



UDC 811.511.141'366.593=111 Original scientific article Received on 01.03. 2018 Accepted for publication on 19.09. 2018

Judit Kleiber University of Pécs, Hungary

Similar intentions with different underlying wishes: Intensional profiles of imperatives in Hungarian*

The paper investigates imperative sentence types in Hungarian focusing on the pragmasemantic contribution of discourse markers. It follows Lauer (2013) in assuming that – though illocutionary force varies widely – sentence types can be associated with conventions of use. The aim is to capture how the addition of extra elements can specify the domain defined by the generalized pragmasemantic representation of imperatives. For the analysis, the formal dynamic discourse- and mind-representation theory \Re eALIS (Alberti & Kleiber 2014) is applied. The paper presents how the central component of imperatives can be captured with an intention-based axiom, and how the pragmasemantic description of the numerous uses – often signaled by discourse markers – can be generated by "monotonously increasing" the basic *intensional profile*. This typically means the specification of the formula characterizing the interlocutors' desires behind the utterance, and/or adding elements representing authorities of various kinds.

Key words: imperatives; discourse markers; pragmasemantic analysis; BDI states; authority.

1. Introduction

The paper investigates imperative sentence types in Hungarian focusing on the pragmasemantic contribution of discourse markers. Imperatives in Hungarian as well as in other languages tend to be associated with a wide (and rather inhomogeneous) range of speech acts, such as command, warning, request, advice, permission, concession, etc. (Kaufmann (2012: 14): the *functional inhomogeneity prob*-

^{*} I am grateful to EFOP 343 for financial support.



lem). When the speaker utters a simple imperative sentence, one without discourse markers or special intonation, the interpreter can only rely on contextual factors to identify the speech act. The addition of extra elements, however, can narrow the possibilities. The main aim of this research is to provide a uniform pragmasemantic description for imperatives that can capture the essence of imperatives as well as the conditions of the various uses frequently signaled by discourse markers.

As a starting point, this paper agrees with Lauer (2013) in supposing that there must exist some kind of conventionalized meaning for every sentence type. The *imperative convention* he formulates in his anti-representational Dynamic Pragmatics states that "an utterance of an imperative conventionally commits the speaker to a preference for the imperative to become fulfilled" (Lauer 2013: 136). His observations are mostly in harmony with how imperatives are analyzed in our approach. It can be argued though that the framework of eliminative possible-world semantics he applies has some weak points theoretically (Pollard 2008) as well as practically (Alberti & Kleiber 2012).

This paper intends to formalize the core meaning of imperatives in a representational framework. It also aims at generating the representations of the various uses of imperatives from the description of the core meaning in a monotone increasing way, and thus offering a more precise and thorough pragmasemantic analysis of imperatives. In the applied framework ReALIS (Alberti & Kleiber 2014), the interlocutors' mental states are represented: the addresser's beliefs, desires, and intentions (BDIs) regarding the eventualities of the outside world, own mental states (BDIs) and those of others – typically the addressee –, as well as authorities. The paper demonstrates that the difference between the various speech acts can be captured by taking the relevant authority-related conditions into consideration on the one hand, and representing the interlocutors' different desires on the other.

The paper is organized as follows. Section 2 introduces some basic concepts regarding the (pragma-)semantics of imperatives from the literature, and outlines Condoravdi & Lauer's (2012) approach. The applied theoretical framework, ReALIS, is introduced briefly in Section 3. Section 4 is devoted to the analysis of the data. It describes the *basic imperative intensional profile* that captures the core meaning of imperatives. Then it elaborates on the pragmasemantic contribution of the different discourse markers: what extra axioms should be added to the main profile in order to generate the different shades of meaning. Finally, Section 5 draws some conclusions.



2. Theoretical background: the (pragma-)semantics of imperatives

In the literature (e.g. von Fintel & Iatridou 2017; Halm 2017), two main types of imperatives are differentiated. "Strong" imperatives express deontic necessity: they convey directive force and thus create obligations on the addressee to make the given eventuality true. Speech acts like *command, request, advice*, or *plea* belong to this type. In contrast, "weak" imperatives express deontic possibility, as they do not create obligations. The second type is constituted by permission statements: *permission, acquiescence*, or *indifference*. However, the classification of speech acts into the two main categories is not always evident; *offer/invitation* and (the types of) *wish* are probably the most controversial.

To formally capture the meaning of imperatives in all its heterogeneity, numerous accounts have been proposed. This paper only mentions a few, each following an anti-representational approach. Portner (2007) proposes the manipulation of the addressee's To-do List (TDL), that is, a set of propositions he is committed to make true. As pointed out by Condoravdi & Lauer (2012) among others, this approach handles strong imperatives effectively, but it is problematic in the case of weak imperatives, and wish-type uses in particular. To fix this problem, Halm (2017) proposes the List of Actions Under Consideration (LAUC) which is to substitute the TDL in the case of weak imperatives.

In von Fintel & Iatridou's (2017) work, a modification is suggested to the TDLapproach. They propose an analysis where uttering an imperative brings about a possible addition to the addressee's TDL, and the choice between the various speech acts depends on the (varying) degree of speaker endorsement. In their account, an imperative (as well as a declarative or an interrogative) carries maximal speaker endorsement by default, which corresponds to the (necessary) addition to the addressee's TDL. However, it is possible to utter a sentence with lower level of speaker endorsement, which is sometimes signaled by linguistic means (such as discourse markers), other times it is indicated only by contextual factors. They propose that acquiescence and indifference uses arise exactly when an utterance is made without speaker endorsement, thus the addressee is fully responsible to decide whether to add the content to their TDL or not (von Fintel & Iatridou's 2017: 28). In contrast to their account, Halm (2017) argues for a binary distinction between strong and weak imperatives, and claims that the (gradual) degree of speaker endorsement only plays a role in the differentiation of the subtypes within the two main categories. It helps to separate, for instance, order and advice within strong imperatives, or *permission* and *indifference* within weak imperatives.

In what follows, Condoravdi & Lauer's (2012) and Lauer's (2013) approach is



introduced in more detail. They point out that Portner's (2007) account has difficulty with several types of imperatives. The problem lies in that "the addressee of an imperative automatically becomes committed to making the content of the imperative true" (Condoravdi & Lauer 2012: 55). They argue that this seems right for order uses, but it is against intuition in the case of imperatives that express weaker directive force such as requests or pleas, which do *not* (directly) create addressee obligations "(though they may be uttered in the hope that the addressee takes on a commitment)" (Condoravdi & Lauer 2012: 55). Non-directive uses (wish, permission, advice) are even more problematic.

Some of these limitations could be overcome by applying one of the above mentioned modifications on Portner's (2007) original account (von Fintel & Iatridou's or Halm's); addressee-less wish uses (e.g. 'Please, don't rain!'), on the other hand, still pose a problem for his approach. Therefore, Condoravdi & Lauer's (2012) and Lauer's (2013) *imperative convention* makes reference only to the addresser: "When a speaker utters an imperative that has the content φ , he thereby commits himself to prefer φ to be actualized" (Lauer 2013: 139). They argue that in order to account for all possible uses of imperatives, strong and weak types alike, their core meaning (uniform effect) cannot be more specific than this statement, and the varied uses of imperatives are to be derived by considering contextual (pragmatic) factors. "Imperatives do not create obligations as a matter of course by linguistic convention, but give rise to obligations only indirectly when the context is right" (Condoravdi & Lauer 2012: 45).

They divide the possible uses into four groups based on two main factors: addressee inducement and speaker desire. In this way, they differentiate between directive, advice, wish-type and permission-type uses. Furthermore, the varied speech acts within each group can sometimes be subcategorized depending on a number of other contextual conditions. In what follows, first the relevant contextual factors are introduced, which Condoravdi & Lauer (2012) and Lauer (2013) rely on, then a table is presented (Table 1), which was created on the basis of their work, and enumerates several speech acts along with their contextual properties. The plus sign means that the given condition holds, while minus stands for the opposite. If both values are displayed, it indicates that they primarily argue for the first option, but somewhere in the paper(s) they seem to assume the second one in some weakened form.

(1) Addressee *inducement*: if the imperative acts as an inducement for the addressee to bring about the content. The idea corresponds roughly to Portner's (2007) addition to the addressee's TDL; however, there is no obligation in the con-



dition *per se*, it is only an attempt to get the addressee to do something, and the obligation may (or may not) arise in the context.

(2) Speaker *desire*: if the imperative "conveys that the speaker wants the content to become reality" (Condoravdi & Lauer 2012: 38). The speaker's desire is a controversial topic in the literature, the paper will elaborate on it in Section 4.

(3) Addressee *desire (preferences)*: if the addressee currently has interfering desires (preferences) according to the speaker. It is not always clear though what they mean exactly by this condition; if it is about the addressee's desire, preference, goal or intention – the paper will address this issue later in this section.

(4) Addressee *control*: if the addressee has control about the content, meaning that it will be realized if and only if the addressee would choose it.

(5) Deontic *authority*: "the speaker believes himself to have deontic authority over the addressee" (Lauer 2013: 144), i.e. the addressee *must* comply to the speaker. The question may arise that what is the addressee's motivation for fulfilling the imperative if the speaker lacks deontic authority. He suggests that agents are supposed to be generally *cooperative-by-default*, meaning that "if the action requested by a speaker does not 'cost' the addressee anything, i.e., if it does not interfere with his private preferences, he will act so as to fulfill the request" (Lauer 2012: 148).

Types of uses	Speech acts	Induce- ment	sp's desire	ae's desire	ae's control	deont. auth.
1	order	+	+	_	+	+
directive	request	+	+	not against	+	_
uses	plea	+	+	against	+	—
advice uses	advice with shared goal	+/_	+	+ for g	+	_
	disinterested adv	+/_		+ for g	+	—
wish-types	well/ill-wish		I			
uses	ae-less/absent w.	_	+		_	
permission	permission/offer	_/+	_	+	+	+
uses	concession	_/+	against	+	+	+

Table 1. Types of imperative and their contextual properties, based on Condoravdi & Lauer (2012) and Lauer (2013)

Abbreviations used in the table (see 1–5 above): speaker (sp); addressee (ae), authority (auth.), goal (g).



As a summary of the discussion of Condoravdi & Lauer (2012) and Lauer (2013), attention is drawn to some problematic points. In order to overcome these limitations, this paper aims to offer an alternative account for the pragmasemantics of imperatives, which is intended to provide a more thorough analysis.

Firstly, using anti-representational means may require cumbersome analysis. This paper argues that a representational approach can provide simpler solutions.

Secondly, Lauer's (2013) Dynamic Pragmatics disregards the epistemic precondition of uttering an imperative, namely that the speaker assumes that the eventuality in question (the content of the imperative) does not hold, and also that the addressee is aware of this fact as well. For instance, telling someone to sit down is odd if the person is apparently sitting.

Thirdly, numerous terms are introduced for the description of similar concepts, such as *(effective/non-effective) preference, desire, endorsement, inducement, enticement*; and it is not always clear how the terms are related to each other and what they mean exactly in a particular setup (especially in the case of wish-type uses). This paper argues that the clear differentiation between intentions and desires can provide a more profitable solution, and the representation of the main three modalities – beliefs, desires and intentions (BDI) – supplemented by a fourth one – authority – can result in a more transparent description.

Finally, their analysis of certain uses (e.g. advice) recognizes that the eventuality an imperative expresses can differ from the eventuality the interlocutors' preferences actually refer to. However, it can be argued that this is a general phenomenon, rather than restricted to only a few types. In the case of the imperative 'Make me a sandwich (please)!' for instance, it is reasonable to assume that the desire behind the utterance concerns an eventuality about *eating* a sandwich instead of making one. Obviously, these eventualities are connected, but the exact nature of the connection varies. This topic will be elaborated on in Section 4.

3. Methodology: a brief introduction to ReALIS

The applied theoretical framework ReALIS 'Reciprocal And Lifelong Interpretation System' (Alberti 2011) can be characterized as a discourse-representationbased (Kamp et al. 2011; Asher & Lascarides 2003) formal semantic theory. It offers a representational solution for numerous phenomena which turned out to be problematic for the anti-representational approach. It is argued that during a conversation the interlocutors' goal is to gain information about each other's minds at least as much as about the outside world. In the ReALIS framework, such stubborn EZIKOSLOVLJE 19.3 (2018): 365-391

problems are accounted for as expressions with the same reference/meaning/truth value, accessibility of referents, modal anchoring and intensional identity. For more on this topic, see Alberti & Kleiber (2012).

The basic argument against representationalism comes from the Amsterdam School (e.g. Groenendijk & Stokhof 1991) saying that it is theoretically problematic to add an extra level between the world model and the linguistic form. ReALIS eliminates this problem by reorganizing DRT via a radically new ontology (Alberti & Kleiber 2014). The innovative feature is that (all) representations are regarded as mental states – the interpreter's beliefs (B), desires (D), and intentions (I) –, which are taken to be part of the world model. In this way, no "extra level" is postulated. Thus, the major benefit of representing the interlocutors' minds on the basis of this new ontology is that it enables a more fine-grained analysis of linguistic phenomena – without these complex structures causing any conceptual problem. Another gain of referring to mental states is that ReALIS deals with similar questions as researchers who have been studying the process of mentalization for several decades (Theory of Mind; e.g. Wimmer & Perner 1983). This connection defines a new field of research: to formalize cognitive/psychological issues (Alberti et al. 2016).

In the framework of \Re eALIS, the evaluation process is based on a generalized version of the formal semantic operation pattern-matching. Since a homogeneous system is assumed for representing the discourse, the world, and the human mind, the same mechanism can be applied for extensional and intensional evaluation. In the process, the interlocutors' momentary discrete mind states are to be mapped into domains defined by the (linguistically encoded) *intensional profiles* of the relevant sentence types. An intensional profile is to represent the pragmasemantic contribution of a clause performed in a discourse: the interlocutors' beliefs, desires, intentions, and authority concerning the current piece of information. It consists of finite components of *worldlets* which minimally encode one meaning component each, such as a desire for an eventuality, or a belief about the intentions of the addressee. A worldlet can be regarded as a labeled DRS-like structure where eventuality *e* is "inside" the box, and the *label* encodes the five essential properties which belong to *e* in this particular case (1).

(1) The worldlet labels of *ReALIS*

M: Modality	belief (B), desire (D), intention (I), authority (A)
I: Intensity of M	$\gamma \in [0,1]$, where 1 corresponds to maximal, 0 to none
R: host of the worldlet	addresser (AR), addressee (ae), others (r,)
T: time parameter	$ au, au^- (< au), au^+ (> au), \ldots$
P: polarity value	+ (true), $-$ (false), 0 (neutral)



For instance, if the sentence is *I know that Peter loves Mary*, then e='Peter loves Mary', and the label encodes its status: AR knows (maximally believes) at time τ that the given eventuality *e* holds (+): $\langle B, 1, AR, \tau, + \rangle$.

Every parameter can have multiple values, which allows underspecification in the representations. For instance, the intensity of a modality can vary within a range, or the polarity value may be "non-neutral" (+/-). Furthermore, a worldlet can be embedded in another worldlet which makes it possible to refer to information states, resulting in recursively built worldlet-structures. For instance, the series of level labels $\langle B,1,AR,\tau,+\rangle\langle D,1,ae,\tau,+\rangle$ assigned to a worldlet encodes that "I am sure that you long for it". Finally, a key property of ReALIS is that a piece of information frequently appears in several worldlets simultaneously. When an eventuality e is represented in the interlocutor's mind, it is "scattered" like a prism scatters images multiplying a single image - this is why this phenomenon is called a prism effect. For instance, one can desire and also intend to do something (placing e in two worldlet boxes appropriately), while it might also happen that one comes to a decision concerning an intention in spite of their opposite desires (placing e in the negative segment of the worldlet of desire). Therefore, a set of finite sequences of level labels is assigned to an eventuality referent. Its mathematical definition encodes thus that intensional profile is an element of the an set $P((P(M) \times P(I) \times P(R) \times P(T) \times P(P))^*)$, where the power set of the set of finite sequences of level labels. The first power set symbol (bold P) captures the prism effect, the internal ones are responsible for underspecification, and the Kleene-star at the end enables recursion.

As for the division of labor between semantics and pragmatics, in ReALIS meaning construction is divided as follows. Semantics is responsible for cumulating the propositional content from morpheme to morpheme. Pragmasemantics is to explore the conventionalized uses of the varied sentence types, and represent the information in the intensional profiles, which make reference to the (conventionalized) addresser and addressee roles. Finally, pragmatics examines the (mis)match between these roles and the mental states of the actual speaker and listener in a particular context. In harmony with Oishi's (2014) thesis, it is to be evaluated from clause to clause whether the speaker is acting legitimately, sincerely, and/or adequately, while, in the on-going discourse, playing the addresser's role. With this approach, various pragmatic factors can be accounted for, such as the Gricean maxims (e.g., the sincerity or the relevance of an utterance), irony, politeness, etc. (For more on this matter, the interested reader is referred to Alberti et al. 2016).

EZIKOSLOVLJE 19.3 (2018): 365-391

Thus, the main objective of our research is very similar to that of Lauer's (2013), namely, to specify the conventionalized meaning of sentence types (cf. Lauer's declarative, imperative and interrogative convention), and then formalize the contribution of the relevant pragmatic factors in order to obtain the various uses. In this sense, ReALIS can be regarded as the representational counterpart of Lauer's (2013) (anti-representational) Dynamic Pragmatics. The first step is to explore the different sentences types, and provide their pragmasemantic descriptions (intensional profiles). (For an overview of all the main types, see Alberti et al. (2016: Section 3). The analysis of interrogatives is discussed in Kleiber & Alberti (2014).) The difference between these profiles can be captured with only a few parameters, which makes the system suitable for computational implementation (Nőthig & Szeteli 2018). The next step is to achieve compositionality at the highest possible level: to derive increasingly more intensional profiles and/or profile elements from smaller parts using compositional processes.

ReALIS applies several means for providing compositional analysis, operations defined on intensional profiles: The union and/or specification of profile elements to simply put together compatible parts, and thus create modified intentional profiles. Concatenation, which is suitable for deriving the profiles of mixed-type sentences, such as *interrogative imperatives*, i.e. questions targeted at commands (Kleiber & Alberti 2017). The formal operation of semantic blending (based on the cognitive linguistic notion), which is capable of mixing partially incompatible meaning components, such as mood and modality (Alberti et al. 2014). Finally, function composition and the process of addressee-accommodation to derive more complex sentence types from simpler ones: declarative, imperative, and interrogative from exclamative, optative, and *vajon*-interrogative 'I wonder', respectively (Kárpáti & Szeteli 2018).

The present paper contributes to this task by proposing a compositional analysis of imperatives. It provides a basic, partially underspecified profile, and formalizes the pragmasemantic contribution of various discourse markers in a way that the specified profiles are calculable via combining the given profile elements using union and specification. It is important to note that while some discourse markers can be assigned close to uniform meanings throughout the various uses, most of them have a much more complex contribution. For instance, *hát* 'well' can indicate many speaker attitudes (e.g. uncertainty, certainty, emphasis, consequence) depending on sentence type, stress pattern, and context. Therefore, their pragmasemantic descriptions should be context-dependent or extremely underspecified. This paper follows the former path.

4. Results: the intensional profiles of various types of imperatives in Hungarian

This section proposes a pragmasemantic analysis for imperatives in the representational framework \Re eALIS. Several types of Hungarian imperative sentences are introduced that differ in discourse markers. It is argued that (1) the conventionalized meaning of imperatives can be described with the *basic imperative intensional profile* (Section 4.1), which belongs to the basic (discourse marker-free) type of imperative sentence; and (2) the contribution of various discourse markers – signaling different uses – can be captured by "monotonously increasing" this basic profile (Section 4.2). Since the paper mainly focuses on the interlocutors' desires, it presents the sentence types starting from the ones expressing strong self-interest toward the ones indicating more and more cooperative behavior.

4.1. Basic profile

In the ReALIS approach, the pragmasemantic contribution of any sentence type is expressed by referring to the interlocutors' beliefs, desires, intentions, and authorities concerning the eventuality in question. For the basic imperative, i.e., the one without extra elements (2), this piece of information is encoded in the *basic imperative intensional profile*.

(2)	Ül-j	le!	command/request/permission/etc.
	sit-SBJV ¹ .2SG	down	
	'Sit down!'		

It is argued that there are three relevant components that constitute the basic profile, i.e. express the core meaning of imperatives: two axioms that represent the interlocutors' beliefs, one (central) axiom for intentions, and an underspecified formula describing desires. It is argued that the need for authority-related axioms emerges only in particular contexts, thus they are not part of the conventionalized profile of imperatives.

The first component of the basic profile concerns the interlocutors' *beliefs* and can be regarded as an epistemic precondition for the imperative to act as a felicitous utterance (3). It expresses that the addresser (AR, sometimes referred to as 'I') assumes that the given eventuality (the content of the imperative) does not hold, and also that the addressee (ae, sometimes referred to as 'you') is aware of this fact

¹ In harmony with Varga (2013), we assume that, due to their full paradigms, imperatives in Hungarian are in the subjunctive mood.

as well. For instance, telling someone to eat their soup is odd if the person's plate is empty. (It does not mean, however, that under no circumstance an imperative like this can be uttered, but then this utterance will fall outside the conventionalized use of imperatives.)

EZIKOSLOVLIE

19.3 (2018): 365-391

(3) $\langle B,1,AR,\tau,-\rangle$; $\langle B,\gamma,AR,\tau,+\rangle\langle B,1,ae,\tau,-\rangle$, where preferably $\gamma=1$ 'I know that *e* does not hold; and assume that you also know that.'

The central component of the basic imperative profile expresses that AR's *intention* is to achieve eventuality e through influencing ae's intention to make e happen (4). This means that in \Re eALIS, it is the speaker who takes on a commitment, similarly to Lauer's (2013) imperative convention.

(4) $\langle I, 1, AR, \tau, + \rangle \langle I, 1, ae, \tau^+, + \rangle$

'I want you to intend (at a later time τ^+) that *e* be realized.'

As for the interlocutors' *desires*, it is argued that the precise values are unspecified in the case of the basic imperative, since in some uses it is not AR but as who longs for *e*. The formula in (5) describes this observation. It expresses that some kind of positive desire has to be behind uttering an imperative. The host of this desire (r*) is typically AR, often ae, and occasionally someone else. The point is that – according to AR – the summed intensity of their desire ≥ 1 (Szeteli 2017).

(5) ⟨B,γ,AR,τ,+⟩⟨D,γ_{r*},r*,τ,+⟩; where Σγ_x ≥1 (x∈r*), and preferably r*={AR,ae}
 'I assume that someone (I, you, maybe someone else) wishes for *e* to be fulfilled.'

This is a general formula which is also a part of the declarative and the interrogative profile. It can capture the fact that it is not *ab ovo* decided whether AR is led by self-interest or cooperation while performing either a declarative, or an interrogative, or even an imperative. In the present discussion, the formula can account for the observation that behind uttering various types of imperatives – while the intentions are rather similar – the desires can be very different: AR can act on selfinterest ($\gamma_{AR}=1$), inclination for cooperation ($\gamma_{ae}=1$), the assumption of a third party's interest ($\gamma_r=1$; r \neq AR,ae), or some kind of combination of the above.

As for the distinction between desire and intention, Mann (2003) differentiates between intended actions and intended effects, and argues that "(i)ntended effects typically are states of affairs that the intender desires or prefers, while intended actions typically involve some identifiable process within the capacities of the actor(s)" (Mann 2003: 170). Thus, 'intended effects' are called desires in \Re eALIS. It can also be said that AR is in the preparatory phase of *e* (Farkas & Ohnmacht 2012) in the case of intentions, but not (necessarily) in the case of desires.

It can also be observed that sometimes the eventuality the interlocutors intend (e) differs from the one their desires actually relate to (e'). The connection between e and e' varies. They can refer to different eventualities that are associated in some way, such as making a sandwich and eating one, or taking the medicine and getting better. They can refer to different phases of the same eventuality, for instance the cumulative phase ('Stand up!') and the result phase ('be standing'). For the sake of uniformity, it is reasonable to assume different e and e' in general, allowing that e=e'. As for the connection between the associated eventualities, it is to be calculated on the basis of a supposed network of predicates, to be more precise, of its cognitive counterpart in the interlocutors' minds. This network consists of lexical information and logical implications, but also of practical and cultural knowledge, i.e. "saved" segments of past eventualities – due to the 'lifelong' nature of \Re ALIS (Kleiber & Alberti 2014).

4.2. Specified profiles

This section elaborates on the pragmasemantic contribution of different discourse markers: compared to the basic profile, what specifications and/or extra axioms are needed in order to generate the different shades of meaning.

To account for the various uses that the addition of extra elements indicate, the different contextual conditions should be taken into consideration. In the framework of \Re eALIS, these conditions can be represented by two kinds of modification on the basic profile. On the one hand, the specification of the general formula in (5) describing the interlocutors' desires, which can reveal that it is AR or ae (or perhaps someone else) who longs for the fulfillment of *e*. On the other hand, the addition of different authority-related conditions, which can capture deontic authority, and addressee's control (cf. Table 1). (In \Re eALIS, having authority over something includes both *right*, and *ability*.)

Before turning to the contribution of discourse markers, a different kind of specialized profile is mentioned. Hungarian is different from English in that an imperative sentence can appear in any person and number (cf. Footnote 1). When the third person is used, AR calls on ae to influence a third person to do something. Consider (6), for instance (one parent to the other).

(6) Vegye be (a gyerek) a vitamin-t! take.SBJV.3SG in the kid the vitamin-ACC 'The kid should take his vitamin!' This usage does not realize the most typical case for imperatives, the one where Ag=ae (2^{nd} person verb forms). There is a contextual precondition in place, namely that AR considers ae to have influence over the agent (i.e. the parent over the child). In this case, an extra axiom is added to the basic profile encoding that – in AR's assumption – ae has *authority* over the intentions of this other person *r* (7).

EZIKOSLOVLIE

19.3 (2018): 365-391

(7) $\langle B,\gamma,AR,\tau,+\rangle\langle A,1,ae,\tau,+\rangle\langle I,1,r,\tau^+,+\rangle$, where r=Ag (the agent of *e*) 'I assume that you have authority over *r*'s intentions regarding *e*.' somewhat simplified: 'I assume that you can tell *r* to do *e*.'

The addition of various discourse markers can specify the situation narrowing the possible speech acts. In what follows, the role of these elements are discussed in three groups: (A) directive, expressing self-interest; (B) directive, indicating cooperation; and (C) non-directive, cooperative. At the end of the section, wish-type uses are also analyzed – as a fourth group (D) expressing non-directive use with self-interest –, despite that wishes are not signaled by discourse markers.

(A) The first group of discourse markers includes *azonnal* 'at once' (8); *nekem* 'to me' (cf. Varga 2013) (9); a special, lengthened ("whining") intonation (10); and the expression *légy szives* 'please' with a normal intonation (11). They all indicate strong self-interest: AR really wants eventuality e to happen, that is, AR's intentions and desires are both positive toward the fulfillment of e. As for AR's suppositions about ae's information state: in the case of (8–10), AR is fairly sure that ae is against (or not interested in) the fulfillment of e. Discourse markers *azonnal* (8) and *nekem* (9) indicate a kind of *command*, while the special intonation in (10) indicates entreaty or *plea* (note that *nekem* does not act as a discourse marker in 10). With *légy szives* 'please' (11), AR supposes that ae is not against e, and hopes to make ae wish for the fulfillment of e at least a little (for AR's sake). Thus, we get the speech act of *request* (in its form; it can still be meant as a command though).

- (8) Azonnal gyere ide! command at_once come.SBJV.2SG here 'Come here at once!'
- (9) *Tedd le nekem* (*az-t*) *a telefon-t*! command/threat put.SBJV.2SG down DAT.1SG that-ACC the phone-ACC 'Hang up the phone (for me)!'
- (10) *Vegyél nekem fagyiii-t (légyszi-légyszi)!* plea buy.SBJV.2SG DAT.1SG ice_cream-ACC (pretty please) 'Buy me an ice cream (pretty please)!'



request

(11) *Gyere ide, légy szíves*! come.SBJV.2SG here please 'Come here, please!'

In order to represent that the addition of all these elements to a basic imperative indicates self-interest, the basic imperative intensional profile is specified so as $\gamma_{AR}=1$ in the formula (5) above. Another common condition, due to the directive nature of this type, is that AR assumes that ae is able to carry out the action, i.e., has authority over *e* (12).

(12) $\langle B,\gamma,AR,\tau,+\rangle\langle A,1,ae,\tau,+\rangle$ 'I assume that you have authority over *e* / you can do *e*.'

The difference between these uses can be captured via two conditions. On the one hand, when the imperative contains *azonnal* (8) or *nekem* (9), another authority axiom (13) is added to the profile, which represents that AR believes to have authority over ae's intentions regarding e (which roughly corresponds to Lauer's (2013) deontic authority). This condition is present for all command-type utterances for that matter. It is not present, however, in the case of plea and request (or any other type).

 $(13)\langle B,\gamma,AR,\tau,+\rangle\langle A,1,AR,\tau,+\rangle\langle I,1,ae,\tau^+,+\rangle$

'I assume that I have authority over your intentions about e / I can tell you to do e.'

On the other hand, when the imperative contains the special intonation accompanying plea (10), AR assumes that as is against the fulfillment of e. So another dimension is taken into consideration: the opposing stance, that is, the interlocutors' negative desire toward e. In this case, (14) is added to the profile.

 $(14)\langle B,\gamma,AR,\tau,+\rangle\langle D,\gamma',ae,\tau,-\rangle$

'I assume that you have negative desire for *e*.'

In the case of commands with *azonnal* or *nekem*, this opposition is also present, but not (necessarily) in plain commands, and neither in requests. On the contrary, for requests it is presupposed that ae is not against the fulfillment of e (15).

(15) $\langle B,\gamma,AR,\tau,-\rangle\langle D,\gamma',ae,\tau,-\rangle$

'I assume that you do not have negative desire for e.'

As for compositionality, the specialized profiles can be constructed by using the union operation (since the meaning components are compatible), i.e. putting together the profile elements of the basic imperative (3-5) with the ones presented in (12-15), and specifying the formula in (5).

Table 2 summarizes the modifications discussed above. It shows that two axioms are present in all cases, while the other two axioms differentiate between the uses.

EZIKOSLOVLIE

19.3 (2018): 365-391

Group (A): self-interest Discourse markers / Speech acts	Specified desire (5)	ae's auth. (12)	AR's Auth. (13)	Negative desire (ae) (14)
<i>azonnal</i> 'at once', <i>nekem</i> 'to me' (command)	$\gamma_{AR}=1$	+	+	+
lengthened intonation (plea)	$\gamma_{AR}=1$	+		+
légy szíves 'please' (request)	$\gamma_{AR}=1$	+		—
(commands without extra elements)	$\gamma_{AR}=1$	+	+	_

Table 2.	Specialized	profiles	of imperatives,	group (A): self-interest
	1	1	1 ,	

(B) The second group collects such directive uses when AR cooperates: the fulfillment of *e* is (supposedly) ae's wish. So the formula in (5) is specified as $\gamma_{ae}=1$. The particles *csak* 'just' (16), and *már* 'already' (17) belong to this group, as well as the speech act of advice which is sometimes signaled by *hát* 'well' (18). The discourse markers *csak* and *már* can express several speaker attitudes even by looking at imperatives only: *threatening, hastening, encouraging* (Fábricz 1986: 78). In (16), *csak* can signal *encouragement* or *threat* depending on the stress pattern (Gyuris 2008: 644) or other contextual factors. In (17), *már* expresses *hastening*. In both cases, the presence of these elements (still) indicates a directive use, but suggests that, this time, ae's (supposed) wish is on the table.

- (16) *Vedd* csak meg az-t az autó-t! encouragement / threat buy.SBJV.2SG just PERF that-ACC the car-ACC 'Just buy that car!'
- (17)*Hív-d* már el Mari-t randi-ra! hastening call-SBJV.2SG already PERF Mari-ACC date-SUB 'Ask Mari out already!'

The particle *hát* 'well' is one of the most commonly used and also the most heterogeneous discourse marker in Hungarian (Kiefer 1988; Alberti 2016). When added to an imperative (18), *hát* expresses a kind of consequence, a logical response to the preceding discourse and/or the context, and it can usually be substituted or supplemented by *akkor* 'then' (which is in harmony with its diachronically changing meaning; Schirm 2011). This type of imperative mostly conveys the speech act of *advice*. (Note that in the majority of cases, advice-like uses appear without the



presence of extra elements.) In our view, *advice* is still regarded as a directive, though undoubtedly one with a weaker force. The reason could be that the interlocutors' desires for eventuality *e* do not play a part this time; with this utterance, AR merely suggests a logical choice of action. Nevertheless, there seem to be a desire in the background, namely ae's wish for an eventuality *e*' related to *e*.

(18) *Hát* (akkor) keres-s másik orvos-t! advice well (then) look_for-SBJV.2SG another doctor-ACC 'Find another doctor then!'

The common element in all these uses is ae's authority over e(12), due to the directive nature of these types. As for further refinement regarding the interlocutors' desires, when *csak* is used in a threatening tone AR is definitely against e(19).

(19) $\langle D,\gamma,AR,\tau,-\rangle$ 'I am against *e*.'

In the case of advice, two types are differentiated in the literature: advice with a shared goal, and disinterested advice (cf. Condoravdi & Lauer 2012). In \Re eALIS, the difference can be captured by referring to AR's desire. When there is a common goal, for instance at the doctor's (20), AR also wishes for *e*'. In this case, the formula in (5) is realized as an actual summation where γ_{AR} is also positive.

(20) Take these pills!

To find the appropriate associated e' the interlocutors' desire refers to, the above mentioned mental network is employed. In (20), while AR's intention (e) is to take the pills, the common desire (e') is for ae to recover. In \Re eALIS though, it is not necessary for e' to be the same for AR and ae (it does not have to be a *common* goal). As Lauer (2013) points out, the doctor's motivation could be to make extra money (ignoring ae's desire), in which case AR's goal behind the utterance is different from ae's. Furthermore, the doctor's e' can also be constructed from the conjunction of curing the patient *and* making extra money. Similarly, the patient's e'can be composed from 'getting better' and 'not spending too much money'.

(C) In the third group, the contribution of such elements are discussed as *nyugodtan* 'feel free to' (Halm 2017) (21), another lengthened stress pattern (22), and the hortative marker *hadd* 'let' (analyzed later on). When they are added to an imperative, it is clear that AR does not want *e* to be fulfilled for "selfish" reasons, but rather this utterance is made on ae's (or a third party's) behalf. The result is different types of permission statement: *permission, concession, acquiescence*, or *indifference* (von Fintel & Iatridou 2017). The discourse marker *nyugodtan* indicates permission, while the intonation pattern in (22) signals concession.

(21)*Nyugodtan vedd el az utolsó süti-t!* permission calmly take.SBJV.2SG away the last cookie-ACC 'Feel free to take the last cookie!'

ZIKOSLOVLIE

19.3 (2018): 365-391

(22)*Küüüld-jél neki valami-t!* concession send-SBJV.2SG DAT.3SG something-ACC 'Fine, send her something.'

All of these discourse markers indicate a non-directive, cooperative use, when the fulfillment of *e* is ae's (or a third party's) desire, and the purpose of the utterance is to grant authority. In the first two cases (2nd person verb forms), *e* is ae's wish, so the formula in (5) is specified as $\gamma_{ae}=1$. Furthermore, the following authority-related preconditions are added to the profile: (23a), or a more cautious (23b), and (24).

- (23a) (B,γ,AR,τ,-)(A,1,ae,τ,+)
 'I assume that you do not have authority over *e* / you are not allowed to do *e*.'
- (23b) $\langle B,\gamma,AR,\tau,+\rangle\langle B,\gamma',ae,\tau,-\rangle\langle A,1,ae,\tau,+\rangle$ 'I assume that you believe that you do not have authority over *e*.'
- (24) $\langle I, I, AR, \tau, + \rangle \langle A, I, ae, \tau^+, + \rangle$ 'My intention is that you have authority over *e* / you may do *e*.'

So the intentions are modified with this type: the basic imperative intention (4) is backgrounded, since a major condition is missing, namely, ae's authority over *e*. Thus, the main intention of a permission-type imperative will be to grant authority to ae. This solution is in harmony with the literature. For instance, Portner (2007: 357) speculates that in the case of permissions, "it is presupposed that the speaker has the authority to prohibit the act in question". Halm (2017: 2) argues that the effect of weak imperatives "is the lifting of any prohibition that the addressee may have ascribed to the speaker with regard to the action described in the prejacent". Finally, Lauer (2013: 147) supposes that "permission for *p* can be viewed as the retraction or modification of the permitter's existing preferential commitment for $\neg p$ ", i.e., "remove the prohibition against *p*".

The difference between permissions and concessions can be captured (again) by taking the interlocutors' negative desires into consideration. In the case of concessions expressed by this lengthened intonation pattern (22), AR's desire is clearly negative toward the fulfillment of e, so (19) is added to the profile. Still, despite this negative desire, AR decides to grant permission for ae to carry out e. Con-



doravdi & Lauer's (2012) analysis rests on the same observation: "The use of the imperative indicates that the speaker's (limited) endorsement of the content now overrides his desire to the contrary" (Condoravdi & Lauer 2012: 43). In Hungarian, similarly to their English examples, such continuations are infelicitous when AR expresses negative *intention* (with *akar* 'want'), but felicitous when AR expresses negative *desire* (with *szeretne* 'would like' or *bárcsak* 'wish') (25a–b).

(25a) Küüüld-jél neki valami-t! send.SBJV.2SG DAT.3SG something-ACC akar-om, hogy #De én az-t ne küld-j! want-1SG that don't send-SBJV.2SG but I that-ACC 'Fine, you can send her something. But I don't want you to.' $(25b) De \acute{e}n az-t$ szeretné-m. ha nem küld-ené-l! but I that-ACC would like-1SG if send-COND-2SG not / De bárcsak ne küld-ené-l! / but I wish don't send-COND-2SG 'But I wouldn't like you to. / But I wish you would not.'

As mentioned earlier, the hortative marker *hadd* 'let' (26) can express permission, acquiescence, or indifference depending on the context. The possible continuations can differentiate between the uses. Note that *hadd* can also express asking for permission (Szücs 2010), in which case the verb can be in the first and third person, while in the case of granting permission, only the third person is possible.

(26) *Hadd* kiabál-jon! permission / acquiescence / indifference let shout-SBJV.3SG
'He can shout.' (I allow it. / It doesn't bother me. / I don't care.) (also: 'Let him shout.')

The intensional profile of the permission-granting type of *hadd* is very similar to that of other permission uses (*nyugodtan*-type); the difference derives from the verb being in the third person. In this case, it is not ae but this third person *r* (the agent) who longs for the fulfillment of *e*, so the formula in (5) is specified as $\gamma_r=1$, where $r\neq AR$, or ae. Furthermore, the authority-related extra axioms (23a) and (24) are added to the profile in their generalized forms (23a') and (24'), respectively. In the original account of imperatives, every condition is formulated in a form that captures the pragmasemantic contribution of second and third person verb forms alike (see e.g. Kleiber et al. 2016).

(23a') $\langle B,\gamma,AR,\tau,-\rangle\langle A,1,r,\tau,+\rangle$

'I assume that r does not have authority over e / r is not allowed to do e.'



(24') $\langle I, I, AR, \tau, + \rangle \langle A, I, r, \tau^+, + \rangle$ 'My intention is that *r* have authority over *e* / *r* may do *e*.'

There is no agreement on how to analyze offers (invitations). For instance, Condoravdi & Lauer (2012) and Lauer (2013) regard this type as a permission statement, while Halm (2017) categorizes it as a "weakly endorsed strong imperative". In \Re eALIS, it does not have to be one or the other. The intensional profile of offers simply contains both intentions: the basic one (4), and the permission-granting one (24). As for the interlocutors' desires, it is argued that the formula in (5) is specified as an actual summation this time, since an offer usually indicates that both AR and ae wishes for the fulfillment of *e*. So γ_{AR} and γ_{ae} are both positive yielding a ≥ 1 value; and the further specification depends on contextual factors. It can be argued though that in the case of offers, AR not really assumes, but rather hopes (wishes) that ae realize *e*, for instance, take a cookie AR baked.

(D) Although wish-type uses are not signaled by discourse markers in Hungarian, they are discussed briefly for the sake of symmetry, since they realize the nondirective, non-cooperative type of imperatives. Consider the examples (27–30), which are the translations of Condoravdi & Lauer's (2012: 39) original examples.

(27) <i>Gyógyul-j meg</i> heal-SBJV.2SG PERI 'Get well soon!'	g hamar! F. soon	well-wish
(28) <i>Dögöl-j</i> die(rude)-SBJV.2SG 'Drop dead!'	<i>meg!</i> PERF.	ill-wish (curse)
(29) <i>Ne essen</i> don't fall.SBJV.3SG 'Don't rain!'	az eső! the rain	addressee-less wish
	<i>zőke!</i> [on the way to a blind date] blond	absent wish

In these cases, the fulfillment of *e* is AR's wish: $\gamma_{AR}=1$. Curses (28) are different in that AR does not typically wish for *e per se*, but instead a more general *e'* expressing 'something bad'. They are often idiomatic; for instance, instead of (28), the non-rude verb *meghal* 'die' cannot be used (while meant it as a curse). The main difference between well- and ill-wish is that AR supposes that ae's desire is positive toward the first one, while negative toward the second one. As for intentions, in the case of well/ill-wish (27–28), ae clearly does not have authority over *e*



(23a), and thus the basic intention in (4) cannot be satisfied. And in the case of addressee-less and absent wish (29–30), there is no actual addressee, which makes the basic intention in (4) meaningless. Therefore (4) – and also the second part of (3) – become subject to a contextually triggered deletion, resulting in the optative intensional profile, and thus merely expressing AR's desire (31) (Alberti et al. 2016).

 $(31)\langle B,1,AR,\tau,-\rangle;\langle D,1,AR,\tau,+\rangle$

'I know that e does not hold, and I wish for e to be fulfilled.'

As a summary of all the specialized profiles, the relevant contextual conditions are presented in a table (Table 3): how the formula for desires in (5) is specified, and what extra axioms are added to the basic profile in order to capture the pragmasemantic contribution of the various discourse markers. The relevant axioms are repeated below for the ease of reading.

- (32a) $\langle B, 1, AR, \tau, \rangle$ 'I know that *e* does not hold.'
- (32b) $\langle B,\gamma,AR,\tau,+\rangle\langle B,1,ae,\tau,-\rangle$ 'I assume that you also know that *e* does not hold.'
- (33) $\langle I, I, AR, \tau, + \rangle \langle I, I, ae, \tau^+, + \rangle$ 'I want you to intend (at a later time τ^+) that *e* be realized.'
- (34) ⟨B,γ,AR,τ,+⟩⟨D,γ_{r*},r*,τ,+⟩; where Σγ_x ≥1 (x∈r*), and preferably r*={AR,ae}
 'I assume that someone (I, you, maybe someone else) wishes for *e* to be fulfilled.'
- (35) $\langle B,\gamma,AR,\tau,+\rangle\langle A,1,ae,\tau,+\rangle$ 'I assume that you have authority over *e* / you can do *e*.'
- (36) (B,γ,AR,τ,+)(A,1,AR,τ,+)(I,1,ae,τ⁺,+)
 'I assume that I have authority over your intentions about *e* / I can tell you to do *e*.'
- (37) $(\langle B,\gamma,AR,\tau,+\rangle)\langle D,\gamma',r,\tau,-\rangle$ '(I assume that) someone has negative desire for *e*.'
- (38) $\langle B,\gamma,AR,\tau,-\rangle\langle A,1,ae,\tau,+\rangle$ 'I assume you do not have authority over *e* / you are not allowed to do *e*.'
- (39) $\langle I, I, AR, \tau, + \rangle \langle A, I, ae, \tau^+, + \rangle$ 'My intention is that you have authority over *e* / you may do *e*.'



	Discourse markers Speech acts	AR's Bel. (32a)	ae's Bel. (32b)	Basic Int. (33)	Weak Int. (39)	Spec. Des. (34)	ae's Auth. (35/38)	AR's Auth. (36)	Neg. Des. (37)
	<i>azonnal / nekem</i> command	+	+	+		γ _{AR} =1	+	+	r=ae
(A)	lengthened int. 1 plea	+	+	+	_	$\gamma_{AR}=1$	+	_	r=ae
	<i>légy szíves</i> request	+	+	+	_	$\gamma_{AR}=1$	+	_	—
		+	+	+	_	$\gamma_{AR}=1$	+	+	—
	<i>csak</i> encourag.	+	+	+		γ _{ae} =1	+	—	—
	<i>csak</i> threat	+	+	+	_	γ _{ae} =1	+	—	r=AR
(B)	<i>már</i> hastening	+	+	+	_	γ _{ae} =1	+	—	—
	 – / (hát) advice shared g. 	+	+	+	-	$\gamma_{ae}=1$ $\gamma_{AR}>0.5$	+	_	—
	 – / (hát) disinterest- ed adv. 	+	+	+		γ _{ae} =1	+	_	—
(C)	<i>nyugodtan</i> permiss.	+	+	(+)	+	γ _{ae} =1	_	_	_
	lengthened int. 2 concess.	+	+	(+)	+	γ _{ae} =1	_	_	r=AR
	<i>hadd</i> perm./acq./ indiff.	+	+	(+)	+	γ _{ae} =1	_	_	_
	offer	+	+	+	+	$\gamma_{ae} > 0.5$ $\gamma_{AR} > 0.5$	_	_	_
(D)	well/ill- wish	+	+		_	γ _{AR} =1	—	—	_/r=ae
	ae-less/ ab- sent w.	+	0	0	0	γ _{AR} =1	0	0	—

Table 3. Specialized profiles of imperatives in Hungarian

4.3. Four challenges of imperatives

Condoravdi & Lauer (2012) introduces four challenges that a theory of imperatives should meet. This section discusses how they are accounted for in the framework



of ReALIS.

1. *Contextual inconsistency* means that "different utterances of imperatives (from the same speaker, towards the same addressee) must be *consistent* (and hence contradicting utterances must be interpreted as revisions)" (Condoravdi & Lauer 2012: 41). On the other hand, it is not inconsistent to have contradicting desires. Consider (40a–b).

- (40a) #Go, and stay! / #My intention is that you go, and that you stay.
- (40b) I wish you would go (so you do not get into trouble), but I also wish you would stay (so we could spend a little more time together).

In \Re eALIS, a given worldlet with the modality label of *Intention* needs to be consistent (with a given time stamp), since AR cannot be in the preparatory phase of *e* and $\neg e$ at the same time. However, a worldlet with the modality label *Desire* can contain various kinds of wishes; one can even long for incompatible eventualities at the same time (with the same or with a different degree of intensity). There is no conflict, because desires are not necessarily acted on.

2. Speaker endorsement means that "(a) speaker who utters an imperative with content p cannot, without being subject to blame, act so as to prevent the realization of p" (Lauer 2013: 142). This requirement excludes a continuation like "but I do not want you to", meaning that the speaker has to endorse the action. On the other hand, a continuation like "but I wish you would not" is felicitous, indicating that the speaker can have, and can even express, an opposite desire. In \Re eALIS, endorsement corresponds to *intention*, and since uttering an imperative always commits AR to the intention toward the realization of e (33), AR necessarily endorses the action. It is possible, however, to have a desire that is in opposition of this intention, which was demonstrated in Section 4.2 for concessions.

3. *Automatic sincerity* means that "(t)he speaker of an imperative cannot be taken to be *insincere* with respect to the desire he communicates with an imperative" (Condoravdi & Lauer 2012: 43). This condition excludes reactions like (41a), while the same reaction is fine, when a declarative is uttered instead of an imperative (41b).

- (41a) A: Go home! B: #You are lying, you don't really want me to go home.
- (41b) A: I want you to go home. B: You are lying, you don't really want me to go home.

The difference can be explained by pointing out that the word *lying* is only used in connection with declaratives. However, this does not mean that an imperative



cannot be insincere. Consider (41c), for instance, which can constitute as a felicitous dialogue.

(41c) A: Go home! B: Don't act like you want me to leave! I know that you need me here.

It is true, though, that an imperative conveys that AR's intention (and sometimes desire) is that *e* becomes fulfilled; however, the *actual* speaker's intentions and desires can be different. This issue is addressed in the pragmatics along with other potential mismatches between the content of the conventionalized intentional profiles and the actual speech situation (Section 3).

4. Interlocutors' role in acting on the imperative states that the speaker's involvement is limited in the realization of the content, and "if, but only if, there is a volitional addressee and he has influence on the realization of the content, the primary responsibility for realizing the content lies with him" (Condoravdi & Lauer 2012: 44). In other words, an imperative is agentive for the addressee, except for wish-uses. This condition excludes that an imperative be a promise, for instance. In ReALIS, the basic intention (33) encodes that it is the addressee whose responsibility is the realization of the content, while in the case of wish-uses, this axiom is deleted due to either the lack of authority (no "influence"), or the lack of addressee. This contextually triggered deletion results in the reinterpretation of the imperative as an optative.

5. Conclusions

The paper introduced an account for the pragmasemantics of imperatives in a representational interpretation system, ReALIS. Imperatives can convey a wide range of speech acts, such as command, request, advice, permission, concession, etc. When a simple imperative is uttered, the interpreter can only rely on contextual factors to identify the speech act. In Hungarian, the addition of various discourse markers to a simple imperative sentence can narrow the possibilities. The aim of the paper was to provide an analysis able to capture the conventionalized (core) meaning of imperatives, as well as the contribution of the various discourse markers signaling different uses.

In the \Re eALIS approach, the interlocutors' mental states are represented – as a part of the world model –: beliefs, desires, intentions and authorities. The core meaning of imperatives is encoded in the *basic imperative intensional profile*. It was argued that there are three components that constitute the basic profile. (1) Two axioms that represent the interlocutors' beliefs about the assumption that *e*

does not hold. (2) One central axiom for intentions, which can capture the *imperative convention* (Lauer 2013) saying that the addresser's (AR) intention is to get the addressee (ae) to intend the eventuality in question (*e*). And (3) an underspecified formula for the representation of desires, which can capture the fact that AR can act on self-interest (γ_{AR} =1), cooperation (γ_{ae} =1), assumption of a third party's interest (γ_r =1; r≠AR,ae), or a combination of the above (actual summation).

After describing the basic profile for imperatives, the paper demonstrated how the addition of various discourse markers can lead to specialized profiles by taking into consideration the different contextual conditions these elements introduce. These specialized profiles were created via monotone increasing modifications on the basic profile. This typically involved the specification of the formula characterizing the interlocutors' desires, and/or the addition of axioms representing authorities of various kinds, such as AR's authority over ae's intentions, or ae's authority over *e*. Based on these conditions, four groups of imperatives were discussed: (A) directive, expressing self-interest; (B) directive, indicating cooperation; (C) nondirective, cooperative; and (D) non-directive with self-interest.

In addition to categorizing the various uses based primarily on the interlocutors' desires and authorities, the analysis revealed that AR's main intention behind uttering an imperative can be twofold: to get ae to carry out *e*, and to grant authority to ae to carry out *e*. The second type of intention emerges in the case of permission statements (C), when the basic intention gets backgrounded, due to the (assumed) lack of addressee-authority.

There has been a debate in the literature about whether the distinction between the types of imperative should be binary (e.g. Halm 2017) or "graded" (e.g. von Fintel & Iatridou 2017). In the light of this research, the answer could be: *both*. The main distinction between strong and weak imperatives can be captured by the two main intentions, while the various desires – represented by the underspecified formula of the basic imperative profile – can correspond to the gradual scale of speaker endorsement, which can be made explicit by adding extra elements to a simple imperative.

EZIKOSLOVLJE 19.3 (2018): 365-391

References

- Alberti, Gábor. 2011. *ReALIS: Interpretálók a világban, világok az interpretálóban* [Interpreters in the world, worlds in the interpreter]. Budapest: Akadémiai Kiadó.
- Alberti, Gábor. 2016. Hát a meg meg a hát [The meg and the hát]. In Kas, Bence (ed.), "Szavad ne feledd!": Tanulmányok Bánréti Zoltán tiszteletére, 17–27. Budapest: MTA Nyelvtudományi Intézet.
- Alberti, Gábor & Kleiber, Judit. 2012. Where are possible worlds? Arguments for ReALIS. *Acta Linguistica Hungarica* 59. 3–26.
- Alberti, Gábor & Kleiber, Judit. 2014. ReALIS: Discourse representation with a radically new ontology. *Complex Visibles Out There. Olomouc Modern Language Series* 4. Olomouc: Palacký University. 513–528.
- Alberti, Gábor & Kleiber, Judit & Schnell, Zsuzsanna & Szabó, Veronika. 2016. Intensional profiles and different kinds of human minds: "Case studies" about Hungarian imperative-like sentence types. *Linguistics Beyond and Within* 2. 6–26.
- Alberti, Gábor & Dóla, Mónika & Kleiber, Judit. 2014. Mood and modality in Hungarian: Discourse Representation Theory meets Cognitive Linguistics. *Argumentum* 10, 172– 191.
- Asher, Nicholas & Lascarides, Alex. 2003. *Logics of conversation*. Cambridge: Cambridge University Press.
- Cantarini, Sibilla & Abraham, Werner & Leiss, Elizabeth (eds.). *Certainty-uncertainty and the attitudinal space in between* (Studies in language companion series 165). Amsterdam: John Benjamins.
- Condoravdi, Cleo & Lauer, Sven. 2012. Imperatives: Meaning and illocutionary force, In Pinon, Christopher (ed.), *Empirical issues in syntax and semantics* 9, 37–58.
- Fábricz, Károly. 1986. *Partikulák a magyar és az orosz nyelvben* [Particles in Hungarian and Russian]. Candidate thesis. Szeged.
- Farkas, Judit & Ohnmacht, Magdolna. 2012. Aspect and eventuality structure in a representational dynamic semantics. In Alberti, Gábor & Kleiber, Judit & Judit Farkas (eds.), *Vonzásban és változásban*, 353–379. Pécs: PTE BTK Nyelvtudományi Doktori Iskola.
- von Fintel, Kai & Iatridou, Sabine. 2017. A modest proposal for the meaning of imperatives. In Arregui, Ana & Rivero, María Luisa & Salanova, Andrés (eds.), *Modality across syntactic categories*, 288–319. New York: Oxford University Press.
- Groenendijk, Jeroen & Stokhof, Martin. 1991. Dynamic predicate logic. *Linguistics and Philosophy*, 14. 39–100.
- Gyuris, Beáta. 2008. A diskurzus-partikulák formális vizsgálata felé [Toward the formal analysis of discourse particles]. In Kiefer, Ferenc (ed.), *Strukturális magyar nyelvtan* IV. A lexikon szerkezete, 639–682. Budapest: Akadémiai Kiadó.
- Halm, Tamás. 2017. The semantics of weak imperatives revisited: Evidence from freechoice item licensing. (Paper presented at the 13th International Conference on the

Structure of Hungarian (ICSH13), Budapest, Hungary, 29-30 June 2017).

- Kamp, Hans & van Genabith, Josef & Reyle, Uwe. 2011. Discourse representation theory. In Gabbay, Dov & Guenthner, Franz (eds.), *Handbook of philosophical logic*, 125–394. Berlin: Springer.
- Kárpáti, Eszter & Szeteli, Anna. 2018. Parancsolsz? Mondattípus, illokúciós aktus, perlokúciós hatás [Sentence type, illocutionary act, perlocutionary effect] (Paper presented at the conference Újdonságok a szemantikai és pragmatikai kutatásokban, Szeged, Hungary, 24 April 2018).
- Kaufmann, Magdalena. 2012. Interpreting imperatives. Dordrecht: Springer.
- Kiefer, Ferenc. 1988. Modal particles as discourse markers in questions. *Acta Linguistica Hungarica* 38. 107–125.
- Kleiber, Judit & Alberti, Gábor. 2014. Uncertainty in polar questions and certainty in answers? In Cantarini, Sibilla & Abraham, Werner & Leiss, Elizabeth (eds.), Certaintyuncertainty – and the attitudinal space in between (Studies in language companion series 165), 135–152. Amsterdam: John Benjamins.
- Kleiber, Judit & Alberti, Gábor. 2017. Compositional analysis of interrogative imperatives in Hungarian. *Linguistics Beyond And Within* 3. 117–135.
- Kleiber, Judit, Alberti, Gábor & Szabó, Veronika. 2016. The intensional profiles of five Hungarian imperative sentence types. *Linguistica* 56(1). 161–172.
- Lauer, Sven. 2013. *Towards a dynamic pragmatics*. Unpublished doctoral dissertation, Stanford: Stanford University.
- Mann, William C. 2003. Models of intentions in language. In Kühnlein, Peter & Rieser, Hannes & Zeevat, Henk (eds.), *Perspectives on dialogue in the new millennium* (Pragmatics and Beyond, New Series 114), 166–178. Amsterdam: Benjamins.
- Nőthig, László & Szeteli, Anna. 2018. Nagyfelbontású pragmaszemantikai igazságértékelés egy játékprogramban [High-resolution truth evaluation in a game program]. In Vincze, Veronika (ed.), *MSZNY 2018*, 456–465. Szeged: University of Szeged.
- Oishi, Etsuko. 2014. Discursive functions of evidentials and epistemic modals. In Cantarini, Sibilla & Abraham, Werner & Leiss, Elizabeth (eds.), *Certainty-uncertainty – and the attitudinal space in between* (Studies in language companion series 165), 239–262. Amsterdam: Benjamins.
- Pollard, Carl. 2008. Hyperintensions. Journal of Logic and Computation 18(2). 257–282.
- Portner, Paul. 2007. Imperatives and modals. *Natural Language Semantics* 15(4). 351–383.
- Schirm, Anita. 2011. A diskurzusjelölők funkciói: a *hát*, az -*e* és a *vajon* elemek története és jelenkori szinkrón státusa alapján [The function of Hungarian discourse markers: The history and present synchronic status of the Hungarian elements *hát*, -*e* and *vajon*]. Unpublished doctoral dissertation, Szeged: University of Szeged.



- Szeteli, Anna. 2017. Szerint(em): A kifejezés funkcióinak vizsgálata formális interpretációs rendszerben [In my opinion: Analysis of the expression in a formal interpretation system]. In Czeferner, Dóra & Böhm, Gábor & Fedeles, Tamás (eds.), Specimina Operum Iuvenum 5, 88–107. Pécs: PTE BTK KTDT.
- Szücs, Márta. 2010. A *hadd* problémaköre [Problems concerning *hadd*]. *LingDok* 9. Szeged: University of Szeged. 193–214.
- Varga, Diána. 2013. A magyar felszólító mondatok szerkezete [The structure of Hungarian imperative sentences]. Unpublished doctoral dissertation, Budapest: Pázmány Péter University.
- Wimmer, Heinz & Perner, Josef. 1983. Beliefs about beliefs: Representation and constraining function of wrong beliefs in young children's understanding of deception. *Cognition* 13. 103–128.

Author's address:

Department of Linguistics, University of Pécs Ifjúság u. 6, Pécs, Hungary E-mail: kleiber.judit@pte.hu

GLEICHE INTENTIONEN MIT UNTERSCHIEDLICHEN WÜNSCHEN IM HINTERgrund: Intensionales Profil des Imperativs im Ungarischen

Diese Arbeit untersucht Aufforderungssätze im Ungarischen insbesondere im Zusammenhang mit dem pragmasemantischen Beitrag der Diskursmarker. Der Ausgangspunkt ist Lauers Annahme (2013), dass – wegen der Vielfalt von illokutiven Kräften – den Satztypen Verwendungskonventionen zugeordnet werden können. Das Ziel ist zu erfassen, wie diese zusätzlichen Elemente der verallgemeinerten pragmasemantischen Repräsentation der Imperativsätze eine spezifischere Bedeutung hinzufügen können. Bei der Analyse wurde die formale, dynamische Diskurs- und mentale Repräsentationstheorie ℜeALIS (Alberti & Kleiber, 2014) angewendet. Die zentrale Komponente der Imperativsätze wird durch ein auf der Intention basierendes Axiom erfasst. Die pragmasemantischen Beschreibungen der verschiedenen Verwendungen – die oft durch Diskursmarker signalisiert werden – können durch monotone Erweiterung des intensionalen Profils erzeugt werden. Das bedeutet typischerweise die Spezifizierung der Formel, die auf die Wünsche der Diskursteilnehmer/innen verweist, und/oder die Angabe von zusätzlichen Elementen, die verschiedene Autoritäten repräsentieren.

Stichwörter: Aufforderung; Diskursmarker; pragmasemantische Analyse; Autorität.