaning ‘someone/something lives on something’ shows a shift of perspective on the event configuration, and thus a change in the structure of the verb occurs. Here we have a subject argument and an elative argument to the verb, this latter referring to the entity consumed, yet not expressed in the way food generally is, with a direct object. This use is not frequent though; there is only one example of it in the corpus:

- (10) *A nyomdafesték először <esz-ikØ> a fölháborodás-ból.*
 ART print first eat.PRES-1SG ART indignation-ELA
 ‘Print, first of all, feeds on indignation.’⁵

This example is interesting, because it seems to be motivated by the use of the verb *táplál* ‘feed’ to similar perceptions, but with a different profile. *Táplál* is widely used in expressing the ensuring of an emotional state (see also subsection 3.3.). In those cases the entity or event maintaining the emotional state is most salient. When using the verb *eszik* ‘eat’ to refer to similar perceptions, the focus turns to the Eater, and the phase of nutrition is more salient in the configuration.

Moreover, the construction related to this sense of the verb is motivated, most probably, by another verb which is also widely used in this sense and in this construction type.⁶ The phrase in (11), an example from the Hungarian National Corpus, means that someone ensures his/her subsistence by writing poetry.

- (11) *az ember Magyarország-on költészet-ből <élØ>*
 ART man Hungary-SUP poetry-ELA live.PRES.3SG
 ‘Someone lives from poetry in Hungary.’

The common meaning and the common construction type suggest that this sense of the verb *él* ‘live’ could have also motivated the presently discussed meaning of the verb *eszik* ‘eat’.

2.7. ‘Someone/something gradually ruins someone/something’

The meaning ‘to gradually ruin something’ is most probably an extension of the hurting sense of the verb *eszik* ‘eat’. This is exemplified in (12).

- (12) *Maguk <esz-ikØ> meg Magyarország-ot.*
 1PL eat.PRES-3PL prefix.PFV Hungary-ACC
 ‘You are the ones ruining Hungary.’

⁵ Here, *print* refers metonymically to journalists (who feed on indignation).

⁶ There are 5134 results in the HNC for the verb *él* ‘live’ with a noun argument in the elative case. The search was done with a -5 – 5 window filter.

Although the second figure is not a person, an abstract entity, the construction pattern totally matches the structure of that of the primary meaning.

The explicatory dictionary lists some other cases of this sense, for which there were no examples in the corpus sample, so they are probably more typical of literary texts. These are similar in their motivation to the use in (12). I illustrate them with examples from the dictionary.

- (13) *A rozsda esz-i a vas-at.*
 ART rust eat.PRES-1SG.DEF ART iron-ACC
 ‘Rust is eating the iron.’

Rust eating iron is motivated by our experience of the gradual spread of rust at the same time as the gradual vanishing of iron. This way, there is growth perceived in the amount of rust, as if it is being added more and more to it, and there is a gradual disappearance of iron. Thereby this use is similar to the cases of fuel/energy consumed.

The motivation of the sense discussed next may have the same motivation as the sense ‘someone hurts another person’, but it might also be the case that it is the extension of the gradual destruction sense (as in *the rust eating the iron*). Or, most probably, the ANIMAL EATING frame as the source of meaning extension is strengthened by other uses of the verb, like the gradual destruction sense.

- (14) *A méreg e-tt-e belül, ha rágondol-t.*
 ART anger eat-PAST-3SG inside if think.about.it-PAST
 ‘S/he was tormented by the idea, if s/he thought about it.’

In this example, which literally means that anger is eating up someone from the inside, we have a feeling or emotion that is making someone feel bad, tormenting her/him. This use has its motivation, most probably, in the ANIMAL EATING frame, but there is also a change of perspective: it is not the human figure eating something, but an inanimate figure (a feeling) eating up a person from the inside. The structure of the verb, however, does not change. The feeling is the agent, the subject argument, and the person tormented is the patient, the direct object of the verb.

2.8. Proverbial uses of the verb

Among the proverbial or idiomatic uses of the verb, two are explained by the generalization of some features of the prototypical eating situation. *Nem tudja, hogy eszik-e vagy isszák* ‘s/he has no idea about it’ literally means ‘s/he has no idea whether it is to be eaten or to be drunk’. The phrase can be used to refer to any kind of situation, so practically we have a meaning generalization of the entire phrase as a whole from a specific uncertainty situation to all kinds of uncertainty situations.

The phrase *nem eszik valamiből* ‘s/he will not get anything from something’, literally meaning ‘s/he will not eat from something’ has the same explication: a generalization from a specific situation (in which

someone cannot have some food, and so does not have any experience of its taste), to any kinds of situations where someone cannot experience something. So, these are actually not extended meanings of the verb, but extended meanings of the phrases, which are conventionalized in these forms in the language (idioms).

The motivation for the phrase *a tenyeréből/kezeiből eszik* referring to someone who is totally docile to the speaker is similar. The difference is that the source is not human eating, but the feeding of some animals by humans (see also subsection 2.5.). We do this, for example, with dogs: we feed them from our palm/hands, and with a change of perspective we can say that the animal is eating from our palm/hands. Naturally, we cannot do this with any animal, only with those tamed and friendly. This is the knowledge that is the basis for the extended meaning of the phrase: the one who eats out of my hands is tame, subservient. This phrase is used metaphorically based on an experience connected somewhat loosely to eating, having a more direct connection with feeding, though expressed by using the verb *eszik* ‘eat’. The reason for this is that in Hungarian the verb *táplál* ‘feed’ is rarely used to express people feeding animals. Instead the causative form of the verb *eszik* ‘eat’ is basic in this sense: *etet* ‘giving food to someone/something’, from the same root as *eszik*.

Another idiomatic use of the verb in the sample is *ha a fene fenét eszik is*, meaning ‘by any means’, and having the literal meaning ‘even if chancre eats chancre’. This is the only example that leaves me puzzled, although it is not the only phrase containing chancre and EATING. There is also the prevalent *egye meg a fene* ‘let chancre eat it all’, used as an expletive. *Fene* is a variant of *fekély*, meaning ‘chancre’, and the different variants of it are used in several expletives. I presume there could have been an influence from the tormenting sense of the verb (e.g., *Esz a méreg* ‘Anger is eating me inside’) that contributed to these uses of *eszik* ‘eat’ with *fene* ‘chancre’. But Newman’s explanation could also be accepted, who notes that “an extension of ‘eat’ to ‘physical destruction, injuring, overpowering’ sense is common”, and attested in several languages (2009a: 16). The fact that this use is widely spread among the languages of the world, suggests that the motivation lies in some components salient in all of these languages and cultures. This confirms Newman’s claim regarding the connection between eating and different forms of harming or destruction.

2.9. Other figurative uses of the verb

I have not found instances of the following sense of the verb enumerated in The Hungarian Explanatory Dictionary: ‘torment’. I illustrate this with an example from the Dictionary.

- (15) *Anná-t esz-i az irigység.*
 Anna-ACC eat.PRES-1SG.PFV ART envy
 ‘Anna is being eaten up by envy.’

We can see that there is a similar construction with a similar meaning in English too. However, the fact that there were no instances of this sense in the sample, suggests that it is not widely used in Hungarian, most probably it is confined to the poetic register.

The motivation for this sense of the verb is quite complex. The construction pattern changes concerning the prototypical meaning. The human figure is the entity being eaten (the Food), though, only partially, from inside, leaving the outside untouched; and the feeling/emotion is the Eater. The common component that motivates the meaning extension seems to be the gradual disappearance on the one hand and the ‘someone/something gradually ruins someone/something’ meaning on the other hand (cf. *Rust eats iron*). However, other sources must play a role in this meaning of the verb, because the ones mentioned cannot provide for the construction pattern associated to this sense. This third source could be a more general metaphorical correspondence between eating/consuming/digesting and negative emotional states. This correspondence is exemplified by several other cases too in which negative emotions/states are expressed with verbs primarily expressing eating or a phase related to eating (e.g., *rág* ‘chew’, *emészt* ‘digest’, etc.).

3. Patterns and motivations in the meaning extensions of the Hungarian verb *táplál*

3.1. Primary meaning

Táplál has two distinct components from those of *eszik*, with all other components being common. This is due to the fact that the two verbs express two different profiles on the same eating event. In *eszik* the focus is on the activity of eating, while in *táplál* the focus is on the activity of making eating possible. Following this, the figurative meanings of *eszik* ‘eat’ are mostly centred around the growth induced by eating, while figurative meanings of *táplál* ‘feed’ are mostly based on the nurturing component.

Feeding is an activity performed by a person or an animal, and it occurs in cases in which the Eater is a baby, a person, or an animal not capable of eating by herself/himself/itself or providing food for herself/himself/itself.

The components relevant in meaning extension in the case of *táplál* ‘feed’ are the following:

- the activity is performed by a person or animal (Feeder);
- the receiver (Fed) is a person or animal not capable of feeding by / providing for herself/himself, but who needs Food;
- Food contains nutrients that are necessary for subsistence;
- the activity is a means to ensure the subsistence of the Eater;
- there is a feeling/phenomenon of growth that is physiologically or visually perceptible, generated by the Food;

- the activity consists of the adding of something into something (that can stay there for a while and can get out at a given moment); this is what generates growth;
- what is eaten, gradually disappears from sight.

3.2. Figurative meanings

These components enumerated in the previous subsection describe in detail a prototypical feeding situation, or the primary meaning of the verb *táplál* ‘feed’. The figurative meanings of the verbs are all motivated by one or more of these components. Henceforward, I present those occurring in the corpus sample. I start with a synthesizing table, and then I elaborate on each case in a different subsection.

	Feeder	Fed (needs Food for subsistence)	Food (that is nutritive, ensures subsistence)	The phase of adding something into something	The feeling/ phenomenon of growth	Food gradually disappears from sight
Ensures the existence of a state or some abstract concept	+	+	–	–	+	–
Ensures the functioning of a system/ mechanism	+	+	–	+	+	–
Entering information into a system	+	+	–	+	–	+
Nature or an element of nature provides for people	+	+	+/-	–	–	–

Table 2. Meanings of the verb *táplál* ‘feed’ and the semantic components relevant to them

3.3. ‘Ensures the existence of a state or some abstract concept’

The most prominent perception expressed by the verb *táplál* ‘feed’ in the analysed data is that of upholding a feeling or emotion (e.g., hope, hate, love, rage, feelings in general, doubt, sympathy, and so on). The expression of feelings and emotions with this verb is prevalent in Hungarian. The feeling or emotion can be either the agent figure or the patient in the configuration of *táplál*, or both, that is, there might not be a human figure at all. I illustrate this below.

- (16) *Ha viszont mély-ebb érzelm-ek-et < táplálØ > iránta*
if however deep-COMPA feeling-PL-ACC feed.PRES.3SG towards.her/him
'But if s/he has strong feelings towards her/him.'
- (17) *publikálØ egy level-et ami-t híres szerelem < táplálØ >*
publish.PRES.3SG ART letter-ACC which-ACC renowned love feed.PRES.3SG
'Publishes a letter that was inspired by a renowned love.'
- (18) *káröröm, amely-et a szerbség iránti gyűlölet < táplálØ >*
gloat that-ACC ART Serbians towards hate feed. PRES.3SG
'Gloat that is fed by hate towards the Serbians.'
- (19) *közvetítő, ki-t a jámbor áldozó oktalanság-a < táplálØ >*
mediator who-ACC ART pious offeror folly-GEN feed. PRES.3SG
'The mediator, who is inspired by the folly of the pious offeror.'

In the first example, a person is feeding emotions towards someone else. In the second example an abstract thing, love is feeding the birth of an inanimate thing, a letter. The third example shows that we can as well have two abstract things as figures in the configuration, here gloat and hate. Finally, in the last example, folly, a complex attribute is the agent figure, and a person is a patient, the figure that is being fed. These few examples already show the great variety of argument types the verb *táplál* can take in extended meanings, but I will return to this a bit later.

Not only emotions, but thoughts can be fed and can feed in their turn as well. This is illustrated in examples (20) to (23).

- (20) *A fiú ezért ördög terv-et < táplálØ >*
ART boy for.this diabolical plan-ACC feed. PRES.3SG
'Because of this, the boy has a diabolical plan.'
- (21) *Olyan vélemény-ek-et, amely idegengyűlölet-et < táplálØ >*
such opinion-PL-ACC that xenophobia-ACC feed. PRES.3SG
'Opinions that amplify xenophobia.'

In numerous examples the verb *táplál* 'feed' refers to an illusion, dreams or aims:

- (22) *Oktatási Minisztérium, úgy látszikØ, nem < táplálØ > illúzió-k-at*
Ministry of Education so seem.PRES.3SG NEG feed. PRES.3SG illusion-PL-ACC
'It seems that the Ministry of Education does not have illusions.'
- (23) *Czine Mihály realizmus-a ilyen álm-ok-at nem < táplálØ >*
Mihály Czine realism-GEN such dream-PL-ACC NEG feed. PRES.3SG
'The realism of Mihály Czine does not maintain such dreams.'

Both thoughts and illusions are structurally similar to feelings and emotions. We have mentioned them separately, because there are numerous examples of each of them in the corpus sample. This shows that they are prevalent in the language; the verb *táplál* 'feed' is productive in expressing feelings, emotions, thoughts, illusions and other abstract concepts, like time, past and present, life situations, or others. What is common in these uses is the change in the structure of the verb. First of all, the three-figure configuration changes in these meanings to a two-figure configuration. Food is being omitted, and so the components present in these meanings are the following: the Feeder, the Fed and the feeling/phenomenon of growth. In rare cases, the Food is expressed, and more often it is not even possible to express it, because we do not know or

cannot define what it is. Secondly, there is great flexibility in how the verb's arguments can change. There is no restriction to the type of figures *táplál* can take as long as there is some sense of growth perceived in the event. That is, the verb needs to have at least two arguments when used in this sense, and those arguments need to be an agent and patient, subject and direct object respectively. However, the nature of the figures which fill in these roles is entirely flexible and determined only by the growth element of the perception: if there is some kind of growth in a percept, it can be expressed with the verb *táplál* in Hungarian.

The figure below illustrates the shift in perspective in these senses of the verb.

Figure 1. The overlap of the primary meaning and the figurative meaning 'ensures subsistence of a state/abstract concept'

3.4. 'Ensures the functioning of a system/mechanism'

In the case of changes in organisms, organizations and elements of nature expressed with *táplál* 'feed', both the phenomenon of growth and the phase of adding something into something are relevant, but the argument structure of the verb changes in the same way as the figure above illustrates. That is, in these cases the source/cause of growth is also encoded. This can be easily seen in examples referring to elements of nature.

- (24) *a láng-ok, amely-ek-et az erős szél is < táplálØ >*
 ART flame-PL which-PL-ACC ART strong wind also feed. PRES.3SG
 'The flames, which are also fed by the strong wind.'

- (25) *tav-ak-ban élØ-bet meg, amely-ek-et termálvíz < táplálØ >*
 lake-PL-INE live.PRES.3SG prefix.PFV which-PL-ACC thermal.water feed. PRES.3SG
 '[It] can survive in lakes, which are fed by thermal water.'

Wind can fan a fire, that is, feed it, and this is an element of knowledge belonging to the conceptual frame of FIRE, just as the fact that lakes are fed by rivers that flow into them. However, here we treat this information as a semantic component of the verb, because it blends into the meaning of the verb. This example illustrates again the extremely

flexible nature of verbal meaning. The verb *táplál* ‘feed’ practically builds this knowledge of the conceptual frame of its argument (FIRE) into its meaning, as a semantic component.

The phase of adding something into something (which in its turn generates growth) is an element coming from another conceptual frame, and is conflated into the verbal semantics in the case of living organisms and food as well. The example in (26) illustrates this.

- (26) *Újabban lehet kap-ni kefir-t, nem hizlalO, mégis < táplálO >...*
 recently it.is.possible find.INF kefir-ACC NEG fatten.PRES.3SG yet feed.PRES.3SG
 ‘You can buy kefir, for some time now; it does not fatten, yet is nutritive.’

We know that kefir is nutritive to us because of the nutrients it contains, and this knowledge is conflated into the meaning of the verb, quite possibly precisely because there is a Food component in the primary meaning of the verb too. This knowledge component is built into the figurative meaning of the verb discussed here.

This example also illustrates how the argument structure of the verb can lose further elements. When used in an attributive sense, the verb has only a subject argument. In the example above, the second clause contains the verb *táplál*, and it takes as subject the topic of the former clause, which in this case of the kefir. It is totally plausible in Hungarian to say *A kefir táplál*, that is, ‘Kefir feeds’ in the sense that ‘Kefir is a nutritive aliment’. The figure below illustrates the further change in the semantic structure of the verb.

Figure 2. The overlap of three different senses of the verb *táplál*

The component that is the theme in the primary meaning, Food, becomes the agent when other arguments are lost.

3.5. ‘Entering information into a system’

This meaning of the verb *táplál* ‘feed’ is also motivated by the phase of adding something into something and by the element of growth.⁷ This sense of the verb is specific to machines that work with data. There was one result for use in the sample.

- (27) *computer-be* < *táplálØ* > 304 805 *héber* *betű-t*
 computer-ILL feed. PRES.3SG 304 805 Hebrew letter-ACC
 ‘S/he feeds 304 805 Hebrew letters into the computer.’

This use is also accounted for by Croft (2009), that is, it also exists in English. He explains it by a distinct image schema concerning the primary meaning of the English verb *feed*. In English, this use pairs with an *into* directional construction, which is not allowed in the first meaning of the verb. Because of this, he considers that “the container directional *into* is disallowed in the literal meaning of *feed* even though the Food does move into a container (the human or animal body), because the literal meaning employs a transfer image-schema, as expressed by the double object construction or dative *to*, not a motion image-schema, as expressed by the motion preposition *into*” (2009: 24). The same could be said about the Hungarian data, because we have a directional use of the verb *táplál* expressed by the illative construction here as well (see *-be* in *komputerbe*). However, systems, abstract or not, are widely perceived as containers, and this might sanction the directional construction. If so, then the argument of the different image schemas does not account for the meaning extension (that is, we cannot tell what motivates this use), but is merely a consequence of the conceptual frame that comes with the arguments (e.g., the container schema with systems and machines).

Meanwhile, if accounting for the difference with the components of the prototypical feeding situation, we can determine the common components of the perceptions that motivate this use of the verb (the Feeder, the Fed, and most importantly the element of growth and the phase of adding something into something). Moreover, we can generalize, because we experience something very similar to what we have seen in section 3.4. Information or elements from the conceptual frame(s) pertaining to the (non-prototypical) argument(s) of the verb are treated as part of the semantic structure of the verb, blended into it. This phenomenon is in total accordance with the flexibility of the semantic structure of verbs and accounts for both semantic and constructional differences in the distinct senses.

3.6. ‘Nature or an element of nature provides for people’

Finally, we have a meaning of *táplál* in which there is a shift in the configuration of the verb. We have already seen examples for changes in the type of the primary or secondary figure, or both. We have the same

7 I am grateful to one of my anonymous reviewers for pointing out that there is a sense of growth in these perceptions too.

in these examples, with the addition that we can identify a specific semantic field in which this meaning extension is productive. It is nature or an element of nature providing for someone or for some community. This is illustrated in example (28).

- (28) *kiterjedt és dúsan termő völgy vesző körül és < táplál >*
 wide and richly yielding valley surround.PRES.3SG and feed. PRES.3SG
 ‘[We] are surrounded and nourished by a wide and richly yielding valley.’

In this type of meaning, the agent figure becomes the providing entity, which actually produces the food (fruit, crop, and other). We have a metonymic movement in this case, where the valley (or other productive plants/fields) which is providing, stands for the people who produce and harvest the crop. We can use numerous other nutrients in this way. In the corpus sample the following example appears:

- (29) *a gyümölcs frissít, élénkít, a gabona < táplál >*
 ART fruit freshen.PRES.3SG vivify.PRES.3SG ART corn feed. PRES.3SG
 ‘Fruit freshens and vivifies, corn is nutritive.’

In The Hungarian Explicatory Dictionary, the senses of the verb are distinguished differently. The editors used mainly the nature of the primary figure to determine whether a usage should be considered a distinct sense or not. In the analysis, I have concentrated on the semantic components and the changes concerning the semantic structure of the verb. Because of this approach, the meanings as distinguished here may differ somewhat from what we find listed in the dictionary, but can nonetheless be matched with them.

4. Results

In sections 2 and 3, I have presented a detailed semantic analysis of two Hungarian verbs, *eszik* ‘eat’ and *táplál* ‘feed’, and have shown that extended meanings of verbs are motivated and can be described exhaustively, though they need a very meticulous analysis and a complex methodology to reveal the complex semantic relations. In the analysis, I started from the prototypical meanings of the verb. In the case of the verb *eszik* ‘eat’, the components identified resonate with those used by Newman (2009a). He enumerates metaphorical extensions based on (i) the sensation of the consumer while ingesting, (ii) the internalization, or taking in of something, and (iii) the destruction or disappearance of the entity consumed. Jaggar and Buba (2009) also argue that a significant number of the widespread EAT/DRINK metaphors in Hausa “correlate ontologically with the core meanings of these two bodily consumption verbs, and so have a nonarbitrary, real-world grounding” (230). The present study outlines a more fine-grained analysis as opposed to these,

because of which there are differences between the semantic components identified, but the main findings are similar.

The hypothesis that the internal semantic structure of the verbs can be described by a radial organization of the different senses was not entirely confirmed. Among the senses of the verb *eszik* I have found two which could only be explicated based on a type of animal eating behaviour. (Cf. Croft (2009) who has found several source domains for the metaphorical mappings in which the English verbs *eat* and *feed* are engaged: HUMAN EATING and ANIMAL EATING). Moreover, in several cases, we witnessed more complicated patterns in meaning extension, which could be described as the blending of conceptual contents of the primary meaning of the verb and the conceptual content evoked by some of its actual arguments. This could be easily seen in the change of the constructional choices of the verb in the different senses. We could see examples of this among the extended meanings of both verbs (see especially subsections 2.6., 2.7., and 3.4., 3.5. respectively).

The cases termed as *blending* in the paper, however, are not all the same in terms of the constituents engaged. Some show the blending of two conceptual frames, others show the blending of two constructional patterns, and yet others show both conceptual and constructional properties blended. This calls for a more directed analysis in a blending theory setting in order to be able to deliver a precise delineation of the types of blending engaged in verbal polysemy.

Many figurative meanings seem to be the result of meaning shift triggered by common components we experience in very different perceptions. These common components show resemblance, but only on a schematic base. There is a sense of consumption in both eating and fuel consumption of machines, and a sense of adding something into a container in both feeding a baby and in feeding emotions in someone. The experiences *per se* are quite different, but schematically, we can find the components that motivate their verbalization with the same verb.

Regardless of whether a figurative meaning can be shown to be motivated by common components of the actual perception and the prototypical situation or by some other conceptual content, there can be more complex cases of meaning shift in terms of multiple sources. In the sample, I have found evidence for change of constructional properties on the influence of another verb with similar meaning (e.g., the verb *tetszik* ‘like’ in the same meaning of the verb *eszik* ‘eat’; see subsection 2.4. for details). But studies on the sound form of lexical units with similar meanings (e.g., verbs expressing manner of speaking, or adjectives expressing the spoiled, more inferior element of a category in Hungarian) suggest that sound form might also be a property that can induce approximation in meaning, that is, semantic change (see Szilágyi 2015, Dimény 2018).

All these are in perfect accordance with the words of Fauconnier and Turner: “language does not represent meaning directly; it instead prompts for the construction of meaning in systematic fashion” (2003: 89–90). This brings into attention the argumentation of Raukko who sees polysemy as “patterns of flexibility in (lexical) meaning” (2003: 161). He argues for a more loosely structured “flexible ‘mass’” showing up in the network of the semantically plausible links in verbal polysemy. If analogy at large plays a role in these mechanisms, polysemy as a pattern of flexibility might be a method of providing an extensive grasp over the phenomena.

Through the analysis, I believe, I have managed to show that a cognitive-functional approach does make possible the revealing of all motivation in verbal polysemy, at least in some verbs. This is due to the encyclopaedic view that it adopts in linguistic analysis. Nonetheless, there are several limitations to the analysis presented here. Among these, we need to mention first that constructional criteria have been considered, but the analysis is short of a systematic account of all constructional patterns related to the particular senses. A purely constructional approach might shed light on yet other blending cases in the uses of these verbs. Secondly, being a compositional analysis, it cannot be considered to be a sample of how verbal meaning is stored in linguistic knowledge, because it is not probable that it is so. However, the fact that differences of meaning extension in verbs can be described as metaphorical or metonymical extension based on differing components, suggests that compositionality might be an issue to further analysis.

5. Summary

In the paper I have analysed the figurative uses of two Hungarian verbs, *eszik* ‘eat’ and *táplál* ‘feed’. For the analysis I have used a corpus sample of 2500 matches from the Hungarian National Corpus. I have only searched for uses without a prefix, because those can change both the meaning and the constructional patterns of a verb. I have manually abstracted the figurative uses of the verbs from the sample, leaving out the uses in which the activity is performed by a person or an animal and with regular food. This resulted in a corpus sample of 117 instances for *eszik* and 442 instances for *táplál*. The great difference between the proportions of figurative uses, I believe, is due to the fact that figurative uses of *táplál* are more productive (see especially subsections 3.3. and 3.4. for this). The most frequent figurative uses of *eszik* are related to the consuming of fuel/energy of some machine or device. The verb *táplál* also has figurative uses referring to the fuel consumption of machines. Moreover, this is not the only conceptual frame in which the figurative meanings of the two verbs overlap. There is a partial overlap in expressing emotional

states, feelings and existential needs (living on something that someone or something provides), which are present as possible meaning extension links in both verbs. These overlaps are, naturally, due to the fact that the primary (or prototypical) meanings of the verbs also overlap. In their primary meaning, they express two different profiles of the same perception.

My hypothesis was that it is possible to provide an exhaustive semantic description of the figurative uses of the two verbs, *eszik* and *táplál*, based on the detailed components of the prototypical situations. This would have resulted in a radial semantic organization of the verbs. However, I have found that at least two senses of *eszik* 'eat' cannot be explained starting from the prototypical meaning. In subsection 2.5., I have argued that the meaning 'someone hurts another person on purpose' has as its source knowledge of particular animal behaviour, or the ANIMAL EATING conceptual frame. Among the proverbial uses of the verb (subsection 2.9.), I have found another instance in which the meaning of the verb can be described by taking into consideration knowledge pertaining to the feeding of particular animals (e.g., dogs). In other cases, one figurative meaning seems to strengthen the development of another (see subsection 2.7.). These cases undermine the presumption that the semantic organization of verbs can be exhaustively described by common properties with the prototypical meaning. This means that, at least for some verbs, a radial category organization is not appropriate, but rather a family resemblance description is needed, and a wide variety of possible sources needs to be taken into consideration for all the semantically plausible links to be covered.

Generally, we consider figurative uses that are motivated by the primary meaning as metaphorical extensions. I have shown however, that there are several cases that can be described more appropriately as conceptual blending of the verbal semantic structure and the elements of the conceptual frame pertaining to one of its arguments. We can conclude that the sources for semantically plausible links to meaning extension have several sources in verbs. The primary or prototypical meaning is one of the possible sources, but the verbal meaning can blend with the meaning of other words appearing in the construction. As a sequel to this case study, a systematic analysis of the constructional patterns could be fruitful in a blending theory framework. This could account for a higher precision for the constructional property changes in parallel with blended meaning.

Abbreviations

1 = first person; 3 = third person; ACC = accusative; ART = article; CAU = causative; COMPA = comparative (adjective); DEF = definite; ELA = elative; GEN = genitive; ILL = illative; INE = inessive; INF = infinitive; NEG = negative; NOM = nominative; PAST = past; PFV = perfective; PL = plural; PRES = present; SG = singular; SUP = superessive

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