Dative experiencer predicates in Hungarian

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Dative experiencer predicates in Hungarian

Datieve *experiencer*-predikaten in het Hongaars (met een samenvatting in het Nederlands)

Proefschrift

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List of abbreviations

ACC	accusative	case	
ABL	ablative	case	[≈'from (the vicinity of)']
ACT	active	voice	
ADJ	adjectival	suffix	
ALL	allative	case	[≈'to (the vicinity of)']
BNDST	bound	stem	
CAUS	causative	suffix	
CL	clitic	pronoun	
COM	comitative	case	[≈'with']
COND	conditional	mood	
DAT	dative	case	
DEFOBJ	definite object	conjugation	
DEL	delative	case	[≈'about, from']
DIM	diminuative	suffix	
ELA	elative	case	[≈'from (the inside of), out of']
F	feminine	gender	
FAC	factive	case ¹	
ILL	illative	case	[≈'into']
INE	inessive	case	[≈'in']
INF	infinitival	suffix	-
INS	instrumental	case ²	
M	masculine	gender	
MID	middle	morphology	<i>I</i>
NOM	nominative	case	
PART	participle	suffix	
PAST	past	tense	
PL	plural	number	
POSS	possessive	inflection	
POSSUF	possibility	suffix	

¹ Factive case is used typically to mark resultative change of state secondary predicates.

² Instrumental case is formally equivalent with comitative case, I distinguish the two on functional grounds for expository purposes.

PRES	present	tense	
PTCL	verbal	particle	
SBJ	subjunctive	mood	
SBL	sublative	case	[≈'onto']
SOC	sociative	case	[≈'together with']
SUP	superessive	case	[≈'on']
SG	singular	number	
N	neuter	gender	
1	first	person	
2	second	person	
3	third	person	

I observe the following glossing conventions.

- (i) In the glosses, I do not, by default, indicate features that have zero morphology. This concerns nominative case on subject noun phrases, the singular number of non-plural count nouns, and third person subject agreement on verbs in present tense, indicative mood, as well as present tense in general.
- (ii) I add the abbreviation '*lit*.' to English translations of Hungarian examples to render the Hungarian structure transparently. These 'translations' are often ungrammatical in English, but I do not mark them as such in this context.
- (iii) An example from a language other than English or Hungarian is introduced with a language tag. English or Hungarian examples do not receive a language tag.
- (iv) The citation form of Hungarian verbs is their 3sG, present tense form.

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Introduction

1.1. The problem of dative experiencers, as it arises from a historical perspective

This dissertation is about the thematic structure of a special subclass of what are known as psychological predicates: predicates with dative/adpositional experiencers. Psychological predicates have attracted an enormous amount of attention from linguists of all theoretical persuasions, which renders it a task of considerable complexity to present a comprehensive overview of the literature. Instead of attempting at this task right at the beginning, I constrain myself to a brief review of some representative analyses, all within a particular line of inquiry. This excursion will introduce us into the terrain that this work aims to investigate, and establishes a perspective from which the landscape is going to painted.

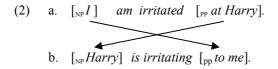
What defines psychological predicates as such is the shared entailment that one of their arguments must denote an individual whose mental state is relevant with respect to the eventuality denoted by the predicate. This argument is commonly said to bear the *experiencer* thematic role. What makes this class of predicates non-homogenous and, at the same time, a challenge for the linguist, is the fact that they are licensed into what, at first sight, appear to be quite different syntactic structures. The three major types, as discussed by Belletti & Rizzi (1988), are listed in (1).

- (1) a. *Subject experiencers* [the *temere*-class] *fear, love, hate, like, want, know, believe, forget, see, smell, hear,* etc.
 - a'. John loves books.
 - b. *Object experiencers* [the *preoccupare*-class] worry, scare, amuse, frighten, concern, interest, etc.
 - b'. Books worry John.
 - c. *Dative experiencers* [the *piacere*-class] *appeal to, matter to, occur to,* etc.
 - c'. Books appeal to John.

¹ I do not capitalize thematic role labels throughout this dissertation for the reason that they are not going to have a theoretical status in the framework that I use.

The difference is obvious from a purely descriptive perspective: the *experiencer* is either a nominative subject (1a'), an accusative object (1b'), or a dative/adposition-marked noun phrase (1c').

Nevertheless, the history of the discussion of psych constructions in generative linguistics starts with the assumption that there is a deeper uniformity beyond the turbulent surface. Postal (1971) proposed that non-subject experiencer constructions can be derived from a deep structure corresponding to subject-experiencer structures by a transformation called *psych*-movement (also known as *flip* from Lakoff 1970). This operation was thought to be akin to the (then-assumed) passive rule, which moved subjects into the VP and supplied them with a preposition (optionally), and which lifted direct objects into subject position at the same time. The basic driving force was to treat prepositional experiencers, generally marked by *to* in English, as some sort of "*underlying logical subjects*". Psych movement is most productive with participial/adjectival predicates,



but Postal also applied it to pairs such as *I liked the play* and *The play pleased me*. Since the surface structures in (1) were all derived from subject experiencer deep structures, it was implied within the *Aspects*-model of the time that the three experiencer-predicate classes are not different with respect to their thematic properties.

This assumption is shared by Belletti & Rizzi (1988), too. For them, the three psych-verb classes have essentially the same argument structure, inasmuch as in each case it contains an experiencer and a theme. The former is higher ranking than the latter, which is adequately reflected in syntax by assuming that the experiencer argument always asymmetrically c-commands the theme at the level of the GB-theoretic D-structure. The reason why the S-structures look so different is to be sought in the case assigning potential of the respective predicate types.

(3)	a.	temere 'fear'	< Experiencer, Theme>	" θ -grid"
			[]	"Case-grid"
	b.	preoccupare 'worry'	< Experiencer, Theme>	"θ-grid"
			[ACC -]	"Case-grid"
	c.	piacere 'appeal to'	< Experiencer, Theme>	"θ-grid"
			[DAT -]	"Case-grid"

Preoccupare and *piacere* assign inherent case to the experiencer argument in the lexicon, which destines these psych predicates for an unaccusative derivation, on the assumption that inherent case can only be assigned VP-internally. The experiencer

projects into a higher VP-internal position than the Theme, but this latter can undergo subsequent NP-movement. The *temere*-class has a radically different derivation. There is no inherent case available, so the higher-ranking experiencer ends up as an external argument (marked by underlining), and the theme receives structural accusative case. Consequently, only (3b) and (3c) share the same D-structure in their analysis. Since, however, the semantic correlates of the external-internal argument distinction were not very articulate in the GB-tradition, it is not suggested in their work that we could perhaps expect important semantic distinctions between the predicate classes. So while their analysis was an important step towards understanding the behavior of psych predicates, it did not depart from the tacit assumption already present in early generative grammar that there are no semantic differences between these structures which have thematic relevance.

This view has been challenged in Pesetsky (1995). Some important details set aside for later discussion, Pesetsky makes convincing arguments against the assumption that psychological predicates share the same thematic structure. In particular, the *preoccupare/worry*-class has a distinct thematic profile, though the other two are still considered non-distinct thematically. This comes about by leaving the experiencer role intact in the analysis, and substituting the theme role of Belletti and Rizzi (1988) for three distinct thematic roles, of which we need two now.

```
(4) a. fear/appeal to < experiencer, target> b. worry < causer, experiencer>
```

Let me illustrate the need for the introduction of *causer* into the analysis of the *worry*-class with Pesetsky's minimal pair that has by now gained some fame (1995:59). He argues that *please* is not an equivalent of *appeal to* (or, for that matter, of *piacere*). The former has a non-derived causer subject, and the latter has a derived target subject. As a result, the following two sentences do not have the same truth-conditions.

- (5) a. The play didn't please Mary.
 - b. The play didn't appeal to Mary.

If the play did not appeal to Mary, then she simply did not like it. If, on the other hand, it did not please her, she might either have liked it or not: the focus is on the fact that it "failed to bring her pleasure". Assuming the thematic hierarchy

```
(6) causer > experiencer > target (of emotion)
```

we arrive at a non-unaccusative derivation for the *worry*-class, which Pesetsky shows to be the empirically correct analysis, contra Belletti & Rizzi (1988). To mention but one of his arguments, *please* can passivize, whereas *appeal to* cannot.

- (7) a. Mary wasn't pleased by the play.
 - b. *Mary wasn't appealed to by the play.

The differences between the dative experiencers (*appeal to*) and the subject experiencers (*fear/like*) are, however, still treated as more of a matter of an accident (which has serious grammatical consequences though). He does not discuss this issue much, but his assumptions are essentially similar to those of Belletti & Rizzi (1988) in targeting the different case assigning potential of the two predicate types for explanation. Normally, the predicate case-marks the target and the experiencer raises to a subject position Spec, IP (assuming the VP-internal Subject Hypothesis). This is the subject experiencer class (8a). In the case of *appeal to* and the like predicates, the verb happens to case-mark the experiencer but fails to case-mark the target, which therefore has to move to a subject position (8b).

(8) a.
$$[_{IP} [experiencer_i] [_{I'} [_{VP} [_{V'} like target] t_i]]]$$

b. $[_{IP} [target_i] [_{I'} [_{VP} [_{V'} appeal to t_i]] experiencer]]]$

The desired surface structures result.

Thus, these three proposals share the assumption that whatever difference there may be between subject and dative experiencer predicates, it has not much to do with their semantics and their thematic structure. On this view, say, *like* and *appeal* to encode the same concept, but perhaps differ in their case-assigning properties and the rest follows as described above. That the basic syntactic realization of certain predicate types is lexically underdetermined is not treated as a special state of affairs in many linking theories. It is unique in the current case, however, that the distinct syntactic realizations are not considered semantically and thematically distinct. This conviction is based on the assumption that in the lack of a causer in the thematic structure, no strong predictions can be made about the linking of an experiencer argument to syntax. Or, in Jackendoff's explication (to appear:7-14): "The psychological predicates expressing EXP [a separate thematic tier hosting experiencers and stimuli], on this view, are genuine counterexamples to the linking universals, and children do have to learn them one by one." In the pre-Pesetskian approaches, as in many more recent ones (cf. Alberti 1997, Dowty 1991, Jackendoff to appear), this hypothesis is assumed to hold for all the three classes described. In its weaker version (Landau 2005, Pesetsky 1995, among others), the hypothesis is primarily about the subject experiencer and the dative experiencer classes, as a deterministic linking obtains in the presence of a causer subject in the case of worrytype predicates.

Pesetsky has nevertheless started a program of diversification that one can continue further: there is something truly unsatisfactory about assuming that *like* and *appeal to* are manifestations of the same thematic structure in accidentally distinct phonetic forms. Technically, the two are treated as two distinct predicates both in Pesetsky (1995) and Belletti & Rizzi (1988), since only *appeal to* is assigned inherent case in the lexicon. But we do not know when exactly and why such an inherent case turns up. As far as I am aware, it holds cross-linguistically that *hate*,

fear, know and most of the rest of the subject experiencer predicates do not have a dative-marked alternate² Appeal to, on the other hand, translates into many languages by preserving the dative structure the English appeal to has. Could it not be so because simply there is a distinct APPEAL concept available in our mental storage, besides a LIKE concept? I suggest an answer in the positive, and this dissertation is aimed at substantiating this conviction.

The general agenda involves showing that our three experiencer constructions each have unique semantics, and, importantly, that this has consequences for the constitution of their thematic structure. This assumption can naturally be accommodated in what have come to be called *neo-constructionist models* (cf. Kratzer 1996, Marantz 1997, or Borer 2003, 2005) of grammar, in which some or all argument structure interpretation is assigned directly to syntax, rather than derived from a lexical representation. In such an approach, experiencer predicates are of no special concern since alternative syntactic realizations of a single concept (or of an encyclopedic/vocabulary item) are believed to represent the norm rather than the exception. Nevertheless, constructions are unique pairings of form and meaning, and therefore the grammatical model should be so construed that it has appropriate tools to treat *John likes Peter* and *Peter appeals to John* distinctly with respect to both meaning and form.³

More recently, it has been proposed that dative/adpositional experiencers are indeed distinct objects of grammar and are introduced into syntax by a special *applicative* head (Cuervo 2003, Pylkkänen 2002). The applicative analysis, as well as sharing an interest in the same empirical domain as the current work, is also illustrative of a non-lexicalist trend that I will not subscribe to here. Let me provide some preliminary motivation for why my concerns are different from the ones in general expressible in such a framework, by way of presenting a brief overview of Cuervo's (2003) careful and comprehensive analysis of dative constructions in Spanish. She argues that datives as a class are not licensed directly by the verb, but are rather added as "extra participants" through the mediation of an applicative

² This should be understood as restricted to verbal predicates. Morphologically related adjectives or participles (*hateful*, *fearful*, *known*) do exist of course, and most do license a dative/adpositional phrase, as the early generative literature already pointed out. But so do most other nonderived adjectives: it will be one of my main concerns to show that these experiencers are licensed by different mechanisms than that of *appeal to*.

³ I am applying here the strict constructionist view (as in Goldberg 1995) to characterize approaches which do not in fact regard constructions to be primitive objects of grammar, and which derive meaning compositionally, parallel with the derivation of the construction. Nevertheless, I do not think it does an injustice to them to claim that *like* and *appeal to* are licensed into different constructions with different semantics. This is mainly so because our concern is only the basic syntax, where lexical elements are first inserted into the structure. Roughly, this is covered by at least certain understandings of the *thematic phase*, as it is often sometimes referred to. In that domain, each position is expected to have a unique semantic correlate within constructionist models.

head.⁴ An applicative head can be projected into different parts of the clause structure and the exact interpretation of its dative specifier can be derived from the nature of the complements the ApplP takes, and from the nature of the heads that can take ApplP as their complements. In other words, it is the position of the dative in the structure that tells us its meaning, as is expected in a constructionist framework. This way a range of possible uses is argued to be accounted for: Spanish datives can be used as goals, possessors, locations, experiencers, benefactives, malefactives, affected datives, datives of interest, or as ethical datives.

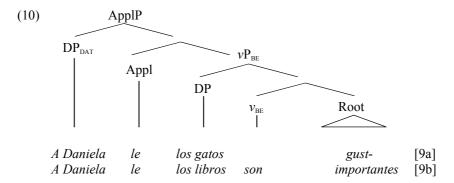
The following two examples should suffice to show how the system works. A dative experiencer of a *piacere*-predicate or of an evaluative such as *important* is licensed as a high-level applicative taking a state-denoting verbal complement (νP_{BE}) .

(9) **Spanish**, Cuervo (2003:165, 169)

- a. A Daniela le gustan los gatos.

 Daniela.DAT CL.DAT like.PL the cats
 'Daniela likes cats.'
- b. A Daniela le son importantes esos libros.

 Daniela.DAT CL.DAT are important.PL those books.PL 'Those books are important to Daniela.'



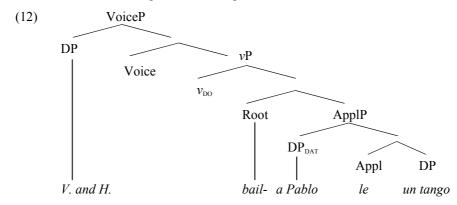
A recipient or a benefactive dative appears as a low-level applicative, in which case it takes the object as its complement. As a result, the dative is interpreted in a small-clause configuration, close in spirit to the proposal of Larson (1988).

_

⁴ Applicatives are generally known from Bantu languages. See Pylkkänen (2002) for a theory that systematically generalizes them into part of universal grammar.

(11) *Spanish*, Cuervo (2003:192)

Vicki y Hugo le bailaron un tango a Pablo. Vicki and Hugo CL.DAT danced a tango Pablo.DAT 'Vicki and Hugo danced a tango for Pablo.'



The verbal head v_{DO} introduces an event of the type *activity*. The external subject is introduced, as is standardly assumed in these approaches, via the *Voice-head* of Kratzer (1996).

This analysis has the appeal that it provides us with appropriate tools for computing the meaning of a dative expression from the structure in which it appears. It also achieves a unified syntactic treatment of various related uses of the dative, inasmuch as all are licensed as the specifiers of the applicative phrase.

But there is a more fundamental question that this analysis leaves unanswered: we do not know what exactly licenses the applicative head itself into the structure. In particular, we do not know what specifically licenses a dative experiencer. It is clearly not enough to refer to the presence of a stative verbal complement $vP_{\rm BE}$. That may be a necessary criterion for membership in the *appeal to*-set, but it is certainly not sufficient. Many stative predicates cannot have dative Experiencers at all. *Concern, interest,* or, most importantly, *like* do not have one. Coming back to our original concern, it is left nonobvious why *like* is so much unlike *appeal to* with respect to its syntax - we only know that it cannot project an applicative structure, *since it cannot have a dative argument.* This ultimate circularity seems unavoidable in this sort of argumentation, unless we are able to predict or speculate what independent properties of the predicate will license an applicative head. In this respect, even the inherent-case analyses appear to take the higher ground, since when an inherent case is stipulated on a lexical entry of the kind discussed here, its basic syntax is also determined.

At this point, I would like to emphasize that the *like - appeal to* problem is not analogous to the problem of the so-called variable behavior verbs. It has been argued recently that the fact that many intransitives may show either unergative or unaccusative properties is best accounted for in the syntax and not in the lexicon (see Borer 2005). That is, a single lexical item can be associated with FALL, for

example, with no lexical specification on what sort of syntactic constructions it can be inserted into. The constructions in (14) represent regular unaccusative contexts, but the constructions in (13) are often argued to host unergative predicates.⁵

(13) Unergative constructions

- a. He has fallen into the sea on purpose. agentive adverbial
- b. He's a great faller. [said of a stunt man] -er nominalization
- c. I taught him how to fall into the sea elegantly. control

(14) Unaccusative constructions

a. He has accidentally fallen into the sea.
 b. He's a fallen man.
 c. The joke fell flat.
 non-agentive adverbial modifier past participle resultative predication

Experiencer predicates on the whole do not fit this picture, as I will argue in this dissertation. A dative experiencer predicate in particular has a unique syntactic realization, and the sort of variation that is characteristic of some intransitive verbs is completely absent. Furthermore, as I have already pointed out, we cannot establish a systematic relation between subject experiencers and dative experiencers on analogy with variable behavior verbs, assuming in this case that a single lexical item somehow has two distinct phonetic forms. Pairs of the kind *like - appeal to* are few and far between, and even the rare exceptions can be dismissed with, as I will show in 2.2.4.

I will argue that the subject experiencer construction and the dative experiencer construction are not instantiations of a unique set of lexical items. On the contrary, each construction is licensed by a distinct set of predicates, which have non-identical thematic coding. This is the second, and as I argue here, the more satisfactory way of continuing Pesetsky's program, which consists of diversifying experiencer predicates by positing a distinct thematic structure for each of the three groups, supported by thematically relevant semantic distinctions between the classes. Such a lexicalist approach is represented by the Theta System of Reinhart (2000, 2002), wherein experiencer predicates are distinguished not only by the *causer-theme* duality of Pesetsky, but also by a unique thematic coding of what used to be the same experiencer role for each of the three predicate classes. This dissertation is an attempt at substantiating this approach with respect to the dative experiencer class. I will try to show that such an enterprise is not dictated by the "exigencies of syntax" (cf. Jackendoff 1987), but can rather be carried out through a likeable marriage of empirical data and theory.

As the title makes clear, the dissertation focuses on Hungarian data. I will make comparisons with other languages at every relevant point, and use English data whenever some obviously universal property of these predicates is discussed. Hungarian dative experiencers have many intriguing properties, not unlike their

⁵ Though see Reinhart (1996) for why *agentive adverbials* and *-er nominalization* cannot be used as reliable tests to identify agent arguments (in this context, an *unergative derivation*).

counterparts in other languages. I will re-examine some perennially vexing questions these predicates pose in the light of the thematic structure analysis that I provide. Let me now turn to a brief inventory of the specific problems that this dissertation aims to investigate.

1.2. Aims and claims: the structure of the dissertation

1.2.1. Experiencers and thematic theory (Chapter 2)

I first introduce the Theta System as it is presented in Reinhart (2000, 2002), and subsequently elaborated in certain aspects in Marelj (2002, 2004). The Theta System is a lexicalist theory and the discussion in the dissertation is embedded in this framework. In particular, I will be assuming the following two basic lexicalist tenets. First, the thematic structure of predicates determines their basic syntactic realization. Second, the lexicon is an active component of grammar within which operations may apply to the lexical entries. What differentiates the Theta System from other lexicalist proposals is discussed in detail in 2.1.

In 2.2, I show how experiencer predicates are analyzed in the Theta System. My major aim is to argue for the empirical validity of the claim that each of the three classes of experiencer predicates discussed above (see (1)) has a unique thematic structure. In particular, I show that the thematic properties of dative experiencer predicates cannot be reduced to the thematic properties of either subject or object experiencers.

1.2.2. Dative experiencers in Hungarian (Chapter 3)

The major predicate classes discussed in this dissertation involve *piacere*-predicates, modals, and predicates that are generally referred to as *evaluatives* (cf. Komlósy 1994 and Tóth 2000a from the Hungarian literature).

(15) *Piacere*-predicates

Ez tetsz-ik Péter-nek. this appeal-3SG Peter-DAT 'This appeals to me.'

(16) Modal predicates

Ez lehetséges nek-em. this possible DAT-1SG 'This is possible to me.'

(17) Evaluative predicates

Ez jó nek-em.⁶ this good DAT-1SG 'This is good to me.'

I provide a comprehensive inventory in Chapter 3, together with a descriptive overview of the basic syntactic and semantic properties of the predicates that have dative experiencer dependants. Evaluative predicates are especially numerous, and therefore the natural class of dative experiencer predicates is potentially quite large.

1.2.3. Three types of dative experiencers (Chapter 4)

A major aim of this dissertation is to show that the dative experiencers that have a thematic specification relate to their governing predicates in two fundamentally distinct ways. The experiencer is an argument of the predicate only in a relatively small number of cases. The predicate in (15), for example, has an experiencer argument, but the predicates in (16) and (17) do not. It is generally assumed in the literature on Hungarian that all these datives are experiencer arguments, but I will argue that the predicates in (16) and (17) license a truly optional *thematic adjunct*, but not a dative *argument*.⁷

This adjunct receives a thematic role, but, among other things, it does not need to be an experiencer (18a), nor does it necessarily have to be a dative (18b).

(18) a. Ez fontos a fá-k-nak. this important the tree-PL-DAT 'This is important for the trees.'

⁶ The morphology of dative pronouns is worth a comment for expository purposes, even if this issue is not going to be relevant for us. The full morphological complex of a dative pronoun involves the base form of the pronoun, dative case, plus agreement morphology. However, since Hungarian is a *pro*-drop language, the base form is generally omitted, as in the examples (16-17). The full form is only used if the pronoun receives a discourse function, as in the following example, where it is focused. But *pro*-drop is allowed even in these cases.

⁽i) Ez CSAK (ÉN)-NEK-EM fontos.

This only I-DAT-1SG important 'This is only important FOR ME.'

⁷ The most important works on dative experiencer predicates in Hungarian include Dalmi (1983, 1995, 2002, 2005), É. Kiss (1986, 1987, 2001, 2002), Kenesei (1993), Komlósy (1994), and Tóth (2000a, 2001, 2002, 2004). It is not an accident that this list closely overlaps with the list of the most important literature on agreement-marked infinitives in Hungarian: the majority of dative experiencer predicates license agreement-marked infinitives. This topic is discussed in Chapter 6.

b. Ez lehetséges számomra. this possible for me 'This is possible for me.'

The category *thematic adjunct* is intended to cover objects of grammar that are sometimes characterized as bearers of circumstantial or non-core participant roles. This non-core thematic domain is variously taken to include comitatives, benefactives, instrumentals, and the like; but it does not generally include the kind of non-subject participants we have in (16-18). One exception is the applicative analysis that I have discussed above, but therein all datives are assumed to be licensed by essentially the same mechanism. Here thematic arguments and thematic adjuncts are distinguished systematically.

In Chapter 4, I present an analysis of thematic adjuncts as an expansion of the Theta System. It has been suggested in Marelj (2004) within the research frame of the Theta System that certain locative goals (such as to London in I sent a letter to London) can receive a thematic specification even if they are not arguments. Marelj (2005) argues further that instruments, benefactives, goals and sources make up a "hybrid class", and they have a mixture of properties of true arguments and adjuncts. After reviewing like-spirited proposals, I will take this insight as a starting point, and suggests that arguments and thematic adjuncts can be systematically treated as elements of two distinct domains. Arguments, as usual, are represented on the argument list of the predicate, but thematic adjuncts are only introduced post-lexically if their licensing conditions are met. The constraints that govern thematic entities of grammar are applied over these two domains distributively. For example, two dependants can bear the same thematic specification as long as they are not in the same domain, as suggested in Marelj (2004). I will capture this by assuming that a non-identity constraint is operative within, but not across the domain boundaries.

If it is needed, I use the term *thematic dependant* to cover both thematic arguments and thematic adjuncts. They together will be distinguished from regular, non-thematic adjuncts, such as *nekem* 'to me' in (19), that may have superficially similar semantics.

(19) Nek-em szép ez a kép.

DAT-1SG beautiful this the picture 'To me, this picture is beautiful.'

It is often the case that in works that take a broader perspective on datives, such examples as in (19) are treated on a par with dative thematic dependants. I will show in 4.4 that this is misguided, as the syntax of regular adjuncts and the syntax of thematic datives are quite radically different. Simple dative adjuncts are not sensitive to the nature of the predicate in the clause, and they do not need any lexical licensing. One reflex of this in the analysis is the lack of a thematic specification on real adjuncts. I will refer to these simply as *dative adjuncts* (19), as opposed to *dative thematic dependants*, as in (15-18). Predicates that license dative thematic

dependants will be called dative predicates.8

This gives us a classification in which what are frequently glossed as dative experiencers fall into three distinct grammatical types: arguments, thematic adjuncts, and non-thematic, event-external adjuncts. I use this trichotomy to take a fresh look at the constructions which dative predicates project and which have interested Hungarian linguists for more than two decades now.

1.2.4. Dative experiencer predicates are not quirky (Chapter 5)

It is a recurrent claim that dative experiencers have a unique syntax, and in many languages, they behave as true syntactic subjects. Icelandic is well known for having quirky subjects of this sort.

(20) *Icelandic*, Sigurðsson (1989:205)

Mér leiðist Haraldur. I.DAT bore.PRES.3SG Harold.NOM 'Harold bores me.'

The quirky analysis has been applied to Hungarian by Dalmi (2002, 2005). In Chapter 5, I argue that the syntax of dative experiencer predicates in Hungarian is not necessarily more complicated than what meets the eye, and the dative is shown to have no quirky subject properties. The special syntactic properties these predicates have can be derived from the make-up of their thematic structure, and they certainly do not project quirky constructions in the strong Icelandic sense, nor is there a need to assume a covert LF-subject status for these datives in the sense of, for example, Landau (2005).

In Hungarian, dative experiencer predicates can in fact also subcategorize for a finite *that*-clause or an infinitival clause in place of the nominative subject.

- (21) a. Nem fontos nek-i [IPinf itt marad-ni(-a)]. not important DAT-3SG here stay-INF-3SG 'It is not important for him to stay here.'
 - b. Nem fontos nek-i, [CPfin hogy itt marad-j-ak]. not important DAT-3SG that here stay-SBJ-1SG 'It is not important for him that I stay here.'

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⁸ As shown in (18), *dative thematic adjuncts* can in fact be coded by other means than dative case, but I just make the terminological convenience of gathering the distinct morphological instantiations under this term. I may also continue to refer to dative thematic dependants of the kind discussed here as *dative experiencers*, even though this thematic specification is a default possibility, but not a necessity for dative thematic adjuncts (cf. 18a).

c. Nem fontos nek-i [DP ez a hely]. not important DAT-3SG this the place 'This place is not important for him.'

I will argue that the three constructions in (21) are projected by a single lexical entry for *fontos* 'important', which does not directly constrain the categorial realization of its subject argument. This property is characteristic of the whole class of dative experiencer predicates. It is customary in traditional grammars to assume that the clausal arguments in (21a-b) are subjects, and at least at the level of terminology this assumption is taken over in many generative studies, too. I will provide substance to this assumption in Chapter 5, and argue that clauses can indeed be directly assigned subject status, without the mediation of a (covert) expletive element. This possibility is shown to follow from the thematic structure of dative experiencer predicates.

In an appendix to this chapter (5.6), I discuss certain dative modal verbs - *kell* 'must', *lehet* 'can', and *szabad* 'may' - that function as semi-auxiliaries. These will be argued to have restructuring properties and to have no thematic structure. Their syntax is therefore different from the syntax of dative experiencer predicates, including modal predicates, such as *lehetséges* 'possible'.

1.2.5. Datives and agreement-marked infinitives (Chapter 6)

The extensive literature on dative experiencer predicates in Hungarian (see footnote 7) has been mainly focused on one peculiar property: the fact that most of them license agreement-marked infinitives.

(22) Nek-em fontos itt marad-n(-om).

DAT-1SG important here stay-INF-1SG
'For me to stay here is important.'

The infinitive can agree in person and number with the dative expression, as is clear from the example. There is agreement in the literature that dative predicates can be dyadic or monadic (with a general disagreement over the exact distribution of these thematic varieties over the class as a whole), depending on whether the dative is in the matrix clause or it is directly inserted as the subject of the infinitive.

Most of the proposals have considered the infinitival marker optional in (22). É. Kiss (2001, 2002) is an exception to this, for she argues that there is a strict correlation between the status of the dative and the presence or absence of infinitival agreement marking. Infinitival agreement is obligatory with a clause-mate dative, but it is prohibited if the dative is base-generated in the matrix clause. (23) represents schematically what are the two grammatical structures for É. Kiss.

(23) a. *important* [IPinf I.DAT to-stay-AGR]
b. *important* I.DAT [IPinf PRO to-stay]

In Chapter 6, I will argue that this view on infinitival agreement marking is essentially right, and can accommodate the analysis proposed in Chapter 4 well. Predicates that have dative arguments will be shown not to license agreement-marked infinitives. Predicates licensing optional dative thematic adjuncts project the structure in (23a) in the absence of this thematic adjunct, and they project the structure in (23b) in the presence of it. The choice between two is concomitant with interpretive differences.

1.3. A brief glance at the structure of the Hungarian clause

Hungarian is known to be a discourse configurational language, in which phrases in the preverbal field line up according to their discourse function and/or quantifier type, rather than according to their syntactic function. If we take, for example, a simple dative experiencer construction, it will not only have the English-like order DP_{NOM} - V - DP_{DAT} , but the remaining five possible permutations are also grammatical.

- (24) a. *Kati tetsz-ik Péter-nek*. Kate appeal-3sg Peter-DAT 'Kate appeals to Peter.'
 - b. Kati Péternek tetszik.
 - c. Tetszik Kati Péternek.
 - d. Tetszik Péternek Kati.
 - e. Péternek tetszik Kati.
 - f. Péternek Kati tetszik.

These sentences all share the same thematic meaning, but their discourse/quantificational properties vary, and each sentence can have multiple readings conditioned in part by its prosodic structure. Scope is determined linearly by default, and any deviation from this principle is marked by non-neutral prosody.

The structure of the preverbal part of the Hungarian clause that I present below focuses on the essentials, but it will be sufficient for the purposes of the representation and the description of the data. I am not committed to radically more elaborate syntactic structure.

The position immediately preceding the verb can host two types of expressions. In prosodically neutral clauses, a set of non-referential elements generally known as

⁹ I refer the reader to Brody & Szabolcsi (2003), É. Kiss (2002, 2003), Koopman & Szabolcsi (2000), and Szabolcsi (1997) for some recent representative works that describe the left periphery of the Hungarian clause in detail.

verb(al) modifiers, such as bare noun phrases, verbal particles, or secondary predicates precede the verb and form a single prosodic word with it. For this reason, some of these are spelled together with the verb in this position in accepted Hungarian orthography (25b).

- (25) a. *János tévé-t néz*.

 John tv-ACC watches 'John watches tv.'
 - b. *János fel-áll-t*.
 John up-stand-PAST 'John stood up.'

This neutral preverbal position has been dubbed Asp(ectual)P, since it has an important role in determining grammatical aspect. The particle-verb order (25b) generally expresses perfective aspect, whereas the reverse order renders the structure imperfective in the lack of other intervening factors.

(26) János áll-t fel, amikor

John stand-PAST up when

'John was standing up when'

The particle-verb order is also reversed if a constituent is focused. Focused constituents receive main stress. I mark them by capitals if needed, but I do not otherwise represent prosodic structure in this dissertation.

(27) JÁNOS áll-t fel.
John stand-PAST up.
'It was JOHN who stood up.'

Focused constituents and verb modifiers are in complementary distribution in the preverbal position.

(28) JÁNOS (*fel)-áll-t (fel). John up-stand-PAST up. 'It was JOHN who stood (up).'

Since, however, preverbal verb modifiers and focused elements have quite distinct prosodic and semantic properties, it has become generally accepted to assume a separate FocusP and an AspP, in this order, in the preverbal field (or an analogous distinction). I adopt this approach for the descriptive purposes that this work needs.

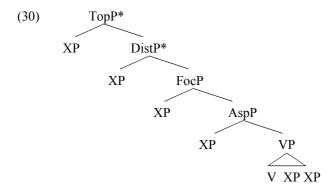
To the left of this core left-peripheral domain, there may appear distributively quantified expressions and topics.

(29) [TOPP János] [DISTP minden filme-t] meg-néz-ett.

John every movie-ACC PTCL-watch-PAST 'As for John, he watched every movie.'

Contrastive topics usually occur on the very left, but they can also intermingle with regular topics. A contrastive topic is marked prosodically with rising pitch and it is followed by a slight pause.

I adopt the following bare skeleton of the left periphery from É. Kiss (2003:23).



In recent work, É. Kiss has been arguing for a predicative analysis of both verbal modifiers (2005b) and focused constituents (2004, 2005a). This amounts to collapsing the FocP and AspP projections into a single PredP, which marks the left edge of the predication. Certain aspects of this proposal have not been fully elaborated yet, but the notion of predication it assumes will be useful for us at relevant points of the discussion. To represent clause structure, I will nevertheless use the more traditional tree in (30). I adhere to the convention of using only the part of this structure that is filled in by visible material. In general, nothing crucial is going to depend on the exact make-up of the left-periphery beyond what is necessary for the simple description of the data.

A more pressing concern is whether Hungarian is configurational or not below the left periphery with respect to the coding of arguments. There was an extensive debate of the configurationality issue in the eighties of the last century, which faded by and large by the middle of the nineties. The only fully elaborated and empirically substantiated approach that has emerged is that of É. Kiss, who has been propagating a flat-VP structure for Hungarian (1987, 1994, 2002, 2003). In her analysis, arguments are base generated in the VP in a random order, and they mutually c-command each other. They can stay in situ or move to appropriate positions in the left periphery (30) when, for example, they are focused or topicalized. This is the position that I assume in this dissertation.

A subject and an object can be syntactically identified as such even in the flat VP analysis by assuming that each moves to its respective AgrP projection during the derivation. Bartos (1999) presents several, mainly morphological arguments to

¹⁰ Horváth (1986), Kenesei (1986), and Marácz (1989), among others, are major proponents of the configurational line. Recently, Surányi (2005) has provided some novel arguments against the non-configurational analysis.

posit an Agr_SP and an Agr_OP in the preverbal field of the Hungarian clause. ¹¹ É. Kiss (2002) adopts Bartos' proposal, but whether one does so or not is independent of the acceptance of the flat-VP analysis. Instead, I take the position that is standard in *Lexical-Functional Grammar*, where syntactic functions are considered to be primitive objects of grammar (cf. Bresnan 1982b, 2001 or Dalrymple 2001). In a non-configurational language such as Hungarian, an argument is recognized as a subject or object by its morphology in the default case. In particular, Hungarian subjects are not marked by overt, phonologically realized case, but any non-subject argument receives an appropriate overt case-marker by default.

The flat-VP analysis obviously does not imply that there are no subject-object asymmetries in Hungarian, and in fact, it is a well known that there exist asymmetries of this kind. What is claimed in the present analysis is that subject-object asymmetries originate in non-configurational aspects of representation. I will argue in particular that such grammatical phenomena as *past-participle formation* or *anaphoric binding* are directly sensitive to the thematic structure of the predicates involved, and not to presumed configurational asymmetries. This gives further support to the flat-VP proposal, but I will not argue this position beyond what is relevant for the analysis of dative experiencer predicates.

The only remaining issue, the problem of how to represent the external argument - internal argument distinction in the flat-VP proposal, is too important to omit but involves too many complexities to properly tackle here. It has become widely accepted to identify external arguments as being inserted into a functional projection outside the lexical verbal projection. This functional projection - the vP of Chomsky (1995) or the VoiceP of Kratzer (1996) - assigns a thematic role to the external argument, which is therefore not thought to be thematically related to the predicate. This approach is not compatible with the flat-VP analysis, in which every argument, including the external argument, is base generated inside the VP-internal thematic field.

There is solid empirical evidence from participle formation and resultative predicate licensing (to be discussed in Chapter 2 and Chapter 4) that the external argument - internal argument distinction is grammatically relevant in Hungarian, too. On the other hand, there is no purely syntactic evidence available to assume that external arguments are indeed inserted into a separate projection of their own. It has long been observed that the neutral word order in Hungarian tends to be SVO, especially in the case of subjects that are external arguments (cf. Kálmán 1985). Thus, (31b), as opposed to (31a) is not neutral with respect to its prosodic and/or discourse properties.

¹¹ In recent versions of the Minimalist Program, these AgrPs are positioned inside the VP. This, nevertheless, is not directly relevant for us.

¹² It would be more appropriate to talk of asymmetries between subjects and other non-subject arguments. I just simply follow traditional parlance.

- (31) a. János elüt-ött-e Péter-t.

 John run.over-PAST-3SG Peter-ACC

 (i) 'John ran over Peter.'
 - (ii) 'As for John, he ran over Peter.'
 - b. Péter-t elüt-ött-e János. Peter-ACC run.over-PAST-3SG John 'As for Peter, he was ran over by John.'

Since unaccusative subjects can stay inside the VP in neutral sentences, these data could be used to argue for the presence of an external argument projection in front of the verb. But É. Kiss (2002:9) points out that (31) should be evaluated in terms of topic selection, and not directly in terms of thematic or functional differences. The reason why (31a) is neutral is that other things being equal, subjects are the likeliest candidates for topichood. Topic selection is also influenced by the animacy features of the arguments. Consequently, (32a) below is at least as neutral as (32b). In fact, (32a) would be preferred as a response to a question about what has happened.

- (32) a. *A polgármester-t elüt-ött-e a villamos*. the mayor-ACC run.over-PAST-3SG the tram 'The tram ran over the mayor.'
 - b. A villamos elüt-ött-e a polgármestert. the tram run.over-PAST-3SG the mayor-ACC 'The tram ran over the mayor.'

Imagine the context of a middle-sized town with a single tramline and a single mayor. In such a context, the two participants have equal discourse prominence. The only reason why (32a) is preferred is that only the object has a [+animate] feature. Given that the internal object argument is preferred over the external subject as a candidate for the preverbal position, these data indeed seem to be about differences in topic selection, and they do not provide an argument for the syntactic separation of the external argument.

Similar considerations have led to proposals in which the external/internal distinction is determined at the level of argument structure, but is not necessarily reflected configurationally (as in Bresnan & Zaenen 1990 and Zaenen 1993). Levin & Rappaport (1995), however, call attention to the fact that thematic structure underdetermines syntactic realization in a relevant respect. Certain intransitive predicates with a theme argument show unergative properties (emission predicates like *glow* or *radiate*). Some further deviations from an ideal deterministic mapping from thematic structure to syntax are discussed directly in Chapter 2.

As we will see, external arguments are distinguished technically from internal arguments in the Theta System by receiving distinct mapping indices at the level of thematic structure. However, certain arguments (like the subject of emission verbs) do not get an index. I will not assume that a separate position is available for the external argument in the structure of the Hungarian clause, in conformity with the

flat-VP hypothesis. It therefore remains a problem to identify arguments without a mapping index as external or internal in syntax. I can see two possible solutions, but I stay non-committed to either. First, given the above considerations, it could be that the external-internal argument distinction is not directly relevant for syntax in Hungarian; it is only operative in the lexicon, where it governs such processes as past-participle formation. Second, the distinction might be captured syntactically by assuming that external arguments are inserted into a specifier position in the VP (the VP-internal subject hypothesis), whereas internal arguments are complements. This position is revived in Horvath & Siloni (2002), who make several empirical and conceptual arguments against the little-v hypothesis. They also suggest that this makes it possible to pair subjects up with adjuncts (which are also in specifier positions), inasmuch as both could be assumed to be inserted via the asymmetric (adjunction) operation pair-merge (cf. Chomsky 2001). The crucial idea is that external subjects and adjuncts are treated on a par, and this is not primarily achieved by placing them into a given structural position, but by assigning them to the same grammatical type with respect to lexical insertion. Such an approach could in principle be reconciled with the flat-VP analysis, but I will not pursue a solution here.

Experiencers and thematic theory

2.1. The Theta System

This work presupposes a lexicalist approach to grammar. In particular, I embed the analysis in the *Theta System* of Reinhart, as it has been developed in Reinhart (1996, 2000, 2002); and further elaborated in Reinhart & Siloni (2004, 2005), as well as in Marelj (2002, 2004). The major concern of the Theta System is to provide for an explanatorily adequate model of the interface between the conceptual system and the computational system, or syntax.

In this chapter, I first present an overview of the Theta System, concentrating on those aspects of it that have direct relevance for the current work (Section 2.1). The rest of this chapter is devoted to an overview of how psych-predicates and experiencer arguments are treated in Theta System. I have already pointed out in 1.1 that the three major *psych*-classes - *viz.*, subject, object, and dative experiencer predicates - have each been argued in Reinhart (2002) to receive unique thematic encoding. It might not be immediately obvious why this should be so, and since the issue deserves due attention for the reasons I have already explicated, I perform a thorough investigation in Section 2.2. The main objective is to establish the independent, and grammatically justified, existence of the dative experiencer class.

2.1.1. The view on the lexicon and its role in grammar

As opposed to neo-constructionist theories of grammar, wherein the lexicon is simply a list of roots (as in Marantz 1997 or Borer 2003, 2005), the Theta System rests on the assumption that the lexicon is a richer storage of grammatically relevant chunks of information. This assumption is certainly not unique to the Theta System: the mainstream Minimalist Program (MP), as well as Lexical-Functional Grammar (LFG) or Head-driven Phrase Structure Grammar (HPSG), among others, are also lexicalist in this sense. Moreover, it is also a shared assumption among these theories that the grammatically relevant lexical information is not distributed completely idiosyncratically over lexical items, but there are important regularities to capture.

Nevertheless, one can be lexicalist to different degrees. What has come to be known as the *Strong Lexicalist Hypothesis* constrains both derivational and inflectional morphology to the lexicon. Grammars that abide by this hypothesis, with LFG being a prime example (cf. Bresnan 2001, Dalrymple 2001), assume the *Lexical Integrity Principle*, which allows no syntactic rule to refer to elements of morphological structure. The so-called *Weak Lexicalist Hypothesis* allows only derivational morphology in the lexicon, whereas the place of inflectional morphology is in syntax. The Theta System is weakly lexicalist, and consequently the lexicon is conceived of as an active module of grammar, inside which arity operations (operations targeting thematic structure) can apply to the lexical entries stored therein.

It is a core fact of language that verbs by default can have different syntactic realizations. At least some of this variation is often taken to correlate with variation in thematic structure, as in the following case.

- (1) a. John opened the door.
 - b. The door opened.
 - c. The door was opened (by John).
 - d. This door does not open easily.

Despite the obvious structural differences, there is a fundamental conceptual relatedness between the verbs in these four constructions, inasmuch as in some sense all the four can be thought to involve different instances of the same verb. Any of these four different instances can in theory be taken to be more basic than the other(s), and be used as input to derive the other(s) by lexical rules. In many approaches (for example, in LFG), each of these four instances is associated with a distinct lexical entry of its own. This is technically satisfactory, but gives no obvious account of the intuition that it is after all a single underlying concept that is involved in all cases. In the Theta System, however, this intuition is taken seriously and is turned into a design feature of grammar, in the form of what Reinhart (2000:5) calls the *Lexicon Uniformity Principle*.

(2) Lexicon Uniformity Principle

Each verb-concept corresponds to one lexical entry with one thematic structure. [Consequently], the various thematic forms of a given verb are derived by lexicon-operations from one thematic structure.

Reinhart herself notes that the generalization this principle expresses cannot as such be derived but has more of a status of a theoretical primitive that guides research on thematic structure. I regard (2) both as a methodological guideline and as an operative principle of thematic structure.

The application of this principle has wide-reaching consequences, which sometimes cause non-trivial problems (most of which are in fact not specific to the Theta System only). Let me provide an illustration for an issue that pops up several times in this dissertation, too. Consider the following sentences with the complex

verb open up.

- (3) a. John/the wind opened up the roof.
 - b. The roof opened up.
- (4) a. The embalmer opened up the body.
 - b. Dead bodies open up easily.
- (5) a. Psychologists open people up.
 - b. People do not easily open up (to psychologists).

(3) can probably be subsumed under the same lexical entry as the *open*'s in (1), with some auxiliary assumptions about how the meaning of the particle combines with that of the verb. The same might also hold for (4), where (4b) is a middle construction comparable to (1d), and (4a) appears to have the same cause-subject *open* as (1a) or (3a): besides doctors or embalmers, hand grenades could in principle also open up dead bodies. It is simply world-knowledge that tells us that dead bodies are usually opened up by people. (5), however, seems to have a different reading, which perhaps only metaphorically relates to what is considered to be the basic meaning of *open*. Crucially, the object in (5a) and the subject in (5b) denote mentally involved participants in the event - these are experiencer arguments. Psychologists do not open people up the same way they open up books, but books, films or disasters can open people up in a way similar to what psychologists do. In other words, *open up* in (5) behaves as if it were a *worry*-type experiencer predicate. As I argue, in fact it is.

This is therefore a thematically relevant difference, which leads us to set up at least two distinct lexical entries to capture the data we have just seen.

```
(6) a. open_1(-up) < causer, theme/patient> [for (1), (3), (4)]
b. open_2-up < causer, experiencer> [for (5)]
```

Again, I disregard now the exact contribution of the particle in the case of (3) and (4), but I assume that these complexes are compositional, as opposed to (5), which is not.² It is important to emphasize that the decision to create two distinct lexical entries is made on the basis of thematically relevant considerations, and not on the basis of simply comparing the lexical semantics of the predicates. Polysemy is all over the lexicon, and it might be otherwise quite legitimate to assume that *open* has a slightly different meaning in, say, (1a), and (4a). It is a more contentious issue to decide whether the mental *open up* is related to the others through homonymy or

¹ Often it is *people's hearts*, *minds* or *eyes* that are opened up, but these are conventional metonyms for the people themselves, used with the aim of highlighting the precise nature of the experience. Note that *one's heart* may also be worried, *one's mind* be frightened, and so on.

² Unless one has a very precise understanding of how metaphorical extensions happen.

polysemy, but such decisions are not necessarily relevant for thematic theory.³ On the other hand, thematic diversification should have grammatical correlates. To take just a brief example, the experiencer entry, and only that, in fact includes a third thematic role which can be realized with the subject-experiencer version. This third thematic role is what Pesetsky (1995) calls the subject matter of emotion.

- (7) a. The Pharaoh worried about his love life.
 - b. The Pharaoh opened up about his love life.
 - c. The dead body of the Pharaoh opened up (*about his eating habits).

In the presence of the subject matter argument, *open up* necessarily has the experiencer reading (7b), and it is the same construction as the one in (7a). The regular, non-experiencer entry of *open up* does not license a subject matter argument (7c). This strengthens the conclusion that we need at least two distinct lexical entries for *open (up)* in the lexicon. Since the two respective concepts also seem to be distinct enough, this move does not go against the spirit of the *Lexical Uniformity Principle*.⁴

Coming back to our initial concern, lexical entries by default carry a rich thematic specification in the Theta System and each distinct (verbal) concept is associated with a single basic thematic structure. The four syntactically distinct constructions that are represented in (1) for the *open* concept are four distinct realizations of this underlying structure, as a result of arity operations that have applied in the lexicon. It is thus the *lexicon* that ultimately dictates the initial syntax of these constructions. The Theta System, as the interface between the Conceptual System and the Computational System (syntax), gathers and organizes this syntactically relevant information, and hosts the lexicon itself as its integral part.

The thematic specification that the System assigns to concepts can be passed on by the computational system for the Context and the Inference Systems. This is so because thematic structure can be semantically interpreted (it is defined to be), therefore it carries information relevant for the interpretation of syntactically complex structures. Besides, in certain cases the thematic makeup of an argument can be underspecified in the lexicon in ways that I discuss in the next subsections, and then the final specification may only happen at a post-syntactic phase.

This discussion presupposes a modular view of grammar in the sense that each module mentioned above is thought to represent independently operating cognitive systems, which, in the lack of direct, mutually legible information, communicate with each other via interfaces. The (partial) model that emerges is represented schematically in Figure 1.

³ Though a clear case of homonymy is an obvious argument for the postulation of two distinct lexical entries.

⁴ Again, as I have emphasized above, 'conceptual distinctness' is a somewhat vague notion, which can motivate but not justify such a move in itself.

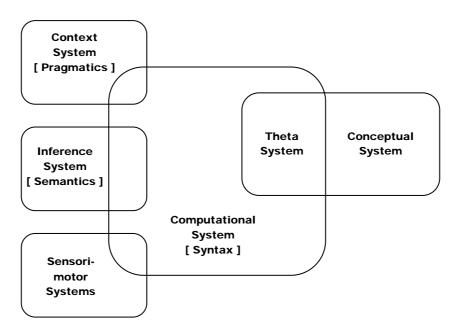


Figure 1.

The Theta System directly communicates with syntax, and indirectly, through the mediation of the Computational System (syntax), with the Inference and the Context Systems. It is thus involved in the operation of three interfaces.

After this overview, I turn now to a discussion of the type of information the Theta System encodes.

2.1.2. Thematic features instead of thematic roles

By the late eighties of the last century, the traditional conception of thematic roles as denoting discrete, syntactically relevant semantic types of arguments has come to be criticized from several directions. Such skepticism might simply result in not allowing thematic roles to come into any direct contact with syntax. Grimshaw (1990), for example, assumes that thematic roles are relevant only in building up argument structure, which is simply a hierarchy of argument places, but they do not participate directly in this structure. Nor do they have in general any further role in grammar. In the classical *Lexical Mapping Theory* of LFG (Bresnan & Kanerva 1989), arguments are associated with thematic roles at the level of argument structure, but it is not directly the roles themselves that participate in the mapping to *functional structure* (a syntactic level of representation). This mapping is determined instead by the two features [+/-r(estricted semantically)] and [+/-o(bjectlike)],

which are distributed over argument slots according to an algorithm that feeds on the thematic type of arguments and the exact constitution of the argument structure. Thus while thematic roles are absent from syntactic levels of representation, they are still there in the background in both proposals.

Others have come to question whether a finite list of discrete roles as such has any real usefulness at all. Jackendoff (1987, 1990) argues that thematic information cannot always be separated meaningfully from selectional restrictions. An adequate thematic theory should be capable of covering both by decomposing this wider range of lexical information into a representation that is structured into separate "tiers". In a way then, thematic information is disseminated over a rich semantic representation. Such a decomposition might offer us valuable insights into the sort of semantic/conceptual features that have immediate grammatical relevance, and which therefore can be used as the building blocks of a thematic theory.

Dowty (1991) offers a proposal which narrows down on these building blocks and which can be regarded in certain aspects as a predecessor to the Theta System.⁵ He uses two cluster concepts, Proto-Agent and Proto-Patient, instead of the traditional discrete roles. Proto-roles are nondiscrete, some arguments could qualify partially but equally for both roles. They are also non-exhaustive (some arguments may have neither role), and non-unique (arguments may share the same role). The two proto-roles are described by the following sets of entailments of their governing predicates.

(8) **P-Agent entailments**

- (i) volitional involvement in the event or state
- (ii) sentience (and/or perception)
- (iii) causing an event or change of state in another participant
- (iv) movement (relative to the position of another participant)

(9) **P-Patient entailments**

- (i) undergoes change of state
- (ii) incremental theme
- (iii) causally affected by another participant
- (iv) stationary relative to movement of another participant

Given the prototype approach to argument selection, arguments can have more or less of these entailments, and they qualify accordingly as more or less prototypical P-Agents or P-Patients. The argument for which the predicate entails the greatest number of Proto-Agent properties will be the subject, similarly for P-Patients and objects.

Dowty himself cautions against regarding the entailment lists as feature-decompositions of the two proto-roles: "Although we are using sets of entailments

⁵ Dowty's analysis directly influenced the development of several mapping proposals adopting the proto-role approach, such as that of Alsina (1996) or Zaenen (1993).

much like distinctive features to crossclassify arguments, I deliberately avoid saying 'feature decomposition of roles', because I believe that the boundaries of these kinds of entailments may never be entirely clearcut and I also would not rule out the desirability of 'weighting' some entailments more than others for purposes of argument selection (as just mentioned with causation)" (1991:574). The Theta System takes the opposite stand on this issue. If elsewhere in grammar - in phonology, morphology, and syntax - features have turned out to be useful devices, there is no principled reason to refrain from attempting to use them in thematic theory, too. Thematic structure is an interface between the system of concepts and syntax, and as such, it uses its own set of primitives for the purposes of coding information. These primitives should be conceptually grounded (i.e., appropriately derived from an underlying conceptual representation), but they are not themselves elements of the conceptual system itself. Let us entertain the plausible hypothesis that feature decomposition of thematic information is a viable option, and see whether the arising system can give us predictions about argument realization. If yes, such predictions are falsifiable, which in turn helps evaluate the validity of the proposal itself.

The Theta System uses two binary features to classify the whole thematic domain: cause change [+/-c], and mental state is relevant [+/-m]. A traditional agent, such as the subject argument of assassinate, is coded as [+c+m], since it denotes a participant of the killing-event who causes a change, and whose mental state is relevant.

- (10) a. John/the wind/the key opened the door.
 - b. *Gavrilo Princip*/*the revolver/*the turmoil assassinated the archduke.

The subject of *open*, on the other hand, can be either an agent (like *John*), a simple cause (*the wind*), or an instrument, a sort of secondary cause in the presence of an agent (*the key*). These options can be coded at the same time by underspecifying a single thematic entity for the *mental state* feature, and then [+c] stands for all the three role types that are licensed on the subject argument slot of *open*.

Causality is thus taken to be a key feature in thematic encoding. That it has a special, linguistically relevant role in human cognition, is recognized also by Dowty (see the quote above); and that it has a distinguished part in thematic theory has been suggested already by Jackendoff (1987, 1990) or Grimshaw (1990), among others. In the Theta System, it is one of the two building blocks, the other being the mental state attribute (which is also recognized by Dowty, cf. his *volitional* and *sentience* entailments in (8)). Hence the System is, so to say, biased towards the Proto-Agent pole of Dowty: the Proto-Agent role is chosen to be positively encoded. Proto-Patient arguments, such as *the door* in (10a) and *the archduke* in (10b) are coded negatively: they do not cause a change and they are not involved mentally. This is a necessary entailment for the object argument of these two verbs, and for this reason, they are coded [-c-m]. This also means that such entailments as *affected* fall out as

⁶ Cf. Jackendoff (1987) for an approach that treats instruments as (secondary) causes.

not directly relevant for the purposes of argument selection, though it is not ruled out in principle that they could be relevant elsewhere in grammar. The lexical entries for the two verbs are then as follows.

Notice that the Theta System also does not directly encode information concerning the movement-properties of participants, or whether they are incremental themes or not. Such semantic entailments are relevant for the determination of the aspectual properties of the predicate, but the assumption in this framework is that aspectual considerations do not have a direct influence on argument selection, contra Borer (2005), Grimshaw (1990), or Ramchand (1997, 2003), among others.

Given the option for underspecification, there can be altogether nine thematic types in the system, which Reinhart (2002:10) refers to as *clusters*. Table 1 gives an overview of these, with corresponding traditional thematic role labels also listed.

THETA CLUSTERS	THEMATIC ROLE LABELS		
[+c+m]	agent		
[+c-m]	instrument		
[-c+m]	experiencer		
[-c-m]	theme/patient		
[+c]	cause		
[+m]	sentient		
[-m]	subject matter/locative source		
[-c]	goal/benefactor		
[]	arb(itrary) ⁷		

Table 1. Theta clusters

The role labels are only given for expository purposes, the exact distribution of theta clusters across predicate classes is discussed in the rest of this chapter. What is more immediately important is that it is only the left column that has formal recognition in the Theta System. On the one hand, the labels are simply mnemonics for certain

⁷ The ninth cluster is underspecified for the value of both features. It has been proposed in Marelj (2004) that this cluster is operative in middle-formation. In languages where middles are formed in the lexicon (such as Dutch, English or Hungarian), the operation changes the thematic specification of the subject argument of the input verb, and gives [] as the output on the middle verb. Marelj (2004) argues that this cluster has an arbitrary interpretation in the sense of Chierchia (1995).

semantic types that the clusters are typically associated with. Notice that the clusters themselves leave much open for interpretation: this void may be filled in idiosyncratically by the lexical semantics of the predicates, or ultimately by the given context of use. Another option is for one argument to constrain the semantic type of another: in the presence of a [+c+m] argument (an agent), a [+c-m] cluster is interpreted as an instrument. That the meaning of a thematic entity is often contextually determined is an assumption that the Theta System and Dowty's protorole proposal share. On the other hand, Dowty does not consider feature decomposition of thematic roles a valid step, whereas this move is essential in the Theta System. The arising theta clusters are discrete and cover the totality of the thematic space available for semantic arguments. Every argument is obligatorily classified with respect to thematic type, and membership is not graded.

Therefore an immediate advantage of such a system is the ability to non-ambiguously classify every argument with respect to thematic type, without the need for recourse to traditional thematic labels. The feature decomposition analysis provides us with powerful, but restricted machinery to investigate the syntax-lexicon interface. Again, many other sorts of decomposition are possible, and it could turn out that there are more optimal ones than the one pursued here. I carry on with the Theta System and show that it can be successfully used to capture the peculiar behavior of experiencer predicates.

Before that, I briefly introduce the rest of the system: co-occurrence restrictions on theta clusters (2.1.3), the mapping generalizations (2.1.4), and the assumed arity operations that are relevant for the subsequent discussion (2.1.5). This last subsection also includes some discussion on how the unergative-unaccusative distinction is captured in the Theta System.

2.1.3. Constraints on the co-occurrence and interpretation of theta clusters

2.1.3.1. Uniqueness and non-identity

There is an accepted generalization that no verbs denote eventualities that have more than one instance of the same thematic role (cf. Carlson 1984, 1998; Chierchia 1989b; Marelj 2005; and Parsons 1990, among others, for arguments for why this generalization should hold). It seems plausible to believe that the argument structure of a predicate is already constrained in the lexicon not to contain two identical thematic roles. This condition is generally referred to as the *uniqueness constraint*. I quote here two different formulations of this constraint: the *Thematic Diversity* constraint of Pesetsky (1995) and the *Non-Identity Constraint* of Marelj (2004:55).

(12) *Thematic Diversity*, Pesetsky (1995:62)

If α and β are distinct arguments of a predicate P, the thematic role assigned to α must be distinct from the thematic role assigned to β .

(13) The Non-Identity Constraint, Marelj (2004:55)

An n-place verb, n>1, is encoded in terms of non-identical feature clusters.

Marelj's formulation, which has been adopted in the Theta System, is not equivalent to that of Pesetsky. Let us see why.

Since thematic roles are crucial for the linking from the lexicon to syntax, the uniqueness constraint can be approached as arising at least in part from the requirements of the lexicon-syntax interface. In order for this linking to be deterministic, i.e., to be able to prevent a situation in which two arguments are equal competitors for the same syntactic position, arguments must be individuated somehow and supplied with information that syntax can read as distinct. If two arguments bear exactly the same thematic specification, then, in certain cases at least, there may be no principled way to distinguish them in a non-arbitrary way (via, say, case or by merging indices - see below).

Pesetsky's (1995) *Thematic Diversity* constraint, coupled with the classical *Theta Criterion* of GB (Chomsky:1981), provides for argument structures that represent what we can regard the optimal input to the lexicon-syntax interface.

(14) *Theta Criterion*, Chomsky (1981:36)

- 1. Each argument bears one and only one θ -role.
- 2. Each θ -role is assigned to one and only one argument.

If (12) and (14) hold at the same time, then every single argument of the predicate receives a thematic role that is distinct from the thematic role of any other argument on the same argument list.

The same result can be arrived at if we assume the *Non-Identity Constraint* (13) instead of (12), but (13) allows for a larger set of admissible argument structures than (12). By (13), it is in principle possible for an argument slot to receive two feature clusters (elsewhere: *thematic roles*), as long as no other argument receives the same thematic specification. Multiple thematic role assignment to an argument is not allowed by the classical Theta Criterion (14), but it is allowed by its later reformulations, which require each argument to receive at least one thematic role (cf. Brody 1993). The same is true of the *Function-Argument Biuniqueness* principle of LFG, as is defined in Bresnan (1982b:163).

(15) Function-Argument Biuniqueness, Bresnan (1982b:163)

 $G=g_1...g_n$ is a possible grammatical function assignment to P(1...m) iff the mapping from 1...m to G defined by $i \rightarrow g_i$ is injective (one-to-one and onto).

where $g_1 \dots g_n$ is a list of grammatical functions, and P(1..m) is a semantic form with a list of arguments 1...m.

This formulation defines a one-to-one mapping between argument slots of a predicate and syntactic functions. For this to be possible, argument slots must be individuated, but this does not rule out the assignment of the two thematic roles upon the same argument slot.

Something like the *Non-Identity Constraint* in (13) is needed independently for the accommodation of the analysis that Reinhart & Siloni (2004, 2005) propose for the treatment of reflexive predicates. They argue that an inherent reflexive predicate, such as (16b), is formed from the corresponding transitive predicate (16a).

- (16) a. John washed himself.
 - b. John washed.

The relevant lexical operation is called *reflexive bundling*, which unifies the two input thematic roles on the single argument slot of the inherent reflexive as follows.

(17) a. Reflexive bundling

$$wash_{tr} < [+c+m], [-c-m] > \longrightarrow wash_{int} < [[+c+m][-c-m]] >$$

$$b. \quad \textit{John}_{[+c+m]} \textit{ washed himself}_{[-c-m]}. \rightarrow \quad \textit{John}_{[+c+m][-c-m]} \textit{ washed}.$$

Thus two theta clusters end up on the same argument. The argument structure of the reflexive *wash* still vacuously satisfies (13), given that the two roles are assigned to the only argument slot of a monadic predicate. Moreover, (13) would also be satisfied if a dyadic or a triadic argument structure contained the bundled argument, as long as no other argument is assigned the same bundle.

The way the Non-Identity Constraint is formulated makes it a constraint on theta clusters, and not on thematic role labels. This is so because only theta clusters have a formal recognition in the Theta System. Therefore the Non-Identity Constraint, as it is, does not distinguish between, say a participant that is affected (*patient*) and a participant that moves without being affected (*theme*), for both types are coded as [-c-m] in the Theta System. The co-occurrence of a *patient* and a *theme* is therefore not ruled out by (13), contra the assumptions made in the literature quoted above, including Marelj (2005). I will revisit this question in Chapter 4 as part of the discussion on how thematic adjuncts are constrained. I will suggest that there are reasons to maintain (13) as a constraint on the theta clusters of the Theta System, rather than a constraint on thematic role labels.

There is, nevertheless, a further substantial issue at hand which is immediately relevant for us. The problem stems from the fact that the Theta System allows underspecified unary clusters. How is one to decide whether, say, [-c] is identical to [-c-m], or whether [-c] is identical to [+m]? With respect to the first pair, the extension of [-c-m] is contained within the extension of [-c]. With respect to the second, [-c] and [+m] are incommensurable: there is no common ground of

comparison which we could use to decide whether they are identical or not.⁸ To come round this problem, a corollary and a further constraint need to be added to the system.

2.1.3.2. The Principle of Full Interpretation (Marelj 2004)

Thematic underspecification is a lexical matter, which can, and as Marelj argues, must be resolved at a post-syntactic phase at the latest. She formulates this requirement as the following principle.

(18) The Principle of Full Interpretation [FITR], Marelj (2004:67)

For the purposes of interpretation, all clusters must be fully specified.

In other words, if nothing else, then at least the pragmatic context is expected to be rich enough to provide us with information as to whether John acted as an agent or as a non-agentive cause in, for instance, the following situation.

(19) *John opened the door.*

The agentive reading is obviously much preferred given what we know about the world, but a non-agentive reading is also possible, as in (20a). This is an expected possibility, since, as I have already noted, *open* can take non-agentive subjects, too. So here *John* patterns with *the wind* in not consciously acting to achieve the opening of the door.

- (20) a. John fell and rolled down the stairs, and he hit against our door. That's how he accidentally opened it, to our surprise.
 - b. The wind opened the door.

No such variation can happen with strictly agentive verbs, such as *assassinate*. Gavrilo Princip could have killed but not assassinated Archduke Franz Ferdinand by accidentally falling upon him.

Recall that *open* is coded in the Theta System as < [+c] [-c-m] >. By the *Principle of Full Interpretation*, this structure is either interpreted as < [+c+m] [-c-m] >, in which case we get (19); or as < [+c-m] [-c-m] >, in which case we get (20). Let us assume now that the Non-Identity Constraint (13) is operative at every thematically relevant level, even possibly post-syntactically. The resulting fully specified clusters are well-formed then, since they do not violate this constraint.

In other cases, the given thematic structure is sufficient in itself to determine the

⁸ See Alberti (1997) for some discussion on why incommensurable thematic types need special attention.

interpretative options for underspecified clusters, without the need to recourse to context. Let me use one of the examples of Marelj (2004) for illustration. *Give*-type alternating predicates take a recipient argument, which by definition denotes an animate participant.

- (21) a. John lent Peter/*the table some money.
 - b. John gave Peter/* the table some money.
- (22) a. John lent some money to Peter/* to the table.
 - b. John gave some money to Peter/* to the table.

Recipients, however, behave in many ways like locative goals: they can usually share the same morphological encoding. Also, recipients denote the end of a (sometimes abstract) path, just like locative goals. In that sense, they are of the same conceptual category. In the Theta System, both are encoded as [-c] - this captures the grammatically supported underlying intuition that there is much in common in the two types of roles. So the lexical entry for *lend* looks like as follows.

(23)
$$lend < [+c+m] [-c-m] [-c] >$$

The Principle of Full Interpretation has to apply again to provide the third argument with full thematic specification.

(24) a.
$$lend < [+c+m] [-c-m] [-c+m] >$$

b. $lend *< [+c+m] [-c-m] [-c-m] >$

This time, however, the second extension is ungrammatical, since it violates the Non-Identity Constraint. There is only one possible interpretation of the [-c] argument, and that is exactly the one that complies with the data in (21) and (22). Notice that the recipient argument of *give* or *lend* is not only required to be animate, it also has to be a participant who has to relate to the event mentally. If this condition is not satisfied, the sentence is not well-formed (Marijana Marelj, p.c.).

(25) *I lent some money to Peter while he was unconscious.

In contrast to the case of *open*, this single possible interpretation can be arrived at without any recourse to (pragmatic) context.

One could perhaps wonder why the *Principle of Full Interpretation* does not apply already in the lexicon in the case of (23). The theory-internal motivation is that this would in most cases violate the mapping constraints (see below). But the real question is whether it is justified to assume lexical underspecification, as in (23), when the information needed for a full interpretation of the thematic structure is already available in the lexicon. There is no single answer to this. The approach

⁹ But the syntax of recipients and locative goals is quite radically different. I come back to this issue in Chapter 4.

just described is based on the assumption that locative goals and recipients have similar thematic properties - this might be welcome if we want to capture the obvious conceptual relatedness between the two. On the other hand, what is suggested here is that speakers have to do some extra computation to arrive at a full meaning representation of *open* and *lend* in any given sentence of occurrence; as opposed to *assassinate*, which does not contain an underspecified cluster. This is a matter for experimental testing, and I am not aware of any relevant research. Since, however, it needs to be assumed anyway that the Principle of Full Interpretation applies at the syntax-context interface in certain cases (cf. *open*), I will abide by the notion that it always uniformly applies there.

There is nevertheless one consequence of the Principle of Full Interpretation, pointed out in Marelj (2004), that seems unambiguously welcome. Since in the Theta System only four fully specified clusters are available, it is predicted that no argument structure can contain more than four arguments - there is simply no space for a fifth argument without the violation of the Non-Identity Constraint. This complies with the commonly held wisdom that natural language predicates can have only a limited number of true arguments. In this approach, there can be at most four.

2.1.3.3. The Cluster Distinctness Constraint

Certain pairs of unary clusters are non-problematic with respect to the operation of the Non-Identity Constraints. These are the ones that share an attribute but do not share the value it receives.

$$\begin{array}{lll} (26) & a. & <[+c],\,[-c],\,...>\\ & b. & <[+m],\,[-m],\,...> \end{array}$$

No matter how the Principle of Full Interpretation extends these unary clusters (in any given thematic configuration), the two can never end up identical, so the Non-Identity Constraint need not even be activated. In case a unary feature co-occurs with a binary feature that includes it, then the Non-Identity Constraint is activated, but the computational burden is relatively low since there are only two candidates to compare. (24) is an example for such configuration, with the [-c] and [-c-m] arguments being relevant for comparison.

The following four unary cluster pairs, however, represent a problem in this respect, as is recognized in Kremers (1999) and Reinhart (2000).

(27) a.
$$<[+c], [-m], ...>$$

b.
$$<[+c],[+m],...>$$

c.
$$< [-c], [-m], ... >$$

d.
$$< [-c], [+m], ... >$$

These pairs share the property of containing *incommensurable* or *indistinct* clusters, and thus represent a potential burden for computation. Taking (27a) as a testing example, in each case 4 distinct interpretations are possible by the *Principle of Full Interpretation*.

(28) a.
$$<[+c+m][+c-m]...>$$

b. $<[+c+m][-c-m]...>$
c. $<[+c-m][-c-m]...>$
d. $*<[+c-m][+c-m]...>$

The last construal is not grammatical, since it is a pair of two identical binary clusters. But to arrive at this result, one needs to run through four possible pairs of construals.

Marelj (2002, 2004) hypothesizes that such a heavy computational burden makes the co-realization of indistinct clusters illicit. Note that this does not mean that a lexical entry cannot have two indistinct clusters. It can, but the two indistinct unary clusters cannot be sent off for computation together (i.e., they cannot be corealized), since it is at a post-syntactic level where they are extended for interpretational purposes, and it is there where their non-identity is checked. These considerations lead Marelj (2002) to formulate the constraint against indistinctness as follows.

(29) *Cluster Distinctness Constraint*, Marelj (2002:372)

Two underspecified clusters are indistinct if there is a construal under which they are identical.

She also argues that this constraint is a weak (i.e. *violable*) constraint, which can be overridden for some speakers in case a heavy contextual support that facilitates any of the licit construals is available.

I postpone the illustration of the empirical coverage of this constraint until Section 2.2. Having overviewed how thematic encoding is achieved in the Theta System, let me turn now to the mapping generalizations.

2.1.4. The mapping generalizations

Mapping or linking theories aim at predicting how thematic structure is realized in syntax. This is an essential task, and obviously constitutes an area of crucial importance in the Theta System, too. Here I briefly review the mapping proposal as presented in Reinhart (2002). The following notational conventions are used here and throughout the dissertation to generalize over the clusters introduced in Table 1.

NOTATION	MEANING
[α]	Feature cluster α
/α	Feature α (e.g.The feature /+m occurs in the clusters [+c+m], [-c+m] and [+m].)
[/α]	A cluster one of whose features is $/\alpha$ (e.g. [/+m] is an abbreviation for the set $\{[+c+m], [-c+m], [+m]\}$)
[+], [-]	A cluster all of whose features have the value + or – (e.g. [+] is an abbreviation for the set {[+m], [+c+m], [+c]})

Table 2. Notational conventions in the Theta System

Once again, the term *cluster* is used here to refer to unary and binary features alike.

Reinhart's mapping system, just like most other mapping proposals, rests on the assumption that the mapping instructions are not idiosyncratically listed for individual entries, but rather are stated as generalizations over thematic structures. In this particular case, they can be stated with reference to the clusters themselves, and no extra machinery is needed beyond this. We can refer to these instructions as marking procedures.

There are two types of marking procedures. First, an index is assigned to certain cluster types, which marks whether they are inserted as external (index I) or as internal arguments (index 2). This may happen on condition that the thematic structure is at least dyadic.

(30) Lexicon Marking I.

Given an n-place verb-entry, n>1

- a. Mark a [-] cluster with index 2.
- b. Mark a [+] cluster with index 1.

The marking happens within the Theta System (i.e. at the interface), and it is only the indices that are legible for syntax, but the thematic content of the clusters is not. The mapping proceeds as follows.

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¹⁰ Such indices were first used in Williams (1981).

(31) **Merging Instructions**

- a. An argument realizing a cluster marked 2 merges internally.
- b. An argument realizing a cluster marked 1 merges externally.
- c. When nothing rules it out, merge externally.

The lines (a) and (b) should be obvious, though I may add that as is generally assumed, there can only be one external argument, whereas there can be more than one internal arguments. Line (c) expresses an elsewhere condition for clusters that do not receive an index. This can happen in two cases. First, the 'mixed clusters' [-c+m] and [+c-m] never can get an index (cf. 30), irrespective of the nature of the thematic structure they occur in. Second, monadic entries cannot receive an index either, therefore their single argument is going to be merged externally, irrespective of its thematic makeup.

The second dimension of the mapping concerns the case properties of the arguments.

(32) Lexicon Marking II.

- a. Mark the verb with the ACC feature if the entry includes both a [+] cluster and a fully specified cluster [$/\alpha$, /-c].
- b. The unary clusters [-c] and [-m] require inherent case (or an adposition, depending on the morphological inventory of the language).

The accusative case assigning potential of a verb is thus lexically determined. Every verb with an external argument and a [-c-m] or [-c+m] internal argument assigns accusative case, which is taken up (checked) in syntax by an appropriate noun phrase. Line (b) is more of a descriptive generalization: it requires every internal argument that cannot receive accusative case to be marked by the appropriate case (usually dative) or adposition.¹¹

To be able to develop a fully comprehensive picture of how the mapping is executed, we must also briefly overview some of the thematic operations that the Theta System recognizes. I concentrate on those operations that are going to be directly relevant in the subsequent discussion. Recall that in the default case the different diatheses of a verb are assumed to be derived from a common underlying thematic structure by the Lexical Uniformity Principle (2). It must be made clear whether the marking happens to this underlying thematic structure or to the set of clusters that are sent off to syntax. ¹²

¹¹ As we will see, in certain cases [-m] arguments can be realized as subjects and receive nominative case.

¹² Reinhart & Siloni (2004, 2005) suggest that there is a parameter that divides languages according to whether they allow arity operations (such as reflexive, reciprocal or middle formation, or causativization) in syntax or they confine these operations to the lexicon. They make the claim that in Hungarian, just like in Hebrew, Dutch, English or Russian, among

2.1.5. Thematic operations in the Theta System

2.1.5.1. Causativization

Causativization is the only lexical operation discussed here that can be viewed as a concept-forming operation, since it adds a new argument to the verb's thematic structure. This new argument is always an agent ([+c+m]).¹³ In English, causativization is restricted to a handful of predicates, such as the following.

- (33) a. They ran / galloped / walked.
 - b. She ran | galloped | walked them. [causativization]
- (34) a. The bell buzzed.
 - b. She buzzed the bell. [causativization]

Reinhart (2002, 2006) proposes that the lexical operation of causativization is decomposed into two parts. The following formulation is from Horvath & Siloni (2006).

- (35) *Causativization*, Horvath & Siloni (2006:12)
 - a. Agentivization: Add an agent ([+c+m]) role.

$$V < \alpha > \rightarrow CAUS-V < [+c+m], \alpha >$$

b. *Feature adjustment*: If the output of (a) violates the Non-Identity Constraint (13), change a /+c feature to a /- feature.

(36)
$$walk < [+c+m] > \rightarrow CAUS-walk < [+c+m], [-c+m] >$$

(35b) demotes the causee, who is no longer considered as causally responsible for the event. It is the new, added agent who exercises control over what happens (35a). (36) is an illustration for how this operation is assumed to work. Since the resulting causative entry *CAUS-walk* has both a [+] and a [/ α , /-c] role, accusative case is introduced on the causee (cf. 32).

Lexical causativization is restricted in English, but it is very productive in

other languages, such operations always take place in the lexicon. I refer the reader to these two works for arguments substantiating this divide, but I do not discuss this issue in detail here. It suffices to be aware that Hungarian does not license such arity operations in syntax.

¹³ Typological works sometimes refer to these verbs as *factitive*, and *causative* is used to describe the transitive verb in pairs such as *The wind opened the door - The door opened*. In the Theta System, these two are strictly kept separate for reasons I explicate in 2.1.5.3. The term *causative* is used here to refer to verbs that are the outputs of the causativization operation (34).

Hungarian. Hungarian. The causative morpheme -tVt (or -Vt in the case of monosyllabic stems) can be added to any agentive verb without special restrictions.

- (37) a. *Meg-sétál-tat-t-am* a kutyá-t.

 PTCL-walk-CAUS-PAST-1SG the dog-ACC
 'I walked the dog.'
 - b. *Haza-telefonál-tat-t-am János-t.*home-phone-CAUS-PAST-1SG John-ACC
 'I made John phone home.'

In case the stem is transitive, the cause will appear in comitative case.

(38) Meg-ír-at-t-am a level-et János-sal.

PTCL-write-CAUS-PAST-1SG the letter-ACC John-COM
'I made John write the letter.'

It is a known typological pattern for the causee to appear in dative, comitative or in some other oblique case if the input verb is transitive (cf. Comrie 1985). What is going to be directly relevant for us is that causativization is productive in Hungarian, and it is marked by uniform verbal morphology.

2.1.5.2. Saturation

Saturation is an operation that existentially closes an argument which cannot be realized syntactically. Nevertheless, the argument is still present in semantics. This is how a passive construction is treated in the Theta System.

- (39) a. $open < \theta_1, \theta_2 >$
 - b. Saturation: $\exists x \text{ (open } (x, \theta_2))$
 - c. The door was opened: $\exists x \text{ (open } (x, \text{ the door)})$

That the saturated argument is necessarily present in the semantic interpretation can be confirmed by the well-known fact that passives license different sorts of agentive modification, such as instrument phrases.

(40) The door was opened with a key.

In this approach, a *by*-phrase is only licensed as an adjunct parasitic on the existentially closed external argument (cf. Grimshaw 1990).

¹⁴ See Komlósy (2000) and Nemes (2003) for comprehensive discussions of Hungarian causative constructions. Komlósy proposes a *bundling* operation (cf. (17)) to derive the thematic properties of the causee, which ends up being an agent and a patient at the same time.

Passives have an unaccusative derivation. In our current terms, it implies that the passive subject has to have an index 2, which can only be assigned in a thematic structure that is at least dyadic (cf. 30). In other words, marking happens on the basic thematic structure.

(41)
$$open_{ACC} < [+c]_1 [-c-m]_2 >$$

On the other hand, the accusative feature is also introduced on this entry by (32). Since there is no accusative argument in the passive construction, we have to postulate that the operation has the effect of eliminating the accusative case.

The same is true for the middle formation (42), which is another saturation operation (see Marelj 2004 for a Theta Theoretic discussion).

(42) This door doesn't open easily.

As discussed by, among others, Ackema & Schoorlemmer (1994), Chierchia (1995) and Marelj (2004), the argument saturated in middles always receives an arbitrary [+human] interpretation. I do not discuss middle constructions here, the interested reader is referred either to these papers or to the large available literature.

The licensing of implicit arguments (a.k.a. *object pro-drop*) has not been discussed in the Theta System as a saturation operation. As opposed to passivization and middle formation, implicit argument licensing is more restricted and cannot apply across the board, but it is apparently akin to the two saturation operations. Implicit arguments can have a definite (43a) or an indefinite (43b) interpretation.

- (43) a. I'm waiting.
 - b. She's reading.

I will discuss implicit argument licensing in some detail in Chapter 4, as part of the discussion on dative phrases.

What is common in the saturation operations is that they close an argument slot, with some further semantic diversification triggered by the exact choice of operation. The saturated argument cannot be syntactically expressed qua an argument, though it may surface as an adjunct, as it happens in passives. With respect to the mapping problem, the following generalizations present themselves. We see directly that (44) can in fact be subsumed in a broader generalization.

(44) Generalizations on saturation

- a. Saturation applies to the marked entry (i.e. after marking).
- b. Saturation eliminates the accusative feature of the verb.

¹⁵ This can happen, according to Reinhart & Siloni (2005) either fully or partially, with syntactic consequences that are not relevant for us.

The elimination of the accusative feature is a by-product of these operations, and is strictly speaking, not derived formally but is stated as a postulate.

2.1.5.3. Decausativization:

The background to the unaccusative - unergative divide

Decausativization is an argument reducing operation that has played a crucial role in the development of the Theta System. The underlying analytical problem concerns the merging properties of monadic predicates. Recall that the current mapping generalizations only assign a mapping index to arguments if the predicate is at least dyadic, and the elsewhere condition (31c) allows an argument of any thematic specification to merge externally if nothing rules it out. As a result, the single argument of any monadic predicate is expected to behave as an external argument. But from the now thirty-year old research on unaccusative predicates, we know that a big portion of monadic predicates have a radically different derivation, therefore at least two groups need to be distinguished.

(45) a. Unaccusatives: V_[-c-m]

arrive, awake, break, collapse, die, drown, fall, freeze, etc.

b. Unergatives: $V_{[+c+m]}$

dance, play, shout, telephone, work, etc.

The unaccusative - unergative distinction, as it appears in (45), could easily be accounted for by making reference to the thematic properties of the arguments. I have, however, already pointed out in 1.3 that such an approach fails to give the right predictions with certain groups of predicates. Levin & Rappaport (1995) argue that there is a substantial amount of monadic predicates that universally show unergative behavior even though they take a theme ([-c-m]) subject. These are verbs which are characterized by what they call "internal causation", including verbs of emission and internally caused verbs of change of state.

(46) Theme Unergatives: $V_{[-c-m]}$

beep, bleed, clap, glow, shine, sweat, radiate; blossom, burn, flower, rot

Given the existence of theme unergatives, the unaccusative - unergative distinction cannot simply be reduced to derive from a thematic base only. This also raises some serious concerns with respect to language acquisition: it should not be the case that the syntax of monadic predicates is determined idiosyncratically by assigning some diacritic to the entries, but children should be able to deduce it from some underlying and systematically available distinction. Which, then, cannot just simply be the thematic quality of the single argument present.

From the above described perspective of the Theta System, it is the

unaccusative class (45a) that represents a problem. In order for the unaccusative derivation to be secured, the argument needs an index 2 on it, which can only happen if there is an (underlying) dyadic predicate from which the unaccusative entry is derived. Reinhart (1996, 2000, 2002), following Chierchia (1989a) and in agreement with Levin & Rappaport (1995), argues that this exactly is the case: monadic unaccusatives universally have a transitive pair with a cause ([+c]) subject.16

- (47) a. John / the wind / the key opened the door.
 - b. The door opened.

Thus, the unaccusative entry in (47b) is derived from the transitive entry, by completely reducing the external argument even from the semantics. This also gives us the essential difference between saturation and reduction: in the latter case, no reference is available to the original subject any more. As a consequence, no agentsensitive elements are licensed. Compare (48) with the repeated (40), for example, both having an instrument noun phrase.

- (40)The door was opened with a key.
- (48)*The door opened with a key.

The operation is defined as follows.

(49)Decausativization: reduction of an external [+c] role

$$V_{acc} < \theta_{1[+c]}, \theta_2 > \rightarrow V_{intr} < \theta_2 >$$

In the case of decausativization, a [+c] external argument is reduced both from syntax and semantics, but the internal argument maintains its internal status, just like in the case of passive saturation. Accusative case, however, is eliminated, again just like in the case of saturation. Thus, now it is possible to extend the coverage of the earlier generalization in (44).

(50)Generalizations on saturation and reduction

- a. Saturation and reduction apply to the marked entry (i.e. after marking).
- b. Saturation and reduction eliminate the accusative feature of the verb.

The learnability problem receives an obvious solution in this approach: children will acquire the unaccusative status of certain monadic verbs by being able to relate them to transitive diatheses with a [+c] subject argument. There are, nevertheless, some

¹⁶ Since, however, this is a relation inside the lexicon (where idiosyncrasies are not uncommon), it is not always possible to find the [+c] transitive alternate to a given unaccusative verb in a particular language. Even if such frozen items turn up frequently, it seems always possible to find a language in which the relevant pair exists.

perhaps less obvious aspects of this analysis that are worth a brief attention.

Decausativization and causativization are treated here as essentially different sorts of lexical processes, targeting different sorts of inputs.

(51) a. The dog walked.

b. John walked the dog. [causativization]

(52) a. John broke the window.

b. The window broke. [decausativization]

An alternative, and indeed more common, approach would be to take the intransitive form as more basic and derive the transitive version from it through a *unified causativization* process. This is what Pesetsky (1995) argues for, among others. If this is accepted, we also get it for free that it is uniformly the semantically more specific construction which is derived: the events in which the dog is walked by somebody form of a subset of the events in which the dog walks; and the events in which somebody breaks the window form a subset of the events in which the window breaks.¹⁷

That the Theta System takes a different path of analysis is in fact well-motivated by the following considerations. First of all, notice that the output of one operation is not equal to the input of the other: lexical causativization always adds an agent [+c+m], whereas decausativization removes a cause [+c]. We expect the two operations to have non-identical grammatical reflexes. This is indeed so. It can happen, for example, that one language has only one of these operations, but not the other. French is a case at hand: it has decausativization, but it lacks lexical causativization (Reinhart 2002:243).

It is also expected under this view that languages differ in how they morphologically encode the two operations. Again, this is borne out: it tends to be the case that whereas the (narrowly interpreted) causativization has more or less regular morphological encoding, the morphological marking of the transitive input of the decausativization operation shows a lot of irregularity. This has been shown, among others, by Reinhart (2000) for Hebrew, by Hasegawa (2001) for Japanese and by Vinokurova (2005) for Sakha. In 2.1.5.1, I have already pointed out that in Hungarian the morpheme -(t)Vt is used with full productivity to mark causativization. Decausativization pairs, however, have varied and often non-predictable morphological properties, as is also discussed in Komlósy (2000). Some of the typical morphological patterns are represented in Table 3. The suffix -ik is a special 3SG agreement marker, with a somewhat idiosyncratic distribution over mainly intransitive verbs.

¹⁷ This calls attention to the fact that the decausativization operation of the Theta System is not monotonic. Lexical operations, however, need not be required to be monotonic even in grammars that, like LFG, otherwise require monotonicity to be a general requirement on non-lexical representations. See Ackerman (1992) for some discussion of this issue.

[+c] TRANSITIVE VERB		INTRANSITIVE VERB (UNACCUSATIVE)			
I. COMMON BOUND STEM, DIFFERENT MORPHOLOGY					
borít	'tilts, overturns'	borul	'tilts, overturns'		
pusztít	'destroys'	pusztul	'decays, perishes'		
süt	'fries, bakes'	sül	'fries, bakes'		
nyit	'opens'	nyíl-ik	'opens'		
fejleszt	'develops'	fejlőd-ik	'develops'		
II. TRANSITIVE MARKED, INTRANSITIVE UNMARKED					
felkelt	'wakes up'	felkel	'awakes'		
fagyaszt	'freezes'	fagy	'freezes'		
forral	'boils'	forr	'boils'		
koptat	'wears out'	kop-ik	'wears out'		
III. TRANSITIVE UNMARKED, INTRANSITIVE MARKED					
meglep	'suprises'	meglepőd-ik	'is/gets surprised'		
csuk	'closes'	csukód-ik	'closes'		
megold	'solves'	megoldód-ik	'works out'		
becsap	'shuts'	becsapód-ik	'gets shut'		
IV. TRANSITIVE UNMARKED, INTRANSITIVE UNMARKED					
tör	'breaks'	tör-ik	'breaks'		

Table 3. Transitive - unaccusative pairs in Hungarian

As this overview suggests, morphological considerations do not give support to any directionality in relating these transitive - intransitive pairs. They do give support, however, to a separation of causativization and decausativization as these are discussed here: only the former operation is coded through productive morphological means in Hungarian.

To this I may add that the transitive alternate of *break*-type unaccusatives can also be causativized.

(53) János le-fagy-aszt-at-t-a a hús-t Kati-val.

John down-freeze-SUF-CAUS-PAST-3SG the meat-ACC Kate-with 'John made Kate freeze the meat.'

Regular causative morphology always follows whatever morphology marks the transitive alternate of unaccusatives, and never the other way round. Thus, there is

no form *fagy-at-aszt 'freeze_{causative}', where the two respective morphemes have been reversed. This again gives some support to restricting causativization to an agent-adding operation the way it is discussed here.

Let me make a final remark on an issue that was brought up in Section 1.3. There I noted that the fact that some unaccusatives show variable behavior has led some to assume that the unaccusative - unergative distinction is not coded in the lexicon, but arises through the insertion of the same entry into different syntactic constructions. Is I repeat example (13) from 1.3 as (54) below, where the (otherwise) unaccusative *fall* appears in unergative contexts.

(54) Unergative constructions for *fall*

- a. He has fallen into the sea on purpose. agentive adverbial
- b. He's a great faller. [said of a stunt man] -er nominalization
- c. I taught him how to fall into the sea elegantly. control

The constructionist account of this variation (cf. Borer 2005) is incompatible with the lexicalist assumptions of the Theta System. As Borer correctly points out, a lexicalist approach cannot but propose two different entries to account for the variable behavior of *fall*: one will be unaccusative, and one unergative.

Is that a big price to pay? Well, if we acknowledge the fact that the examples in (54) are quite marked in the sense that they definitely represent atypical falling situations, the sort of which are in fact not always possible to construe for all unaccusative predicates, then it might not. We should be able to account for the fact that *faller* has a definite coercive nature to it (to the extent that many would gloss it as ungrammatical), which is completely absent with regular agentive forms such as *player* or *singer*. Coming back to the discussion above, this is also evident from how the Hungarian *esik* 'falls' interacts with the two types of 'causative' morphology. Consider the following minimal pair.

- (55) a. A rendező le-ej-t-ett-e a színész-t.

 The director down-fall-SUF-PAST-3SG the actor-ACC 'The director dropped down the actor.'
 - b. % rendező le-es-tet-t-e a színész-t.

 The director down-fall-CAUS-PAST-3SG the actor-ACC 'The director made/asked the actor fall down.'

In (55a), we have diachronically related transitive [+c] alternate of *esik* 'falls': *ejt* 'drops.' In (55b), we have the regular causative *estet* 'fall-CAUS', with an agent ([+c+m]) subject. As both Komlósy (2000) and Nemes (2003) point out, causative examples of the (55b) type are quite marked and they need very strong contextual support, the term context understood both in the constructional and in the pragmatic sense. Any adequate grammar of Hungarian should predict this strong intuition

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¹⁸ The existence of such variation was in fact already pointed out in Perlmutter 1978.

about the difference in naturalness between the two constructions. Besides, if the triad *esik - ejt - estet* 'fall - drop - fall-CAUS' is to be derived fully in syntax from a single underspecified lexical representation, as Borer suggests, then we have to postulate the existence of at least two different types of causative heads in syntax to account for the meaning difference between *ejt* 'drop' and *estet* 'fall-CAUS' (and also to account for data like (54)). One would relate its complement to a cause subject, the other to an agent subject. This is the exact syntactic correlate of the sort of distinction we have been discussing here - with the difference that the purely syntactic/constructional approach makes no predictions about which verb normally co-occurs with which of these presumed causative projections.

For these reasons, I will abide by the lexicalist assumption presented here, according to which the unaccusative - unergative distinction is a real divide between predicates, and is determined in the lexicon. Since the dative unaccusatives this dissertation focuses on show no variable behavior, this is a convenient and motivated assumption anyway.

2.2. Experiencers in the Theta System

2.2.1. An overview

It has been anticipated in Chapter 1 that in the Theta System, a different thematic encoding is assigned to each of the three basic experiencer classes of Belletti & Rizzi (1988). Now that this framework has been presented, all the tools are available to explicate this analysis. The three types of experiencer predicates are represented in (56).

- (56) Subject experiencers
 - a. $John_{[+m]}$ loves books[-c-m].
 - Object experiencers
 - b. $Books_{[+c]}$ worry $John_{[-c+m]}$.
 - Dative experiencers
 - c. $Books_{[-c-m]}$ appeal to $John_{[-c]}$.

The non-self-explanatory aspects of these representations are picked up directly, let me focus now on the arguments marked by grey filling. These all correspond to what is elsewhere referred to by the single thematic role label *experiencer*, but only in the case of object experiencers is this argument coded as expected. Recall, however, that the *Principle of Full Interpretation* (18) requires unary clusters to be extended for the purposes of interpretation, and note that the [+m] argument of subject experiencers, as well as the [-c] argument of dative experiencers, can be interpreted as [-c+m].

In this section, I discuss these predicate classes individually to substantiate the claim that the basic thematic encoding of these experiencers is not uniform. This will involve some discussion of the grammatically relevant subclasses. I come to the

dative experiencer class last, when I will be in the position to argue that it cannot be reduced to any (subclass) of the other two classes. I start with object experiencer predicates, which have perhaps attracted the most attention.

2.2.2. Object Experiencers: The worry-class

2.2.2.1. On the T/SM restriction of Pesetsky (1995)

Pesetsky (1995), as I have already mentioned in the Chapter 1, argued that the subject of object experiencer verbs is a causer, and not a theme. This is quite compatible with what many others have noted in some form, without necessarily transforming the semantic intuition into thematic substance. Thus, the subject in the following example of his (1995:56) is a causer.

(57) The article in the Times angered / enraged Bill.

He distinguishes causer from both *target* of emotion (58) and *subject matter* of emotion (59).

- (58) John likes | adores | is satisfied with Bill
- (59) John worried about / puzzled over the tv set.

A target argument is simply evaluated by the experiencer in a way made specific by the semantics of the predicate. A subject matter argument denotes an entity that represents the emotional concern of the experiencer, and this relation need not include any evaluation.

Pesetsky presents these two roles as occupying the same place in the partial hierarchy of thematic roles he needs for his purposes. (60) is the extended version of (6) in Chapter 1.

(60) causer > experiencer > target / subject matter

One would not expect it from this scenario, but the target and subject matter arguments can in fact co-occur. These examples are from Pesetsky (1995:63).

- (61) a. Sue is angry with Bill about the party.
 - b. Bill likes this about his new job: he doesn't have to get up very early.

As noted by Pesetsky, what we would expect - the co-occurrence of a causer and a target/subject matter argument on the same predicate - is, however, ungrammatical, as the following examples show (1995:60).

- (62) a. *The article in the Times angered Bill at the government.
 - b. *The television set worried John about the veracity of Bill's alibi.

In other words, only two adjacent arguments of the partial hierarchy in (60) can be realized at the same time. This is the gist of the *Target/Subject Matter Restriction* of Pesetsky (T/SM restriction for short).

This restriction has been criticized by Grimshaw (1990), Jackendoff (to appear), McGinnis (2001), and Landau (2005), among others, for lack of sufficient empirical support, i.e. for not making the right prediction in certain cases. Before interpreting some of this criticism, it is worthwhile nevertheless to be aware of Pesetsky's arguments for the separation of causers from T/SM arguments (instead of assuming a single thematic type to cover all) and for the grammatical relevance of the T/SM restriction. I focus now on the subject matter role, as this is what is selected by object experiencer predicates. The featural encoding of the target role is discussed in 2.2.3, where subject experiencer predicates are described.

First of all, it is true that in the core cases the causer version is entailed by the subject matter version, but not the other way round. So while in the situation described by (63b) the doctor himself must constitute the subject matter of John's worries, (63a) usually means that the doctor is only at the initiator end of a chain that ends in emotional reaction in John, and John is not directly worried about the doctor himself (but probably about his own health instead). Nevertheless, (63a) may also have a reading close to that of (63b).

- (63) a. The doctor worried John.
 - b. John worried about the doctor.
 - c. $b \rightarrow a \& a \not\rightarrow b$

With other object experiencer predicates (e.g. *interest - be interested in*) not all speakers get a semantic difference between the two argument structure versions, but in the core cases it is positively there. That is an argument for treating causer and the subject matter arguments as thematically different.

Besides, Pesetsky notes that right dislocation of the subject matter argument (64a), as well as periphrasis (64b), result in much better or completely grammatical constructions (1995:61, and 301, footnote 57).

- (64) a. ?The article in the Times angered Bill but not at the government.
 - b. The article in the Times made Bill angry at the government.

Again, even if we might not always get the same result in every relevant case, the contrast between (64) and (62) is crucial, and re-appears with most object experiencer predicates. There must be something deeper to the unacceptability of (62) than simple semantic incongruity.

The objections and the exceptions to the T/SM restriction suggest nevertheless that one might view it as a soft, or violable constraint of grammar, which is in fact the road taken in the Theta System. In compliance with Pesetsky (1995), Reinhart (2002) proposes that object experiencers are essentially triadic, and have the following argument structure: $V_{\text{OBJ-EXP}} < [+c] [-c+m] [-m] >$. The causer argument of

Pesetsky is coded quite transparently as [+c], whereas his subject matter argument is coded as [-m]. Thus a subject matter is regarded as being underspecified with respect to whether it establishes a causal relation with the predicate or not. We must keep in mind that the kind of causality the /+c feature of the Theta System represents is perception driven, and its conceptual content is not definable with logical precision. The [-m] encoding should be interpreted with respect to this background. As Reinhart (2002:262) argues, "in our perception of the world it is possible that the subject matter of emotion is itself the cause of this emotion. Whether it is or not for a given situation depends just on whether there is another condition we perceive as causing it". So if, for example, John worries about the doctor, it is not trivial to decide by commonsense reasoning whether the doctor is in fact the cause or just the subject matter of John's worry, taking these two terms in an intuitive sense now. 19

The T/SM restriction in this setting specifically boils down to the fact that the [+c] and [-m] arguments cannot be realized together. This result has been anticipated already: recall that the Cluster Distinctness Constraint does not allow for the co-realization of a [+c] and a [-m] cluster. I repeat the constraint here.

(29) Cluster Distinctness Constraint

Two underspecified clusters are indistinct if there is a construal under which they are identical.

If extended for the purposes of interpretation (by the *Principle of Full Interpretation* (18)), then there is a construal, ([+c-m], [+c-m], ...), under which the two arguments are thematically equivalent. This, in turn, is ruled out by the *Non-Identity Constraint* (13): a predicate cannot have two thematically identical arguments at any level of representation.²⁰ For this reason, [+c] and [-m] can be on the same argument list, but they cannot be realized together.

I have mentioned above that the T/SM restriction has been criticised on empirical grounds as it fails in the case of a substantial group of predicates. Within the current approach, there are basically two ways to account for these failures with

This is of course not a problem in everyday life, but it can be in a grammar class when one is required to classify adverbial clauses. I am not sure I would know without previous training which one expresses the reason (i.e., the cause) of the matrix event, and which one expresses its purpose. Frawley (1992:227) argues that it is exactly this close conceptual relation between the two notions which makes it "common for languages to conflate reasons and purposes in overt form".

¹⁹ The distinction between adverbial clauses of purpose and reason, familiar from traditional grammars, raises similar nontrivial conceptual problems for a naive speaker without a philosophical background.

⁽i) John got up early because he was meeting a girl at noon. [clause of reason]

⁽ii) John got up early to meet a girl at noon. [clause of purpose]

²⁰ This interpretation of the T/SM restriction makes it a purely thematic constraint, as opposed to Pesetsky's syntactic solution, which I do not present here.

the simultaneous maintenance of the T/SM restriction for the core cases. First, remember that (29) has been presented as a weakly violable constraint. If the context forces an agentive reading on the causer argument, then a T/SM violation is indeed much milder, as argued in Bouchard (1995:333) and Marelj (2004:94).

(65) Persuaded John
$$[PRO_{[+c+m]}]$$
 to anger $Bill_{[-c+m]}$ at the government $[-m]$.

In (65), the selectional restrictions of *persuade* require John to be an agent in the event denoted by the infinitival predicate. Such an interpretation is by default available for a [+c] argument. Once it has been fixed, there is no possible interpretation of the subject matter argument [-m] which would be identical to the particular [+c+m] interpretation of the subject. The construction is still not completely acceptable for most speakers, but there is a clear contrast between (65) and (62), contra Landau (2005:66, footnote 42) or Anagnostopoulou (1999:84), for whom the T/SM restriction fails to distinguish agentive from non-agentive psych-constructions. The agentive reading does meliorate the effects of the T/SM restriction, and this seems to be a universal property of this construction, consider this Hungarian *worry*-example.

(66) ?(?)Ez az orvos szándékosan nyugtalanít-ja this the doctor on.purpose worry-3SG

a beteg-ek-et az egészség-ük miatt. the patient-PL-ACC the health-POSS.3PL because.of

c?(?)This doctor worries patients about their health on purpose.'

Out of context, (66) is unacceptable without the purpose adverbial *szándékosan* 'on purpose', but it is quite tolerable in its presence.

The second, possibly quite large set of predicates which fail to show the T/SM restriction may simply do so because they do not have a thematic structure that triggers this effect. Pesetsky himself (1995:216) calls attention to verbs of accustoming and alienation, which are non-problematic in the sort of triadic constructions where *worry*-type predicates are.

- (67) a. The orientation lectures acclimatized us to our new surroundings.
 - b. His remarks alienated the voters from the party.
 - c. These measures will habituate workers to the loud noise.

He makes the tentative suggestion that an explanation is probably rooted in the lexical semantics of these verbs, which is an insight Reinhart (2000, 2002) capitalizes on. She points out that the PP argument of these verbs differs from subject matter arguments in that it cannot be interpreted as a potential cause. There is no meaningful decomposition of (67a), for example, in which the new surroundings cause the speaker to acclimatize. Consequently, the thematic coding of the third argument cannot be identical to that of a subject matter ([-m]), which is

underspecified for causation. Instead, it is coded as a necessary non-cause [-c], and *acclimatize* and its kins have the following lexical entry.

(68)
$$acclimatize < [+c] [-c+m] [-c] >$$

The difference between these verbs and *worry*-type object experiencers is minimal but all the more important: whereas the [-c] and [-m] arguments are indistinct in the latter case, the [+c] and [-c] arguments are not in the former. Nothing constrains then the co-realization of all the three arguments in the examples in (67).

Reinhart (2000, 2002) and Bouchard (1995:333) discuss some further cases where the T/SM restriction is expected, but does not occur. What is common to all these is that the predicates can be shown to have a thematic structure that is minimally different from standard *worry*-predicates, but this minimum is enough not to trigger a T/SM violation. We have nevertheless enough evidence to support a thematic analysis of standard *worry*-type experiencers that is based on the validity of the T/SM restriction. Instead of indulging in some further subtle thematic variations, I proceed to the syntax of this core set of object experiencer predicates.

2.2.2.2. The syntactic behavior of *worry*-type predicates

Applying the marking procedures now familiar from 2.1.4 to the lexical entry of *worry*-type object experiencers, we get (69). For expository purposes, I put the accusative feature on the experiencer argument, which realizes it.

(69)
$$V_{OBJ-EXP} < [+c]_1 [-c+m]_{ACC} [-m]_2 >$$

Given that the [+c] and the [-m] clusters cannot realize together, and given that the [-c+m] experiencer is the only candidate to take up accusative case, two distinct syntactic realizations of the basic entry are expected to be possible. In one, the subject is the [+c] argument, in the other, the subject is the [-m] argument.

Reinhart (2000, 2002) argues that there is indeed evidence for both derivations. The main argument comes from backward bound anaphora, which is commonly believed to be possible with object experiencers. But in fact there is quite a clear contrast between the following sentences.

- (70) a. His health worried every patient i.
 - b. ??His_i doctor worried every patient_i.

The contrast is arguably not decisive but is still indicative of an important underlying difference. A doctor is possibly, but not usually construed as the subject matter of one's worry, whereas one's health can only be construed as a subject matter. We can make the plausible assumption that this anaphora pattern is licensed in the presence of a [-m] subject, but not in the presence of a [+c] subject. The former is the sole possibility for (70a), and the latter is the more obvious choice for

(70b).

So in the first case, the [-m] and the [-c+m] roles are selected for realization. The first must merge internally since it has an index 2 (cf. (69)), and the second also must merge internally, since it is the experiencer that checks the accusative case feature of the verb. The result is an unaccusative derivation, with the [-m] argument moving into the subject position from inside the VP for EPP reasons. Thus, the derivation has the following shape, assuming a V-shell (Reinhart 2002:271).

$[[_{IP} \textit{his health}_{[-m]}]]_{VP} \textit{worried} \ [[_{V} \textit{every patient}_{[-c+m]}]]_{V} t_{worried} t_{his health}]]]]$ (71)

Inside the VP, his health is c-commanded by every patient, so the relevant conditions for bound anaphora to be licensed are met. A further piece of evidence for the availability of an unaccusative derivation for worry-type object experiencers is that if the [-m] argument is realized as a clause, then an expletive element is licensed in the matrix subject position.

It angered/surprised/scared/excited him [that he failed][-m]. (72)

Every predicate with the thematic structure in (69) is expected to show these unaccusative properties, and this prediction seems to be borne out.²¹ It is important to note nevertheless that these unaccusative structures represent only one realization possibility of these predicates, contra Belletti & Rizzi (1988), for whom the unaccusative derivation is obligatory. This constrains them, as discussed in 1.1, to propose that the accusative on object-experiencers is an inherent case. In the Theta System, the accusative is licensed by the simultaneous presence of the [+c] and [-c+m] arguments in the underlying thematic structure, which is invariant irrespective of the nature of the syntactic derivation that the predicate enters. The constructions in (71) and (72) have thus a dual nature: they are unaccusative the way just described, but they involve what elsewhere would be called structural accusative case. This has further consequences which I turn to in the next subsection.

The non-unaccusative realization of the basic entry involves the presence of the [+c] argument, and the absence of the [-m] argument. Since the [+c] argument is an external argument (it has index 1), it can be directly inserted into an external subject position (remaining noncommittal to the VP-internal subject hypothesis for expository purposes).

(73)[[The $doctor_{[+c]}]$] [vp worried [the patient_{[-c+m]}]]].

²¹ This is true of Hungarian, too, but the tests mentioned for English are not applicable. First of all, weak crossover effects do not show up in the flat-VP structure of Hungarian (cf. É. Kiss 1987), and backward bound anaphora is an instance of weak crossover. Second, I argue in Chapter 5 that Hungarian has no true expletives, and we find a true (demonstrative) pronoun in place of the English it. As a pronoun, it is not constrained to semantically empty positions.

For Pesetsky (1995), this is the only possibility, but to capture a wider range of facts that he considers, both an unaccusative and a non-unaccusative derivation needs to be allowed, as is assumed in the Theta System.

There is, however, also a third realization option for *worry*-type object experiencers. The basic entry, which I repeat here,

(69)
$$V_{OBJ-EXP} < [+c]_1 [-c+m]_{ACC} [-m]_2 >$$

includes a [+c] role. This thematic structure is a suitable candidate for the decausativization operation to take place: it consists of three arguments of which the [+c] argument can be reduced. In English, this possibility does not manifest itself very vividly, as most object experiencers do not have a reduced verbal alternate, but we find an adjective instead (cf. *anger - angry*), or what superficially looks like a participle (cf. *annoy - annoyed*). In Hungarian, however, verbal alternates are the norm rather than the exception. Some examples are listed in Table 4.

OBJECT EXPERIENCER [x worries y]		SUBJECT EXPERIENCER [y worries (about x)]	
ideges-ít angry-SUF	'angers, worries'	ideges-kedik angry-SUF	'is angry, is worried about'
fel-ideges-ít up-angry-SUF	'angers, worries' [telic]	fel-ideges-edik up-angry-SUF	'gets angry, gets worried about'
nyugtalan-ít worried-SUF	'worries'	nyugtalan-kodik worried-SUF	'worries'
<i>meg-őr-jít</i> PTCL-BNDST-SUF	'drives crazy'	meg-őr-ül PTCL-BNDST-SUF	'goes crazy'
<i>meg-rém-ít</i> PTCL-BNDST-SUF	'frightens'	meg-rém-ül PTCL-BNDST-SUF	'gets frightened'
<i>izg-at</i> BNDST-SUF	'excites, worries'	izg-ul BNDST-SUF	'is excited, worries'
agg-aszt BNDST-SUF	'worries'	agg-ódik BNDST-SUF	'worries'
meg-lep PTCL-BNDST	'surprises'	meg-lep-ődik PTCL-BNDST-SUF	'gets surprised'
<i>érdek-el</i> interest-SUF	'interest, concerns'	<i>érdekl-ődik</i> BNDST-SUF	'shows interest, is concerned about'
vonz attract	'attracts'	vonz-ódik attract-SUF	'is attracted to'
<i>meg-sért</i> PTCL-hurt	'hurts'	<i>meg-sért-ődik</i> PTCL-hurt-SUF	'gets hurt emotionally'

Table 4. [+c]-reduction in object experiencers in Hungarian

Just like the predicates in Table 3, these experiencer predicates also show a great deal of morphological variation. Comparing the two tables, it should be evident that the transitive entries in both are characterized by the same set of suffixes (which is generally distinct from the regular causativization morphology), and the subject experiencer has the same, albeit varied, reduction morphology as monadic unaccusatives do. This does not come as a surprise, as these reduced subject experiencers are derived through exactly the same decausativization operation as one-place unaccusatives.

The outputs of the reduction operation have nevertheless radically different syntactic properties in the two cases, conditioned by the thematic constitution of the underlying lexical entry. Let me recapitulate the standard unaccusative derivation for the sake of comparison (cf. 2.1.5.3). The unaccusative *break* is derived from the transitive *break* through reducing the external argument.

(74)
$$break_{ACC} < [+c]_1 [-c-m]_2 > \rightarrow break_R < [-c-m]_2 > [decausativization]$$

The accusative case feature is deleted during reduction, but the index is not, therefore the [-c-m] argument merges internally even in the intransitive construction (and then it may move for EPP purposes). Object experiencers present a different sort of input.

(75)
$$V_{OBJ-EXP} < [+c]_1 [-c+m]_{ACC} [-m]_2 > \rightarrow V_{OBJ-EXP} < [-c+m] [-m]_2 > [decaus.]$$

In this case, the experiencer does not receive an index, since it is a mixed cluster (cf. 30). The subject matter argument receives index 2. In the reduced entry, there is thus an obligatorily internal and an unmarked argument present. Since in the default case arguments must merge externally if nothing is specified to the contrary, the experiencer will merge externally here. Therefore, reduced object experiencers of the *worry*-type have unergative, and not unaccusative properties.

Reinhart (2000) points out that these reduced experiencer predicates indeed show unergative properties, such as not allowing post-verbal subjects in Hebrew, requiring *zich* in Dutch, and so on. I have mentioned in 1.3 that there are no purely configurational reflexes of the unergative-unaccusative distinction in the flat-VP structure of Hungarian, but the distinction does show up elsewhere. It is well known that unaccusatives license resultative expressions (conditioned by the lexical semantics of the predicate), but unergatives can only do so in the presence of a *fake reflexive* (cf. Bresnan & Zaenen 1990 for an overview). The two constructions are in complementary distribution with respect to these two intransitive predicate classes.

- (76) a. The river froze (*itself) solid.
 - b. The dog barked *(itself) hoarse.

The following two predicates are from the list of unaccuatives in Table 3, and they indeed allow simple resultatives, as is expected.

- (77) a. A hús piros-ra sül-t. the meat red-SBL fry-PAST 'The meat fried red.'
 - b. A viz jég-gé fagy-ott. the water ice-FAC freeze-PAST 'The water froze solid (lit.: into ice).'

Derived subject experiencers, on the other hand, only license resultatives in the presence of a fake reflexive, just like any other unergative. In (78b), the resultative expression is the particle ki 'out' itself.²² This is a fully productive constructional idiom, with the meaning that the relevant activity is finished only when the subject has become satisfied with it, or feels that it has been enough (Komlósy 1994:104).

- (78) a. *János halál-ra izgul-t-a* *(magá-t).

 John death-SBL worry-PAST-3SG.DEFOBF himself-ACC 'John worried himself to death.'
 - b. *Most jól ki-idegesked-t-em* *(magam-at).

 now well out-worry-PAST-1SG.DEFOBJ myself-ACC
 'I have had well enough of worrying.'

 [lit. 'I have worried myself out well.']

Thus, subject experiencers pattern up with unergatives, and not with unaccusatives, as should indeed follow from the above analysis.

Taken together, *worry*-type predicates have at least three different syntactic realizations: an unergative with a [-c+m] external subject, a transitive with a [+c] external subject, and a special transitive but nevertheless unaccusative construction with a [-m] subject. In other words, any of the three arguments can end up being the syntactic subject. In the next subsection, I provide some further arguments for this analysis.

2.2.2.3. Stative object experiencers are just object experiencers

Whereas in Grimshaw's (1990) analysis object experiencers are uniformly eventive, Pesetsky (1995) points out that in fact there is a more varied distribution of aspectual properties across the class. Some object experiencers, like *concern*, *interest*, *depress*, *fascinate*, etc. favor a stative reading; some, like *scare*, *shock*, *surprise*, *alarm*, or *terrify* are quite strongly eventive; and some others are aspectually more or less neutral, such as *frighten*, *embarrass*, or *worry*. These

²² É. Kiss (2004, 2005b) and, following her, Bene (2005) point out that resultative expressions tend to be in complementary distribution with particles. This follows from the assumption that both particles and resultatives are secondary predicates, and they compete for the same position in PredP in the clause-structure analysis that É. Kiss proposes (cf. 1.3). This can explain why resultatives generally only appear in the absence of a particle.

aspectual distinctions have an important influence on, among other things, whether the predicate can occur in the progressive, a test used by Pesetsky to argue for the verbal character of the passive versions (1995:29-30).²³

- (79) a. ?? Odd noises were continually depressing Sue.
 - b. ??Sue was continually being depressed by odd noises.
- (80) a. Odd noises were continually scaring Sue.
 - b. Sue was continually being scared by odd noises.

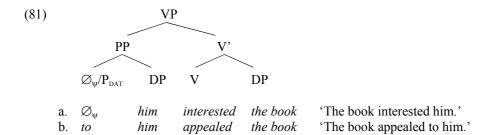
But the reason why aspectual properties are relevant for us now is that stative object experiencers have been claimed to have non-canonical objects (cf. Arad 1998, Landau 2005). It is this claim I want to investigate briefly below from a Hungarian perspective.

Landau $(2005)^{24}$ argues that stative object experiencers (for him, those items that *only* have a stative reading) are grammatically distinct from eventive object experiencers: the former have unaccusative, whereas the latter have unergative syntax. In both cases nevertheless, the object bears inherent case, just like for Belletti & Rizzi (1988). But Landau assumes further that inherent case is always assigned by a null prepositional element \mathcal{O}_{ψ} . Crucially, for him all non-nominative experiencers are prepositional, including dative experiencers of *piacere*-predicates. In languages where the dative marker is an independent preposition (like the Italian a), this preposition is overt (P_{DAT}); in languages with a suffixal dative marker (like Hungarian) this dative is assumed to be assigned again by a zero preposition \mathcal{O}_{ψ} . Dative experiencers and stative object experiencers thus do not differ in any important grammatical properties in this analysis: both are unaccusative and both have a prepositional object. Indeed, Landau assumes these two sets of verbs are in fact nondistinct, and the following tree represents both (2005:6), cutting it down to the bottom for expository purposes.

²³ I do not venture into characterizing what makes a stative or an eventive predicate whatever it is. Though Pesetsky himself relies on this terminology, he makes a comment that is actually more suggestive of what might really count here: "I conjecture that emotions that typically come on suddenly and consciously (e.g., frights and surprises) allow the iterative progressive, whereas emotions that typically grow imperceptibly (e.g., boredom and depression) do not, ..." (1995:30). What seems to matter, as I argue below, is whether the predicate is compatible with a change of state reading or not. I discuss this variation in terms of the telic-atelic distinction.

²⁴ This is an updated version of his earlier manuscript (2002). I make references to the more recent version.

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Concentrating on the immediate concerns of this work, I want to present some arguments against collapsing the stative object experiencer and the dative unaccusative class. With respect to Hungarian, such unification is not warranted.

Notice first of all that the English examples in (81) both involve what looks like accusative case on the experiencer. In languages with both dative case (for the dative experiencers) and accusative case (for the object experiencers), we must assume that the two are selected by two distinct types of (zero) prepositions. This already makes the move to collapse the two verb classes somewhat suspicious, but it still does not render it completely out-of-place in languages where Ps in general can govern both accusative and dative. Hungarian has two types of P elements: postpositions that take their complement without overt case marking (82a), and postpositions which assign some contentful case to their complements, such as comitative (82b) or superessive (82c).

- (82) a. *János által/alatt / körül*John by under around 'by/under/around John'
 - b. János-sal együtt John-COM together 'together with John'
 - c. János-on át John-SUP across 'across John'

There is no Hungarian postposition, however, which would take accusative case. And with respect to overt case marking, there is an obvious difference between the two verb classes: object experiencers are marked accusative, and dative experiencers are marked dative.

- (83) a. *A könyv érdekel-t-e János-t.* the book interest-PAST-3SG.DEFOBJ John-ACC 'The book interested John.'
 - b. A könyv tetsz-ett János-nak. the book appeal-PAST John-DAT 'The book appealed to John.'

If this morphology is taken seriously at face value, which I would like to think is not so deceptive a move after all, then in Landau's analysis we cannot but postulate that there is a covert P element in Hungarian which obligatorily assigns accusative case. Such a postposition would be the only one of its kind in this language.

Further, note that the accusative object in (83a) shows definite object agreement. In rough descriptive terms, if a verb has a definite object in Hungarian, then it belongs to a completely different paradigm than in the case it has an indefinite object or no object at all.²⁵ One of Landau's main arguments for the covert-P analysis is that object experiencers often seem to behave as islands with respect to extractions phenomena. In that perspective, it is not clear at all why an accusative object buried inside a postpositional phrase should show object agreement. If, on the other hand, the presumed PP is transparent for agreement purposes, then there is no principled reason for the dative in (83b) not to show object agreement, too. It is supposed to be the same structure after all (cf. (81)). But the dative never shows object agreement, cf. (83b) and (84).

(84) *A könyv tetsz-ett-e János-nak. the book appeal-PAST-3SG.DEFOBJ John-DAT 'The book appealed to John.'

This is making it more and more complicated to maintain a unified syntactic analysis for object and dative experiencers in Hungarian. One has to assume, at least, that the two covert adpositional elements of a Landau-type analysis are radically different.

Instead, I take the simpler path and continue assuming that all object experiencers, irrespective of their aspectual properties, assign regular (structural) accusative case without the involvement of any covert adpositional element.²⁶ The exact mechanism that secures this accusative case has been already presented, and has been argued to feed on the thematic structure of these predicates. But notice that I am rejecting only one half of Landau's analysis: the need for a covert P. The other half, that stative object experiencers have an unaccusative derivation (with the object originating VP-internally), is perfectly compatible with the proposal presented in the previous section, though with a bit of a twist to it.

Recall that an unaccusative derivation is permitted for every *worry*-type object experiencer in the Theta System. I repeat (71) for exposition.

(71) $[[_{IP} his health_{[-m]}]]_{VP} worried [[_{V} every patient_{[-c+m]}]]_{V} t_{worried} t_{his health}]]]]$

 $^{^{25}}$ See Bartos (1999) for how this object agreement phenomenon can be given a strictly structural explanation.

²⁶ The fact that I reject Landau's covert-P analysis of object experiencers with respect to Hungarian does not rule out the possibility that it still holds of other languages. What I am suggesting is that Landau's proposal (81) could possibly be parameterized. Object experiencers in Hungarian do not seem to have island properties; they pattern up with other objects with respect to extraction phenomena.

In this particular construction, only two arguments of the lexical entry are used up. Nevertheless, the underlying lexical entry is assumed to be triadic still. Now I repeat (69).

(69)
$$V_{OBJ-EXP} < [+c]_1 [-c+m]_{ACC} [-m]_2 >$$

Accusative case is licensed since a [+] argument and a $[\alpha/-c]$ argument is present in the lexicon. But the external, [+c] argument is not sent off to syntax, hence (71) can be an unaccusative movement structure. Let me briefly elaborate on this.

It is noted by Reinhart (2002:271) in passim (referring to work by Friedemann 2000) that stative object experiencers seem to allow for only the (71)-type derivation (involving movement), but not the non-unaccusative derivation with the [+c] argument selected as a subject. This can be concluded, for example, from the fact that these verbs always allow for backward bound anaphora. Sometimes even two, almost synonymous verbs behave quite differently: the French *inquieter* patterns up with the English *worry*, but *preoccuper* allows only for the unaccusative derivation. Reinhart hypothesizes that the basic entry for these is what we have in (69), but the realization option is frozen for the [+c] argument in the lexicon. In other words, the [+c] argument cannot be sent off to syntax. In the Theta System, this explains why accusative case is licensed on the experiencer. But is there any other argument for pursuing this line, instead of assuming, as Landau does, that stative object experiencers are just simple unaccusatives?

The general thematic structure considerations I am concerned with suggest an answer in the positive. If stative object experiencers have a [+c] argument, albeit frozen in the lexicon, they are expected to undergo decausativization, the result of which is generally a distinct lexical entry in Hungarian, marked by reduction morphology. I have already shown in Table 4 that this is indeed the case, here I repeat the relevant examples.

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(85) a. érdekel 'interests sb' → érdeklődik 'shows interest' b. aggaszt 'worries/concerns sb' → aggódik 'worries/is concerned about'
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The stative - eventive distinction, as I have noted above, is not an immediately obvious divide of predicates. I make the assumption that the examples in (85) are aggressively stative (obligatorily stative) in the sense that they never can occur with a telicizing verbal particle (either in the object or the subject experiencer version). By default, a verbal particle makes the verb telic in Hungarian, as happens with the other *worry*-verb *idegesit* 'angers, worries'.

- (86) a. 5 perc-ig /*5 perc alatt idegesít-ett-ék a hír-ek János-t. 5 minute-for 5 minute in worry-PAST-3PL the news-PL John-ACC 'The news worried John for 5 minutes / * in 5 minutes.'
 - b. *5 perc-ig /5 perc alatt fel-idegesít-ett-ék a hír-ek János-t. 5 minute-for 5 minute in up-worry-PAST-3PL the news-PL John-ACC 'The news angered John up *for 5 minutes / in 5 minutes.'

So *idegesit* 'angers, worries' has a telic, change of state alternate, *fel-idegesit* 'angers up'. Both can be coerced into agentive readings in appropriate contexts. The two predicates in (85) show neither of these properties, which I consider to be an indication that they are aggressively stative. *Érdekel* 'interests sb' and *aggaszt* 'worries/concerns sb' are therefore object experiencer verbs that have all the 'surface' unaccusative traits, *except for* the fact that they have a reduced (*decausativized*, cf. 2.1.5.3) alternate. Decausativization reduces a [+c] argument. Therefore, if the two object experiencers in (85) have a reduced, subject-experiencer alternate, they must have also have a [+c] argument on their argument structure. This is what Reinhart (2000, 2002) claims. The only peculiarity of these verbs is that their [+c] argument cannot be realized in syntax. Since Landau (2005) treats stative object experiencers as 'deep' unaccusatives, he does not predict that they can have a reduced, subject-experiencer entry.

Finally, I would like to point out that the obligatory unaccusative realization (with the [+c] argument frozen in the lexicon) is not necessarily tied to stative only object experiencers. Fascinate is case at hand: it is generally regarded to be stative necessarily unaccusative. The Hungarian fascinate, le-nvűg-öz 'down-drag_n-SUF', is fully non-compositional: literally it should mean something like 'supply somebody with something to worry about', but in fact it means 'fascinate'. What is important is that it has a particle le 'down', which does not participate in a contrast since there is no verb *nyűgöz, as opposed to the felidegesít - idegesit 'worry' pair above. It is probably the lack of contrast which enables lenyűg-öz to show both telic and atelic properties. It is compatible, for example, both with for and in-type adverbials.

- (87) a. *A szovjet propaganda egy hét alatt lenyűgöz-t-e a nyugat-ot.* the Soviet propaganda a week in fascinate-PAST-3SG the West-ACC 'The Soviet propaganda fascinated the West in a week.'
 - b. A szovjet propaganda egy hét-ig lenyűgöz-t-e a nyugat-ot. the Soviet propaganda a week-for fascinate-PAST-3SG the West-ACC 'The Soviet propaganda fascinated the West for a week.'

Despite of this aspectual variation, the verb seems to show constant properties of an unaccusative derivation, with an obligatory [-m]-subject. This is not an a priori problem for the current approach, where thematic structure is in principle regarded to be independent from the aspectual constitution of a predicate, or at least the two do not necessarily need to converge along an expected dimension.

2.2.2.4. The problem of *elude* and *escape*

There still remain two problematic verbs: *elude* and *escape*. These look like object experiencers, but both Pesetsky (1995) and Reinhart (2000, 2002) classify them together with *piacere*-predicates, without much comment. In the light of the preceding subsection, where I have argued that object experiencers cannot be collapsed with dative experiencers, the claim that *elude* and *escape* are *piacere*-predicates is an apparent non-sequitur. At first sight, *elude* and *escape* appear to take an accusative object in English.

There are nonetheless some considerations that suggest that these two verbs are indeed special in English. First, Reinhart (2002:254) notes that the equivalents of these two verbs in other languages, such as German, clearly assign dative, and not accusative case to their experiencer argument. Below are two examples, the second one is claimed to be old-fashioned and/or literary style.²⁷

(88) German

- a. Die Loesung ist mir ent-gangen. the solution is I.DAT PTCL-gone 'The solution has escaped me.'
- b. *Die Loesung ent-fleucht mir. the solution PTCL-flies I.DAT 'The solution escapes me.'

The morphological distinction between dative and accusative has been lost in English, and nothing in principle rules out the assumption that *elude* and *escape* do take dative even in English, as also happens in the related German constructions.

In fact, there is also a more principled motivation for this assumption. As opposed to the above discussed object experiencers, *elude* and *escape* do not have a reduced subject experiencer alternate.

- (89) a. The solution eluded John.
 - b. *John eluded (about the solution).

Since reduction is tied to the presence of a [+c] argument in the Theta System, the fact that it fails to apply in the current case can be explained by postulating a lexical entry that lacks the external argument. If, in turn, there is no external argument, then accusative case cannot be assigned. Hence the object in (89a) has to be non-accusative. I will assume that Landau's covert P-analysis holds of *elude* and *escape*: these two verbs project a structure with a covert *to* preposition governing the object.

²⁷ I am grateful to Berit Gehrke for providing me with these examples.

In other words, they are indeed in the same group as appeal to.²⁸

Neither *elude* nor *escape* has a psych-equivalent in Hungarian. All the Hungarian verbs in the *piacere*-group assign dative case to their experiencer. I regard *elude* and *escape* as somewhat idiosyncratic elements of the group of psychverbs in English.²⁹

2.2.3. Subject Experiencers: the like-class

2.2.3.1. Subclasses and thematic coding

Roughly, four broader subclasses of nonderived, transitive subject experiencers can be distinguished on semantic grounds. I list some typical Hungarian examples with their English equivalents.

(90) a. Verbs of emotion

szeret 'loves, likes', kedvel 'likes', imád 'adores', utál 'hates', gyűlöl 'loathes', megbecsül 'appreciates', megvet 'despises', etc.

b. Verbs of cognition

tud 'knows', (meg)ért 'understands', (el)felejt 'forgets', elismer 'acknowledges', ismer 'knows', felfog 'grasps', etc.

c. Verbs of involuntary sensation

lát 'sees', hall 'hears', érez 'feels', etc.

d. Other verbs denoting non-necessarily agentive activities

nevet 'laughs', alszik 'sleeps', sír 'cries', szenved 'suffers', etc.

These predicates are only discussed by Reinhart (2000, 2002) in passim. She mentions nevertheless that they possibly, but not necessarily involve agency or a causal relation with the subject 'experiencer' argument, which is therefore coded as [+m], underspecified for causation (2002:285, footnote 6). Reinhart labels this cluster as "sentient", but since such labels do not really have a formal role in the

²⁸ This does not undermine the claim made in the previous section (2.2.2.3) that regular object experiencers need not have a PP-cap. The crucial difference between *worry* and *elude* is that the only the former has a (possibly non-realized) [+c] argument.

²⁹ *Elude* and *escape*, together with *appeal to*, allow for a rich array of interpretations in English. They can have an agentive interpretation, for example.

⁽i) John escaped from prison.

⁽ii) John appealed to the court.

⁽i) and (ii) can be translated to Hungarian, but none of the predicates that can be used for the translation has a conventionalized psych reading. It seems to me that the psych reading of *elude*, *escape*, and *appeal to* is a conventionalized metaphoric extension of the more basic non-psych use in English.

Theta System anyway, I will be referring to these arguments by the conventional label 'experiencer'.

This ties in with the uncontroversial view that non-derived subject experiencer verbs are not unaccusative. They are regular unergative verbs with an external subject and with structural accusative case on the object for the transitive subclasses (90a-c), cf. Belletti & Rizzi (1988) and Pesetsky (1995), among others. The marking procedure (32) requires the presence of a [$/\alpha$, /-c] argument for the accusative feature to be assigned on the verb. As the object argument is not a mentally involved participant, it has to be specified as a /-m argument. This leaves us with a single option for encoding the object: [-c-m]. The decision appears to be driven by the exigencies of the Theta System, but it can in fact be given some independent substantiation, to which I am turning now.

2.2.3.2. The [+m] subject

The [+m] specification in the given thematic structure allows both the possible extensions [-c+m] and [+c+m]. One dimension of this variation should be the licensing of agentive readings. It is indeed the case that many subject experiencers sound quite natural in, for example, deontic contexts. This is a cross-linguistically valid observation, I illustrate with English data for expository purposes.

- (91) a. You should learn to appreciate it.
 - b. See me on my bended knees.
 - c. Don't laugh at me.
 - d. You must understand my reasons.

These examples may presumably involve different degrees of coercion, but the feeling of coercion is not very strong. This is expected in the [+m] analysis.

Passivization facts present another argument for the [+m] coding. It is not under all circumstances that subject experiencers passivize naturally. Agentive predicates, like *eat*, show a strong contrast with *like* in most contexts.

- (92) a. Only I didn't eat the breakfast yesterday.
 - b. The breakfast wasn't eaten only by me yesterday.
- (93) a. Only I didn't know the right answer yesterday.
 - b. "The right answer wasn't known only by me yesterday.

Passives of subject experiencers are best in generic contexts, where the passive subjects appear to be affected by being targeted as people's emotional/perceptual concern.³⁰

³⁰ At least (94b) is a verbal passive, and I assume (94a) also is.

- (94) a. I didn't want to go some place where Americans were not liked.
 - b. His protest that he was being misunderstood got him 90 days in prison.

Keenan (1984) argues that passivization often results in an attribution of increased affectedness to the passive subject. This might be a by-product of the known pragmatics of the passive. Nevertheless, the change is often quite observable, compare (95) with (94).

- (95) a. I didn't want to go some place where the locals don't like Americans.
 - b. His protest that Kate was misunderstanding him got him 90 days in prison.

The observation is that it seems that passives of subject experiencers are most natural if the passive subject can be understood as somehow being affected in the relevant event.

Recall that the Theta System does not encode information about affectedness, though an affected argument is by default expected to be specified as /-c, given the general assumptions about causal relations. If an entity is affected by another one, then in the default case it does not itself acts as cause in the selfsame relation. In the Theta System, it is the cause participant that is encoded as a /+c argument, and certain lexical conventions, as well as pragmatic inferencing, will associate in particular cases another argument with an affected role in the causality chain. This then all relies on the presence of a /+c argument. If we assume that the subject of these experiencer predicates is optionally interpreted as a cause, then the data in (94) receive a natural explanation. Besides, it is also expected (given the underspecification for causation), that these experiencer passives are not always perfectly acceptable, which is indeed the case (cf. 93).

2.2.3.3. The [-c-m] object of subject experiencers, and how it compares with *hope for* and the like

The passive considerations already give some motivation to why the object argument of subject experiencers is not to be conceptualized as a cause at least in those cases when the subject is interpreted as /+c. It does not follow though from this that the object *has to* be [-c-m]. This is ultimately still a requirement arising from case-considerations in the Theta System. Accusative case would not be licensed on the object if it did not have a [-c-m] specification.

If we approach the problem from a conceptual perspective, it comes down to the fact that it is not evident whether the object of these predicates is to be coded as [-c-m], or as simply [-m]. The latter, as we have already seen it, corresponds to Pesetsky's (1995) subject matter role, but he discusses the subject experiencers in question as having a *target* role on the object argument. I quote him for an illustrative passage on the difference between the two roles (1995:96): "If John is afraid of an object, he evaluates it negatively, but also has a more complex attitude

towards it, involving desire for avoidance, suspicions of possible harm, and so on [subject matter]. By contrast, if Sue likes Mary, she merely evaluates her positively, and, if she hates Mary, she merely evaluates her negatively [target]." In other words, whereas the subject matter can be interpreted as a possible cause ([-m]), this conception of the target role has a bias towards viewing it as a necessary non-cause, or [-c-m] in current terms.

The other side of the problem, as is discussed here, is that choice between [-m] and [-c-m] also has grammatical consequences. In the Theta System, [-m] does not license accusative case, but [-c-m] does in the relevant configuration. Given both the meaning and the syntactic considerations, we would expect the second argument to be a possible cause [-m] in (96b), but a non-cause [-c-m] in (96a).

- (96) a. We liked the meeting.
 - b. We laughed about the meeting.

This seems to me to be on the right track. (96b) can indeed be decomposed informally as 'the (notion of) the meeting caused us to laugh', whereas any such decomposition is awkward for *like* and the rest of the object experiencers. Entertaining an optimal scenario, we could assume that any nonderived subject experiencer with a non-accusative second argument codes it as [-m].³¹ Depending on the morphological inventory of the language, this argument might be marked by a P-element or by case. I illustrate with English and Hungarian examples.

```
(97) a. long for - vágyakozik + superessive [≈onto]
b. count on - számít + superessive [≈onto]
c. insist on - ragaszkodik + allative [≈to]
d. depend on - függ + ablative [≈from]
```

Keeping this class maximally close to the *like*-class, a verb like *hope for* can then be coded as < [+m][-m] >. Alternatively, it could also be < [-c+m] [-m] >, since (i) accusative is likewise not licensed (in the absence of a [+] argument), and (ii) [-c+m] merges externally since nothing rules it out in this case. No radical grammatical difference results between the two coding options, though the second suggests that *hope for*-type predicates should be less agentive than *like*-predicates, which may be the case. What is important nevertheless for my reasoning is that the second argument is coded as [-m].

There is both a thematic and an aspectual dimension to this variation, which fits in a larger domain wherein the *spray/load*-alternation, and pairs like *watch - look at* also belong. I shall have nothing to say about these, the discussion in the main text is restricted to experiencer predicates.

³¹ Many agentive predicates are known to show universally the so-called conative alternation between accusative and non-accusative objects.

⁽i) John shot the bear.

⁽ii) John shot at the bear.

Particularly interesting in this perspective are predicates alternating between the *like* and the *hope for* patterns. *Believe* is a case at hand both in Hungarian and English, as well as in many other languages.

- (98) a. *El-hisz-em a történet-et*.

 PTCL-believe-1SG the story-ACC 'I believe the story.'
 - b. Hisz-ek ben-ned. believe-1sG INE-2sG 'I believe in you.'

Following Pesetsky's line of reasoning, whereas (98a) is simply an expression of evaluation, (98b) is about something more than evaluation. This surplus is approached here as the potential causal nature of the second argument, so that the *you* in (98b) may be construed quite similarly to the one in *you make me believe*. Parallel considerations may be applied to the difference between *trust someone* and *trust in someone*, the latter expressing a stronger, more solid belief than the former.

While I do not intend to suggest here that a thematic analysis necessarily paves the way to a comprehensive account for all such alternations, it certainly gives them good motivation in most cases. To illustrate this, I finish this discussion on a remark that Everaert (2002:337) makes on the encoding of subject experiencers in the Theta System. He points out that in the sentence

(99) Simone feared John's anger.

John's anger can be interpreted as a possible cause for Simone's fear. It should be familiar by now that it means a [-m] encoding in the Theta System, but then accusative case cannot be assigned by the verb. Possibly, one could assume, just like in the case of *escape* and *elude* (2.2.2.4) that what looks like accusative is in fact not accusative, but some other case without phonological realization in the system of current English. To check this further, we can try to look at other languages and see what happens there. In Hungarian, for example, *fear* and synonymous verbs do not take accusative. They mark the potential cause with ablative case [≈from].

(100) Szimóna fél János harag-já-tól. Simone fear John anger-POSS.3SG-ABL 'Simone fears John's anger.'

On the alternative explanation, English does have accusative on the object in (99), but then it is expected to be thematically different, i.e. [-c-m]. Some difference indeed can be found between the Hungarian and the English versions. The English *fear* creates an intensional context for the interpretation of its object argument, and non-presupposed arguments are perfectly fine in that position.

- (101) a. I fear a world that operates on Linux alone.
 - b. I fear a deadly storm.

The Hungarian *fél* is slightly deviant in such contexts, quite like *afraid* in *I* am afraid of a deadly storm. This is possibly so since a cause, even if potential ([-m]), is less felicitously denoted by a strongly non-extensional object.³² If the English *fear* has a [-c-m] object, which can never be construed as a cause, then that can provide an explanation for why the two sentences in (101) are fully natural.

While arguably this accusative/non-accusative variation should be looked at more carefully, and embedded in the general system of such alternations, the data here discussed give, I think, some extra motivation for why *like*-type subject experiencers are to be encoded as <[+m][-c-m]>.

2.2.4. Dative experiencers

2.2.4.1. A small class that matters

Finally, we have arrived at the class that constitutes the focus of this dissertation. Dative experiencers, or the *piacere/appeal to-*class as they are often referred to, have been shown to have their linguistic importance in 1.1. Slightly in contrast with its big fame, the extension of the class is generally given as quite small. Belletti & Rizzi (1988), for example, only discuss *piacere-examples*; Pesetsky (1995) has *matter to, appeal to, occur to, elude* and *escape* in this group; whereas Levin's (1993) comprehensive survey of the verbal predicates of English lists the following 5 items among her *appeal to-verbs: appeal to, matter to, niggle at, grate on, jar on.* Part of the challenge lies in the very definition of this class, and the lack of a general consensus on the defining properties may result in partially incompatible classificatory schemas. A finer-grained taxonomy will be given in Chapter 3 as part of the description of Hungarian dative experiencers.

In this subsection, I focus on prototypical *piacere*-verbs to create a vantage point from which the subsequent discussion can be carried out. I first discuss how core dative Experiencers are encoded in the Theta System. The other main item of the agenda is the establishment of dative experiencers as an independent class. In 2.2.2.3 I have already presented some evidence that dative experiencers are unlike stative object experiencers, here I will show that they cannot systematically be related to nonderived subject experiencer predicates either.

2.2.4.2. Dative experiencers in the Theta System

Core dative experiencers, like *appeal to*, are typically unaccusative. They are dyadic and do not have a [+c] alternate, as opposed to monadic unaccusatives. Reinhart (2000, 2002) assumes the following thematic structure for these core cases.

³² See also Pesetsky (2005:300, footnote 53) for some related discussion.

(102) appeal to
$$<[-c-m]_2[-c]_2>$$

Since the predicate is dyadic, a merging index can be assigned, which is 2 for both arguments since they are [-] clusters. By the convention on case marking (32), the unary cluster [-c] requires inherent case (dative in Hungarian, preposition in English). The [-c-m] argument cannot get accusative case in the lack of a [+c] cluster, and will move to a subject position for EPP reasons. This results in a derivation much like what is assumed in Belletti & Rizzi (1988) or Pesetsky (1995). I repeat Pesetsky's structure, previously presented as (8b) in Chapter 1.

(103) a. The picture [
$$-c-m$$
] appeals to her [$-c$]. b. [$_{IP}$ [$-c-m$], [$_{I'}$ [$_{VP}$ [$_{V'}$ appeal to t_i] [$-c$]]]]

This is a non-quirky derivation, which characterizes both English and Hungarian, as will be argued for in detail in Chapter 5. Until then, it suffices to be aware that the nominative argument has all the expected subject properties in Hungarian, too.

That the nominative argument is coded as [-c-m] is relatively straightforward. It is Pesetsky's target, and target-type participants do not causally relate to the event, recall the discussion in 2.2.3.3. But the dative is coded as [-c], which might again appear to be a decision dictated by the Theta System itself. The basic experiencer encoding, [-c+m], would result in an unergative derivation, since [-c+m] is not assigned a merging index, and in the absence of another external argument it should merge externally. There are two considerations, however, which make this decision non-arbitrary. First, notice that out of the two possible construals that the Principle of Full Interpretation (18) allows for the dative [-c] argument, only one is grammatical in this particular thematic configuration, as noted by Marelj (2004:68).

The second construal, [-c-m], gives us two identical theta clusters, which is ruled out by the Non-identity Constraint (13). Thus, the dative cannot escape being interpreted as an experiencer anyway.

The second consideration which gives the [-c] coding of dative experiencers motivation is that this way they are placed in the same natural class as goals and beneficiaries. These are coded as [-c] in the Theta System, since goal-type participants are not causally responsible for the events denoted by their predicate, but, depending on the construction, their mental state can be relevant. Languages typically encode these participants in converging ways, and one way of capturing this relatedness is to assume a uniform basic thematic encoding for these thematic

entities of grammar.³³ It is thus expected to be possible that predicates that have an experiencer reading for their [-c] argument also allow for a non-experiencer ([-c-m]) interpretation for the same argument, provided that their thematic structure is distinct from that of *appeal to*. I show in Chapter 4 that this is indeed the case with a number of predicates that are otherwise generally classified as experiencers. This will provide important additional support to the thematic assumptions presented here.

2.2.4.3. The (non-)issue of lexical converses

Notwithstanding the above considerations, the issue with which I have started this dissertation has still not been attended satisfactorily. What is it that ultimately justifies the assumption that now we have one thematic structure for *like* and another for *appeal to*, with a truly thematic difference between the two that goes beyond the generally accepted account involving case marking differences? I repeat the two lexical entries for the purposes of comparison.

(105) a. like
$$<[+m]_1[-c-m]_2>$$

b. appeal to $<[-c-m]_2[-c]_2>$

Given the fact that the [-c] argument of *appeal to* is interpreted as [-c+m], and the [+m] argument of *like* is usually also interpreted as [-c+m], the conceptual difference between the two predicate classes is not radical at all. But the difference in thematic structure is still there, and this receives the strongest support if it can be supported by a conceptual differentiation of an appropriate kind. In other words, I want to argue here that *like* and *appeal to* are distinct lexical entries in their own right, and quite possibly do not encode the same concept.

Let me start the argumentation in a bottom-up fashion with a closer look at dative experiencer verbs that appear to have a subject experiencer converse. I am aware of four such cross-linguistically relevant pairs, each of which is represented in Hungarian.

As has been pointed out already, it is not assumed in the Theta System that aspectual variation necessarily has a thematic correlate. Therefore, aspectual differences between oblique experiencers, goals, or beneficiaries are of secondary importance beyond the thematic similarities. It is evident then that this thematic unification is not totally construction-driven.

³³ This argument has a constructionist flavor to it, inasmuch as a uniform thematic encoding is taken to be supported by constructional similarities among the structures the respective predicates project. Note nevertheless that neo-constructionist accounts, which generally take an aspect-driven approach to thematic variation, cannot easily treat dative experiencers and locative goals on a par, since the former regularly participate in atelic, and the latter in telic constructions.

⁽i) The picture appeals/matters to me.

⁽ii) I went/ran to Amsterdam.

(106)		Dative experiencers		Subject experiencers
	a.	tetszik 'appeals to'	-	szeret 'likes'
	b.	hiányzik 'is missing'	-	hiányol 'misses, lacks'
	c.	fáj 'hurts, is painful'	-	fájlal 'complains of/feels a pain in'
	d.	számít 'matters counts'	_	számít 'counts on'

Miss does not have a dative experiencer version in English, but it does in Hebrew (xaser, Landau 2005:55) or Italian (mancare, Perlmutter 1984:293). Hurt has a subject experiencer alternate in Hebrew (ka'av, Reinhart 2002:254, footnote 17). I go through each of these pairs now with a focus on Hungarian to show that the respective members are semantically different in ways idiosyncratically listed with each pair.

As opposed to the situation in some other languages, the Hungarian pair *tetszik* 'appeals to' and *szeret* 'like' are clearly experienced as semantically distinct uniformly by all native speakers. ³⁴ *Tetszik* is an expression of the pleasure an individual or object stimulates in the experiencer, often with a direct focus on only external aesthetic qualities of the target, and generally no lasting or deep emotional attachment is implied. As opposed to this, *szeret* always implies a more intensive emotional bound between the experiencer and the target, and the focus is not so much on the target's external properties but on its internal constitution that qualifies it as a long-term object of one's emotions. As a result, the English *I didn't like the film yesterday* can only be translated into Hungarian with the dative experiencer.

(107) Nem tetsz-ett a film tegnap. not appeal-PAST the film yesterday lit. 'The film didn't appeal to me yesterday.'

Notice that the English translation I have provided is quite clumsy, but it is exactly this construction that must be used in Hungarian. It is also a consequence of the just-described semantic differences that neither of the following is a contradiction in Hungarian.

(108) a. Nem tetsz-ik nek-em János, de szeret-em. not appeal-3SG DAT-1SG John but like-1SG.DEFOBJ cc. 'I don't find John attractive, but I like him.' [lit. 'John doesn't appeal to me, but I like him.']

³⁴ The English *appeal to* appears to be much more constrained on its psych reading for English native speakers than the Hungarian *tetszik* for Hungarians. This might be a result of the diachronic development of *appeal to*, since it did not have a psych reading until the very end of 19th century (cf. the entry in the *Online Etymological Dictionary*, http://www.etymonline.com/). The relative freshness of this metaphoric extension from the basic *request* reading might explain part of the uncertainty native speakers often have concerning judgments on *appeal to* constructions. The Hungarian *tetszik* 'appeal to' is non-ambiguous, it only has the psych reading.

b. Nem szeret-em János-t, de tetsz-ik nek-em. not like-1SG John-ACC but appeal-3SG DAT-1SG cc. 'I don't like John, but I find him attractive.'
[lit. 'I don't like John, but he appeals to me.']

This we would not expect if *tetszik* was simply the converse of *szeret*.

The other three pairs in (106) behave essentially the same way. In general, the subject experiencer alternate expresses the manner in which the target is evaluated, and the attention is on the experiencer and on the nature of this evaluative act itself. In the dative experiencer construction, the focus is more on the target and on the way he stimulates the experiencer. This variation triggers somewhat idiosyncratic, but appropriately channeled differences in the lexical semantics of the members of each pair. Consequently, the following complex sentences are not contradictory, just like (108). I provide some context in English.

(109) Uttered by the boss in an office in disorder, with the secretary on holiday.

Már hiányol-om a titkárnő-m-et, already miss-1SG the secretary-1SG.POSS-ACC

bár nem igazán hiányz-ik nek-em. though not really miss-3SG DAT-1SG

cc. 'I would need my secretary, but I don't really miss her.' [lit. 'I am missing my secretary but she does not really miss to me.']

(110) Uttered by someone who believes John is faking pain.

János a láb-á-t fájlal-ja, John the leg-POSS.3SG-ACC hurt-3SG.DEFOBJ

de szerint-em nem fáj nek-i igazán. but according.to-1SG not hurt DAT-3SG for.real

cc. 'John is complaining about his aching leg, but I don't think it really hurts him.'

[lit. 'John is paining his leg but according to me it does not really pain to him.']

(111) From an apocryphal speech by George W. Bush on Iraq.

```
Számít-ok a katoná-i-nk-ra Irak-ban, count-1SG the soldier-PL-POSS.1PL-SUB Iraq-INE

de egyébként ők nem számít-anak nek-em.
but otherwise they not count-3PL DAT-1SG
```

cc. 'I am counting on our soldiers in Iraq, but otherwise they do not really matter to me.'

[lit. 'I count on our soldiers in Iraq but otherwise they do not count to me.']

It depends on the lexical inventory of the particular target language whether these sentences can directly be translated, but pairs of the kind listed here generally do show this bifurcation of meaning along the two constructions as is exemplified here.

I conclude that the two verbs in each pair above are sufficiently different in meaning to justify being stored in the lexicon as distinct entries. By default, this means that they do not encode the same concept - an assumption I see no essential problems with in the light of the above data. In other words, there is enough grammatical evidence to think that there possibly is an APPEAL concept in the lexicon, distinct from the LIKE concept, and so on respectively for the other verbs.

This evidence also includes the fact that there is no systematic mapping from the subject experiencer class to dative experiencers. On the one hand, not all dative experiencers have a subject experiencer alternate. Sikerül 'succeeds' or derogál 'feels derogatory to do', for example, do not. On the other hand, most subject experiencers do not universally have a dative experiencer alternate. Hate, loathe, adore and the rest would be expected to have a verbal alternate with a dative experiencer, if the like - appeal to relation were systematic, but these verbs do not have an alternate. Or, to turn the argument around: if the like - appeal to pair is just an accidental piece of lexicalization, why is it that such accidents do not involve most other subject experiencers? If appeal to is assumed to denote a distinct concept of its own, then such questions do not arise.

It is interesting to note in this respect that it is not generally argued that *like*, *love*, *admire* and *adore* have the same conceptual content, but on closer inspection they really only seem to denote different degrees of the same type of emotion. What is more, *dislike*, *hate* and *loathe* map onto respective degrees of the selfsame emotional scale, and differ only in polarity from the previous list of verbs. There is a sense in which all these verbs are about the same higher-level concept, but it is a fact that lexicalizations of this kind are universally recurrent and this tells us that the internal structure of this complex concept is linguistically relevant, and possibly includes atomic concepts that directly correspond to the denotations of these verbs. If this is so, then there should be nothing outrageous with arguing that *like* and *appeal to* are likewise conceptually differentiated.

Dative experiencers in Hungarian: the empirical background

3.1. Introduction

I have concluded Chapter 2 with the claim that dative experiencers cannot be reduced to any other experiencer (sub)class. They make up a distinct predicate class with independent thematic and syntactic properties. This view allows us to expand upon the core *piacere*-class, as is discussed in Belletti & Rizzi (1988) or Pesetsky (1995). In fact, *piacere/appeal to*-verbs are grouped together with *seem*-type verbs and evaluative predicates of the *good/important*-type in much of the literature (cf. Jackendoff to appear, Perlmutter 1984, and Postal 1971, among others). What is common in all these predicates is that they license a dative experiencer. In the literature on Hungarian, evaluatives are the prime examples of dative experiencer predicates (É. Kiss 2001, 2002; Komlósy 1994; Tóth 2000a, 2002), and modal predicates (like *lehetséges* 'possible') are also often said to license *experiencer* datives (as in Dalmi 2005 and É. Kiss 2002).

In this chapter, I present a descriptive overview of this extended class of dative experiencer predicates, constraining the discussion to the description of the Hungarian data. The descriptive background presented here complements the discussion in Chapter 2, and together they constitute the starting point for the thematic and syntactic analysis in the forthcoming chapters. My major concern is to show that dative experiencer predicates fall into two subclasses in a way that cuts across previous taxonomies. A relatively small group of verbs, including the core *piacere*-predicates, have a dative argument with obligatory experiencer semantics. The rest, including modal and evaluatives predicates, as well as a handful of other dative verbs, license a dative which is optional and which is not necessarily an experiencer. To the best of my knowledge, the only place in the literature on Hungarian where mention is made of the fact that certain dative 'experiencer' predicates license a non-experiencer reading is Tóth (2000a:16). She has the following example.

(1) Rossz a környezet-nek, hogy ennyi szemet-et lerak-nak. bad the environment-DAT that this.much waste-ACC dump-3PL 'It is bad for the environment that they dump so much waste.'

Tóth, however, does not follow this observation up. I believe that (1) calls attention to a very important divide between dative predicates. I provide the empirical foundations to this divide in this chapter, and this will lead me to set up a systematic distinction between dative arguments and dative thematic adjuncts in Chapter 4. In particular, *appeal to-*predicates will be argued to take a dative argument, but predicates that can have an optional, non-necessarily experiencer dative will be claimed to license this dative as a thematic adjunct.

In this chapter, I use the descriptive terms *predicates with experiencer* arguments and *predicates licensing optional datives* to distinguish between the two groups. The first group is discussed in Section 3.2, and subclasses in the second group are overviewed in 3.3. I focus on two descriptive parameters in distinguishing between the two types of predicates. First, the dative can be obligatory or optional. Second, I investigate whether the dative can only be interpreted as an experiencer or other interpretations are also possible (as in (1)). These phenomena will be revisited in Chapter 4, here I rely on a more intuitive, preliminary understanding of what optionality and experiencerhood are. I round up the discussion in 3.4.

I make the methodological convenience of not including the infinitival construction in the discussion in this chapter. Recall that dative experiencer predicates can have not only nominal subjects, but they can also subcategorize for infinitival- or *that*-clauses. I repeat (21) from 1.2.4 as (2) to illustrate.

- (2) a. Nem fontos nek-i [IPinf itt marad-ni(-a)].
 not important DAT-3SG here stay-INF-3SG
 'It is not important for him to stay here.'
 - b. Nem fontos nek-i, [CPfin hogy itt marad-j-ak]. not important DAT-3SG that here stay-SBJ-1SG 'It is not important for him that I stay here.'
 - c. Nem fontos nek-i [DP] ez a hely]. not important DAT-3SG this the place 'This place is not important for him.'

The Hungarian literature focuses on the infinitival construction, and there is an intense discussion on when the dative is base-generated in the matrix clause (as indicated by the bracketing in (2a)) and when it is directly inserted as the subject of the infinitive. I devote the whole of Chapter 6 to a thorough discussion of this question. Until then, I concentrate on the constructions represented by (2b) and (2c). The status of the dative is more 'transparent' in (2b) and (2c): it can only be licensed by the predicate *fontos* 'important' itself, and we can avoid the sort of bracketing problems that the infinitival construction represents. Notice that this procedure presupposes that the constructions in (2) are all derived from the same lexical entry.

By the *Lexical Uniformity Principle* (2.1.1), according to which each predicative concept corresponds to one lexical entry with one thematic structure, such a scenario in fact counts as the default. In the forthcoming chapters, I will substantiate the 'single-entry analysis' of the three constructions in (2).

3.2. Dative predicates with experiencer arguments

3.2.1. Core *piacere*-predicates

What I include in the group of core *piacere*-predicates are simply dative experiencer verbs that have no other special semantic property that is common to them.

(3) *Piacere*-predicates

```
a. nem akaró(d)zik 'does not feel like' [lit. 'does not want-MID to']
```

b. *derogál* 'it is beneath one's dignity to'

c. *jól/rosszul esik* 'feels good/bad to' [*lit.* 'falls well/badly']

d. tetszik 'appeals to'

e. *sikerül* 'succeeds, works well'

f. sikeredik 'succeeds'

These only have the psych reading, and only occur in the basic dyadic dative construction, as in (4).

(4) A Suzuki derogál a magyar rendőr-nek. the Suzuki derogatory.feel the Hungarian policeman-DAT 'A Hungarian policeman feels that a Suzuki is beneath his dignity.'

Sikerül and sikeredik - both mean 'succeeds' - can be used felicitously without an overt dative phrase even in case there is no explicitly mentioned discourse antecedent to identify the intended experiencer. These two Hungarian verbs behave like the English *manage* in presupposing that an attempt was made. The truth of either (5a) or (5b) necessarily entails the truth of (6).

- (5) a. John managed to give a concert.
 - b. John did not manage to give a concert.
- (6) *John tried to give a concert.*

Sikerül 'succeeds', unlike *manage* in English, projects a dative construction, but the presupposition that somebody made a try is the same. Consequently, (7) entails that there was an individual or a group of individuals who tried to give a concert.

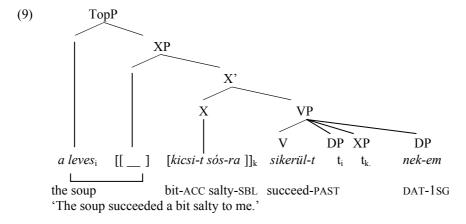
(7) Nem sikerül-t a koncert.
not succeed the concert
'The concert did not succeed.'

The pragmatically most likely interpretation of the implicit dative argument is that it picks up the musician(s), for whom the concert was not a success. That is, they did not play well. The point is that even if there is no overt dative phrase present in the clause projected by *sikerül* 'succeeds' or *sikeredik* 'succeeds', a definite implicit dative argument must be identifiable for the *try*-presupposition to work.

These two verbs also differ from the other verbs in (3) in being able to take a resultative secondary predicate (a small clause).

(8) A leves [sc kicsi-t sós-ra] sikerül-t nek-em. the soup little-ACC salty-SBL succeed-PAST DAT-1SG 'I made the soup a little salty.'
[lit. 'The soup succeeded a bit salty to me.']

The small clause behaves as a verb modifier (*VM*) and occupies an immediately preverbal position in neutral sentences (cf. 1.3). The simplified structure of (8) is in (9). Focusing on the bare essentials, I place the resultative small clause into an unspecified XP projection and assume that it has a subject position in Spec,XP.¹



It is only *sikerül* 'succeeds' and *sikeredik* 'succeeds' of all the dative predicates that can take optional resultative predicates. The reader may recall from 2.2.2.2 that this is an unaccusative property: only unaccusative predicates license resultatives. I repeat (76a) from Chapter 2 as (10) to illustrate.

(10) The river froze solid.

I will show in Chapter 4 that it is not an accident that the only dative predicates that license resultative secondary predicates are among the predicates that have dative experiencer arguments. These dative predicates are indeed unaccusatives, but

¹ Predicative complements of the kind discussed here have long been known to pattern up with verb modifiers in occupying a preverbal position in neutral sentences (cf., among others, Komlósy 1994, Kálmán et al. 1989, Szabolcsi & Koopman 2000).

predicates that license optional dative thematic adjuncts (the *important*-class) will be shown to have unergative properties.

3.2.2. Verbs of mental appearance

These verbs denote the emergence of a mental image (11a-e), or the resulting emotional state (11f-g). Each has a general metaphoric character and is restricted to informal registers, except for *megjelenik* 'appears' and *feltűnik* 'appears'.

(11) Verbs of mental appearance

```
'appears, materializes'
a. megjelenik
                    'appears, attracts attention'
b. feltűnik
c. beugrik
                    'clicks, the recognition comes'
                                                          [lit. 'jumps in]
d. bekattan
                    'clicks, the recognition comes'
                                                          [lit. 'clicks in']
e. leesik
                    'gets it, picks it up'
                                                          [lit. 'falls down']
                    'likes'
    bejön
                                                          [lit. 'comes in']
f.
g. nem fekszik
                    'doesn't like; doesn't suit sb'
                                                          [lit. 'doesn't lie']
```

Here are two examples.

- (12) a. *Hirtelen be-ugr-ott nek-em a megoldás*. suddenly in-jump-PAST DAT-1SG the solution 'I suddenly remembered the solution.'

 [*lit.* 'The solution jumped in to me suddenly.']
 - b. Álm-om-ban meg-jelen-t nek-em egy kép. dream-POSS.1SG-INE PTCL-appear-PAST DAT-1SG a picture 'An image appeared to me in my dreams.'

The psych reading of these verbs always involves a dative experiencer. The verbs in (11) also have a non-psych reading, in which case the dative experiencer is replaced with an appropriate locative case marker (or a postposition), as in (13b).

- (13) a. Be-jön nek-em ez a lány.
 in-come DAT-1SG this the girl
 'I like this girl.'
 [lit. 'This girl comes in to me.']
 - b. Be-jön a szobá-ba ez a lány. in-come the room-ILL this the girl 'This girl comes into the room.'

I consider this situation a pure case of homonymy. The psych reading is conventionalized, and is idiosyncratically allowed for some verbs originally denoting motion or manner of motion. This meaning shift is not a productive

process, unlike regular polysemic meaning extensions. *Befut* 'runs in', or *bemászik* 'climbs in' and most other motion verbs do not have a psych reading. The ones that do have to be learnt one by one. Given these considerations, I assume that the relevant psych readings and the non-psych motion readings are stored as two different lexical entries. Only the psych-versions can have a dative experiencer argument.

All the psych-predicates can take a *that*-clause instead of a nominal subject. Predicates that have a stative reading (11f-g) can also take an infinitival clause, but predicates that denote the emergence of a mental state (11a-e) cannot.

- (14) a. Be-jön nek-i ilyen-ek-et ír-ni. in-come DAT-3SG such-PL-ACC write-INF 'He likes to write such things.'
 - b. *Be-ugr-ott nek-i ilyen-ek-et ír-ni.
 in-jump-PAST DAT-3SG such-PL-ACC write-INF
 int. 'He remembered that he should write such things.'
 [lit. 'It jumped in to him to write such things.']

I assume that there is a conflict between the semantics of the infinitive and the selectional restrictions of the matrix predicate in (14b). This restriction generally characterizes each mental-emergence predicate in (11a-e). All the other dative predicates discussed in 3.2 and 3.3 can govern an infinitival clause.

3.3. Predicates licensing optional datives

3.3.1. Overview

As anticipated in the introduction (3.1), the predicates to be covered in this section differ from the predicates that have dative experiencer arguments in two major ways. First, their dative is optional. Second, even if they have a dative, it does not have to be interpreted as an experiencer.

Evaluative and modal predicates are the two groups that have received most of the attention in studies on Hungarian. I discuss these predicate classes in 3.3.2 and 3.3.3, respectively. In 3.3.4, I give a brief taxonomy of four smaller classes of verbs that also license optional datives.

3.3.2. Evaluative predicates

This is a rather large class of predicates, but the following list is representative. All are adjectives, except for *nem árt* 'does not hurt, serves sb/sth well' (15p), which is a verb.

(15)**Evaluative predicates**

```
elég
                   'enough'
a.
b. fontos
                   'important'
c. hasznos
                   'useful'
d. jó
                   'good'
   kellemes
                   'pleasant'
e.
                   'unpleasant'
   kellemetlen
f.
g. kényelmes
                   'comfortable'
                   'embarassing'
h.
   kínos
                   'risky'
i.
    kockázatos
                   'early'
    korai
i.
k.
   könnvű
                   'easy
1.
    nehéz
                   'difficult, heavy'
m. rossz
                   'bad'
n. tanácsos
                   'advisable'
```

o. veszélyes 'dangerous'

p. nem árt 'does not hurt; serves sb well'

I take the term evaluative over from Komlósy (1994) and Tóth (2000a). Intuitively, all these predicates can be thought of as expressing some sort of an evaluation.

It is customary to claim the dative of evaluative predicates to be an experiencer (cf. Komlósy 1994; Dalmi 2005; É. Kiss 2002; and Tóth 2000a, 2002, 2004). As I have already noted in the introduction to this chapter, this claim is based on the study of only or mainly the infinitival construction. Or to be precise, on certain specific instantiations of the infinitival construction.

A partly different picture emerges if we approach these predicates through the nominal and the that-clause constructions.

- volt János-nak a találkozás. good was John-DAT the meeting 'The meeting was good for John.'
 - volt János-nak, hogy találkoz-t-unk. good was John-DAT that meet-PAST-1PL 'It was good for John that we met.'

These sentences are at least two ways ambiguous. On the familiar psych reading, John felt it was good for him that the meeting happened. This reading indeed involves a dative experiencer. On the non-psych reading, the evaluative component is anchored not to John but to the speaker by default. How John feels about the meeting might not matter at all, hence (17) is a non-contradiction.

(17) Szerint-em jó volt János-nak, hogy találkoz-t-unk, according.to-1SG good was John-DAT that meet-PAST-1PL bár ő nem nagyon örül-t. though he not very glad.be-PAST

'I think it was good for John that we met, though he wasn't very happy.'

The majority of the evaluative predicates show this ambiguity. Furthermore, all of them allow the omission of the dative expression. This is possible in (16) and (17), too. With the dative omitted, the sentence can gain an objective interpretation.

(18) Jó volt a találkozás. good was the meeting 'The meeting was good.'

In Chapter 4, I investigate the non-experiencer readings thoroughly, and make detailed comments on the exact nature of the alternation between the presence and the absence of the dative phrase. Here it suffices to observe that the dative of evaluative predicates does not behave the same way as the dative of *appeal to*-predicates.

3.3.3. *Modal predicates*

There is a handful of modal predicates in Hungarian, most of which are adjectives, except for the verbs *kell* 'needs' and *illik* 'fits, proper to do'. Modality is understood here in the sense it is used in logic: modal predicates express different types of possibility or necessity.

² There are three modal verbs which I have not listed in (19): *kell* on the reading 'must', the verbal *szabad* meaning 'may', and the verb *lehet* 'can'. These are semi-auxiliary predicates, and behave as quasi-functional elements in the synchronic system. I catalogue the properties that distinguish them from main verbs in the Appendix in 5.6, but I do not discuss them in the main text

The semi-auxiliary modals cannot take nominal subjects (cf. 5.6), but all the modal predicates in (19) behave like any other dative predicates in subcategorizing either for clauses or for nominal subjects, contra Tóth (2000a:20, footnote 13) and Komlósy (1994:168), who claim that modals cannot have DP subjects. Though they may have strong selectional restrictions on the semantic type of the subject noun phrase they take, all the items in (19) can take nominal subjects. Consider the following example.

⁽i) Péter-nek lehetséges #a kép /#a friss levegő / a győzelem.

Peter-DAT possible the picture the fresh air the victory
"#The picture/#fresh air/victory is possible for Peter."

(19) Modal predicates

ill(end)ő 'proper, becoming' a. b. illik 'it is (recognized as) proper to, fits.' b. *kell* 'needs' c. kötelező 'obligatory' d. lehetetlen 'impossible' lehetséges 'possible' e. 'necessary, must' f. muszáj 'allowed/permitted' g. szabad

e. szükséges 'necessary' h. szükségtelen 'unnecessary' i. tilos 'forbidden'

The prevailing view in the literature on Hungarian is that modals have a monadic and a dyadic alternate (Dalmi 1995, 2002; É. Kiss 2001, 2002; Tóth 2000a).³ It is sometimes assumed that the dative phrase is the experiencer argument of the modal on the dyadic reading (Dalmi 2005, É. Kiss 2002). In order to be able to evaluate these claims, I must first make a small detour on the treatment of natural language modality. This discussion is constrained to English data for expository purposes, and I return to the Hungarian data when this overview has been completed.

It is well known that natural language modals have an array of possible interpretations. The modal auxiliary *must* in the English sentence (20) can express at least four different modal readings, which I informally characterize with the paraphrases in (21) in the manner of Kratzer (1977).

(20) *John must stay at home.*

(21) That John stays at home is necessary in view of

(i) the available evidence that I have [epistemic]
 (ii) certain obligations imposed on him [deontic]
 (iii) the current state of the world - there is a flood outside [circumstantial]

(iv) his own dispositions

[dispositional]

Other readings are also possible, these are the major ones discussed in the literature. In the semantic literature on modality, it is sometimes claimed that modals are truly ambiguous (Kiefer 1981) or that they have different senses related through polysemy (Sweetser 1990). It is more common, however, to assume that modals are monosemous, and any variation in interpretation is due to the influence of the pragmatic context (Groefsema 1995; Kratzer 1977, 1991; Papafragou 1998).

The classical syntactic analysis of Ross (1969) focused on the epistemic - deontic distinction, and it was claimed that it correlates with a monadic - dyadic syntactic alternation on the modal predicate. Monadic modal predicates are inserted

³ Except for Komlósy (1994), who claims that each modal is monadic, irrespective of the kind of interpretation that it has.

into a raising construction, and dyadic modals behave as control predicates. It was subsequently pointed out that deontic modals can also be monadic (cf. Brennan 1993, Barbiers 1995), as in the following sentence.

(22) The table must be laid by 9.

In the literature on Hungarian, Tóth (2000a) has been influential in incorporating this observation into the analysis of Hungarian modals; but the details set aside, Dalmi (1995, 2002, 2005), É. Kiss (2001, 2002) and Tóth (2000a, 2002) agree that Hungarian modals are monadic syntactically if they have the readings in (23), and they are dyadic if they have the readings in (24). I illustrate on English examples.

(23) Monadic modals

a.	John must be at home, as the lights are on.	[epistemic]
b.	The essay must be ready by tomorrow.	[deontic]

(24) **Dyadic modals**

a.	John must stay at home by Peter's orders.	[deontic]
b.	John had to take a taxi, as the buses did not run.	[circumstantial]
c.	John feels like he must stay at home today.	[dispositional]

In other words, this divide reflects a difference between monadic and dyadic readings on the one hand, and a difference between monadic and dyadic syntactic constructions on the other. A dyadic modal assigns a theta-role to the subject and projects a control structure. The authors quoted above mostly concentrate on the infinitival construction, which I discuss in Chapter 6. A slightly different picture emerges, however, if we focus on the *that*-clause construction. This modified picture will help us reinvestigate the infinitival construction from a different perspective.

Notice that the approach of syntactic disambiguation is best accommodated in a semantic analysis that treats modals as ambiguous. However, on the monosemy account of natural language modals (as in Kratzer 1977, 1991), what we would expect is that modals are always inserted into the same syntactic structure. This is exactly what Wurmbrand (1999) claims. Following Kratzer, she argues that whatever variation there exists in the meaning of modals is primarily determined by contextual factors and not by presumed syntactic differences. Being an *obligee* or a *permissee* is a semantic/pragmatic role at best, but such participants do not have to be assigned a specific slot in the argument structure of the predicate. In other words, a deontic subject receives no thematic role from the modal predicate.

The position that I take here is intermediate between that of Tóth (2000a) and Wurmbrand (1998). I claim that modals do not assign an extra thematic role on their epistemic, deontic, or circumstantial readings; but they do so on the reading referred to above as dispositional. Let us see now how the Hungarian data support this claim.

I take the modal adjective *muszáj* 'must' first as an example. It licenses a dative phrase together with a *that*-clause.

(25) János-nak muszáj, hogy otthon-legy-en.
John-DAT must that home-be.SBJ-3SG lit. 'It is necessary for John that he be home.'

This is a dyadic modal construction, but it does not have a pure deontic or a circumstantial reading, contrary to what we would expect on the basis of the analysis of Tóth (2000a). (25) cannot be used to issue a command. Nor is it possible to use this sentence to express the fact that John is blocked from leaving his home by the external circumstances.

What sort of meaning does the modal have then in (25)? One interpretation, I claim, involves a sort of experiencer semantics on the dative. It is the reading that has been referred to above as *dispositional*. For (25), this can be roughly paraphrased as 'John feels that it is unavoidable for him to stay at home'. The other interpretation does not necessarily involve John as an experiencer, but is rather about the attribution of a certain property to him which strongly biases a world in which the embedded proposition holds. For example, the speaker knows that John has not yet recovered fully from an illness. Even if he does not want to, he has to stay at home until he is well again. This reading of (25) can be paraphrased as 'The speaker knows that John is not yet healthy enough to leave his home.' I refer to this reading as the *property reading*.

If the modal predicates in (19) license a dative phrase in the *that*-clause construction, they systematically allow for the dispositional reading or the property reading, but not for the other modal readings (epistemic, deontic, and circumstantial). Consider this example.

(26) A fiú-k-nak nem lehetséges, hogy átkel-j-enek a folyó-n. the boy-PL-DAT not possible that cross-SBJ-3PL the river-SUP lit. 'It is impossible for the boys that they cross the river here.'

The most likely reading of (26) is the property reading: the boys are not in the necessary physical shape to be able to carry out the crossing. (26) does not imply that the river is generally difficult to cross. In (26), a claim is made specifically about *the boys*, and the sentence is compatible with the assertion that for anybody else, it is possible to cross the river. (26) can also be interpreted dispositionally, which could be paraphrased as 'The boys do not yet feel they are prepared to cross the river'. This reading is less prominent, but it is still possible, as opposed to the other modal readings, which are not.

I conclude that modals only assign a thematic role to the dative on the dispositional or on the property reading. This conclusion is reinforced by the behavior of *tilos* 'forbidden, prohibited', which is lexically constrained to have a deontic meaning only. Compare the infinitival (27a) and the *that*-clause constructions (27b).

- (27) a. *Idegen-ek-nek belép-ni tilos*. stranger-PL-DAT enter-INF prohibited 'It is prohibited for strangers to enter.'
 - b. ^{?(?)}Idegen-ek-nek tilos, hogy belép-j-enek. stranger-PL-DAT prohibited that enter-SBJ-3PL lit. 'It is forbidden for strangers that they enter.'

The *that*-clause construction (27b) is not fully acceptable, though it is not completely ungrammatical either. It seems as if deontic and circumstantial modals had some sort of intermediate status between evidently monadic and evidently dyadic modals. I return to this issue in 6.3.4, as part of the discussion on how modals interact with agreement-marked infinitives. Until then, I focus on modals with a dispositional or a property reading. These readings have been shown here to be expressed by a dyadic syntactic construction.

3.3.4. *Miscellaneous verbs with optional dative experiencers*

3.3.4.1. Dative verbs licensing an optional secondary predicate

The following verbs license an optional dative and an optional non-resultative secondary predicate.

(28) Dative verbs licensing an optional secondary predicate

a. megfelel 'is suitable (for a purpose)'

b. beválikc. számít'works well''matters, counts'

They differ from *piacere*-predicates in not having an obligatory dative argument. Furthermore, their optional dative need not be an experiencer.

(29) A bútor-ok-nak nem számít egy kis eső. the furniture-PL-DAT not matter a little rain 'A little rain does not matter for the furniture.'

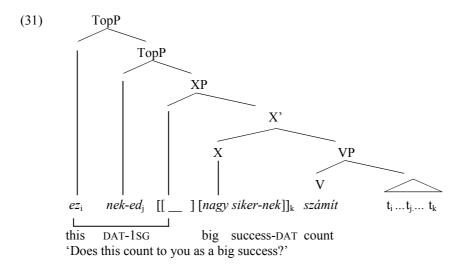
This is what puts them among the predicates discussed in 3.3.

The secondary predicates in question are marked by dative case, which is used as a default secondary predicate marker in Hungarian.⁴

⁴ As noted by É. Kiss (2001:50) in another context, predicative case-marking is independent in Hungarian of the case that the small clause subject has. The ECM-predicate *tart* 'considers', for example, takes a dative-marked small clause complement, just like *számít* 'counts' in (30).

(30) Ez nek-ed [sc nagy siker-nek] számít? this DAT-2SG big success-DAT count 'Does this count to you as a big success?'

The simplified syntactic structure of (30) is represented in (31).



See the earlier discussion on (9) in 3.2.1 for the assumptions that underlie this representation.

The small clause is optional, and if it is missing, the verb projects the regular dative experiencer construction.

- (32) a. Ez nek-ed számít? this DAT-2SG count 'Does this matter to you?'
 - b. Ez bevál-t nek-em. this work.well-PAST DAT-1SG 'This worked well for me.'

This implies that the nominative subject is a thematic argument of these predicates, since it does not rely on the predicative complement for thematic licensing. The dative experiencer is available both in the absence and the presence of the predicative complement.

(i) János nem tart-ja [sc Péter-t okos-nak].

John not consider-DEFOBJ.3SG Peter-ACC clever-DAT

'John considers Peter clever.'

The dative case on the small clause predicate in (30) is not a result of some sort of an agreement phenomenon with the dative experiencer of the matrix predicate *számít* 'counts'.

3.3.4.2. *Seem*-type raising predicates

This group consists of subject-raising verbs, which all have roughly the same semantic content, akin to that of the English *seem*. *Hat* and *tetszik*² sound somewhat sophisticated and are used in more formal styles. *Tűnik* is the more common option in the everyday use of the language.

(33) Seem-type predicates

```
a. tűnik 'seems'b. tetszik<sub>2</sub> 'seems'c. hat 'seems'
```

*Tetszik*₂ is indexed because it is homonymous with the *piacere*-verb *tetszik* 'appeal to'. I assume these two are two distinct lexical entries in the synchronic system.

I give an example sentence for each of these verbs in (34).

(34) a.
$$[_{DP} Az \ az \ egy \ óra] \ [_{SC} \ _ \ egy \ nap-nak \] \ tetsz-ett$$
 nek-em. that the one hour a day-DAT seem-PAST DAT-1SG 'That one hour seemed a day to me.'

b.
$$[_{DP}Ez]$$
 $[_{SC}$ $_$ $kicsi-t$ $utopisztikus-nak]$ $hatott$ $nek-em.$ this.NOM little-ACC utopian-DAT seem-PAST DAT-1SG 'This seemed a little utopian to me.'

The 'raised' subjects and the respective small clause subject positions are marked by the dependency lines in accordance with the analysis in the previous subsection 3.3.4.1.

There is, however, a crucial difference between these verbs and *számít* 'counts, matters' discussed above in 3.3.4.1. The subject of the raising predicate (a nominative DP in (34a-b) and a *that*-clause in (34c)) does not receive a thematic role from the raising predicate itself. As expected, these structures are ungrammatical in the absence of the small clause, since the non-expletive subject would not be licensed thematically. Only the small clause predicate can assign a thematic role to it.

(35) Ez *(jó-nak) tűn-ik nek-em. this.NOM good-DAT seem-3SG DAT-1SG 'This seems to me *(good).' Thus (35) directly contrasts with (32) above.

The dative experiencer is fully optional, and can be omitted in any of the sentences in (34) or (35). Here is an additional example.

(36) Az épület kicsi-t utópisztikus-nak hat. the building little-ACC utopian-DAT seem 'The building seems a bit utopian.'

This sentence makes an assertion about a property of the building, and has an objective reading that does not involve an experiencer.

3.3.4.3. *Jelent* 'means' and *megér* 'is worth'

These two verbs allow both a psych and a non-psych reading, depending on whether the relation is experienced by or just attributed to the dative referent.

- (37) a. Ez jelent-i nek-em a hazám-at. this mean-3SG.DEFOBJ DAT-1SG the homeland-ACC 'This means my homeland for me.'
 - b. Párizs megér-t IV. Henrik-nek egy misé-t.
 Paris worth-PAST IV. Henry-DAT a mass-ACC
 'Paris was well worth a mass to Henry IV.'

What makes these verbs special is that despite their unaccusative derivation (they have an internal subject), they still have an accusative-marked object argument. Given that their thematic structure does not include an external ([+]) argument, they cannot license accusative case in the Theta System (cf. 2.1.4). This leads to the conclusion that this accusative case is inherent, i.e. idiosyncratically assigned in the lexicon.

This conclusion seems to be right. One difference between structural and inherent accusative case is that only the former can be suppressed. The predicate *ad* 'give' has both an accusative and a dative argument, and it has structural accusative case. This verb can serve as input to passive participle formation, which involves the suppression of accusative case (and the saturation of the input subject).

- (38) a. *János ad egy könyv-et Kati-nak.*John give a book-ACC Kate-DAT 'John gives a book to Kate.'
 - b. a Kati-nak ad-ott könyv the Kate-DAT give-PART book 'the book given to Kate'

Such a participle cannot be formed from either of the verbs discussed.

(39) *a IV. Henrik-nek megér-t mise the IV Henry-DAT worth-PART mass lit. 'the to Henry IV worth mass'

Passive participle formation may be sensitive to the aspectual properties of the input predicates, but at least in some varieties of Hungarian, stative passive participles are grammatical (see Laczkó (2000)). Furthermore, $meg\acute{e}r$ 'worth' is historically a combination of the telicizing particle meg- and the verb $\acute{e}r$ 'reach, get to'. It is thus formally a telic complex, even if it is not interpreted so. In any case, (39) is totally unacceptable in any variety of Hungarian, even for speakers who find stative verbs grammatical in this construction. This can be easily explained if the accusative case on the object in (39) is inherent, which cannot be suppressed and therefore participle formation is blocked.

3.3.4.4. Fáj 'hurts' and hiányzik 'be missing'

These two verbs belong to a cross-linguistically known group of verbs which license a so-called possessive dative in many languages, such as German, French or Spanish (see Pijnenburg 1991). The possessive dative, which is used to encode inalienable possession relations, is exemplified from Spanish.

- (40) **Spanish**, Cuervo (2003:176, 179)
 - a. *A Laura le duele la cabeza*.

 DAT Laura CL.DAT hurt.3SG the head 'Laura has a headache.'
 - b. A la torta le faltan las velitas.

 DAT the cake CL.DAT lack.3PL the little.candle.PL 'The birthday cake is missing the birthday candles.'

Cuervo treats these Spanish constructions as always dyadic, but I want to present some arguments now that the corresponding Hungarian construction can be monadic. It is not the case therefore that *fâj* 'hurts' and *hiânyzik* 'be missing' are always required to take a dative in Hungarian, even though they can do so optionally. But let us consider first the non-possessive reading, which involves no extra complications.

On the non-possessive dyadic reading in Hungarian, the dative of *fáj* 'hurts, is painful' is generally interpreted as an experiencer. The emotion involved is either direct physical pain (41a), or more abstract suffering in the psyche (41b).

(41) a. A injekció fáj-t nek-em. the injection hurt-PAST DAT-1SG 'The injection was painful to me.'

b. A vereség fáj-t nek-em. the defeat hurt-PAST DAT-1SG 'The defeat was painful to me.'

Hiányzik 'is missing' is ambiguous in the dative construction between a psych (42ai) and a non-psych reading (42aii). On this latter reading, the speaker expresses his/her conviction that the dative referent would be better off being appropriately related to the entity denoted by the nominative subject. Besides, *hiányzik* 'is missing' can also take a locative argument (42b).

- (42) a. *Hiányz-ik nek-i a vereség.* miss-3SG DAT-1SG the defeat
 - (i) 'He misses the defeat.'
 - (ii) 'He could do with a defeat.'
 - b. Hiányz-ik egy lap a könyv-ből. miss-3SG a page the book-ELA 'A page is missing from the book.'

The ambiguity of *hiányzik* in (42a) is somewhat reminiscent of the meaning difference between *miss* and *lack* in English, discussed in Arad (1998:271).

- (43) a. Nina misses her former home / her family.
 - b. *Nina lacks courage | the ability to cope with the situation.*

She argues that the main difference between (43a) and (43b) is in the availability of an *internal* versus *external* viewpoint.⁵

Let us turn to the possessive dative that has been exemplified from Spanish in (40). There are two ways of translating (40) into Hungarian. First, a simple possessive noun phrase can be used (which is in fact a possibility in just about any other language, including Spanish).

(44) [DP Laura fej-e] fáj.
Laura head-POSS.3SG hurt
'Laura's head aches/Laura has a headache.'

The second option to translate (40) into Hungarian involves the extraction of the possessor from the noun phrase. Extraction of dative possessors is a general possibility in Hungarian, and is usually triggered by discourse needs.⁶ In the following sentence, the dative possessor alone (and not the whole possessive construction) occupies a sentence initial topic position.

⁵ Hungarian does not have an equivalent of *lack*, but *hiányzik* can be used to translate (43b) with elative case on *Nina*. It cannot, however, be used to translate the happenstance reading of the English *miss*, such as in, for example, *to miss a detail/a shot/a chance*.

⁶ See Szabolcsi 1983, 1994; den Dikken (1999) and É. Kiss (2000) for details.

The Hungarian possessive construction differs from possessive datives in Spanish and in other languages in that the dative possessor shows agreement with the possessed noun. Given the possibility for dative extraction, (45) can in fact be regarded as a version of the monadic construction in (44). Consequently, Laura is only a possessor, but not an experiencer in (45). Notice that the non-possessive structures can also occur without an overt experiencer.

- (46) a. Az injekció fáj. the injection hurt 'Injections are painful.'
 - b. *Hiányz-ik a párbeszéd.* miss-3sG the dialogue 'The dialogue is missing.'

I suggest that (44), (45) and (46) are essentially similar for all relevant purposes, except that the sentences in (46) have a simple, non-possessive subject. In other words, the predicate has just one syntactic argument in each of these sentences.

Some further evidence for the same conclusion comes from constructions where the relation between possessor and possessee is not a relation of inalienable possession. Hungarian is a *pro*-drop language, and the presence of agreement morphology in the possessive construction licenses *pro*-drop of the possessor, too. As a result, if the subject is a possessive noun phrase and there is only one dative expression in the sentence, the structure can be ambiguous (cf. Szabolcsi 1992b:90 for similar data).

- - b. $Laur\acute{a}-nak_i$ $hi\acute{a}nyz$ -ik [DP $pro_{i/j}$ a $cip\~o$ -je]. Laura-DAT miss-3SG the shoe-POSS.3SG 'As for Laura, she is missing her (or somebody else's) shoes.'

In (47a), the predicate is monadic, but it is dyadic in (47b), with the dative being an experiencer. In this latter case, the possessor of the shoes can be either identical to or distinct from Laura. As is expected, two datives are also possible: one will be the extracted possessor, the other the experiencer, in a *dyadic* construction.

What makes inalienable possession constructions like (45) in Hungarian special is their semantics, but structurally they simply only involve the (non-obligatory) extraction of a dative possessor - a general possibility in this language. Possessor datives and experiencer datives are not in complementary distribution in Hungarian, and, crucially, dative possessors are not restricted to encoding only inalienable possession even with these two predicates. We can thus safely conclude that both *hiányzik* 'be missing' and *fáj* 'hurts, is painful' license an optional dative.

3.4. Summary

Core *piacere*-predicates (3.2.1) and verbs of mental appearance (3.2.2) take a dative which is obligatory and which can only be interpreted as an experiencer. This is what we expect on the account that has been elaborated in 2.2.4. Recall that *appeal to* predicates have the following thematic structure in the Theta System.

(49)
$$tetszik$$
 'appeals to' $< [-c-m][-c] >$

As discussed there, Marelj (2004) notes that the Principle of Full Interpretation (2.1.3.2) allows for only one grammatical extension of the thematic structure in (49). I repeat (104) from 2.2.4 as (50) for illustration.

(50) a. appeal to
$$<[-c-m][-c+m]>$$

b. *appeal to $<[-c-m][-c-m]>$

(50b) is an ungrammatical thematic constellation, since it violates uniqueness (2.1.3.1). This is why the dative argument of *piacere*-predicates and verbs of mental appearance is always interpreted as an experiencer.

But what shall we do with evaluative predicates, modal predicates, and the miscellaneous dative verbs discussed in 3.3? Their dative is optional, and in most cases, it does not have to be interpreted as an experiencer. We cannot assume that the argument structure in (49) describes the argument structure of these predicates, too. That would give us the wrong predictions. Notice that this is not a problem internal to the Theta System. Optimally, we should be able to predict that the datives of these predicates do not have to be interpreted as experiencers, and the question of their optionality should also be properly addressed. In Chapter 4, I give thorough consideration to these issues and develop an analysis that accounts for the behavior of the predicates overviewed in 3.3.

Three types of dative experiencers: Arguments, adjuncts, and thematic adjuncts

4.1. Introduction

I have shown in the empirical survey in the previous chapter that dative experiencer predicates fall into two subsets. In the core cases, illustrated in (1), the dative phrase is obligatory and has necessary experiencer semantics. For the rest (and the majority) of the dative predicates, exemplified in (2), experiencer semantics is only an option but not a necessity, and the presence of the dative expression does not seem to be obligatory. The major purpose of this chapter is to substantiate this divide by presenting further empirical differences between the two types of dative dependants, and by setting up an analysis in which the two relate to the predicate in two fundamentally distinct ways. I argue that whereas the core dative predicates in (1) have regular dative arguments, those in (2) license what I will be referring to as dative thematic adjuncts (2).

- (1) a. Ez nem tetsz-ik nek-em. this not appeal-3sG DAT-1sG 'This does not appeal to me.'
 - b. Ez nem ugr-ott be nek-em. this not jump-PAST in DAT-1SG 'I didn't remember this.' [lit. 'This didn't jump in to me.']
- (2) a. Ez nem számít nek-em. this not matter DAT-1SG 'This does not matter to me.'
 - b. Ez nem fontos nek-em. this not important DAT-1SG 'This is not important to me.'

It is common to both types of datives that they receive a thematic role, but they do so as members of two distinct domains. They together will be contrasted with

regular dative adjuncts, which may have superficially similar semantics, but which, I will show, belong to a separate, non-thematic domain.

- (3) a. Nek-em ez szép.

 DAT-1SG this beautiful.'

 'To me, this is beautiful.'
 - b. Nek-em ez vicces.

 DAT-1SG this funny
 'To me, this is funny.'

Regular, non-thematic dative adjuncts, such as the ones in (3) do not need any specific lexical trigger, and have a number of, often overlooked, syntactic properties that distinguish them from the two thematic datives. The overall scene that I am presenting here thus classifies the datives that are otherwise glossed as experiencers into three distinct grammatical types: dative arguments, dative thematic adjuncts, and dative adjuncts.

My main concern lies with dative thematic adjuncts. I argue that they belong to a non-core thematic domain, which includes expressions bearing the thematic roles benefactive, instrument, comitative, and the like. Ever since the arrival of thematic roles into linguistic theory in the late 1960s, it has always been around that certain participant expressions are less argument-like than others, while at the same time not being completely adjunct-like either. In this chapter, I first overview the discussion on how the non-core thematic domain relates to prototypical arguments and to prototypical adjuncts (4.2). Building on this investigation, I present an approach that relies on the assumption that the core and the non-core thematic domains are strictly distinct (4.3). I argue further that the restrictive feature inventory of the Theta System - [+/-c(ause)] and [+/-m(entally) involved)] - can be used to encode thematic information in both domains.

After these preliminaries, I go through a series of tests to motivate the above described threefold divide between the datives under investigation (4.4). The distinct encoding of the two thematic types (dative arguments and dative thematic adjuncts) is described in 4.5 within the framework established in 4.3. It is a consequence of the analysis that the predicates licensing dative arguments are unaccusative, but the predicates licensing dative thematic adjuncts are predicted to have unergative, rather then unaccusative/ergative properties. I conclude by showing that this prediction is indeed borne out.

4.2. Thematic adjuncts: the background

4.2.1. The non-core thematic domain

I use the term 'non-core thematic domain' here in an intuitive, pre-theoretic sense. The main purpose of this chapter is to give substance to an analysis that recognizes the existence of this non-core domain, which is distinguished from the domain of true arguments and the domain of true adjuncts. Let me illustrate the need

for this move by summarizing the conclusions Marelj (2004:76-91) has reached as a result of a case study of dative and locative goals.

Marelj points out that there is an obvious conceptual relatedness between dative goals/recipients (4a) and locative goals/directionals (4b) (cf. Jackendoff 1987, a.o.).

- (4) a. Max sent a book to Lucy.
 - b. Max sent a book to London.

The endpoint of the movement of *the book* is the participant denoted by the *to-PP* in both (4a) and (4b). It would be natural to suppose that both get thematic specification. In the Theta System, goal-type participants, dative experiencers and benefactives share the same encoding, which reflects their conceptual relatedness. Dative experiencers and benefactives can also be regarded as endpoints of an abstract path. All these participants are encoded as [-c], since they do not relate to the event causally, but their mental state can be relevant (depending on the choice of the predicate and the actual context of use). In the particular case of (4), Marelj argues that *to Lucy* (a recipient) and *to London* (a locative goal) both bear the thematic specification [-c].

She goes on to pointing out that the two PPs in (4) are nevertheless not equivalent in grammatical status. Among other things, only the recipient PP (4a) can undergo dative shift in English.

- (5) a. Max sent Lucy a book.
 - b. *Max sent London a book.

Furthermore, a recipient and a locative goal can co-occur in the same clause.

(6)
$$Max_{[+c+m]}$$
 sent $Lucy_{[-c]}$ a $book_{[-c-m]}$ to $London_{[-c]}$.

Under the assumptions that both recipients and locative goals receive the same thematic specification, the grammaticality of (6) is problematic since the co-occurrence of two [-c] clusters in the same clause violates uniqueness (2.1.3.1). If we do not want to give up on the idea that locative goals receive a thematic role, then, argues Marelj, we have to assume that the two [-c] participants are not co-arguments of the verb. Only the recipient is an argument (cf. (5)), but the locative goal is something different. For Marelj (2004), it is an adjunct that bears a theta cluster. The Non-Identity Constraint ranges over co-arguments of a predicate, and it is not violated in (6) since *Lucy* and *to London* do not count on a par: the first is an argument, but the second is an adjunct with a thematic role.

In this approach, locative goals are part of what I refer to here as the non-core thematic domain. They populate this space together with other elements of grammar that are generally discussed in terms of thematic roles, but which do not behave on a par with prototypical arguments. This section is devoted to unearthing the roots of these non-core elements which are in the middle ground between the argument and the adjunct terrains.

For expository purposes, I use a terminology that is aimed to be neutral regarding the semantic and syntactic aspects of representation. Thus, the terms argument and adjunct loosely cover here both the semantic distinction between arguments and modifiers, and the syntactic distinction between complements and adjuncts, assuming this latter distinction has a formal status in some way (as in Categorial Grammar, or Lexical-Functional Grammar, among others). An argument is an element that is by default syntactically obligatory, and is also semantically required to make the meaning of the predicate complete. By adjunct I understand a syntactically optional element that modifies, rather than completes the meaning of the predicate (cf. Bresnan 2001, Dalrymple 2001, and Dowty 2003 for some recent overviews on this topic). Let us assume that these notions by default refer to what can be regarded as prototypical instantiations of these categories. Some problematic cases will be discussed shortly. Finally, I restrict my attention to the clausal domain, so I only discuss arguments and adjuncts of the predicate of the clause.

Recently, the thematic specification of non-core thematic entities has been referred to under the terms *circumstantial roles* (e.g. Fillmore 1994; Cinque 1999, 2006b)³, *nonparticipant roles* (Frawley 1992), among others. The non-core entities themselves have been referred to as *circumstantials* and *nonparticipants*, respectively, or as *outer arguments* (Marelj 2005). There is an understanding of the need for the introduction and the special treatment of these categories, which are generally agreed to be event- and VP-internal (cf. Ernst 2002), and are thought to be typically marked by adpositions (or contentful cases in languages like Hungarian or Finnish). But individual authors vary in what should exactly belong here, and membership is generally treated as a matter of taxonomy rather than a matter of strict eligibility criteria.

Nevertheless, roughly three ways can be distinguished in which potential candidates are chosen into the non-core thematic domain. The more traditional approach is to include *place*, *time* and *manner* phrases (Fillmore 1994), with the possible addition of *reasons* and *purposes* (Frawley 1992). In this approach, *instrument*, *benefactive*, *goal* and *source* expressions are discussed together with regular arguments.

On the second approach to the non-core thematic domain, all VP-internal complement and adverbial PPs are grouped together. As an extension of his grand research program, Cinque (2006b) makes the proposal that these (which he refers to as circumstantials) are rigidly ordered among each other, just like adverb phrases are argued to be in Cinque (1999). Though it is technically not essential for him to suppose that circumstantial phrases receive a thematic role, he does make this assumption (2006:160-161). By way of conclusion, he also notes that the hierarchy of circumstantial PPs set up in Schweikert (2004) seems to be on the right track. Schweikert's hierarchy - a result of an investigation of Germanic circumstantials - is

¹ In doing this, I simply follow common, albeit casual linguistic parlance.

² As discussed in 1.3, I assume a version of the VP-internal subject hypothesis. The notion *complement* is intended to cover subjects, too, in this setting.

³ This term goes back Lucien Tesnière's *Eléments de Syntaxe Structurale* (1959).

presented in (7). He explicitly regards these labels as thematic roles.

(7) Evidential > Temporal > Locative > Comitative > Benefactive > Reason > Source > Malefactive > Instrumental/Means/Path > Matter > Manner

This is what we can dub the maximalist approach to the non-core thematic domain: any morphologically 'heavy' VP-internal phrase is thought to receive a thematic role.

What I subscribe to here is the third, more restricted approach, in which the non-core domain is discussed primarily with respect to participant-denoting expressions, such as regular instruments, comitatives, or benefactives: the *participant PPs* of Ernst (2002) or the *outer arguments* of Marelj (2005).

(8)	a.	He was eating his meat	[PP with my fork].	instrument
	b.	He was eating his meat	[$_{PP}$ with my sister].	comitative
	c.	He was eating his meat	[PP] for his mum].	benefactive

As we have seen, Marelj (2004, 2005) includes locative goals and locative sources in the non-core domain. For Ernst (2002:264), *eventive locative phrases* (9) are also thought to have the same status as the PPs in (8).

(9) He was reading a book [PP] on the deck of the ship.

I will provide some arguments below for why such eventive locative phrases are better treated as regular adjuncts. Locative goals and locative sources are, however, a much more complex case. Though there are good reasons to assume that they receive a thematic role (as is argued by Marelj), in many ways they behave differently from the type of expressions listed in (8). For instance, benefactives, comitatives, and instruments do not have an influence on the aspectual properties of the predicate, whereas locatives do. The predicate *ran* is atelic and remains atelic if it is extended with the comitative (10b). The addition of a locative goal (10c), however, makes the predicate telic.

- (10) a. John ran.
 - b. John ran with Peter.
 - c. John ran to the next village.

The telicity change between (10a) and (10c) is well known, and is assumed to trigger appropriate adjustments in clause structure in constructionists account (cf. Borer 2005 and Ramchand 2003, a.o.). The participant PPs in (8) do not figure in discussions on aspect.

It is possible to assume that roles concerning motion and location are represented on a separate *thematic tier* of their own, as Jackendoff (1987) argues. I believe that in the optimal case, thematic theory should be able to treat locative phrases together with instruments, benefactives, and comitatives *as members of the same non-core thematic domain*, but I cannot present such a unified account here. In

what follows, I do not include locative sources and goals in the discussion on the non-core thematic domain.

The non-core domain, on the other hand, can be extended in another direction. Asudeh & Toivonen (2005, 2006) discuss what they call Pgoals ('goal of perception') and Psources ('source of perception') as belonging to essentially what I am referring to as the non-core thematic domain. The first role covers what is for me the experiencer of *seem*-type predicates (11), and the second is picked up by Swedish $p\hat{a}$ -phrases for the same set of predicates. The $p\hat{a}$ -PPs denote the conceptual source that triggered the perceptual report expressed by the sentence (12). In the (b)-lines I quote their Parsonian (1990) characterization of these roles.

- (11) a. It seemed to Tom as if Kalle had won.
 - b. Pgoal: 'x is the PGoal of an eventuality e iff e is perceivable to x'
- (12) a. **Swedish**, Asudeh & Toivonen (2006:7)

Det verkar på Tom som om Kalle har vunnin it seems on Tom as if Kalle has won 'Tom gives the impression that Kalle has won.'

b. Psource: 'x is the Psource of an eventuality e iff e is perceivable from x'

Asudeh and Toivonen make two claims with respect to the status of these prepositional phrases. First, they are syntactic adjuncts, rather than arguments, since they are optional and they are islands for extraction (2006:13). Second, not being arguments, what they receive is not a thematic role but what they call a *semantic role*. Semantic roles are regarded as a generalized notion of thematic roles: "all thematic roles are semantic roles, but not vice versa" (2006:22).

My basic aim in this chapter is to argue that a relatively large group of dative experiencers also belong to the non-core thematic domain, alongside instruments, comitatives, benefactives or Psources and Pgoals. From now on, I will refer to these phrases as *thematic adjuncts*. Their optionality is a crucial property, which motivates them being classified as adjuncts. On the other hand, they are treated on a par with arguments in receiving a thematic specification. I concur with Marelj (2004, 2005) and Asudeh & Toivonen (2005, 2006) that this specification is not what is aimed to be covered by the traditional understanding of thematic roles (as in the Theta Criterion of GB), and the two types—should be kept separate. This separation, however, can be achieved by placing the two in two distinct domains, while coding them both by the same feature specification that the Theta System provides. This is essentially the claim that Marelj (2004) makes, and which I intend to elaborate here.

Two caveats are in order before I discuss the empirical motivation for splitting the thematic domain in two (or, from another perspective, for expanding it). First of all, it is hard to deny that arguments and adjuncts are the two endpoints of what Dowty (2003:60) calls a "complex psycholinguistic continuum". Formalizing the endpoints, he argues, is not enough in itself to properly account for the intermediate points, but it still helps us better understand the nature of the whole continuum.

What I argue for is that giving a try to the middle of this continuum might further the understanding that we have. It will certainly prove to be a useful tool in accounting for the datives I am investigating, which gives justification to the exercise.

Secondly, it is important to remind ourselves that the lexicalist framework that I am assuming does not give formal recognition to traditional thematic role labels (cf. Chapter 2). The non-core thematic domain therefore cannot be, and is indeed not intended to be characterized in terms of thematic labels, which I take to be names for semantic role types. In that sense, I will continue referring to instruments, benefactives, or comitatives, but the claim is not that, say, all participants of the instrument or the benefactive semantic type are necessarily destined to belong to the non-core thematic domain. While it is true, for example, that most instrument expressions do not behave as typical arguments, it is not necessary that they should always do so. Reinhart (2002:235) points out that the existence of an instrumenttype participant is entailed with the so-called 'manner-verbs' (cf. also Levin & Rappaport 1995, a.o.), such as peel, cut, screw, sow or drill. Being entailed is a typical argument property. Besides, these verbs are also distinguished from other verbs by allowing the instrument to realize not only as an oblique PP, but also as a nominative subject. Contrast, for example, peel with dry. The former entails the existence of an instrument, therefore it has an instrument-type ([+c-m]) argument (13a). The latter does not entail the existence of instrument argument, it can only take an optional instrument adjunct (14a). Correspondingly, only dry allows for a cause subject (compare (13c) with (14c)), and only dry has a reduced unaccusative alternate (compare (13d) with (14d)).

- (13) peel < [+c+m] [-c-m] [+c-m] >
 - a. John peeled the apple with a knife.
 - b. The knife peeled the apple.
 - c. *The heat peeled the apple.
 - d. *The apple peeled.
- (14) dry < [+c] [-c-m] >
 - a. John dried the apple with a hair-drier.
 - b. The hair-drier dried the apple.
 - c. The heat dried the apple.
 - d. The apple dried.

The subjects in (14b-c) are instantiation of the [+c] argument, and they are not directly related to the instrument phrase in (14a). One could imagine that the *hair-drier* turns on automatically and dries the apple by itself. In that case, it certainly does not participate in the event as an instrument. The *knife* in (13b) can only be construed as an instrument, used by the implicit human agent. This shows that the *with*-phrase in (13a) is derivationally related to the subject in (13b), which is not so for (14a) and (14b). This is also indicative of the difference between the two *with*-phrases. Since, arguably, the semantic type of the two is the same (instrument), the

difference must lie somewhere else, and the argument-adjunct distinction seems to be an appropriate way to characterize it. What matters then with respect to the general problem at hand is not primarily the semantic or thematic content of an expression, but how exactly it relates to its predicate.

4.2.2. On the argument-adjunct distinction

4.2.2.1. Introduction

In order to be able to show that thematic adjuncts are not mere artefacts of the analysis but have their proper place in grammar alongside arguments and regular, non-thematic adjuncts, I first go through some of the well known diagnostics that distinguish arguments from adjuncts. In particular, I will concentrate on the following three areas: (i) optionality, (ii) uniqueness and (non)-iterability, and (iii) morphological encoding. The choice is somewhat utilitarian, since I focus on diagnostics that will be directly relevant not only for the general discussion on thematic adjuncts (4.2.3), but also for the particular discussion on dative phrases in Hungarian (4.4). I do not include, for example, a discussion of ordering differences, since the flat-VP structure of Hungarian generally allows for flexible argument and adjunct orders. For a more comprehensive discussion on the argument-adjunct distinction, I refer the reader to Bresnan (1982b), Dalrymple (2001), Dowty (2003), Marelj (2005) and Schütze (1995), among others.

4.2.2.2. Optionality

A typical adjunct is optional both semantically and syntactically. This much is accepted wisdom for most linguists, and can be evaluated in itself as a pre-theoretic statement (cf. Dowty 2003). As a first approximation, semantic optionality equals to not being entailed by the predicate. Syntactic optionality means the possibility not to be realized in non-elliptical constructions.⁵

There are some well-known problematic cases for the assumption that adjuncts are optional. Adverbs as a category are often considered to be destined for adjuncthood, but certain predicates seem to select for adverbial arguments. These adverbs can be substituted by PP adverbials.

- (15) a. She treated him *(well/with indifference).
 - b. She should have phrased it *(differently/in a different way).

If we relax our categorial expectations on how an argument can be expressed, then

⁴ We will see in 4.4.3 that event-external adjuncts are confined to predicate external positions, but there is no obvious evidence that adjuncts are further ordered with respect to each other or with respect to arguments.

⁵ Some more specific comments on syntactic optionality will follow in 4.4 as part of the discussion on datives.

(15) is not devastating. Since the (meanings of the) adverbs/PPs are entailed by the predicate and their syntactic presence is also obligatory, they are strong candidates for argumenthood.

It is a more serious matter that the entailment test does not distinguish arguments from a large group of syntactically optional adjuncts, which is noted in Bresnan (1982b). Every eventuality can in principle be anchored to a particular location and a time frame, and in that sense every predicate entails the existence of a location and a time.⁶ These anchors, nevertheless, do not have to be realized syntactically.

(16) *(I) read out *(books) (in the school) (at the weekend).

Marelj (2005) argues further that it is part of our knowledge of the world that eventualities take place in space and time, hence they should not directly be represented as the part of the meaning of a predicate. Indeed, knowing the meaning of *read* means knowing how a *reader* and the *object read* are related to each other in a *reading event*, and that is enough to distinguish this verbal concept from any other concept in the lexicon.

I will consequently abide by the notion that the general syntactic optionality of adjuncts is indicative of the fact that the meaning of their licensing predicates is not "incomplete or incoherent" (Dowty 2003) in their absence. Even if the entailment test might be problematic to apply in the case of certain adjuncts, it is safe to conclude that it is a necessary property of every argument that they are entailed by their predicates. Therefore, if an expression is not entailed by the predicate, then it can only be an adjunct, but it cannot be an argument.

4.2.2.3. Uniqueness and (non)-iterability

Uniqueness (cf. 2.1.3.1) requires every argument to bear unique thematic specification. Consequently, multiple occurrences of the same thematic role type in the same clause are forbidden. This is a well known fact, just like the fact that a series of time, place or manner adverbials (PPs as well as adverbs) can appear in the same clause.

- (17) a. I will see you at noon on Friday.
 - b. I will see you in the cafe in Broad Street in the centre.
 - c. I will be coming with pleasure without reservation.

Arguably, multiple time and place adverbials most often make up some sort of a loose complex, with some limited liberty in respective ordering. But members of this complex can be removed, which is a clear sign of their syntactic independence

⁶ This is the commonsense conceptualization of eventualities, and I deliberately avoid the philosophical problems with constraining certain types of statements in time and space.

(cf. Goldberg 2002:334, Marelj 2004:84).

(18) On Friday, I will see you at noon.

On Friday becomes a frame-adverbial in (18) and a sentential topic in this case. Thus, we have one event-internal and one event-external time adverbial in the same clause, which cannot easily be treated as part of the same complex (unlike 17a). If we wanted to give the two time expressions a thematic role label, then it should be the same since there is no inherent semantic difference between them. If uniqueness is to be maintained, it is the easiest not to assign a thematic role to these phrases, i.e. to treat them as regular adjuncts.

Notice further that even in (17b), where the place adverbials are in consecutive linear order, it is not at all straightforward whether they can be analyzed as a complex. *In the centre* is not interpreted directly as a modifier of Broad Street in the most prominent reading (*Broad Street*, being a proper noun, cannot be restrictively modified anyway), or of the expression *in the cafe*. It is true though that the three PPs all seem to give us a single place, so that informally the meaning of the sentence can be rendered as 'I will see you at a place p, such that p is in a cafe in Broad Street and p is in the centre (of the town)'. In that sense, there may be argued to be a single semantic object denoted by the totality of the adverbials. Nevertheless, the syntax of this 'complex' stays loose enough to raise some concerns for the assumption that there is only one location argument in (17b).

Whatever the proper analysis of these data is, the point is that arguments never pair up to form such complexes. On the analogy of (17a), for example, we could expect two patients to be grammatical in the same clause if the denotation of one member of the pair is included in the denotation of the other. As noted in Carlson (1998:49, footnote 5.), this is clearly not the case, there is no grammaticality difference between (17a) and (19): they are equally unacceptable.

- (19) a. *I ate the chicken the wing.
 - b. *I took the cutlery the knife.

Thus, as opposed to adjuncts, arguments cannot have multiple occurrences under any circumstances.

This difference is even more absolute in the light of the fact that adjuncts can also be subject to token-multiplication. The interpretation of adverbials is structure-sensitive (cf. Cinque 1999 or Ernst 2002). Consequently, multiple occurrences of the same adverb in the same clause are acceptable, since each can have its own contribution to the meaning of the clause. The following example is from Morzycki (2005:8).

(20) *Happily, Clyde would happily play the tuba happily.*

In his own words, the meanings of the adverbs in (20) are described as follows: "The leftmost instance ascribes to the speaker an attitude of happiness about the

proposition expressed by the sentence; the medial instance ascribes to Clyde a cheerful willingness to play the tuba; and the rightmost instance contributes that the manner of tuba-playing involved is happy" (2005:8). Depending on one's assumptions, this might lead to the proposal that there are three different adverbs in the lexicon, but the interpretive differences can also be derived from a single lexical entry and some compositional mechanism feeding on the different positions that the adverb is inserted into. I take this latter account to be more viable.

These affects arise even in the non-configurational structure of the Hungarian clause. É. Kiss (2002:21) points out that the same adverbial can have different interpretations depending on whether it is internal or external to the predicate. This is the reason why the following sentence, modeled on two examples of hers, is not a contradiction. The first occurrence of the adverb requires rising intonation.

(21) Kati okosan nem okosan válaszol-t-a meg a kérdés-t.

Kate cleverly not cleverly answer-PAST-3SG PTCL the question-ACC 'Cleverly, Kate answered the question not cleverly.'

The tendency for position to determine the meaning of the adverbial thus carries over to Hungarian, too - a non-surprising fact.

These examples involve adverbs, and the 'heavier' PP modifiers have been regarded as much less dependant on position for their interpretation. *On Tuesday* or *in the garden* appear to have the same semantic content irrespective of where they exactly occur in the clause. This underlies the separate treatment Cinque (1999) and (2006) wants to assign to adverbial PPs, and the point is also explicitly argued for in Morzycki (2005). It is, however, quite intricate to determine in exactly what ways size matters here. In English, the morphological difference between adverbial suffixes (such as *-ly*) and prepositions like *with* obviously makes a starting point for the differential treatment of, say, *happily* and *with pleasure*. But it is probably more important, as is suggested by both authors cited, that prepositions have their own semantic content which mediates in linking up their complement with the predicate.⁸

As argued before, I do not consider time, place, or manner expressions as part of the non-core thematic domain. I consider these expressions to be regular adjuncts. An argument for this could be that on closer inspection, at least some of these adverbial PPs might show the kind of structure-sensitivity in interpretation that we have observed in (20) and (21). Manner adverbials clearly can have multiple occurrences even if they are PPs (instrumental case in the relevant Hungarian example).

⁷ See section 1.3 for the configurational determination of predication (PredP) in Hungarian.

⁸ Especially in view of languages like Hungarian, which frequently uses morphological cases where English would have prepositions. What is more, the most productive adverbial suffix is historically related to superessive case, compare *boldog-an* 'happy-ly' and *polc-on* 'shelf-on'. Note nevertheless that the adverbial suffix triggers a different type of vowel harmony than superessive case, which is a good indicator that they have different morphophonological status in the synchronic system.

(22) Öröm-mel válaszol-ok a kérdés-ek-re öröm-mel. pleasure-INS answer-1SG the question-PL-SBL pleasure-INS 'I will with pleasure answer the questions with pleasure.'

This would be an appropriate response to a request by an examiner that the examinee could perhaps respond with an overt expression of pleasure rather than with a scared or perhaps bored look.

It is impossible to construe such examples with arguments. Arguments can never be iterated, be it a multiplication of type or token. This clearly distinguishes them from adjuncts. Furthermore, we have seen that the interpretation of an adjunct can be influenced by the position in which it appears. As opposed to this, the semantic interpretation of arguments is constant, irrespective of the range of syntactic positions that they are allowed to occupy during the derivation.

4.2.2.4. Morphological encoding

Typical arguments have a fixed, non-variable morphology in their basic syntactic realization. This either involves what is commonly referred to as structural case, or an idiosyncratically selected P-element/inherent case, such as the second argument of the subject experiencer predicate *vágyik* 'longs for'. This expression is obligatory, which shows its argument status.

(23) a. A szovjet nő-k *(a béké-re) vágy-nak. the Soviet woman-PL the peace-SUP long.for-3PL 'Soviet women long *(for peace).'

It is impossible to use any other preposition than *for* with the English verb *long for*, or any other case than superessive (\approx 'onto') with its Hungarian equivalent $v\acute{a}gyik$. This situation is typical of true arguments: they are not only represented on the argument list of the predicate, but their morphological realization is also by default determined in the lexicon. Recall that in the Theta System the accusative case feature of a predicate is also introduced in the lexicon, as a result of a specific thematic constellation of a [+] and a [/ α ,/-c] argument (2.1.4). That the morphology of arguments tends to be fixed in the lexicon is an assumption that can be naturally embedded in the current framework. Notice also that the accepted structural case vs. inherent case divide is orthogonal to the lexical determinacy of morphological realization as is conceived here, since the notion covers both 'structural' accusative case and inherent case or selected P.

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⁹ This statement ultimately carries over to subject arguments, too, whether nominative is regarded as a true case or as a lack of case. The claim is simply that the basic morphology of the argument that ends up as a subject is fixed by the given morphological requirements of the subject function.

This generalization is not refuted by the existence of a restricted set of predicates that allow for two alternative realizations of what appears to be the same argument. Some such cases have been discussed in 2.2.3.3, I repeat (98) from that subsection as (24) here.

- (24) a. *El-hisz-em a történet-et*.

 PTCL-believe-1SG the story-ACC 'I believe the story.'
 - b. Hisz-ek ben-ned. believe-1SG INE-2SG 'I believe in you.'

I have claimed there that the non-subject argument is a potential cause ([-m]) in (24b), but it is a non-cause ([-c-m]) in (24a). Thus, the morphological difference correlates with a thematic difference, and in that sense, each linking has its own fixed morphology: the 'potential cause' [-m]-argument in (24b) can only be marked by inessive case in Hungarian and by the preposition *in* in English.

As opposed to this, the morphology of adjuncts is typically not fixed in the lexicon and is generally only constrained by the morphological inventory of the particular language. So whereas *in* is the only option for encoding the second argument of *believe*, in an adjunct position it typically competes with other, semantically related markers.

- (25) a. The children were playing in/inside/behind the garden.
 - b. They stayed there in/during/over the winter.

It is irrelevant now that the exact meaning of the PP changes with the change of the preposition. What is important is that such variation is grammatical, and it involves prepositions of the same semantic type.

I would like to stress nevertheless that what I am discussing here is a descriptive generalization, and systematic exceptions can be found. One well known case is *put*, the location argument of which can be coded by any goal-type marker (cf. Jackendoff 1987:391).

(26) *I put the book on/under/above/behind the table.*

The existence of this PP-participant is entailed by the predicate, and the PUT-concept is indeed not coherent without a location argument. Still, the predicate only selects for the semantic type of the preposition, but it does not constrain the exact choice, as opposed to (23) or (24). Arguably, the number of such predicates is not very large, and their existence does not undermine the claim that if an expression is an argument, then its morphological encoding is relatively fixed.

4.2.3. Diagnostics of thematic adjuncts

4.2.3.1. Introduction

Having briefly reviewed some relevant diagnostics of the argument-adjunct distinction in the previous section (4.2.2), I now apply the same diagnostics to thematic adjuncts. I focus on instruments, comitatives, and benefactives; dative experiencers will be discussed in 4.4. As we will see directly, thematic adjuncts have both argument and adjunct properties.

4.2.3.2. Optionality

Thematic adjuncts are optional both syntactically and semantically. I repeat (8) to illustrate.

(8) a. He was eating his meat [pp with my fork]. instrument
b. He was eating his meat [pp with my sister]. comitative
c. He was eating his meat [pp for his mum]. benefactive

Each of the three sentences in (8) describes an eating event. The presence of the bracketed PPs is certainly not required syntactically, nor is it the case that the existence of the participants they denote is entailed by the predicate. Anyone can eat alone, and anyone can eat without instruments (i.e. *cutlery*) if needed. By default, food consumption is triggered by the needs of the person who eats, and it is generally not carried out in the benefit of other people.

I have argued in 4.2.3.2 that the entailment test is reliable in the sense that it requires every semantic argument to be entailed by its predicate. It has been pointed out nevertheless that this is not a sufficient test of argumenthood, since certain types of adjuncts (e.g. time expressions) may also be argued to be entailed. But the test does distinguish between thematic adjuncts and regular arguments: thematic adjuncts are optional and they are not entailed by their predicates. If we regard optionality an adjunct property (excluding the problematic cases), then thematic adjuncts pattern up with regular adjuncts in this respect.

4.2.3.3. Uniqueness and (non)-iterability

In 4.2.2.3, I have argued that adjuncts can have multiple occurrences in the same clause, both with respect to type and token. In contrast, a true argument is unique: it can occur at most once in a clause. This is a consequence of the Non-Identity Constraint (2.1.3.1), which requires every argument to bear unique thematic specification.

Thematic adjuncts also obey uniqueness, which I exemplify on instruments. An instrument phrase can never occur twice in the clause (27).

- (27) *With his fork, he was eating his meat with his fork.
- (27) involves token-identical multiplication, but in general, two non-argument instrument phrases can never co-occur.
- (28) a. *He was eating his meat with his fork with his knife.
 - b. *He was eating his meat with his cutlery with his fork.

Such examples are often cited in the literature (cf. Bresnan 1982b, Schütze 1995, Marelj 2005). What they tell us is that instruments, as well as comitatives and benefactives (not shown) obey uniqueness.

Notice, however, that the Non-Identity Constraint, as is formulated (2.1.3.1), cannot apply in the case of (27) and (28). This constraint ranges over arguments, but I am arguing that instruments are not arguments, but thematic adjuncts. Uniqueness needs to be reinterpreted to cover thematic adjuncts, too. I will address this issue in 4.3. In the current empirical survey, it should suffice to conclude that thematic adjuncts, just like arguments, cannot be iterated.

4.2.3.4. Morphological encoding

I have claimed that a regular argument has lexically fixed morphological encoding as a result of being selected by the predicate. Adjuncts typically do not have a fixed morphology. Adpositional or case markers of a given semantic domain can by default be selected quite freely for the purposes of the morphological licensing of a given adjunct. In any case, the predicate cannot interfere with how a particular modifier-content is expressed: there is no verb, for example, which does not allow the adverb *slowly* on its velocity-reading to be replaced by the PP *with slow speed*. The choice between the two expressions is stylistic and not grammatical in nature. In this sense, the exact form that a particular occurrence of an adjunct category takes is subject to variation. This is not so in the case of arguments.

Thematic adjuncts pattern up with adjuncts, rather than with typical arguments in this respect. The comitative argument of a reciprocal verb has fixed morphology, whereas comitative adjuncts can in principle be expressed by alternative means. ¹⁰ The comitative adjunct in (29a) has an array of possible readings. Some possible paraphrases are given in (29b-d).

- (29) a. I wrote a letter with John.
 - b. I wrote a letter in the company of John.
 - c. I wrote a letter together with John
 - d. I wrote a letter with the help of John.

¹⁰ See Carlson (1998), Dowty (1991), Dimitriadis (2002) and Rákosi (2003), among others, for why *with*-phrases of reciprocal predicates should be considered arguments.

The importance of these examples lies in the fact that a non-argument comitative *with*-phrase can be replaced (29b) or appropriately manipulated (29c-d). As opposed to this, the morphology of a comitative argument is fixed, and it cannot be manipulated.¹¹

- (30) a. I shook hands with John.
 - b. *I shook hands in the company of John.
 - c. *I shook hands together with John.
 - d. *I shook hands with the help of John.

The contrast reappears in a somewhat weaker form also between argument and non-argument instruments.

- (31) a. I peeled the apple with (?? the help of) the knife.
 - b. I removed the meat from the cavities with (the help of) the knife.

The two instrument phrases play the same kind of semantic role in the event, and I attribute the difference in the acceptability of the 'with the help of'-phrase to a difference in their grammatical status (see the discussion on the earlier examples (13) and (14)). Similar considerations apply to benefactives. They are typically expressed with the preposition for in English (32b). In (32a), the for-PP is an obligatory argument of the verb.

- (32) a. She cares for (*the sake of) John.
 - b. She did it for (the sake of) John.

As is expected, the form of the benefactive PP can be optionally modified (32b). This is ruled out in the case of the PP-argument (32a).

Again, the observation being discussed holds cross-linguistically, and its validity does not depend on the exact categorial nature of the morphological marker used (adposition or case). Hungarian, for example, has comitative case instead of an adposition, both for comitative arguments and adjuncts (the same case appears also on instruments).

- (33) a. Kati haza-költöz-ött a gyerek-é-vel a szülői ház-ba.

 Kate home-move-PAST the child-POSS.3SG-COM the parental house-ILL 'Kate moved home to the parental house with her child.'
 - b. *Kati keze-t ráz-ott a gyerek-é-vel*.

 Kate hand-ACC shake-PAST the child-POSS.3SG-COM 'Kate shook hands with her child.'

-

¹¹ Examples (30b-d) may be acceptable to some degree if the structure involves an implicit comitative argument and an overt postverbal thematic adjunct. (30b), for example, might possibly mean 'I shook hands with someone in the company of John'. This possibility is irrelevant, the stars are intended to indicate that the overt PPs are not grammatical substitutes for the comitative argument itself.

The comitative expression in (33a) can be manipulated or changed similarly to the English example in (29), but the one in (33b) cannot. Instead of translating the above English data into Hungarian, I point out that besides the comitative, the rich case system of Hungarian also includes the so-called *sociative case* (-*stVI*), the semantic content of which is roughly 'together with'. This can replace the comitative adjunct in (34a), but not the comitative argument in (34b).

- (34) a. *Kati haza-költöz-ött gyerek-estül a szülői ház-ba*. Kate home-move-PAST child-SOC the parental house-INE 'Kate moved home to the parental house with her child/children.'
 - b. *Kati keze-t ráz-ott gyerek-estül.

 Kate hand-ACC shake-PAST child-SOC

 int. 'Kate shook hands with her child.'

Though semantic factors also need to be taken into consideration in the ultimate evaluation of these data, these examples certainly reinforce the claim that the morphology of the default realization of arguments tends to be fixed in the lexicon, be it a matter of adposition or case. Thematic adjuncts, however, cannot be morphologically closed in the lexicon, since they are not introduced in the lexicon, as I will argue in 4.3.

4.2.3.5. Licensing by argument structure

Let me make the final comment here on the empirical side of thematic adjunct licensing. Arguments are licensed by being selected *qua* arguments of their predicates. But thematic adjuncts are not directly selected by their predicates: we have seen that they are optional, and their morphology is subject to variation. What I would like to argue for in this subsection is that thematic adjuncts are licensed by the argument structure of the predicate. More precisely, a thematic adjunct is licensed in the presence of a designated type of argument. This issue raises some fundamental questions with respect how thematic adjuncts can be embedded in the model of grammar that I am assuming. These questions will be discussed in 4.3., here I focus on the empirical substantiation of the assumption that thematic adjuncts are inserted only in the presence of a designated type of argument.

There is in fact nothing new about the assumption. It has been pointed out many times that instrument-phrases are only licensed in the presence of an agent (cf. Reinhart 2000 and Marelj 2005, a.o.). The agent may (35a) or may not (35b) be syntactically present, but it has to be available at the level of argument structure. An instrument is ungrammatical with any verb that has no agent argument (35c).

- (35) a. John repaired the roof with a hammer.
 - b. The roof was repaired with a hammer.
 - c. *I knew the answer with my encyclopedia.

Comitative thematic adjuncts are a more complex case, but under closer scrutiny, we can discover that they also require the presence of an agent argument, just like instrument phrases. The analytical problem with comitative markers is that they are used in different grammatical functions. For instance, comitative phrases are also licensed as associates of a non-agent argument. In this case they generally require the presence of *together* in English.

- (36) a. John broke the window with Kate.
 - b. *The window was broken* *(together) with the door.
 - c. Peter appeals to the girls *(together) with John.

Without the presence of *together*, the *with*-phrase seems to be obligatorily interpreted as an instrument in (36b); whereas (36c) is unacceptable without *together*. On the other hand, if *together* is used with an agentive transitive predicate, then the *with*-phrase may be understood to modify either the subject or the object arguments.

- (37) *Kate gave a slave to John together with Peter.*
 - (i) 'Kate and Peter gave a soldier to John.'
 - (ii) 'Kate gave a slave and Peter to John.'
 - (iii) *'Kate gave a slave to John and Peter.'

Interestingly, the 'together with'-phrase cannot modify an indirect object or a prepositional phrase (an observation already made in Hetzron 1973:495). This, as well as the previous points, carries over to Hungarian, too.

- (38) a. Kati ad-ott egy rabszolgá-t János-nak Péter-rel.

 Kate give-PAST a slave-ACC John-DAT Peter-COM

 'Kate gave a slave to John with Peter.'
 - (i) 'Kate and Peter gave a soldier to John.'
 - (ii) ^{?(?)} Kate gave a slave and Peter to John.'
 - (iii) *'Kate gave a slave to John and Peter.'
 - b. Kati ad-ott egy rabszolgá-t János-nak Péter-rel együtt. Kate give-PAST a slave-ACC John-DAT Peter-COM together 'Kate gave a slave to John together with Peter.'
 - (i) 'Kate and Peter gave a soldier to John.'
 - (ii) 'Kate gave a slave and Peter to John.'
 - (iii) *'Kate gave a slave to John and Peter.'

Thus, there are two types of comitative expressions in both languages. One is subject-oriented, and is licensed by agent subjects. It requires no special prosodic marking, and the presence of the modifier *together/együtt* is largely optional. This is the comitative that I regard as a true thematic adjunct, and I will refer to it as *comitative thematic adjunct*. The other type of comitative is a regular, non-thematic adjunct. It can construe either with subjects or objects, and is not sensitive to the thematic properties of the argument it combines with. It generally requires a prosody

characteristic of epentheticals, and the presence of *together/együtt* can be obligatory. Just like epentheticals, it can be inserted into different parts of the clause. It is generally adjacent to the modified expression, though it is not a necessity either in English or in Hungarian. Nevertheless, if a comitative is adjacent to the subject in English, it has to be of this second type.

- (39) a. John, *(together) with Kate, broke the window.
 - b. János, Kati-val *(együtt), be-tör-t-e az ablak-ot.

 John Kate-COM together in-break-PAST-3SG the window-ACC 'John, together with Kate, broke the window.'

(39a) directly contrasts with (36a) with respect to the properties juts listed. I will refer to this second type of comitative, illustrated in (39), as a *comitative conjunction adjunct*.

It is an old observation that *with*-phrases create conjunction structures (see Lakoff & Peters 1966, or Fillmore 1968 for early generative proposals in this spirit). Since then, it has become obvious that more fine-grained distinctions are needed. In particular, Russian comitatives show a quite obvious split in behavior (cf. McNally 1993 and Feldman 2002 for extensive discussion of the data). Comitative thematic adjuncts (*my terminology*), as expected, are separated from their associates and they do not interfere with subject-predicate agreement.

(40) **Russian**, McNally (1993:350)

Anna pridët s Petej.
Anna come.3SG with Peter.COM
'Anna is coming with Peter.'

Comitative conjunction adjuncts, however, participate in agreement resolution and they trigger plural agreement when they construe with a singular nominative subject (41a). They are obligatorily adjacent to the nominative they combine with (41b).

(41) *Russian*, McNally (1993:353)

- a. Anna s Petej pridut.
 Anna with Peter.COM come.3PL
 'Anna and Peter are coming.'
- b. *Anna pridut s Petej.
 Anna come.3PL with Peter.COM
 'Anna and Peter are coming.'

I refer the reader to the works cited for further differences between the two types of comitatives.

What is important to observe is that Russian provides additional motivation for the assumption that English and Hungarian also have two types of comitatives: comitative thematic adjuncts and comitative conjunction adjuncts. Even though *together*-phrases do not influence agreement resolution, they resemble Russian comitative conjunction in other ways. ¹² For example, it has been observed for Russian that regular coordinate constructions resemble comitative conjunction in allowing both for distributive and collective readings by default. Comitative thematic adjuncts, on the other hand, only have collective readings. To take an English example, *Kate* and *John* need not in fact have gone home together in (42b) and (42c), but a strong distributive reading is unavailable with the comitative thematic adjunct (42a).

```
(42) a. John went home with Kate. [*He left at 6, and she left at 7.]
b. John went home, together with Kate. [√He left at 6, and she left at 7.]
c. John and Kate went home. [√He left at 6, and she left at 7.]
```

This is expected if comitative thematic adjuncts are not regarded to express conjunction. They in fact do not participate in anything that could be regarded as a coordinate construction in any useful sense, in which they are in clear contrast with the syntactically and semantically different comitative conjunction adjuncts.

There is much more to be said about *with*-phrases, but the point of the present discussion is to make it evident that comitative thematic adjuncts are expressions of optional participants in the event, and they behave in important respects like instruments. Given what has been observed, they too are licensed into the clause by

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(i) Mi János-sal el-men-t-ünk a bolt-ba.

we John-COM away-go-PAST-1PL the shop-INE

'I and John went to the shop.'

'We and John went to the shop.'
```

The peculiarity of this construction is that on the most prominent reading the denotation of the comitative phrase is included in the denotation of the subject pronoun, so that the sentence makes an assertion about two people the way it is indicated in the translation. In principle, the sentence can be ambiguous between this inclusive reading and the comitative adjunct reading. Under this latter construal, there must be at least three individuals involved in the event.

It is only in the inclusive pronoun construction that the comitative can form a constituent with the subject. They can be focussed together, which is one of the accepted tests for constituency in Hungarian.

```
(ii) [FocusP Csak mi János-sal] men-t-ünk el a bolt-ba. only we John-COM go-PAST-1PL away the shop-INE 'Only I and John went to the shop.'
```

With this, the comitative adjunct reading (at least three people) disappears, which is clear proof for what I am assuming in the main text, namely, that comitative adjuncts do not form a constituent with the subject noun phrase that licenses them.

¹² The exact equivalent of (41) is ungrammatical in Hungarian. There is, nevertheless, a related construction which Feldman (2002) calls the *inclusive plural pronoun construction* and which exist in Russian and Hungarian alike (see Hetzron 1973 for Hungarian). I illustrate with a Hungarian example.

the presence of an agent argument. This is what I am concerned with here, and I shall have nothing to say about comitative conjunction adjuncts.

Finally, let us consider benefactives. Marelj (2005) investigates benefactives carefully and points out that they too are licensed in the presence of an agent argument. The verb *know* has an experiencer subject and a target object, hence a benefactive is not allowed.

- (43) a. John broke the window for Kate.
 - b. The window was broken for Kate.
 - c. *I know the answer for Kate.

Marelj, however, calls attention to the fact that benefactives may also function in certain cases as event-level modifiers. Hence, they can be compatible with non-agentive predicates, as long as some sort of volitionality or purpose-orientation is present in the interpretation of the event. (44a) is her example, (44b) and (44c) are mine.

- (44) a. Jesus died for them
 - b. I'll be there for you.
 - c. I will behave nicely for you.

It seems that at least in some cases, the licensing of a benefactive is not strictly speaking through thematic structure. In what follows, I disregard this fact, and I will simply be concentrating on the fact that a benefactive is generally licensed in the presence of an agent, just like instruments and comitative thematic adjuncts. This is not to deny the importance of the data in (44), but a comprehensive discussion would well exceed the confines of this work.¹³

¹³ It is interesting to note in this context that there exist regular adjuncts whose licensing is via thematically relevant information. Wyner (1998) refers to such adjuncts as *thematically dependant adverbs* (TDAs). The group of TDAs include such items as *reluctantly, intentionally, deliberately* or *willingly*. These are all subject-oriented adverbs that can construe with agentive participants - this is why they have been used in testing for agents. But it turns out on closer inspection that they are not subject to as strict licensing conditions as comitatives or instruments. They are quite compatible with non-agentive stative verbs, as long as volitionality is implied at the event-level.

⁽i) a. Kim deliberately hates Kate.

b. Kim is deliberately ugly.

This tells us that TDAs are not licensed at the level of argument structure, but at a level of an appropriately refined event structure. Something similar has been noted of benefactives in connection with the examples in (44). If this is a phenomenon with some scope, then the parallel behavior of TDAs and benefactives can be used as an argument for the adjunct-like behavior of benefactives.

4.2.4. Interim summary

In section 4.2, I have been arguing for the relevance of separating non-core thematic expressions from regular arguments and regular adjuncts. I have proposed to call such non-core thematic expressions *thematic adjuncts*. Thematic adjuncts have a mixture of adjunct and argument properties. They are like typical adjuncts in (i) being syntactically and semantically optional, and in (ii) not having a fixed basic morphology. They are like arguments in getting a thematic specification, as a result of which, I argue, (i) their interpretation is not dependant on their syntactic position and (ii) they are non-iterable. Finally, they are licensed in the presence of a designated type of argument. The thematic adjuncts discussed so far - instruments, comitatives, and benefactives - are licensed in the presence of an agent argument.

Let me conclude this section with distinguishing the current notion of thematic adjuncts from two related proposals in the literature. The *a-adjuncts* (argument adjuncts) of Grimshaw (1990) are also argued to be "*licensed by a-structure and hence have an intermediate status*", just like thematic adjuncts. She in particular discusses passive *by*-phrases as being of the a-adjunct category. There is, however, a crucial difference between the licensing of the two types. An a-adjunct does not receive a thematic role, rather it is related to a suppressed (here: saturated) argument position by what Grimshaw calls linking. Thematic adjuncts, as they are conceived here, receive a thematic role in their own right, and they are not linked to a saturated, but semantically active argument. In fact there is no conflict between Grimshaw's proposal and the current one, since I do not regard passive *by*-phrases to be thematic adjuncts. Thematic adjuncts, for example, are not entailed by their predicates, but a passive verb always entails the existence of an (agent) argument, which is only syntactically optional (in most cases).¹⁴

Second, it has also been proposed occasionally that there exist adjunct thematic roles that are assigned on top of argument thematic roles. In other words, an argument may receive two different types of thematic roles. One influential proposal is Zubizarreta (1982), who suggests that what have been discussed in footnote 13 above as *thematically dependant adverbs* assign an adjunct theta-role to their subject associates. This is an example of hers (1982:41).

(45) *Voluntarily, John rolled down the hill.*

Here *John* is thought to receive an adjunct thematic role from the adverb (agent), and a regular thematic role from the verb (theme). Both Zubizarreta (1982) and Thráinsson & Vikner (1995) extend this mechanism to auxiliaries, which are likewise considered to be adjunct theta-role assigners. This topic I will discuss in Chapter 6. The immediately relevant point is that these proposals have an empirical and theoretical target different from what the notion of *thematic adjunct* covers. Thematic adjuncts, as emphasized above, receive a single, regular thematic role.

-

¹⁴ The difference between *by*-phrases and thematic adjuncts is even more transparent in the light of the proposal of Collins (2005), for whom the *by*-phrase is an argument.

4.3. Thematic adjuncts in the Theta System

4.3.1. Introducing thematic adjuncts

I continue to represent arguments according to the conventions introduced in Chapter 2. To take an example, the agent and the patient arguments of the dyadic predicate *fix* are coded as in (46b).

(46) a. [John] will fix [the radiator].
b.
$$fix_v < [+c+m] [-c-m] >$$

This core thematic structure can be supplemented by the addition of optional thematic adjuncts, such as the instrument and the benefactive in (47).

(47) a. [John] will fix [the radiator] [with a hammer] [for the children].
b.
$$fix_v < [+c+m] [-c-m] > ([+c-m] [-c])$$

Thematic adjuncts are licensed, in this case by the presence of an agent argument, into a distinct thematic domain. They are inserted into syntactic structure *qua* adjuncts, but they differ from regular adjuncts in having a thematic tag on them. As adjuncts, they are not represented on the argument structure of the predicate. I elaborate on this below, and I use the term *thematic domain* in a pre-theoretic sense in the meantime. Arguments are in a different thematic domain than thematic adjuncts, since the former are available on the theta-grid of the verb in the lexicon, but the latter are only inserted during the derivation. I place thematic adjuncts inside parentheses, as in (47b). This notation reflects their optionality, which I take to be a crucial distinguishing property of thematic adjuncts.

I assume the following encoding for the three thematic adjunct types that I mostly concentrate on in this section.

Recall from Chapter 2 that instruments are regarded to be secondary causes void of mental involvement, whereas benefactives do not relate to the event causally, but their mental state can be relevant. With respect to comitative thematic adjuncts, I will be assuming that they have the same thematic content as their licensors, i.e., that they are agentive. Some comments on this follow directly.

What needs to be investigated now is the nature of the rules that govern the thematic adjunct domain. I want to show here that the available mechanism of the Theta System for constraining and interpreting thematic structure can be naturally extended to cover the thematic adjunct domain.

4.3.2. Constraints on co-occurrence and interpretation

4.3.2.1. On uniqueness again

The Theta System abides by the notion that the thematic specification of arguments is unique, as is explicitly formulated in Marelj's (2004) Non-Identity Constraint (2.1.3.1). We have seen that uniqueness also applies to thematic adjuncts (4.2.3.3). What I propose now is that the two domains are kept separate with respect to the operation of this constraint.

(49) Uniqueness revisited

- a. The thematic specification of the arguments of a predicate is unique.
- b. The thematic specification of the thematic adjuncts licensed by a predicate is unique.
- c. Uniqueness is relative to the given thematic domain of application.

This has the effect that neither two arguments, nor two thematic adjuncts of a predicate can have the same thematic specification, but an argument and a thematic adjunct of the same predicate can be thematically identical.

This interpretation of uniqueness has been anticipated in 4.2.1. I repeat example (6) from Marelj (2004) for illustration. As discussed in 4.2.1, Marelj points out that the recipient argument and the locative goal can co-occur in the same clause, despite the fact that they both are assumed to be coded as [-c]. Uniqueness is not violated, however, since the two expressions do not count on a par with respect to the operation of this constraint.

(6)
$$Max_{[+c+m]}$$
 sent $Lucy_{[-c]}$ a $book_{[-c-m]}$ to $London_{[-c]}$.

What I am proposing here is that the uniqueness constraint applies distributively over the set of arguments and the set of thematic adjuncts. Let us consider example (50) to see how this works.

(50) I gave it to Bill for Mary.

Bill has a recipient role in the event denoted by this sentence, and for Mary is a benefactive expression. Both are coded in the Theta System as [-c]. I have argued that to Bill is an argument and for Mary is a thematic adjunct. Let us suspend this claim for the sake of the presentation, and see what possible thematic structures can be assigned to the predicate give, assuming that the subject and the object positions host true arguments. There are three logical possibilities to distribute the two [-c] unary clusters over the two thematic domains.

```
(51) a. *give_{v1} < [+c+m] [-c-m] [-c] [-c] >
b. *give_{v2} < [+c+m] [-c-m] > ( [-c] [-c] )
c. give_{v3} < [+c+m] [-c-m] [-c] > ( [-c] )
```

The first two candidates are ungrammatical because they have two [-c] thematic dependants inside the same domain. There are two [-c] arguments in (51a), and two [-c] thematic adjuncts in (51b). Thus (49) predicts neither (51a), nor (51b) to be well-formed thematic structures, and it forces the two [-c] dependants to be in different domains (51c). This is in harmony with what I have been arguing for, and is also consistent with the logic of Marelj's argumentation quoted above.

There lies nevertheless an issue of some weight behind this argumentation. As I have emphasized in 2.1.3, thematic rules and mapping generalizations are required to refer to the clusters, and not to semantic role labels. The only thematic objects that are formally recognized in the Theta System are what Reinhart refers to as *theta clusters*, that is, the by-now familiar features of the kind [+c-m] or [-c]. Role labels, such as agent, instrument, etc., have been used here to describe semantic types of participants, but these labels have no formal status in the Theta System. This design feature of the Theta System raises certain questions about the content of the uniqueness requirement.

The existence of the uniqueness constraint is generally motivated from an event-semantic or conceptual perspective, as in Carlson (1984, 1989), Chierchia (1989b), Marelj (2005), or Parsons (1990), among others. Their claim is that eventualities have at most one instance of a given thematic role. It cannot be the case that there are two agents, two recipients, two themes, etc. in the same in event, since the uniqueness of thematic roles is an essential tool in identifying events. Two agents can only be accommodated as participants in two distinct events, each agent being related to only one event at most.

Given, however, that I assume by (49) that uniqueness applies distributively over the domain of arguments and the domain of thematic adjuncts, it is not ruled out in principle that two elements with the same thematic specification may co-occur in the same clause as long as one of them is an argument, and the other is a thematic adjunct. This happens in (51c), where there are two [-c] clusters present. The relevant participants, however, do not have the same semantic role in the event denoted by this verb: the argument is a recipient, and the thematic adjunct is a benefactive. This is not ruled out by the interpretation of uniqueness that the authors referred to in the paragraph above assume.

If, however, uniqueness is really only sensitive to the theta features, as is suggested here, but not necessarily to the semantic roles the participants play in the event, then in principle it can be possible for two agents to co-occur in the same event. This possibility is conditioned on separating the two agents into two domains. I would like to argue now that this possibility indeed exists.

This leads us back to comitative phrases, which continue to pose problems for any approach to uniqueness. What I am suggesting is that (52a-b) are ungrammatical for reasons that should be obvious by now: two instances of the [+c+m] cluster (agent) are found in the same domain. (52c) is, however, expected to be grammatical, as the two [+c+m] clusters occur in two different thematic domains.

```
\begin{array}{lll} (52) & a. & V_1 & *<[+c+m] \ [+c+m]> \\ & b. & V_2 & *<[+c+m]> \ (\ [+c+m] \ [+c+m] \ ) \\ & c. & V_3 & <[+c+m]> \ (\ [+c+m] \ ) \end{array}
```

A respective instantiation of these thematic structure schemas is presented below.

- (53) a. Kate quarreled with Jane.
 - b. *Kate wrote a letter with Peter with Jane.
 - c. Kate wrote a letter with Jane.

There are two comitative thematic adjuncts in (52b), and its ungrammaticality is a result of the violation of uniqueness. The grammaticality of (53a) is, however, surprising *if we regard it as an instantiation of (52a)*. The thematic structure in (52a) involves two relevant claims. First, the *with*-phrase is claimed to be an argument of the reciprocal predicate (53a). The reciprocal semantics of the predicate provides an obvious motivation for this, since the existence of a partner is entailed, *Kate* simply could not have quarreled alone (see footnote 10 for further literature). Second, this comitative argument is claimed in (52a) to be coded as [+c+m].

In fact, it is this second claim that does not hold (cf. Carlson 1998, Dowty 1991, Rákosi 2004, 2005). It can be shown that agentive reciprocal predicates are not necessarily symmetric semantically, that is, there are truth-conditionally relevant differences between the two argument slots. This is the reason why the answer in (54) is a non-contradiction.

- (54) Why did you quarrel with Jane?
 - I did not quarrel with her, she quarreled with me.

This basic non-symmetry is also responsible for the semantic ill-formedness of (55b), as opposed to (55a).

- (55) a. Even the most accomplished gardener has to compromise with the elements.
 - b. #The elements have to compromise even with the most accomplished gardener.

Consequently, the comitative argument cannot be regarded as an agent, since the participant that it denotes is not necessarily mentally involved (the elements certainly cannot be), and it is not necessarily causally responsible for the event. In the answer to the question (54), for example, Jane is depicted as responsible for the hostility. In other words, I am claiming that comitative arguments are underspecified for both the /c and the /m features. This is essentially the [] cluster of Marelj (2004), which she associates with the saturated argument of middle verbs. But nothing in principle rules out that this fully underspecified cluster should occur elsewhere, too, and be mapped onto syntax. If this is on the right track, then the correct argument structure of the dyadic reciprocal predicates in (54) and (55) is not (52a), but (56).

(56) $V_{\text{recip}} < [+c+m][] >$

(56) does not violate the uniqueness constraint in (49). It does not in fact pose a problem for the event-based approach to uniqueness either, for I have shown that the *with*-argument of a reciprocal verb does not necessarily play the same semantic role as the agent subject.

On the other hand, the thematic structure in (52c) is only predicted to be grammatical in the feature-based approach to uniqueness. I argue that this structure is grammatical, as it is the correct representation of (53c). Thus, there can be two agents in the same clause, provided one is an argument, and the other is a thematic adjunct (contra Carlson 1998). If this is so, we do not expect the kind of non-symmetry phenomena comitative arguments show to occur also with comitative adjuncts (there is nothing that would force it). This is in fact the case. ¹⁵ (53c) and its negated converse cannot be true at the same time.

(57) *Kate wrote a letter with Jane, but Jane didn't write a letter with Kate.

It seems that at least in comitative adjunct structures the same thematic role - and at the same time, the same semantic role - can occur twice in the same clause on condition that the two instances are in different thematic domains.

I do not wish to pursue this issue any further here. What I have wanted to point out is that what is crucial for the uniqueness constraint (49) is that it should refer to the feature content of the theta clusters. This in principle might be compatible in certain cases with there being two instances of the same cluster in the same clause, possibly each receiving the same semantic role. Whether this option is more general than comitative structures is a fascinating issue, but it has no direct relevance for the analysis. I believe nevertheless that nothing in principle rules out having, for example, two [-c] dependants with the same semantic role in the same clause. To test this, one should have a very precise understanding of what semantic roles are. In particular, this would have to involve an exhaustive list of discretely construed semantic roles. Unfortunately, such a list is not available. Fortunately, it is not needed for our purposes anyway in the light of the preceding discussion.

(i) John walked home with Kate.

This might have a non-symmetric reading on which *Kate* was carried along by *John*, so she did not perform any walking at all. This reading, however, does not involve a comitative thematic adjunct. Notice that movement verbs in general can be extended by a *with*-phrase whose semantic content we can gloss as *consignment*, which is evidently different from a comitative. The two may co-occur:

¹⁵ This claim is not refuted by occasional examples such as the following.

⁽ii) John walked home from the shop with his bag with Kate.

⁽i) is ambiguous between a consignment and a comitative reading, and only the latter gets the thematic specification [+c+m].

4.3.2.2. Full interpretation and the Cluster Distinctness Constraint

In Chapter 2 I have described two other thematic constraints that are relevant for the makeup and the interpretation of argument structure. These are the *Principle of Full Interpretation* and the *Cluster Distinctness Constraint* of Marelj (2004), repeated below.

(58) The Principle of Full Interpretation

For the purposes of interpretation, all clusters must be fully specified.

(59) Cluster Distinctness Constraint

Two underspecified clusters are indistinct if there is a construal under which they are identical.

Both (58) and (59) are guided by uniqueness. Since uniqueness has been reinterpreted to apply distributively over the two thematic domains, both (58) and (59) have to be likewise reinterpreted.

I illustrate the consequences with two brief examples, with more to follow during the investigation of datives. Consider first the predicate *sing*.

(60) a. We were singing a song for the queen.

b.
$$sing < [+c+m] [-c-m] > ([-c])$$

The [-c] benefactive thematic adjunct can be extended by the Principle of Full Interpretation either as [-c+m] or as [-c-m]. This second interpretation is possible even if there is already a [-c-m] argument object argument present, because the two are in distinct domains and uniqueness in the sense of (49) is observed. Indeed, the benefactive can be interpreted in this context as denoting either a mentally involved participant, or a participant who is not aware at all of the singing event and therefore cannot possibly relate to it mentally. The first interpretation is most likely if the queen is present at the singing, and the second is basically the only option if she is not.

Conditioning the Cluster Distinctness Constraint into two domains means that two incommensurable (or nondistinct) clusters are allowed to co-occur, as long as one is an argument and the other is a thematic adjunct. Recall that Pesetsky's (1995) Target/Subject Matter restriction is captured in the Theta System as a violation of the Cluster Distinctness Constraint. I repeat (62b) from Chapter 2 as (61).

(61) a. *The television set worried John about the veracity of Bill's alibi.

b.
$$worry < [+c] [-c+m] [-m] >$$

(61a) is ungrammatical in this approach because the indistinct [+c] and [-m] clusters are co-realized. *Worry* has been shown to have a reduced entry with an experiencer subject. If we place this entry into a context in which its subject is interpreted as an

agent, it is possible to add a benefactive.

- (62) a. I personally don't care, but if you want me to, I will be worrying about it for you.
 - b. worry < [+c+m] [-m] > ([-c])

The thematic structure (62b), just like (61b), contains two clusters that are nondistinct: [-m] and [-c] in this case. The reason why (62a) is still acceptable is that the subject matter ([-m]) and the benefactive ([-c]) dependants are in two distinct thematic domains.

4.3.3 The syntactic realization of thematic adjuncts

The last issue to consider in this section is the question of the basic syntactic realization of thematic adjuncts. It is useful for this purpose to recapitulate the mapping generalizations of the Theta System. I repeat this material from 2.1.4.

(63) Lexicon Marking I.

Given an n-place verb-entry, n>1

- a. Mark a [-] cluster with index 2.
- b. Mark a [+] cluster with index 1.

(64) Merging Instructions

- a. An argument realizing a cluster marked 2 merges internally.
- b. An argument realizing a cluster marked 1 merges externally.
- c. When nothing rules it out, merge externally.

(65) Lexicon Marking II.

- a. Mark the verb with the ACC feature if the entry includes both a [+] cluster and a fully specified cluster $[/\alpha, /-c]$.
- b. The unary clusters [-c] and [-m] require inherent case (or an adposition, depending on the morphological inventory of the language).

What governs the syntactic realization of arguments is their merging index (if they have one), and their case properties. Now let me make some comments on how thematic adjuncts can be added to this picture.

Thematic adjuncts do not get a place in argument structure. They are adjuncts and they are inserted freely in the derivation as such. In other words, I hypothesize that thematic adjuncts are not introduced until the point where lexical material is written off for syntax. The addition of a thematic adjunct does not create a new lexical entry, in conformity with the Lexicon Uniformity Principle (see 2.1.1). Write

denotes the same verbal concept whether it is realized with or without an instrument, a benefactive, or a comitative. In this view, there is a partitioning of adjuncts: some of them come with a thematic specification (thematic adjuncts), some of them do not (regular adjuncts). One immediate consequence of the thematic tag that thematic adjuncts receive is that they have to be VP-internal, whereas regular, non-thematic adjuncts can be base-generated outside the VP.

Thematic adjuncts are computed from the theta-grid of the predicate: they need to be licensed by the presence of a designated argument. The dependency between arguments and thematic adjuncts is one-to-many, since an argument can license several thematic adjuncts, but a thematic adjunct is licensed by exactly one argument. The cases discussed so far all involve agent-dependency, so a single agent argument can license an instrument, a benefactive, and a comitative in the same clause.

- (66) a. John wrote a book with a typewriter for his students.
 - b. John wrote a book with Peter for his students.

In this sense, thematic adjunct licensing is similar to the licensing of negative polarity items, of which several can grammatically occur in the scope of a single licensor.

I have hypothesized above that uniqueness, as well as the Principle of Full Interpretation and the Cluster Distinctness Constraint are applied distributively over the argument structure of the predicate and the domain of its thematic adjuncts. Since these are post-lexical processes (cf. 2.1.), there should be some means available for the computational system (syntax) to be able to distinguish between the two sorts of elements that are assigned a theta cluster. Since thematic adjuncts are not introduced in the lexicon, they cannot get a merging index or accusative case, in contradistinction to arguments. As a result, most arguments will be unambiguously tagged *qua arguments* in a way that is legible to the computational system, too: if an expression bears an index or accusative case, it has to be an argument.

There are only a few instances when such an identifier is not available for an argument, namely, when a mixed cluster is realized in a non-object position. This happens in the case of *I worry about it*, where the subject bears the non-indexed [-c+m] cluster. This can create a problem, inasmuch as this experiencer subject bears no information which is directly legible for syntax and which identifies it as an argument. I resort to the conventional wisdom that arguments and adjuncts are inserted into clause structure in non-identical ways (cf. Chomsky 2001), and this structural difference will ultimately always distinguish between arguments and thematic adjuncts.

4.4. The diversity of dative experiencers

4.4.1. Two groups of dative experiencer predicates

Having established that there exist adjuncts that can get a thematic role and that these are formally different both from arguments and from regular adjuncts, now it is time to return to dative experiencer predicates. In the empirical overview in Chapter 3, I have shown that dative experiencer predicates fall into two classes. The claim I am making here is that some have dative arguments, and the rest license the datives as thematic adjuncts. The following predicates are in the first group (the full lists can be found in Chapter 3).

(67) **Predicates with dative arguments**

a. piacere-predicates

```
tetszik<sub>v</sub> 'appeals to'
derogál<sub>v</sub> 'it is beneath one's dignity'
sikerül<sub>v</sub> 'succeeds'
```

b. verbs of mental appearance

```
megjelenik<sub>v</sub> 'appears'
bejön<sub>v</sub> 'likes' [lit. 'comes in']
```

This is the smaller of the two groups. Predicates that license dative thematic adjuncts are more numerous, I represent some typical items.

(68) Predicates licensing dative thematic adjuncts

a. evaluative predicates

```
j \acute{o}_{
m adj} 'good' kellemes_{
m adj} 'pleasant'
```

b. modal predicates

```
lehetséges adj 'possible'
kell<sub>v</sub> 'needs'
```

c. dative verbs of different types

```
'seems'
tűnik,
                       'seems'
tetszik<sub>2v</sub>
                       'is suitable (for a purpose)'
megfelel<sub>v</sub>
számít<sub>v</sub>
                       'counts, matters'
jelent<sub>v</sub>
                       'means'
                       'is worth'
megér<sub>v</sub>
                       'hurts, is painful'
fáj<sub>v</sub>
                       'be missing'
hiányzik<sub>v</sub>
```

The task now is to substantiate this division of predicates. In doing this, I will be

picking representatives from both predicate classes for expository purposes, but the emerging empirical generalizations hold of the whole of the two respective classes.

4.4.2. The empirical background to the divide between dative arguments and dative thematic adjuncts

4.4.2.1. Introduction

In this section, I will apply the diagnostics of thematic adjunct status surveyed in 4.2. We will see that the proposed dative thematic adjuncts indeed pattern up with instruments, benefactives, and comitatives in their core properties. I will also discuss some additional interpretive and syntactic differences between dative arguments and dative thematic adjuncts that are specific to these particular dative expressions under investigation.

4.4.2.2. Optionality

The obligatoriness of a dative expression indicates its argument status, and optionality is a sign of adjuncthood. Syntactic optionality and semantic optionality (i.e. not being entailed by the predicate) do not always converge. An expression can be syntactically obligatory while not being entailed by the predicate. Expletives belong to this category by definition. On the other hand, an expression might be entailed by the predicate, but it still remains syntactically inactive. This is the case of implicit arguments. The particular problem with the datives at hand is that it is often not immediately obvious whether their absence is to be interpreted as a sign that they are genuinely missing, or just simply a sign that they have been omitted from surface syntactic structure.

To see the weight of the problem let us first compare dative arguments in Hungarian and English. In English, a dative experiencer argument cannot be omitted even under strong contextual support.

- (69) a. Do you like the idea of working at weekends?
 - It doesn't really appeal *(to me).
 - b. Did you check your insurance policy before the journey?
 - No, it didn't occur *(to me).

The same, however, is not true of Hungarian. In fact, any kind of dative argument can be omitted in an appropriate context. (70a-b) are two structures where a dative argument has been omitted, and (70c) involves the discourse-licensed omission of a recipient. For transparency, I include the optional dative in brackets. The interpretation of these sentences stays constant in these contexts, whether the dative is present or not.

- (70) a. Na milyen az új irodá-m? Tetsz-ik (nek-ed)? so what the new office-Poss.1sG appeal-3sG DAT-2sG lit. 'So what is my new office like? Does it appeal (to you)?'
 - b. Nem jön be ez a hely (nek-em).
 not come in this the place DAT-1SG
 'I don't like this place.'
 [lit. 'This place does not come in (to me)]
 - c. Mi-t kap-t-ál a Mikulás-tól? what-ACC get-PAST-2SG the Santa-ABL 'What did you get from Santa Claus?'
 - Megint egy könyv-et ad-ott (nek-em). again a book-ACC give-PAST DAT-1SG lit. 'He again gave a book (to me).'

Such implicit arguments have been regularly referred to as *definite implicit arguments* in the literature. It is characteristic of them that their intended referent is always recoverable from the context (usually a speech act participant), even if this participant is not explicitly mentioned anywhere. These predicates never allow for a generic (or indefinite) interpretation of the missing dative argument, (71) is plainly ill-formed on this reading.

(71) Manapság nem népszerű ez a könyv, de régen tetszett. these.days not popular this the book but formerly appeal-PAST 'This book is not popular these days, but it used to appeal to me.' *'This book is not popular these days, but it used to appeal to people.'

It is a recurrent claim in the semantic-pragmatic literature on implicit argument licensing that it is the semantics of the predicate and the pragmatics of the given context of utterance that drives this kind of argument omission (cf. Groefsema 1995, Németh 2001). But on this account, we would not expect the above contrast between English and Hungarian, so other factors (often of syntactic nature) must also be considered, as has been emphasized in another context by Iten et al. (2004) and Pethő & Kardos (2006), among others.

Hungarian is in general more liberal with definite implicit argument licensing than English, for which I have no ready explanation. What is important for us is that dative experiencer arguments cannot be omitted at all in English. In Hungarian they can, but only if supported by an appropriate discourse setting and only under a definite interpretation. I assume without further comments that in this case the missing dative is on the argument list of the predicate, but it does not get projected onto syntax because it undergoes a particular kind of existential closure (cf. Brody & Manzini 1990).

What are usually referred to as indefinite implicit arguments can be approached

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¹⁶ It is evident from this fact alone that these structures are not elliptical.

in a similar way (cf. Bresnan 1982b), the difference is that no special discourse is needed to trigger this omission. Rather, the missing argument is interpreted as denoting prototypical, albeit referentially non-specified entities that otherwise fill this slot. *I'm eating* or *I'm drinking* are well-known examples for such structures. These predicates have a semantically obligatory patient argument, and, as Jackendoff (to appear) argues at some length, they should be carefully distinguished from cases of true (semantic and syntactic) optionality. The following are his examples, which make up a minimal pair in this respect (p. 7-21).

- (72) a. I'm not bored with anything in particular, I'm just plain bored.
 - b. *I'm not interested in anything in particular, I'm just plain interested.

(72b) is a contradiction because *interested* has an obligatory *target* (or *stimulus*) argument. This can be omitted in discourse, but its existence is still entailed. *Bored*, however, is a predicate which can denote "*pure experience*" without being connected to a particular target/stimulus. In other words, the *with*-phrase beside the predicative *bored* is optional both syntactically and semantically. That is why (72a) is meaningful.

The question that we may ask now, together with Jackendoff, is whether the rest of the dative predicates pattern up with *bored* or with *interested* with respect to the omission of their dative. Since I am claiming here that *fontos* 'important', *lehetséges* 'possible', and the like license a dative thematic adjunct, the expected answer is that the dative expression is truly optional with these predicates. Notice first of all, that the absence of these datives is perfectly grammatical in both English and Hungarian, which already gives a contrast between dative arguments and dative thematic adjuncts.

- (73) a. Ez a könyv fontos. this the book important 'This book is important.'
 - b. A fehér galamb jelent-i a béké-t. the white dove mean-DEFOBJ.3SG the peace-ACC 'The white dove means peace.'

Out of context, these sentences predicate the relevant property as pertaining to the subject referent irrespective of the particular experiencer. One way of approaching this is to assume that (73a) is in fact a variant of (74), with a generic closure on the dative argument slot.

(74) Ez a könyv fontos mindenki-nek. this the book important everybody-DAT 'This book is important to everybody.'

Disregarding now irrelevant differences between overt and covert universal operators, (74) can in principle be read as a rough logical form of (73a). Then *important* is a dyadic predicate, with a generic implicit experiencer argument.

The other option is to assume that these structures can gain a "perspective-free" interpretation¹⁷, so that being important becomes an objective property of the book. There are serious philosophical issues behind going for either option, but I stay with commonsense considerations, which are probably more relevant in how these concepts grammaticalize. It is well known that universal quantification tolerates exceptions, in which the structures with or without an overt dative do not differ.

- (75) a. This book is important, but not to me.
 - b. This book is important to everybody, but not to me.

On the other hand, universal quantification does not tolerate *massive* exceptions. If an overt generic quantifier is present, the following structures are semantically ill-formed.

- (76) a. #This book is important to everybody, though nobody has realized it so far.
 - b. #The white dove in fact means peace to everybody, though nobody knows this.

Interestingly, if the dative experiencer is removed, the majority of speakers (both in English and in Hungarian) will accept these sentences.

- (77) a. This book is important, though nobody has realized it so far.
 - b. The white dove in fact means peace, though nobody knows this.

This effect is even stronger if some domain restriction is placed on the predicate. 18

(78) This book is historically important, but not for anybody anymore.

These data clearly indicate that we cannot simply collapse the dativeless construction with the one with a universally quantified overt dative. In other words, this goes against viewing the dative predicate as a two-place predicate with one of the arguments universally closed.

I conclude that there is no thematically relevant experiencer present in the above constructions projected by *important*-type dative predicates. *This book is important* can have a truly objective reading which I associate with the complete lack of the dative experiencer. Since this is an adjunct property, this makes the datives of these predicates a thematic adjunct. The claim is essentially that *This book is important* or *These things matter* do not radically differ from, say, *This book is white* or *This book is long*. At a higher level, the semantic structure of these sentences may include reference to individuals who project the model in which the denotation of the

¹⁷ I adopt this term from Jackendoff (to appear).

 $^{^{18}}$ This argument has been brought to my attention by Scott Grimm at the LFG06 conference in Konstanz.

predicate is interpreted. But this sort of information is independent of the thematic structure of these predicates, which have a single obligatory thematic dependant: the subject argument. The dative thematic adjunct is added to this core structure only optionally.

As opposed to this, predicates in the *piacere*-group have a dative argument. This dative can be an implicit argument in Hungarian, but it is still represented as an argument in the argument structure of the predicate. *Piacere*-predicates have a dyadic argument structure.

4.4.2.3. Morphological variation

I have pointed out that thematic adjuncts, as opposed to arguments, have no lexically fixed morphology by default. The fact that arguments are morphologically stable is quite transparently reflected in the cross-linguistic behavior of *piacere*-predicates, which take a dative argument, marked either by dative case proper or by a designated P element. Dative thematic adjuncts, on the other hand, are subject to morphological variation. In English, dative arguments can be marked only with *to*, while dative thematic adjuncts can be the complements of either *to* or *for*. Dative arguments are shown in (79), and I list some examples with dative thematic adjuncts in (80).

- (79) a. It appeals to / *for me.
 - b. This idea has never occurred to / *for me.
- (80) a. This doesn't matter to / for me.
 - b. This seems to / %for me the best option.
 - c. This is important to / for me.
 - d. This is forbidden to / for us.

There can be some inter-speaker variation in evaluating these data. In particular, *for*-experiencers of *seem*-type predicates are confined to certain dialects of English. Meaning differences can also be detected behind the choice of the preposition, some of which are discussed below in relation to the Hungarian data. But the general expectation is that the appearance of morphological variation correlates with non-argument status. ¹⁹ The predicates that have been surmised to license dative thematic

¹⁹ The cross-linguistic distribution of dative case and a relevant preposition shows an interestingly varied, but partially predictable distribution in this domain. Russian, for example, allows both dative case and the preposition *dlja* 'for' on dative experiencer adjuncts of modal and evaluative predicates. The closely related Czech, however, does not allow dative with these predicates: only the preposition *pro* 'for' can be used. Romanian and Italian weakly contrast in a similar way. Modals or evaluatives cannot have dative case on their experiencer in Italian, the preposition *per* 'for' is used instead. Romanian allows datives with some of these predicates, but it is more common to use *pentru* 'for', which is always an option. And so on.

adjuncts indeed behave as predicted.

The functional equivalent of this use of the English *for* is *számára* in Hungarian. It belongs to the postpositions that Marácz (1983:363) calls *dressed Ps*. These inflect for agreement, and take a nominative complement. If the complement is a pronoun, it is regularly *pro*-dropped since it is recoverable from the inflection. Like most other postpositions and case markers in Hungarian, *számára* has its historic origin as a noun phrase. Its stem *szám* originally means 'number', and on its compositional reading it literally reads as '(on)to his number'. As a postposition it has completely lost this compositional meaning. (81) contains the singular paradigm.

(81) szám-om-ra szám-od-ra szám-á-ra number-1SG-SBL number-2SG-SBL number-3SG-SBL 'for me' 'for you' 'for him'

I indicate the morphological structure in the glosses, but give the English translations that describe the meaning of the postposition. Subsequent occurrences of this postposition are simply glossed as 'for'.

For most speakers, this postposition has an animacy restriction on its use. It still, however, cannot replace true arguments even if these have a [+animate] selectional restriction on them, such as the dative arguments of *segít* 'helps' and *köszön* 'greets'.

- (82) a. Segít-ek János-nak / *János számára. help-1SG John-DAT John for.3SG 'I help John.'
 - b. Köszön-t-em János-nak / *János számára. greet-PAST-1SG John-DAT John for.3SG 'I greeted John.'

In what can be regarded as its basic meaning, *számára* is used to encode secondary recipients and it typically co-occurs with (overt or implicit) primary recipients.

(83) Küld-t-em egy kis pénz-t Kati-nak János számára. send-PAST-1SG a little money-ACC Kate-DAT John for.3SG 'I have sent a little money to Kate for John.'

This implies that Kate has to pass on the money to John somehow, and John is

It generally holds nevertheless that dative experiencer arguments have a fixed morphology, and it is always dative case or an equivalent designated preposition (such as a in Italian). How far the dative can spread beyond the argument domain is a function of the semantics and the syntax of the dative case in the given language. I cannot discuss this issue here in detail, nor is every aspect of this cross-linguistic variation clear to me at this point. I am grateful to Jakub Dotlacil (Czech), Nino Grillo (Italian), Anca Sevcenco (Rumanian), Natalie Slioussar, and Peter Zubkov (Russian) for a discussion of these data.

construed as the ultimate intended recipient. Besides this interpretation, the English *for* also allows for a benefactive reading, in which John need not receive the money but he can still benefit from it (for example, it frees him from the need to do it himself). The Hungarian *számára* does not have this reading.

If we now turn to dative predicates, the scene is quite like in English (79-80). *Számára* cannot substitute for what I claim to be dative experiencer arguments.

- (84) a. Ez tetsz-ik Kati-nak / *Kati számára. this appeal-3SG Kate-DAT Kate for.3SG 'This appeals to Kate.'
 - b. A vizsga nem sikerül-t Kati-nak / Kati *számára. the exam not succeed-PAST Kate-DAT Kate for.3SG lit. 'The exam did not succeed to Kate.'
 - c. Ekkor be-ugr-ott nek-em /*számomra a megoldás. then in-jump-PAST DAT-1SG for 1SG the solution 'Then I remembered the solution.'

 [lit. 'Then the solution jumped in to me.']

But *számára* can generally occur as a dative thematic adjunct. Some examples are listed in (85).

- (85) a. Nek-em / számomra úgy tűn-t, hogy ez a legjobb megoldás.

 DAT-1SG for.1SG so seem-PAST that this the best solution 'It seemed to/for me that this is the best solution.'
 - b. Ez fontos nek-i / számára. this important DAT-3SG for.3SG 'This is important to/for him.'
 - c. Ez nem lehetséges nek-i / számára. this not possible DAT-3SG for.3SG 'This is not possible to/for him.'

Not every speaker is equally comfortable with this use of the postposition, but for most, these examples are completely acceptable (dative case is always fully grammatical). Some informants noted either that *számára* belongs to a more elevated register, or that they feel that its use in this domain is a neologism. It is certainly very frequent in journalism, the following two examples I quote from the *Hungarian National Corpus*.

(86) a. Thus I can only be happy if I feel that ...

semmi sem hiányz-ik számomra. nothing not miss-3SG for.1SG '... there's nothing I would miss.' [lit. '... nothing misses for me.'] b. *Mi-t* számít az az arab banánárus számára, hogy ...? what-ACC matter that the Arab banana.seller for.3sG that 'What does it matter for the Arab banana seller that ...?'

It never happens, however, that we find *számára* in an experiencer *argument* position, and in that sense, the expected contrast between dative arguments and thematic adjuncts clearly exists.

There is no general consensus among native speakers as to any possible semantic difference between the dative and the postposition in this use, in most cases they are truth-conditionally equivalent. Remember that in what can be regarded as their conceptually more basic use, the dative encodes primary recipients, and *számára* encodes secondary recipients. Assuming that the current use is a conceptual extension of this basic meaning, there is some motivation to think that the two will likewise contrast with respect to the availability of a direct contact between the stimulus and the referent of the thematic adjunct. Some speakers indeed report the following kind of contrasts at least with certain predicates. First, the dative may be preferred in the case of concrete, physical experience, as opposed to more abstract or emotional sort of experiencing. Second, dative case is *generally* preferred for experiencer readings, and *számára* is more likely to occur in non-psych-readings of these predicates. Consider the following example.

(87) Ez a helyzet kellemetlen volt nek-em / számomra. this the situation unpleasant was DAT-1SG for.1SG 'This situation was unpleasant to/for me.'

One would very probably opt for the dative if the speaker is actually physically present in a situation in which he is feeling embarrassed. If, however, there is no such direct involvement - for example, the speaker is a prime minister who is worrying because one of the members of his government is involved in a scandal -, then *számomra* is a more likely choice. Nonetheless, these are not absolute choices but tendencies, and both the dative and the postposition can certainly be used to express either meaning. I would like to emphasize again that what in the first place matters for the argumentation here is that such morphological variation exists at all. And, most importantly, there are systematic differences between the semantics of dative arguments and the semantics of dative thematic adjuncts, which are only partially governed by the morphology of the dative dependant. I discuss these differences in the next subsection.

4.4.2.4. Interpretive differences

The dative experiencer arguments that we are discussing indeed necessarily have experiencer semantics, as it has been preliminary discussed in Chapter 3. This means that (i) there is an animacy restriction on them, and (ii) the animate referent of the dative is required to relate mentally to the event, in the sense that some sort of experience is registered internally in him and he generally also has a disposition

towards it. This is the reason why neither sentence in (88) is well-formed semantically.

- (88) a. #Az új festék nem tetsz-ik a szék-nek. the new paint not appeal-3SG the chair-DAT 'The new paint does not appeal to the chair.'
 - b. #János-nak tetsz-ik az új iroda, John-DAT appeal-3SG the new office

bár ő ez-t nem tud-ja. though he this-ACC not know-DEFOBJ.3SG

The dative has an inanimate referent in (88a), and in (88b) a context is created to force a reading in which the new office's appeal cannot be conceived as a disposition in John.

Predicates that license dative thematic adjuncts allow for an experiencer reading on the dative, but this is only an option and not a necessity. In other words, these predicates are only optionally psychological predicates, as I have pointed out already in the previous section (4.4.2.3). This is most evident from the fact that the majority of them can have inanimate datives, as we have already seen in Chapter 3. I illustrate first with English examples, collected from the 1997 issues of *The Times*.

- (89) a. Garlic is good for the vocal cords, and reviving too.
 - b. It is important for the safety of the world that they continue the work.
 - c. Dallas is a wealthy city, and people here see investment in their orchestra as very important to the city's image.
 - d. Lowering that level is easy enough for electric machines, but it soon becomes almost impossible for petrol-driven mowers.
 - e. We don't know what these particles were, but it doesn't matter for the theory.
 - f. Guns will soon be forbidden to civilian possession.

Since dative case is known to be linked up with animacy in many languages (cf. Grimm 2005 for an overview), it is not surprising that English tends to prefer the preposition *for* in these context, rather than *to*, the English functional equivalent of dative case.²⁰

In Hungarian, the situation is reversed: dative case is fully acceptable in these contexts, but *számára* 'for' is either unacceptable or only marginally acceptable, since for most speakers it is only used with a [+animate] selectional restriction on its

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^{&#}x27;The new office appeals to John, though he doesn't know about it.'

 $^{^{20}}$ This is also clear in Russian, where dative case can be used with these predicates only if the thematic adjunct has an animate referent. To translate the sentences in (89), the preposition *dlja* 'for' has to be used.

complement.21

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(90) a. A fokhagyma jó a hangszalag-ok-nak. the garlic good the vocal.cord-PL-DAT

??/*A fokhagyma jó a hangszalag-ok számára. the garlic good the vocal.cord-PL for.3SG

'Garlic is good for the vocal cords.'
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- b. *Nem hiányz-ik még egy földrengés az épület-nek.* not miss-3SG vet one earthquake the building-DAT
 - *Nem hiányz-ik még egy földrengés az épület számára. not miss-3SG vet one earthquake the building for.3SG

'The building is in no need of yet another earthquake.' [lit. 'Yet another earthquake does not miss to the building.']

This selectional restriction set aside as a partly idiosyncratic property of the postposition, the general point is that most licensing predicates can have an inanimate thematic adjunct of this kind.

Furthermore, even if this participant is animate, the sentence need not reflect its psychological state. Some relevant examples have already been discussed in 3.3, here is another one from Arad (1998:270), together with its Hungarian translation.

- (91) a. Nina needs new shoes.
 - b. Niná-nak új cipő-k kell-enek. Nina-DAT new shoe-PL need-3PL 'Nina needs new shoes.'

Arad points out that the ambiguity of these constructions can be characterized in

Some speakers already show no strong sensitivity to the animacy properties of its complement. For these speakers, the following sentence is fully acceptable.

(i) A rovar-ok fontos-ak az erdő számára. the beetle-PL important-PL the forest for.3sG 'Beetles are important for the forest.'

In fact, the same speakers prefer *számára* over dative case in this sentence. If this is the direction in which the language is developing, Hungarian might become similar to most other European languages in applying an animacy restriction on dative case, rather than on the postposition.

²¹ Judgments may vary. The existence of this restriction is probably due to the nominal origin of this postposition. Recall from the previous subsection that *számára* is formally identical to a possessive construction, which might be a reason why animate complements (which would correspond to a possessor in the possessive construction) are preferred. If *számára* becomes more strongly established as a postposition, the animacy restriction might be expected to disappear.

terms of an ambiguity between *external* and *internal viewpoint* (cf. also Bouchard 1995). The former is a non-psych reading and it expresses the speaker's opinion. This is what I have called the property reading in 3.3. *Nina* need not even be aware of the fact that her shoes need to be changed. The second is a psych reading on which her own dispositions are described.

Arad argues that this difference in viewpoint can be grammaticalized in certain constructions. She mentions in particular *-ing* and *-some* psych-adjectives, such as *tiring*, *frightening*, *annoying* on the one hand, and *fearsome*, *awesome*, *tiresome* on the other. However, what really matters is not the categorial type of the predicate, but the thematic status (argument vs. thematic adjunct) of the dative participant. Only the second (92b) is ambiguous in the following two sentences, which minimally differ in the dative being an argument in (92a) and a thematic adjunct in (92b).

- (92) a. *János-nak be-jön a meleg idő*.

 John-DAT in-come the warm weather.

 'John likes warm weather.'

 [lit. 'Warm weather comes in for John.']
 - b. János-nak nem számít a meleg idő.

 John-DAT not matter the warm weather 'Warm weather does not matter for John.'

Számít 'matter' can be used to describe a property of John, without him having any sort of dispositions towards warm weather. (92b) could be uttered, for example, by his coach before John is going to run a race, and it is compatible with the assertion that John in fact thinks that warm weather matters for him. But if (92a) is asserted, then John must have the dispositions described by the sentence.

The existence of this ambiguity helps us view predicates like *kellemes* 'pleasant', *kényelmes* 'comfortable', *tanácsos* 'advisable' and the like from a certain vantage point. These predicates select for animate dative participants, but it should be evident by now that this does not necessarily entail that they are experiencers. With the assertion of (93), we are not necessarily asserting at the same time that Kate is aware of the fact that this situation might have repercussions for her.

(93) Ez a helyzet kellemetlen Kati-nak. this the situation unpleasant Kate-DAT 'This situation is unpleasant for Kate.'

Thus, it can safely be concluded that there are no predicates that license necessarily experiencer dative adjuncts. Experiencer semantics is only an option for these thematic adjuncts, whereas it is a necessity for the dative arguments under consideration. Another piece of evidence for this is that metonymic extensions are more felicitous in the former context than in the latter. Compare these two English examples.

- (94) a. [?]The current situation does not appeal to the White House.
 - b. *The current situation is unpleasant for the White House.*

(94a) with a dative argument is somewhat marked, probably because even if a metonymic extension takes place from the original denotation of the *White House* to the people who work there, the basic, non-shifted meaning is still active to some extent. This basic meaning is incompatible with the experiencer semantics of the argument. The thematic adjunct in (94b) is not required to be an experiencer, hence no meaning incompatibility arises whatsoever.

The interpretive differences between dative arguments and dative thematic adjuncts are not accidental. In 4.5, I will present a thematic analysis which predicts that dative arguments must, but dative thematic adjuncts need not be interpreted as experiencer. Before that, let me provide some further arguments for why dative thematic adjuncts need to be distinguished from other dative expressions.

4.4.2.5. Some syntactic differences

The syntax of 'heavy' VP-internal adjuncts is known often not to differ radically from the syntax of complements. This is especially true of Hungarian, a language with a non-configurational VP. Thematic adjuncts can, nonetheless, be shown to be syntactically non-identical to arguments. The evidence presented below is not massive, as is generally the case with VP-internal adjuncts, but it still goes in the expected direction.

In English, a contrast can be observed with respect to topicalizing dative arguments and dative thematic adjuncts. The former can only be topicalized contrastively, which leads to the unacceptability of (95b) and (95b). The discourse information provided in the (b) examples contradicts the presupposition that comes with the contrastive semantics, namely that there is at least one individual of whom the comment part of the first clause cannot be asserted.

- (95) a. To me he gave a book, but he gave a dvd to everybody else.
 - b. #To me he gave a book, and he gave a book to everybody else, too.
- (96) a. To me it really appeals, but it does not appeal to anybody else.
 - b. #To me it really appeals, and it appeals to everybody else, too.

Dative thematic adjuncts can also be topicalized on the left edge, but they do not have to be contrastive. Therefore, both of the following two pieces of discourse are well-formed.

- (97) a. To me it seems good, and it in fact seems good to everybody else, too.
 - b. To me it really matters, and it matters to everybody else, too.

It seems that the extraction of dative arguments from the VP to left edge of the clause requires a heavier trigger than the extraction of a dative thematic adjunct.

Similar extraction contrasts can be observed in Hungarian, but they are always very mild. Clefting, for example, is slightly degraded with dative thematic adjuncts.

- (98) a. Nek-em ez a munka az, ami tetsz-ik.

 DAT-1SG this the job that which appeal-3SG 'To me it is this job that appeals.'
 - b. [?]Nek-em ez a munka az, ami fontos.

 DAT-1SG this the job that which important 'To me it is this job that is imporant.'

Extraction of a *wh*-dative out of a complement clause of a bridge verb is also less acceptable if the dative is a thematic adjunct.²²

- (99) a. *Melyik lány-nak hall-ott-ad, hogy ez a fiú tetsz-ik?* which girl-DAT hear-PAST-2SG that this the boy appeal-3SG 'To which girl have you heard that this boy appeals?'
 - b. [?]Melyik lány-nak hall-ott-ad, hogy ez a fiú fontos? which girl-DAT hear-PAST-2SG that this the boy important 'To which girl have you heard that this boy is important?'

Even if, admittedly, these contrasts are not strong, they are indicative of an underlying syntactic difference in the expected direction.

A further, more pronounced, contrast exists for those speakers whose grammar is English-like with respect to licensing anaphors in oblique positions. Standard Hungarian contrasts with English in requiring reflexive anaphors, and not allowing pronouns in non-argument oblique phrases that are referentially coindexed with an argument. So instead of an equivalent of the standard English *I see a snake beside me*, standard Hungarian has the following.

(100) Lát-ok magam mellett egy kígyó-t. see-1SG myself beside a snake-ACC lit. 'I see a snake beside myself.'

Den Dikken et al. (2001:footnote 9) notice that there is nevertheless a subset of native speakers of Hungarian - where I also belong - for whom the coindexed pronoun is also grammatical in this position. The pronoun itself is *pro*-dropped in neutral discourse, and it is recoverable from the agreement morphology which is present on the postposition.

(101) %Lát-ok mellett-em egy kígyó-t. see-1SG beside-1SG a snake-ACC 'I see a snake beside me.'

²² Some speakers do not accept (99a) completely, but they too find (99b) worse.

For the speakers of the English-like dialect, there is a contrast between (102a) and (102b). This correlates with the fact that under my analysis, the pronoun is an argument in the former case, and it is a thematic adjunct in the latter.

```
(102) a. **\textsize* \textsize fn csak nek-em tetsz-ek.

I only DAT-1SG appeal-1SG
lit. 'I appeal only to me.'

b. \textsize(\textsize^2) \textsize fn csak nek-em vagyok fontos.

I only DAT-1SG am important
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'I am important only to me.'

This contrast is reminiscent of the following contrast, discussed by Reinhart & Reuland (1993:664), among others.

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(103) a. *Max<sub>i</sub> speaks with him<sub>i</sub>.
b. Max<sub>i</sub> saw a gun near him<sub>i</sub>.
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They argue that coindexation is possible in (103b) because the PP is not a coargument of the predicate. The contentful preposition forms its own predicate, and its complement is therefore in a different binding domain than the subject *Max*. In (103a), however, the preposition is directly selected by the verb and since there is only one binding domain, Principle B of the binding Theory is violated. In the analysis that I am pursuing here, the same account can be applied to (102a) and (102b). I have argued that the morphology of arguments is fixed in the lexicon, possibly in an idiosyncratic way. Thematic adjuncts, on the other hand, have no fixed morphology; and their case or P-markers contribute to the interpretation of the clause (they only have to be compatible semantically with the licensing predicate). We can assume then that the dative in (102b) is predicative and sets up its own binding domain, for at least speakers of the English-like dialect. Hence, a coindexed pronoun is grammatical as it is in its own binding domain.

This approach, however, gives no account of speakers of the standard dialect, for whom a coindexed pronoun is ungrammatical even in (102b). In Chapter 5, I will be arguing that binding in Hungarian is primarily conditioned by the thematic properties of the binder and the bindee. Accordingly, the binding domain might encompass the union of the set of arguments and thematic adjuncts, and by default the two thematic types are not necessarily distinguished in the computation of binding relations.²³ It seems plausible to me that for speakers of the English-like dialect, whose judgments are represented in (102), there is a higher-ranking constraint which introduces a binding domain every time a new predicate is encountered; whereas speakers of the standard put any thematic dependants together that are licensed by the same main predicate. But even if this argumentation is not in the right direction, the grammaticality difference between (102a) and (102b) exists, and it gives further motivation to the analysis pursued here.

²³ This implies that in principle a thematic adjunct can bind an argument. I show in Chapter 5 that in fact this is the case.

4.4.3. Datives without a thematic role

4.4.3.1. Not all dative adjuncts have a thematic role

The picture that we have now contains two types of thematic datives, of which dative thematic adjuncts have been shown to be optional experiencers, whereas dative arguments are obligatory experiencers. One question that I have not commented upon so far is what exactly licenses these dative thematic adjuncts. Instruments, benefactives, and comitatives are all licensed in the presence of an agent argument, but this is obviously not an option for the datives under consideration.

The task is then to characterize those predicates that can have a dative thematic adjunct. The non-trivial aspect of this exercise is that datives with what looks like experiencer semantics may occur with a very wide range of predicates. I repeat (3) to illustrate.

- (3) a. Nek-em ez szép.

 DAT-1SG this beautiful 'To me, this is beautiful.'
 - b. Nek-em ez vicces.

 DAT-1SG this funny
 'To me, this is funny.'

Funny, nice, curious, impressive, among others, are put into the same group of experiencer adjectives in Jackendoff (to appear) as important or dangerous. While Jackendoff (and also much of the early generative literature on this topic) appears to be quite liberal in allowing an extensive array of predicates to have dative experiencer dependants, it has been specifically noted in the literature on Hungarian that certain plausible candidates in fact "do not subcategorize for datives" (É. Kiss 1987:218). É Kiss (1986:395) mentions in particular the adjectival predicates érdemes 'worthwhile' and helyes 'right'; and the nominal evaluative predicates őrültség 'is craziness' and bölcs dolog 'is a wise thing'. These are her examples and judgments.

- (104) a. *János-nak érdemes a munka.

 John-DAT worthwhile the work

 'Work is worthwhile for John.'
 - b. *János-nak érdemes, hogy dolgoz-z-ék.

 John-DAT worthwhile that work-SBJ-3SG
 'It is worthwhile for John that he should work.'

Tóth (2000a:44-47) makes the same point as a generalization over deadjectival nouns - such as *gonoszság* 'viciousness', *illetlenség* 'impoliteness', *butaság* 'stupidity', and so on -, which never subcategorize for datives.

There is an apparent contradiction between the two approaches, but I intend to

show here that each has an insight to it. The crucial step is to distinguish between dative thematic adjuncts (the datives we have been investigating so far) and regular, non-thematic dative adjuncts. The predicates in (3) and in (104) are similar in not licensing a dative thematic adjunct. They do license, however, a high-level, event-external dative adjunct. In fact, such non-thematic dative adjuncts can be inserted quite freely, irrespective of the type of the predicate. I go through a series of tests to prove that thematic datives and event-external dative adjuncts are indeed different grammatically. Once this difference has been substantiated, we will be in a position to better understand what is common in those predicates that license the datives as their thematic adjuncts.

Below I will use the term *dative thematic adjunct* as it has been used so far. The term *non-thematic dative adjunct* will be used to refer to event-external datives that are not related to the predicate thematically.

4.4.3.2. Non-thematic dative adjuncts need no event-internal licensors

It is easy to add to just about any kind of declarative sentence datives which encode participants from whose perspective the propositional core of the sentence is evaluated. Here are a couple of *to-PP* examples in English from the *Times* corpus.

- (105) a. To me, children are the most precious things in the world.
 - b. To me, teaching is like a drug.
 - c. To me, books, real ones, are intimacy, abandonment, risk and pact.
 - d. To me, he had a great life in London seeing friends, eating out, having time to read ...

These datives do not directly depend on the predicate, they are operators that are not in fact sensitive to the internal semantic structure of the proposition they scope over. Similar examples are easy to find in Hungarian, too. I have collected the following from my newspaper corpus.

- (106) a. Nek-em a barátság az barátság, ...

 DAT-1SG the friendship that friendship

 'To me friendship is friendship ...'
 - b. Ez nek-ed élmény, büdös proli? this DAT-2SG experience bloody prole 'Is this a delightful experience to you, you bloody prole?'
 - c. ... nek-i olyan Örkény-t olvas-ni, mint tengervíz-ben füröd-ni.

 DAT-3SG so Örkény-ACC read-INF like seawater-INE bathe-INF
 'To him, reading Örkény is like bathing in seawater.'

Such examples are in fact quite numerous in texts of any style or register.

Even though these datives are not licensed by the predicate, their semantics is

closely related to the semantics of event-internal dative thematic adjuncts, a point that I discuss directly below. It does not come as a surprise then that *számára* 'for' can substitute for the datives in (106), and it in fact seems to occur more frequently in this event-external adjunct function then dative case. This, in turn, is also to be expected since *számára* is never subcategorized for in Hungarian (cf. 4.4.2.3), it is always used as an adjunct (whether thematic adjunct or regular adjunct). I add two corpus examples to illustrate.

- (107) a. Számomra a fekete doboz egyfajta metafora ... for 1SG the black box a.kind.of metaphor 'For me, the black box is a kind of metaphor ...'
 - b. Számukra a kommunizmus kor-á-nak vég-e for.3PL the communism age-POSS.3SG-DAT end-POSS.3SG az elvtelen pragmatizmus kor-á-nak kezdet-e. the unprincipled pragmatism age-POSS.3SG-DAT beginning-3SG
 - 'For them, the end of the age of communism is the beginning of the age of unprincipled pragmatism.'

If there is any difference between dative case and the postposition *számára*, then it again comes down to the latter being more readily compatible with non-experiencer readings. (107b), for example, has a reading on which the people concerned might not even notice that the times have changed. But in general, dative case and the postposition are more or less equivalent. Here is a corpus example in which they are coordinated.

(108) Nek-em, és mindenki számára nagy megrázkódtatás, ami történt.

DAT-1SG and everybody for.3SG big shock which happened 'To me, and for everybody, what happened is a big shock.'

This is a clear sign that two morphological markers have the same status and function.

The more general point is that non-thematic datives can be inserted in basically any declarative sentence. In particular, clauses with nominal predicates, such as <code>butaság</code> 'stupidity' can also have one such dative. The dative that is licensed by adjectives like <code>szép</code> 'beautiful' or <code>kedves</code> 'nice' is also an event-external adjunct, and not an event-internal thematic adjunct or argument.

4.4.3.3. Non-thematic dative adjuncts are external to the predicate

A dative thematic adjunct is generated inside the VP. These datives are expected to be grammatical in an immediate postverbal position (109a), but they can also end up in, among others, a preverbal topic position (109b).

- (109) a. Fontos nek-em, hogy itt marad-j. important DAT-1SG that here stay-SBJ 'It is important for me that you stay here.'
 - b. Nek-em fontos, hogy itt marad-j.

 DAT-1SG important that here stay-SBJ
 'For me it is important that you stay here.'

Event-external dative adjuncts, on the other hand, are barely acceptable or completely non-acceptable inside the VP, in compliance with the observations of É. Kiss (1986, 1987) and Tóth (2000a). But they are fully grammatical outside the predicate (PredP), in a topic or a contrastive topic position (110b).

- (110) a. **Putaság nek-em, hogy el-mész. stupidity DAT-1SG that away-go.2SG lit. 'It is a stupidity to me that you are leaving.'
 - b. *Nek-em butaság*, *hogy el-mész*.

 DAT-1SG stupidity that away-go.2SG

 'To me, it is a stupidity that you are leaving.'

The drive to appear on the left edge of the clause is obvious in the case of event-external dative adjuncts, which clearly distinguishes them from dative thematic adjuncts.

4.4.3.4. Differences in anaphor licensing

Since non-logophoric anaphors are confined to the thematic domain, they are not expected to be licensed as event-external dative adjuncts. This is indeed the case, as the following minimal pair shows.

- (111) a. Egymás-nak fontos-ak vagyunk. each.other-DAT important-PL be.1PL 'To each other, we are important.'
 - b. **Egymás-nak szép-ek vagyunk. each.other-DAT beautiful-PL be.1PL lit. 'To each other, we are beautiful.'

The difference in grammaticality is clear, and is not confined to dialects but is part of the standard. Thus while arguments and thematic adjuncts only dialectally differ in their binding theoretic status (cf. 102), the contrast between the behavior of event-external adjuncts and members of the thematic domain is strong for every speaker.

4.4.3.5. Article loss in the non-thematic domain

It is an old observation that definite noun phrases with a high degree of referentiality tend not to require the presence of a definite article cross-linguistically (cf. Hawkins 1978). If a definite article is grammatical, as in the case of proper names in the Budapest dialect of Hungarian, it is confined to appear in the thematic domain. Outside this domain, for example, in a vocative position, the article is ungrammatical even in the Budapest dialect, as noted in Szabolcsi (1992:131).

- (112) a. *(A) Péter itt marad. the Peter here- stay lit. 'The Peter stays here.'
 - b. (*A) Péter, marad-j itt. the Peter stay-SBJ.2SG here lit. 'The Peter, stay here.'

The same contrast reappears in this dialect in a somewhat weaker form between event-internal and event-external datives.

- (113) a. (A) János-nak kellemetlen ez a helyzet. the John-DAT unpleasant this the situation lit. 'To the John, this situation is unpleasant.'
 - b. (??A) János-nak szép ez a kép. the John-DAT beautiful this the picture *lit*. 'To the John, this picture is beautiful.'

The adjunct dative in (113b) is licensed outside the thematic domain, but it is still within left edge of the clause (as opposed to vocatives, which are outside the structure of the clause). This triggers a non-definitive, but still quite strong difference in article use.

A closely related phenomenon is article use with the postposition *számára* 'for', which I have shown to be in competition with dative case as an adjunct-marker. Recall that *számára* is formally a possessive construction, and can still be used as such. In this case, it obligatorily takes a definite article if the possessor is *pro*dropped.

(114) Rá-néz-t-em *(a) szám-á-ra. onto-look-PAST-1SG the number-POSS-SBL 'I looked at his number.'

As a reflex of this origin, it is still possible to have the definite article even in the postpositional use of *számára*, if it marks thematic adjuncts. The article is completely optional, neither its presence nor its absence is required (or banned).

(115) (A) számomra kellemetlen ez a helyzet. the for 1sG unpleasant this the situation 'For me, this situation is unpleasant.'

If, nevertheless, the postposition marks an event-external, non-thematic adjunct, then the use of the article becomes very marked.

(116) (??A) számomra szép ez a kép. the for.1sG nice this the picture 'For me, this picture is nice.'

The contrast between (115) and (116) repeats the contrast between (113a) and (113b). If the definite article is optional in a particular phrasal category, then its presence becomes marked or ungrammatical once this phrase does not get a thematic role from the predicate.

4.4.3.6. Personally-modification

One of the arguments for his *psych*-movement analysis comes for Postal from the distribution of the adverb *personally* (Postal 1971:42). He argues that *personally* can modify only the logical subject, which he uniformly identifies with the experiencer in the paradigm he presents and which I repeat here.

- (117) a. I personally am annoyed with Jack.
 - b. *Jack is annoyed with me personally.
 - c. Jack is annoying to me personally.
 - d. *I personally am annoying to Jack.

Rogers (1972:303) raises some concerns about Postal's judgments, and he also points out that *personally* can construe with expressions that are presumably not subjects at any level of representation. These are his examples.

- (118) a. John hates me personally.
 - b. I personally hate John.

It thus does not hold that *personally* only combines with experiencers.

Nevertheless, the licensing conditions of *personally* do seem to include the requirement that it combine with thematic expressions, and not with adjuncts. This is definitely true of its Hungarian equivalent *személyesen*. Consider the following pair.

(119) a. Nek-em (személyesen) kellemes volt ez a helyzet.

DAT-1SG personally pleasant was this the situation 'To me (personally), this situation was pleasant.'

b. Nek-em ("személyesen) vicces volt ez a helyzet. DAT-1SG personally funny was this the situation 'To me (??personally), this situation was funny.'

The dative in (119b) is an event-external adjunct by the tests listed above, and it contrasts with the event-internal thematic dative in (119a) in only marginally being compatible with személyesen 'personally'. It seems to me that this sort of modification is only felicitous if the expression it combines with is a participant that is affected in the event expressed by the predicate. Such a participant has to be a thematic dependant of the predicate.

4.4.3.7. Rounding up: thematic dative adjuncts are affected

I have presented evidence that dative experiencers can be of three distinct types: they can be arguments, thematic adjuncts, and non-thematic, event-external adjuncts. The particular problem that I have started this section (4.4.3.) with was the question of how to distinguish between the latter two types: what makes the predicate kellemetlen 'unpleasant' capable of licensing a thematic adjunct, whereas the predicate vicces 'funny' can only co-occur with a high-level dative adjunct, which needs no thematic licensing?

First, it must not be forgotten that both datives belong to the same semantic superset: they may encode (optionally) experiencer participants, who respectively have dispositions towards the event or towards the propositional core of the sentence. That event-external datives too have this meaning component is clear if we compare them with according to-type modifiers. These latter do not express evaluation, but simple introduce an individual anchor for the model in which the relevant proposition is interpreted. For some reason, the English according to tends not to be felicitous with first or second person complements, but the same constraint does not hold of its Hungarian counterpart, the inflecting postposition szerint. Now imagine a context in which the speaker is aware that the person who he is talking about is ugly. Such a context is introduced in (120) in the bold supertext. (120a) with the according to-type adjunct cannot be accommodated in such discourse as the sentence plainly contradicts the supertext. But no incompatibility arises in the case of (120b): one can perfectly well know that someone is ugly but have favorable dispositions towards the appearance of the selfsame person at the same time.

(120) I know that you are ugly, but ...

- a. #Szerintem a legszebb. vagy according.to.1sG you be.2sG the most.beautiful lit. 'According to me, you are the most beautiful.'
- b. $\sqrt{Nek-em}$ te vagy a legszebb. DAT-1SG you be.2SG the most.beautiful 'To me, you are the most beautiful.'

In (120a), the adjunct projects a model in which *the knowledge state* of its referent is interpreted. In (120b) the dative adjunct projects a model in which *the emotional state and the dispositions* of its referent are interpreted. It is common then both to dative thematic adjuncts and to dative non-thematic adjuncts (such as 120b) that they can refer to mentally involved participants. In the former case, this participant is internal to the event. In the latter case, the participant denoted by the non-thematic dative adjunct is external to the event.

The crucial semantic property that the two types of adjuncts do not share is, I argue, that only dative thematic adjuncts may denote affected participants. We have seen that thematic datives can have a range of different interpretations, and one dimension along which their semantics varies is affectedness. Consider the following pairs from this perspective, in which the (a) examples involve dative thematic adjuncts, but the (b) examples have event-external, non-thematic datives by the tests discussed above.

- (121) a. Nek-em nem elég a víz.

 DAT-1SG not enough the water 'To me, the water is enough.'
 - b. Nek-em nem kék a víz.

 DAT-1SG not blue the water 'To me, the water is blue.'
- (122) a. *Nek-em kinos ez a helyzet.*DAT-1SG embarrassing this the situation 'To me, this situation is embarrassing.'
 - b. Nek-em vicces ez a helyzet.

 DAT-2SG funny this the situation 'To me, this situation is funny.'

An *embarrassing situation* affects the dative referent in a way that a *funny situation* does not. Only the former triggers necessarily some mental reaction beyond the mere experience of observation. Or take the first pair: if there is not enough water around, that may have a radical affect on the dative referent's physical constitution. But a non-environmentalist observer can stay totally unaffected mentally just by finding out that the water is not exactly blue at the beach.

Turning this observation around, those predicates will take event-internal thematic datives which denote events in which the dative participant is potentially affected. Affectedness is a proto-patient property for Dowty (1991), but irrespective of whether this feature is directly built into thematic theory or not (this latter is the case in the Theta System), if it stems from the semantics of the predicate, it can only be associated with an expression that is also semantically related to the predicate. This premise is utilized both by Schütze (1995) and Marelj (2005) to argue that instrument phrases are more than simple adjuncts. In an event in which a hammer is used to hit a nail into the wall, the hammer itself is affected at least in being obligatorily moved. This is something that instruments and regular arguments have

in common, as these authors also argue, and this property is captured in the current proposal by assigning a thematic specification to both. The fact that certain dative participants are optionally affected is another indication that it is legitimate to consider them thematically specified objects of grammar.

4.5. The thematic structure of dative experiencer predicates 4.5.1. *Dative arguments*

The Theta Theoretic treatment of dative experiencer arguments has already been discussed in 2.2.4., I only recapitulate here to conclude the previous discussion on Hungarian. A standard *piacere*-predicate has the entry in (123).

(123)
$$tetszik$$
 'appeals to' $< [-c-m]_2 [-c]_2 >$

This thematic specification has found support in the following respects.

First, I have argued extensively that the dative of the relevant set of predicates is an argument. Second, the dative argument has been shown to have necessarily experiencer semantics. This result has been already anticipated in 2.2.4. I repeat (104) from Chapter 2 as (124).

(124) a.
$$tetszik$$
 'appeals to' $< [-c-m] [-c+m] >$
b. $tetszik$ 'appeals to' $< [-c-m] [-c-m] >$

The Principle of Full Interpretation requires the unary cluster [-c] to be extended for the purposes of interpretation. The second of the resulting thematic structures is ungrammatical even by the reinterpreted uniqueness condition (49): two thematically identical arguments cannot co-occur at any level of representation. It follows from the ungrammaticality of (124b) that these dative arguments have to be interpreted as experiencers.

This thematic structure also predestines these predicates to have an unaccusative derivation, since both arguments receive a mapping index 2 (123). A typical two-place unaccusative is atelic, and since many unaccusativity tests are sensitive to telicity (the tests applicable to Hungarian certainly are), two-place unaccusatives often fail both unergativity and unaccusativity tests. But not all are atelic, and some atelic ones have telic alternates in Hungarian. These pass unaccusativity tests, and provide positive syntactic evidence for the validity of the thematic structure in (123).

Notice first of all that the two *piacere*-predicates that can take resultative secondary predicates - *sikerül* and *sikeredik*, both meaning 'succeeds' - have been claimed to have dative arguments, and hence to have the unaccusative structure (123). I repeat example (8) from Chapter 3 as (125).

(125) [sc Kicsi-t sós-ra] sikerül-t nek-em a leves. little-ACC salty-SBL succeed-PAST DAT-1SG the soup 'I made the soup a bit salty.' [lit. 'The soup succeeded a bit salty to me.']

The resultative predicate is licensed by the unaccusative [-c-m] subject (cf. 2.2.2.2). Theme unergatives cannot license resultative predicates.

(126) *A csillag fényes-re ragyog-ott. the star shiny-SBL twinkle-PAST '*The star twinkled shiny.'

It is not by accident that the only two dative predicates that license resultatives are among the predicates that have *dative arguments*.

Another test that has been used to diagnose unaccusativity is past participle formation (cf. 3.3.4.3, as well as Alberti 1997 and Laczkó 2000).²⁴ An intransitive predicate is only a well-formed input to this participle formation in the standard if it is telic and if it has a non-agentive subject.

- (127) a. a fá-ról le-esett gyerek the tree-DEL down-fall-PART child 'the child that fell off the tree'
 - b. *a fá-ról esett gyerek the tree-DEL fall-PART child 'the child that was falling off the tree'
- (128) *a fel-kiált-ott gyerek the up-shout-PART child 'the child that cried out'

(127a) and (127b) minimally contrast in the latter not having a telicizing verbal particle, for which reason it does not qualify as a proper input to participle formation. The input predicate in (128) is telic, but it is agentive and hence the result is again ungrammatical. A further condition is that the intransitive predicate has to be unaccusative, hence theme unergatives are also ungrammatical, or barely acceptable at most.

(129) **/?? az ég-en fel-ragyog-ott csillag the sky-SUP up-twinkle-PART star 'the star that twinkled up in the sky'

²⁴ As Laczkó (2000) points out, the traditional term *past participle* is somewhat of a misnomer, since the participle has no tense, and in fact it need not even be perfective in the case of transitive inputs, just like in the English *the car driven by John*. I use this term nevertheless as it has been established in English descriptive grammars for the corresponding English participle.

The base predicate is telic in (129) - it has a telicizing particle -, and it has a theme subject; but since it is unergative, no participle can be formed.

The two predicates discussed above - *sikerül* and *sikeredik*, 'succeeds' -, are lexically telic. Verbs of mental appearance (3.2.2) are also listed in the lexicon together with telicizing particles, therefore they are also lexically specified as telic.²⁵ They are well-formed input to past participles formation, which shows that they are unaccusatives.

- (130) a. *a nek-em nem sikerül-t vizsga* the DAT-1SG not succeed-PART exam *lit.* 'the to me not succeeded exam'
 - b. a nek-em csak egy perc után le-es-ett válasz the DAT-1SG only a minute after down-fall-PART answer 'the answer that I only understood after a minute' [lit. 'the to me only after a minute down-fallen answer']

It is also possible to telicize stative experiencer predicates in Hungarian by adding the particle *meg* to them, by which a change of state verb is created. This can happen, for example, to *tetszik* 'appeals to'.

(131) A templom meg-tetsz-ett nek-em. the church PTCL-appeal-PAST DAT-1SG 'I got to like the church much.'

This alternate has the same thematic structure as its base verb, and since it is telic, it is expected to be a well-formed input to past participle formation. It indeed is, as the following example from my newspaper corpus shows.

(132) Andrej ... Antibes-ba szállít-tat-ta
Andrej Antibes-ILL transfer-CAUS-PAST.3SG

[a neki korábban nagyon meg-tetsz-ett templom-ocská-t]. the DAT.3SG earlier greatly PTCL-appeal-PART church-DIM-ACC

'Andrej had the small church [that earlier on he got fond of so much] transferred to Antibes.'

[lit. 'Andrej had [the to him earlier greatly appealed church] to Antibes]

It thus turns out that telic dative experiencer predicates systematically pass unaccusativity tests. Given the lexical entry in (123), this is the result that we expect.

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²⁵ With the exception of *be-jön* 'in-comes', which means 'like'; and *nem fekszik*, which means 'does not like'.

4.5.2. Dative thematic adjuncts

The larger group of dative experience predicates, which includes verbs and adjectives alike, have been shown to license an optional thematic adjunct. Furthermore, I have argued that these datives may denote participants that are affected in the relevant eventuality. Affectedness is not coded directly in the Theta System, but being thematically specified as /-c qualifies these dative participants as potentially affected, since an affected participant is a non-cause. In the Theta System, it is the *affecting* participant that can directly be coded as a cause. The referent of the dative thematic adjunct is only optionally affected. Consequently, I argue that the subject of the predicates that license these dative thematic adjuncts is coded as [-m], or as a *potential cause* underspecified for the *c*-feature.

A resulting representative entry is given in (133).

(133)
$$kellemetlen$$
 'unpleasant' $< [-m] > ([-c])$

The [-m] feature cluster, which elsewhere encodes participants of the semantic type *subject matter* or *source*, has so far been claimed to be marked by inherent case (adposition). But these specific semantic instantiations of this cluster always co-occur with other arguments on the same argument list, and these outcompete it for nominative- or accusative case. ²⁶ In (133), [-m] is the only argument, hence the only strong candidate for subjecthood. It thus needs no inherent case specification, as nominative is available.

I have argued that thematic adjuncts are always licensed by designated arguments (4.2.3.5). I assume the following convention for the licensing of these dative adjuncts.

(134) Dative thematic adjunct licensing

A [-m] argument interpreted as potential cause (subject matter) co-occurs with a [-c] argument.

If there is no such argument present, a [-c] thematic adjunct can be introduced.

The underlying assumption is that a [-m] argument on its potential cause interpretation may denote a participant at one end of a causality chain, the other end of which, the affected participant, must also be available. In *worry*-type object

Importantly, the [-m] subject of *kellemetlen* 'unpleasant' is base-generated. This results in an unergative derivation, as I argue below.

²⁶ One important exception to this is the unaccusative derivation of *worry*-type predicates, in which case the experiencer may stay in situ and the subject matter argument moves to subject position. I repeat (71) from Chapter 2.

⁽i) $[[_{IP} his health_{[-m]}]][_{VP} worried_{acc}[[_{V} every patient_{[-c+m]}]][_{V} t_{worried} t_{his health}]]]]$

experiencer predicates, which come with the thematic structure < [+c] [-c+m] [-m] >, the experiencer argument [-c+m] is always available for this purpose. Dative experiencer predicates in the group under consideration come with just one argument, the [-m] subject. Hence a [-c] thematic adjunct can be introduced, to encode the missing end of the potentially available causality chain.

We have seen that participants coded by dative thematic adjuncts are not only potentially affected, but they also need not be experiencers or animate beings. This wide range of interpretations is compatible with the thematic structure in (133). As a result of the application of the Principle of Full Interpretation, maximally four possible extensions of the same lexical entry are allowed in this case.

```
(135) kellemetlen 'unpleasant' < [-m] > ( [-c] )

a. < [+c-m] > ( [-c-m] )

b. < [+c-m] > ( [-c+m] )

c. < [-c-m] > ( [-c-m] )

d. < [-c-m] > ( [-c+m] )
```

All these interpretations correspond to actual semantic structures that we have seen, since the dative participant can be either affected or non-affected on both the experiencer and the non-experiencer readings.

Notice that (135c) is licensed by the reinterpreted uniqueness condition (49): two identical clusters are licensed at any level of representation as long as they are not in the same thematic domain. (49) is satisfied in this case, since one instantiation of the [-c-m] cluster is an argument, and the other one is a thematic adjunct. Furthermore, the way this thematic structure is set up is not an accidental fact of lexicalization, but can in fact be viewed as a direct consequence of the operations of the constraints that govern the thematic field. If both thematic entities were to be on the argument list, the resulting hypothetical entry would be ungrammatical.

(136)
$$kellemetlen$$
 'unpleasant' $*<[-m][-c]>$

The reason is that (136) violates the Cluster Distinctness Constraint. There is a possible interpretation of the two clusters (corresponding to (135c), which results in identical thematic specification on the two arguments. But in this scenario, two identical clusters are represented in the same domain, which is ruled out even by the reinterpreted uniqueness condition (49). Given these considerations, the structure in (133) is the only theoretical possibility, hence its existence as such is a necessity. (133) is not simply an arbitrary construct with a descriptive purpose.

Finally, the thematic structure in (133) differs from the structure of *piacere*-predicates in another crucial respect. I repeat both structures here.

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(123) tetszik 'appeals to' < [-c-m]_2 [-c]_2 > (133) kellemetlen 'unpleasant' < [-m] > ([-c])
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Since [-m] is the only argument in (133), it does not receive a mapping index (which is only assigned if the predicate is at least dyadic). Recall from 2.1.4. that if nothing rules it out, arguments without a mapping index are mapped externally. This means that predicates that license dative thematic adjuncts are unergative, and not unaccusative. They pattern up with emission verbs, and not with *piacere*-verbs in this respect.

There is indeed no positive evidence that they should be unaccusative. Verbs in this group are all stative, and none of them can be telicized. Some do have particles, but these are not interpretable grammatically. *Megfelel* 'is suitable, corresponds', for example, is the non-compositional unit of the telicizing particle *meg* and the verb *felel* 'respond', but it behaves as an atelic verb.

(137) Ez megfelel-t nek-em egy hét-ig. this suitable-PAST DAT-1SG a week-TER 'This was suitable for me for a week.'

For this reason, none of these predicates passes the unaccusativity tests shown in the previous section, since these tests are sensitive to telicity. However, I do not think that it is a mere accident that all the telic dative predicates have dative arguments, rather than dative thematic adjuncts. There is a known, albeit not absolute, correspondence between telicity and unaccusativity on the one hand, and atelicity and unergativity on the other. Even if it is just a weak generalization over basic verbal entries, the assumption that dative predicates with dative adjuncts are unergative predicts that these predicates are more likely to be atelic than telic.

I have also shown that most predicates in this group are in fact adjectives. It is argued in, among others, Cinque (1990) and Bennis (2000) that the unergative-ergative distinction is definable over adjectives, corresponding to the unergative-unaccusative distinction between intransitive verbs. Cinque (1990:3) points out that certain adjectives such as *certain*, *likely*, or *sure* show systematic alternations in syntactic realization, which is comparable to the unaccusative alternation of verbs (2.1.5.3).

- (138) a. John is sure that he will come.
 - b. That he will come is sure.

The entry in (138b) can be therefore regarded as an ergative adjective. Adjectives like *good*, *unjust*, or *dangerous* do not show such an alternation and are argued by Cinque to be unergative. Notice that our dative adjectives are subsumed in Cinque's class of unergative adjectives. Given the structure in (133), this is a welcome result.

Dative experiencers are not quirky in Hungarian

5.1. An introduction to the quirky problem

I have started this dissertation with an overview of the history of generative research of dative experiencer predicates, and it has been noted that already the very first analyses (Lakoff 1970, Postal 1971) treated the experiencers as "underlying logical subjects". There has been no escape ever since from the notion that these datives are some sort of subjects. The strongest evidence comes from languages like Icelandic or Faroese, where dative experiencers behave as syntactic subjects in finite and non-finite clauses alike. The dative argument of the Icelandic lika 'like' in (1) patterns up with regular subjects in environments such as subject-verb inversion, raising, ECM, control, conjunction reduction, and so on (cf. Zaenen et al. 1985, Sigurðsson 1989, a.o.). I illustrate this here with two constructions. (1b) shows that the NOM-V-DAT neutral order is ungrammatical with this predicate, and in (1c) the dative is inverted with the finite verb when the nominative argument is topicalized. The dative occupies a normal subject position in the grammatical sentences (1a) and (1c).

(1) *Icelandic*, Barðdal (2001:59)

- a. Mér hefur alltaf líkað Guðmundur.
 I.DAT has always liked Guðmundur.NOM
 'I have always liked Guðmundur.'
- b. *Guðmundur hefur alltaf líkað mér. Guðmundur.NOM has always liked I.DAT

¹ For some representative literature on the syntax of dative experiencers in particular languages, see Mulder (1992) [*Dutch*]; Barðdal (1999, 2001), Platzack (1999), Sigurðsson (1989, 2002, 2004), Taraldsen (1995), Thráinsson (1979), Zaenen et al. (1985), Woolford (2003) [*Icelandic*]; Barnes (1986), Woolford (2003) [*Faroese*]; Legendre (1989) [*French*]; Anagnostopoulou (1999) [*Greek*]; Belletti & Rizzi (1988), Perlmutter (1984) [*Italian*]; Benedicto (1995), Moore & Perlmutter (2000), Schoorlemmer (1991, 1994) [*Russian*].

c. Guðmundur hefur mér alltaf líkad. Guðmundur.NOM has I.DAT always liked 'Guðmundur I have always liked.'

The striking feature that makes this dative subject non-canonical is its case.^{2, 3} This is the property that the term 'quirky subject' is primarily meant to reflect.

In other languages, such as German, Dutch, Italian, Spanish, or Rumanian, the datives of psych-predicates lack the above-mentioned strong subject properties. They are still distinguished, however, by the fact that both the DAT-V-NOM and the NOM-V-DAT orders are possible in finite clauses. The former order is often argued to be more neutral or natural than the latter.

(2) *Italian*, Belletti & Rizzi (1988:334)

- a. A Gianni è sempre piaciuta la musica. to Gianni is always please music 'Music always appeals to Gianni.'
- b. La musica è sempre piaciuta a Gianni.

The intuition that dative-first is more neutral receives support from the occasional but convincing evidence suggesting that the dative can occupy a true subject position in finite clauses, rather than a clause-initial topic or left-dislocated position. In Italian, for instance, topicalization is argued to create weak islands, over which wh-extraction is weakly deviant (Belletti & Rizzi 1988). However, preverbal dative experiencers (3b), together with regular subjects (3c), are not islands for extraction.

² Quirky subjects can also bear accusative or genitive case in Icelandic, depending on the predicate.

³ I remark here that the Icelandic *lika* is consistently translated in the works that I am citing here as 'like', rather than 'appeal to'. It is a pervasive property of this language to mark subject experiencers with dative case, and several verbs of cognition, emotion or perception have dative subjects (e.g. *bragðast*, *smakkast* 'taste', *dyljast* 'be not aware of', *greypast* 'remember', etc. See Barðdal (2001) for a list of dative-subject predicates in Icelandic). The Faroese *dáma* 'like' has a dative experiencer subject that alternates with nominative, and is accompanied by an accusative-marked target argument in both cases (see example (11) below). It seems to me that *lika* and *dáma* (especially the latter) are possibly grammatical equivalents of *like* rather than *appeal to*, but I have not been able to find relevant data in the literature (though see Barnes (1986:38-39) for a claim that the Faroese *dáma* 'like' can only very marginally be used in the sense 'appeal to' in a NOM_{target}-V-DAT_{experiencer} construction). I continue to refer to these verbs as dative predicates, but it is good to be aware that they may not have the same thematic structure as the English *appeal to*, and their dative subjects receive dative case simply because it is tendency in Icelandic and Faroese to mark different grammatical types of experiencers with inherent case.

- (3) *Italian*, Belletti & Rizzi (1988:337)
 - a. **I libri che a Gianni ho dato sono questi.
 the books that to Gianni I gave are these.
 - b. *I libri che a Gianni sono piaciuti sono questi.* the books that to Gianni are pleased are these
 - c. I libri che Gianni mi ha dato sono questi. the books that Gianni gave me are these

Similar arguments have been put forward for other languages in this group, see Mulder (1992:160-165) for Dutch, Anagnostopoulou (1999) for Greek, and Masullo (1992) for Spanish.⁴

English or French dative experiencers do not show such freedom of occurrence, and the DAT-V-NOM order is ungrammatical.

- (4) a. Music appeals to John.
 - b. *To John appeals music.
- (5) *French*, Belletti & Rizzi (1988:339)
 - a. La musique plait à Jean. the music appeal.3SG to John 'Music appeals to John.'
 - b. *A Jean plait la musique.

In these languages, datives are apparently not quirky.

My prime concern in this chapter is to prove that Hungarian dative experiencer predicates in the *tetszik* 'appeals to' and the *fontos* 'important' classes are not quirky syntactically either in the Icelandic sense or in the weaker Italian sense (contra Dalmi 2002, 2005). There is no (purely) syntactic diagnostic of subjecthood that the dative passes. I investigate data relevant to Hungarian, including distributional facts, raising, ECM, control, conjunction reduction, participle formation, and agreement. These all show the nominative argument of dative predicates to be a syntactic subject. In this respect, the Hungarian *tetszik* 'appeals to' is no different from its English counterpart *appeal to*, even if this fact might be concealed superficially by the non-configurational nature of the Hungarian clause.

On the other hand, dative experiencer predicates (whether the dative is an argument or a thematic adjunct) have peculiar thematic properties. In the standard view (as in Pesetsky 1995), experiencers outrank targets on the thematic hierarchy. I

⁴ Such data do not always converge, however. It is pointed out in Sigurðsson (2002: footnote 28, p.c. with Gisbert Fanselow) with respect to the DAT-NOM verb *gefallen* 'appeal to' in German that the order DAT-NOM is actually more degraded in the presence of the complementizer than the NOM-DAT order. This suggests that the dative is a less likely candidate for subjecthood in German.

reconsider the notion of thematic prominence from the perspective of the Theta System and argue that neither thematic dependant of predicates in the *appeal to* and *important* classes is significantly more prominent thematically than the other. Consequently, they are more or less equally successful targets of operations that are primarily conditioned by thematic structure and not by configuration in Hungarian. I discuss data that involve anaphoric dependencies, backward binding, adjunct control, and word order. I show that these phenomena cannot be given a purely configurational account in Hungarian, in harmony with the flat-VP analysis that I assume (1.3). In this analysis, experiencer datives are not required to be structurally superior to the nominative subject at any point during the derivation.

This approach presupposes a certain view on the data in (1-5). I am embracing here the notion that syntactic functions can be considered to be primitives, as in LFG (cf. 1.3) and contra the Chomskyan tradition (see Chomsky 1981:10). An exponent of the latter view is Sigurðsson (2002:719), who points out that "the interesting questions raised by these arguments [i.e. dative experiencers] is not whether they are 'true subjects' by some postulated standards but rather what they tell us about the interaction of case and other features or properties of language, in particular sentence structure and agreement". I fully agree that a comprehensive account of dative experiencers, which explains the differences between, say, Icelandic, German and English, would have to go beyond issues that simply concern the functional status of the dative constituent in clause structure. But for the moment, there is no comprehensive theory that could predict the differences between all these languages.⁵

It is also important to understand the exact nature of how languages differ in this respect. Many dative predicates allow either the nominative or the dative dependant to be realized as a subject in Icelandic, a fact which is often not commented upon (but see Barðdal 1999, 2001; Platzack 1999; and Zaenen et al. 1985). So *henta* 'please' (6) directly contrast in this with *lika* 'like' (1). Either the nominative or the dative argument can appear in the verb-second subject position.

(6) *Icelandic*, Barðdal (2001:47)

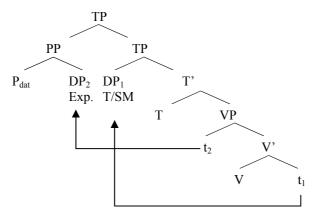
- a. Hentar petta pér? please.3sG this.NOM you.DAT 'Does this please you?'
- b. Hentar pér petta?
 please.3SG you.DAT this.NOM
 'Are you pleased with this?'

⁵ Sigurðsson (2002:721) suggests that the reason why Icelandic quirky subjects are "*so subject-like*" is plausibly that they interfere with agreement in finite clauses (see 5.2.5 on the details). German or Russian datives do not interfere with agreement, hence they will be structurally different from Icelandic datives, given Sigurðsson's Minimalist assumptions. This difference is still only stipulated and we do not know what it could be derived from.

In (6a), the nominative is the subject, which follows from the fact that it inverts with the verb. In (6b), the subject is the dative for the same reason. In general, the nominative shows the expected subject properties if it is in a subject position, but if the dative occupies that position, then the dative will show almost the same set of subject properties (except for agreement). Thus the correct typological generalization seems to be that every language has non-quirky realizations of at least certain DAT-NOM experiencer predicates, and some languages, including Hungarian, have only such realizations. Therefore, a comprehensive analysis of quirky phenomena has to include ways of accounting for not only differences between languages, but also differences between predicates in the same language.⁶ I will not venture at this task here. I concentrate on showing that Hungarian is like English or French in not having quirky datives.

I believe further that these languages represent the default case in this respect, and Icelandic cannot be regarded as some sort of an overt realization of a cross-linguistically constant underlying dative experiencer structure, contra Landau (2005), who argues that all experiencers are LF-subjects. Landau claims that all experiencers move to Spec,TP either in overt or covert syntax. He tries to reduce this movement to locative inversion, an attempt which involves the claim that all experiencers are embedded under a (possibly zero) preposition. I have made some Hungarian-specific arguments against this claim in 2.2.2.3, where I have represented the bottom part of his tree for dative experiencers (81). I include here the full derivation.

(7) *Stative psych verbs*, Landau (2005:84)



In this approach, languages only differ in whether they allow the experiencer to move already in overt syntax, or only in the covert phase. The former can happen in Icelandic, the latter is the only option in English. Landau suggests that possibly more fine-grained distinctions can be made according to where exactly experiencers

⁶ The problem is more complex than this, since we have seen that in many languages (like Italian), quirky properties seem to surface only in finite structures.

are allowed to be spelled out during the derivation. In this approach, all experiencers are 'LF-quirky'.

As stated above, I find it meaningful to view subjecthood as a primitive notion. In particular, subjecthood can be interpreted as a 'surface' syntactic phenomenon, without necessarily having recourse to covert levels of syntactic representation. In that sense, the dative DP in the Icelandic (1a) and the nominative DP in the English (4a) are syntactic subjects. What is cross-linguistically common to all dative experiencers is that they occur in a thematic structure that is non-canonical in ways to be discussed directly. This in particular explains all there is to explain about the Hungarian data. In addition, I will argue that the LF-subjecthood of Landau can in fact be reinterpreted directly as topichood in the case of Hungarian, for which there is good evidence from the language. 8 There is no direct evidence that datives occupy a pre-verbal position distinct from topic in Hungarian. In other words, nothing is needed beyond the simple clause structure discussed in 1.3 to represent the syntactic structure dative experiencer predicates project in Hungarian.9 I shall not have anything to say about other languages beyond what is needed for the purpose of describing Hungarian. Nevertheless, the behavior of dative predicates in Hungarian can be described without specific readjustments to standard syntactic assumptions in this sense, I regard Hungarian as the representative of the default universal realization of dative predicates, and I regard Icelandic as the marked case.

The substantiation of this approach is achieved in 5.2 and 5.3 via an investigation of the nominal construction, i.e. the construction in which the subject argument is a nominative noun phrase (8a). I then go on to show in 5.4 that clausal arguments of dative predicates can also be realized directly as syntactic subjects (8b-c). I repeat (21) from Chapter 1 as (8) here to illustrate.

(8) a. Nem fontos nek-i [DP ez a hely]. not important DAT-3SG this the place 'This place is not important for him.'

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⁷ Hermon (1985) makes a closely related proposal, in which experiencers can move at LF to a relatively high position. Notice that these proposals resurrect Postal's (1971) crossover analysis in the sense that all experiencers are argued to be subjects at a 'non-surface' syntactic level.

⁸ Barðdal (2001) also suggest that there possibly is a connection between subject choice and topic choice in those Icelandic cases where either the dative or the nominative can be chosen as subjects.

⁹ I am not arguing against the relevance of Landau's tree (7) for other languages. But notice that the crucial question of what makes the difference between Icelandic, German and English is totally independent of whether one adopts the tree in (7) or not. Landau (2005:81) has a corollary for this purpose (*Quirky Subject Parameter*), which simply acts as a PF-filter to subjects that do not bear the morphological features required of subjects in a given language. A dative subject is filtered out in English, but not in Icelandic. In some sense, this is no more than a simple restating of the known facts, so the problem still remains.

- b. Nem fontos nek-i [IPinf itt marad-ni]. not important DAT-3SG here stay-INF 'It is not important for him to stay here.'
- c. Nem fontos nek-i, [CPfin hogy itt marad-j-ak]. not important DAT-3SG that here stay-SBJ-1SG 'It is not important for him that I stay here.'

In the analysis that I propose, the bracketed constituents are all subjects in the flat-VP structure of Hungarian. This ties in with the claim that dative experiencer predicates are not quirky in Hungarian.

There are some modal verbs of which this description does not hold. These are functional elements which have restructuring properties and which have no thematic structure. I provide a brief overview of their basic syntax in the Appendix to this chapter.

5.2. The dative is not a subject, the nominative is

5.2.1. Some distributional considerations

In a number of languages, dative experiencers may appear as sole arguments of certain (usually non-agreeing or *impersonal*) predicates.

(9) a. *Malayalam*, Jayaseelan (2004:229)

Avan-ə vis 'akk-unnu. he-DAT hunger-PRES 'He is hungry.'

b. *Icelandic*, Sigurðsson (2004:138)

Henni for fram. she.DAT went forth 'She got better.'

Assuming that the EPP - or the Subject Condition of LFG - is an operative principle of universal grammar, it is most convenient to think that in the lack of another candidate for subjecthood, the dative argument itself is the subject.¹⁰

It is also a typologically frequent pattern for a nominative argument to be in complementary distribution with a dative. The latter, as opposed to the former, may be associated with experiencer semantics, as in the case of the adjectival predicate *veselyj* 'merry' in Russian. This predicate takes either a nominative or a dative subject, but it cannot take both a nominative and a dative argument at the same time.

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¹⁰ Unless the language has null expletive subjects.

- (10) *Russian*, Schoorlemmer (1994:131, 139)
 - a. Vasja byl vesel.
 Vasja.NOM was.M merry.M
 'Vasja was merry.'
 - b. Vasje byl veselo. Vasja.DAT was.N merry.N 'Vasja was having a good time.'

Dative-nominative alternations are also known from Icelandic and Faroese, but the difference between the two versions is stylistic, rather than semantic in nature. The nominative-subject version of the Faroese *dáma* 'like' (11b) is said to be "*frowned upon by normative grammarians*" (Barnes 1986:33).

- (11) *Faroese*, Barnes (1986:33)
 - a. Mær dámar væl hasa bókina.
 I.DAT like.3SG well that book.ACC
 'I like the book.'
 - b. Eg dámi væl hasa bókina.
 I.NOM like.1SG well that book.ACC
 'I like well that book.'

Such distributional variation makes the quirky analysis of the datives in (10b) and (11a) highly plausible in itself.

The Hungarian datives we are concerned with always co-occur with a nominative argument. In fact, I have argued that dative thematic adjuncts - such as the dative of *fontos* 'important' - are truly optional; therefore their licensing predicates may project clauses in which the sole thematic dependant that is present is the nominative DP. Thus the assumption that the nominative is uniformly the syntactic subject in all these constructions gives a general account of all uses of the dative predicates. This is not a decisive argument in itself, but it is important to be aware of the fact that the datives under investigation always occur in contexts in which there is also a nominative DP present, which can potentially outcompete the dative for subjecthood.

5.2.2. Control, raising and ECM

One of the most compelling arguments for the existence of quirky subjects in Icelandic has always been the fact that the Icelandic quirks can be targeted in control, raising, and ECM constructions alike (cf. Zaenen et al. 1985, Sigurðsson 1989). Consider the Icelandic DAT-NOM verb *leiðist* 'bores'.

(12) *Icelandic*, Sigurðsson (2004:142-3)

a. *Henni leiðist bókin sín.* she.DAT bore.PRES.3SG book.the.NOM self's 'She finds her (own) book boring.'

b. Control

 $H\acute{u}n_i$ vonast til [að PRO $_i$ leiðast ekki bókin]. she.NOM hope.PRES.3SG for to bore not book.the.NOM 'She hopes not to find the book boring.'

c. Raising

Henni virðist [hafa leiðst bókin]. she.DAT seem.PRES.3SG have bored book.the.NOM 'She seems to have found the book boring.'

d. Exceptional case marking

Ég mundi telja [henni hafa leiðst bókin]. I.NOM would believe she.DAT have bored book.the.NOM 'I would believe her to have found the book boring.'

The claim that these datives are syntactic subjects explains (12b-d) in itself, and nothing further needs to be said.

If Hungarian dative predicates are to be analyzed on a par with Icelandic quirky predicates, as Dalmi (2002, 2005) argues, then they are expected to pattern up with the Icelandic constructions in (12). This prediction, however, is not borne out. If dative predicates occur in these embedded contexts, it is their nominative argument that is targeted and the dative is retained in the subordinate clause, quite unlike in Icelandic.

(13) a. Subject control

 $\acute{E}n_{i}$ probál-ok [PRO_i tetsze-ni nek-ed]. I.NOM try-1SG appeal-INF DAT-2SG 'I try to appeal to you / I try to have you like me.'

b. Subject raising

Semmi sem látsz-ott [sikerül-ni nek-ik]. nothing.NOM not seem-PAST.3SG succeed-INF DAT-3PL lit. 'Nothing seemed to succeed to them.'

c. ECM

[?]Még sosem lát-t-am [ez-t sikerül-ni nek-i]. 11

yet never see-PAST-1SG this-ACC succeed-INF DAT-3SG

'I have never seen this succeed to him.'

It is impossible to target the subordinate dative in any of these Hungarian constructions. I illustrate with control data. Compare (14) with (13a).

(14) *Én_i próbál-ok [PRO_i tetsze-ni te].

I.NOM try-1SG appeal-INF you.NOM int. 'I try to like you / I try to have you appeal to me.'

These facts in their turn are naturally explained if the nominative argument is considered to be the syntactic subject. The data in (13) pose considerable problems for any analysis that relativizes the notion of subjecthood to the extent that the nominative argument of these Hungarian dative predicates is not covered by it.

5.2.3. Conjunction reduction

In Icelandic, the subject of a coordinated clause can be deleted under identity with the subject of the preceding conjunct clause (Zaenen et al. 1985:453). Quirky subjects, like regular nominative subjects, can be omitted in such a syntactic context. I take it to be an instance of ellipsis.

(15) *Icelandic*, Sigurðsson (2004:142)

Hún var syfjuð og (henni) leiddist bókin. she.NOM was sleepy and (she.DAT) bored book.the.NOM 'She was sleepy and found the book boring.'

Hungarian does not have the exact structural equivalent of this construction. Nominative subjects can be *pro*-dropped in finite clauses in this language. If the nominative in the second conjunct clause is *pro*-dropped in a context reminiscent to the Icelandic (15), then *pro* is interpreted as coreferential with the subject in the first conjunct.

(i) *Még sosem lát-t-am [nek-i sikerül-ni ez]. yet never see-PAST-1SG DAT-3SG succeed-INF this.NOM lit. 'I have never seen to him succeed this.'

¹¹ This sentence is slightly marginal, but this is due to the ill-understood semantic constraints on *lát* 'see' on its ECM use. What is relevant is that the dative clearly cannot be targeted, and (i) is just plain ungrammatical.

(16) Péter_i szerelmes volt, és pro_i tetsz-ett Anná-nak.
Peter_i NOM in.love was and pro appeal-PAST.3SG Anna-DAT 'Peter_i was in love and he_i appealed to Anna.'

There is nothing special in this fact. If, however, the dative were a syntactic subject, then we would expect it to be omissible under the same conditions as the Icelandic quirky subject in (15). To the extent that such a structure is acceptable in Hungarian, it does not have the expected reading.

- (17) Péter szerelmes volt, és tetsz-ett Anna.
 Peter in.love was and appeal-3SG Anna.NOM
 - (i) 'Peter was in love and Anna appealed to me'.
 - (ii) *'Peter, was in love and Anna appealed to him,.'

The missing dative can only be interpreted as a definite implicit argument, referentially identified with the speaker by default (see 4.4.2.2). Speakers refuse the reading in which the implicit dative argument is identified with *Peter*. This is not expected in the quirky analysis of the Hungarian data, but it fits in with the claim that dative experiencers are not syntactic subjects in Hungarian.

5.2.4. Participle formation

Schoorlemmer (1994) calls attention to the fact that dative experiencer predicates in Russian can serve as input active participle formation, preserving the dative experiencer as part of the participial clause. The participle can function as a modifier of a noun which corresponds to the subject argument of the input predicate.

- (18) *Russian*, Schoorlemmer (1994:160, 164)
 - a. *Mne ne nravitsja tvoja kniga*.

 I.DAT not appeal.3SG your book.NOM 'I don't like your book.'
 - b. *Tam ležit ponravivšajasja mne kniga* there lies appeal.PART.NOM.F.SG I.DAT book.NOM.F.SG 'There lies the book which appeals to me.'

As this participle formation process suppresses the subject of the input predicate, the fact that the dative is retained within the participial clause shows that it cannot be a subject.

Much the same argument can be adapted to Hungarian. \acute{O} -participles can be formed of any verb that has a (nominative) subject, so transitive, unergative, and unaccusative predicates are equally acceptable inputs.

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- (19) a. *a level-et ir-ó vendég-ek* the letter-ACC write-PART guest-PL.NOM 'the guests writing a letter'
 - b. a most énekl-ő vendég-ek the now sing-PART guest-PL.NOM 'the guests singing now'
 - c. a most érkez-ő vendég-ek the now arrive-PART guest-PL.NOM 'the guests arriving now'

Dative experiencer predicates retain their dative phrase in this participle formation process, just like in the Russian case above:

(20) Ott van a nek-em tetsz-ő könyv. there is the I.DAT appeal-PART book.NOM 'There lies the book which appeals to me.'

One could perhaps develop a case-based account of this, instead of assuming, as I do, that the dative is not a subject in these constructions. On that account, the participle formation process involves the suppression of a nominative argument, irrespective of its syntactic function. That account is compatible with the quirky analysis, in which the nominative argument is an object. Given, however, that I have already presented arguments against the tenability of the quirky analysis, the simplest way to analyze \acute{O} -participle formation in Hungarian is to assume that it uniformly demotes the subjects of the input verbs.

5.2.5. Agreement

There is another quirky property of Icelandic dative subjects besides their case: they do not show overt agreement with the verb, but they block agreement between the nominative object and the verb in all but third person.¹² Consider the following plural paradigm.

- (21) *Icelandic*, Sigurðsson (2004:148)
 - a. *Honum mundu alltaf lika Peir.* he.DAT would.3PL always like they.NOM 'He would always like them.'
 - b. *Honum munduð alltaf líka Þið. he.DAT would.2PL always like you.NOM.PL 'He would always like you.'

¹² In addition, many speakers prefer the nominative object to be [-human] (Maling & Jónsson 1995). Taraldsen (1995) is one of the firsts to discuss the agreement pattern in (21).

Chapter 5

c. *Honum mundum alltaf líka Þið.
 he.DAT would.1PL always like we.NOM.PL
 'He would always like us.'

Sigurðsson (2002, 2004) interprets these data as follows. First, third person is not "true person" hence there is only number agreement in (21a). Second, the dative subject is in a default "null agreement" correlation with the person feature of the finite verb complex, hence the nominative object can only check the number feature. In other words, agreement is split between the dative (person) and the nominative (number).¹³

In contrast, Hungarian dative experiencers do not tamper with subject agreement. As expected, the nominative shows full agreement with the verb. 14

(22)	Én	tetsz-ek	János-nak.	I.NOM	appeal-1sG	John-DAT
	Те	tetsz-el	János-nak.	you.NOM	appeal-2sG	John-DAT
	Ő	tetsz-ik	János-nak.	he.NOM	appeal-3sG	John-DAT
	Mi	tetsz-ünk	János-nak.	we.NOM	appeal-1PL	John-DAT
	Ti	tetsz-etek	János-nak.	you.NOM	appeal-2PL	John-DAT
	Ők	tetsz-enek	János-nak.	they.NOM	appeal-3PL	John-DAT

Adjectival and nominal predicates need the support of the copula in every slot of the paradigm, expect for third person singular, present tense, indicative. The subject shows full agreement with the copula. If the subject is plural, then the predicative adjective or noun is also marked for plural.

(23) Ti fontos-ak vagytok nek-em. you.PL.NOM important-PL be.2PL DAT-1SG 'You are important to me.'

The dative, as expected, has no effect on this kind of predicative agreement either. This gives further support to the claim that the nominative is a syntactic subject in Hungarian.

¹³ See Anagnostopulou (2003) for a different account of this phenomenon.

¹⁴ It is important to be aware that this claim holds of all dative experiencer predicates. Some have a lexical semantic content that predestines them to have a predominantly third person subject, but there is no grammatical constraint which forces them to be *impersonal*, to use the traditional term. In an appropriate context, each item under discussion can take a first or second person subject, as it happens in the following example.

⁽i) Én véletlenül sikerül-t-em, mert nem akar-t-ak gyerek-et.

I.NOM accidentally succeed-PAST-1SG because not want-PAST-3PL child-ACC
'I was conceived only accidentally, as they did not want a child.'

[lit. I succeeded accidentally, as they did not want a child.]

5.2.6. Interim summary

I have shown above that Hungarian dative experiencers cannot be treated on a par with Icelandic quirky datives, unless one is ready to accept an array of otherwise unmotivated auxiliary assumptions. But any viable approach has to account for the differences between the two languages. This I am not going to achieve here. What I am proposing is that the Hungarian data are fully covered if the nominative is taken to be a syntactic subject. Consequently, dative experiencers are not quirky in Hungarian.

A substantial group of languages - including Italian, Dutch, or Greek - pattern up with Hungarian and not with Icelandic in these tests. Still, as I have pointed out in 5.1, dative experiencers have certain special syntactic properties in these languages. The preverbal position they occupy can be shown to be a true subject, and not a topic position. That gives support to Landau-type structures (7), in which a distinct preverbal position is available for these datives. In the next section, I intend to show that such a configurational account is not necessary in Hungarian to explain the peculiar properties of dative experiencers. It is enough to refer to their thematic structure alone.

5.3. Thematic indeterminacy and its consequences

5.3.1. Preliminaries

5.3.1.1. Dative predicate classes: an overview

It is useful at this point to remind ourselves that the experiencer reading is in fact only one of the possible interpretations of many dative expressions. The thematic profile of the two major dative predicate classes that I have discussed (24a-b) is familiar by now (see Chapter 4).

```
(24) a. tetszik 'appeals to' < [-c-m]_2 [-c]_2 >
b. fontos 'important' < [-m] > ( [-c] )
c. k\"{o}lcs\"{o}nad 'lends' < [+c+m]_1 [-c-m]_2 [-c]_2 >
d. segit 'helps' < [+c]_1 [-c]_2 >
e. k\"{o}sz\"{o}n 'greets' < [+c+m]_1 [-c]_2 >
```

Piacere-predicates and important-type predicates share the property of having a [-]-subject, i.e. a subject argument that bears an "all-minus" theta cluster. I will occasionally refer to these predicates as [-]-subject dative predicates. These will be contrasted with [+]-subject dative predicates, such as the ones in (24c-e). Kölcsönad 'lends' and köszön 'greets' have an agent subject ([+c+m]). Segít 'helps' can also take inanimate subjects, just like its English counterpart, therefore it has a cause subject ([+c]).

I have shown that as a consequence of the particular thematic structure that it occurs in, the [-c] dative in (24a) must be interpreted as an experiencer ([-c+m]).

The dative of three-place [+]-subject dative predicates (24c) is most commonly interpreted as an experiencer, or at least it requires animacy of the argument. The rest of the predicates (24b,d,e) naturally allow a non-experiencer [-c-m] interpretation of the dative. This is so because there is no [-c-m] role present in the thematic domain of the [-c] dative, so its non-experiencer extension ([-c-m]) is not blocked by uniqueness.

There are two natural groupings of these predicates that are relevant here. First, the dative is a thematic adjunct in (24b), and it is a regular argument in the rest. Second, the dative co-occurs with an external [+] argument in (24c,d,e), but no such argument is present in the thematic structures (24a,b). The dative of the *appeal to*-class and the *important*-class co-occurs with a [-] argument. I want to argue here that it is this fact that is responsible for whatever 'quirkiness' there appears to be with the dative dependant of *tetszik* 'appeals to' and *fontos* 'important' in Hungarian. In particular, neither of the two theta clusters in (24a) and (24b) is sufficiently more prominent than the other, and the binding data discussed directly will be shown to be conditioned primarily by thematic structure. It is of less importance that the dative of the former is a necessarily experiencer argument but the dative of the latter is a possibly experiencer thematic adjunct, though these factors will have some influence on the phenomena to be considered.

This view goes against the standard assumption that experiencers outrank target arguments in thematic hierarchies. However, this assumption does not translate directly into the framework of the Theta System. I have shown in Chapter 2 that experiencer participants can in fact be coded by three different clusters ([+m] for *like*, [-c+m] for *worry*, and [-c] for *appeal to*), and each cluster has its own unique realization with non-identical syntactic properties. Besides, it is also not immediately obvious how thematic hierarchies can be interpreted in the Theta System, where thematic role labels do not have a formal status. Therefore I briefly discuss how thematic prominence relations can be approached in the Theta System before investigating the behavior of dative predicates in different binding constructions.

5.3.1.2. Thematic prominence and the Theta System

Different sorts of thematic hierarchies have been proposed over the years. These are often incompatible (and sometimes incommensurable) with each other, as in the case of the following three.

```
    (25) a. Bresnan & Kanerva (1989:23)
    ag > ben > recip/exp > inst > th/pt > loc
    b. É. Kiss (2002:38)
    agent/experiencer > theme > goal > instrumental > locative
```

c. Jackendoff & Culicover (2005:185)

actor/agent > patient/undergoer/beneficiary > non-patient theme > other

Incommensurability may arise from the fact that the inventory of role labels is not the same, or the same label may not be thought to refer to the same semantic type of argument. It can also happen that different sorts of empirical data motivate the setting up of the respective hierarchies. It is still intriguing why, for example, instruments and themes are in reverse order in (25a) and (25b), or why agents and experiencers are in the same place of the hierarchy in (25b), and patients and beneficiaries are non-distinct in prominence in (25c). Since these labels are interpreted roughly the same way by these authors, the hierarchies are partially incompatible. This is one of the reasons why the traditional notion of thematic roles has come to be criticized.

The Theta System does not recognize role labels formally, therefore hierarchies of the kind shown in (25) cannot have a formal recognition qua elements of thematic theory. It is nonetheless possible to entertain the idea that different sorts of partial orderings can be defined over the clusters, which can be relevant in different domains of grammar. One such ordering is inherent in the mapping generalizations (2.1.4). Recall that in an argument structure that is at least dyadic, a [+] cluster always gets the merging index I, [-] clusters are marked with index 2 for internal merge, and mixed clusters do not receive an index. Assuming that inherently external arguments are higher ranking than candidates for internal realization, we get the following partial order.

(26) The mapping hierarchy $[+c+m], [+c], [+m] \succ [-c+m], [+c-m] \succ [-c-m], [-c], [-m]$

This captures, among other things, the fact that any given cluster can only merge externally if there is no other cluster in the derivation which ranks higher by (26). Suppose, for example, that the hypothetical thematic structure < [+c-m] [-m] > is to be mapped onto syntax. By the mapping generalizations, [-m] gets an index 2, and [+c-m] is realized in an external position for a lack of another candidate. [+c-m] ranks higher than [-m] by (26), and since there is no other argument present, it is true that the highest ranking argument is the one which is realized externally. The single argument of a monadic structure is an external argument, regardless of the content of the cluster. Even a [-c-m] will be realized externally in such case, which has indeed been argued to be the true of theme unergatives like *glow*. This is again captured in (26), since nothing outranks the single argument of a monadic structure.

We can in principle set up two other partial hierarchies on the basis of the inherent feature content of the clusters, assuming that the value '+' ranks highest, the value '-' lowest, and underspecification ranks in between.

(27) The cause hierarchy

$$[+c+m], [+c-m] [+c] > [+m], [-m] > [-c-m], [-c+m], [-c]$$

(28) The mental state hierarchy

$$[+c+m], [-c+m] [+m] \succ [+c], [-c] \succ [+c-m], [-c-m], [-m]$$

The 'cause hierarchy' can be viewed as a direct reflex of the causality chain, and has a relevance in, among others, the determination of the aspectual properties of the predicate (cf. Grimshaw 1990 and subsequent work). I hypothesize that the 'mental state hierarchy' can have a relevance in conditioning certain binding relations (especially logophor licensing) or topic selection, among others. The two hierarchies (27) and (28) are defined over the clusters as they are coded in the lexicon, or as they enter syntax. If, however, these features are to be consulted at a post-syntactic level, where the clusters are fully expanded for interpretation, they can in principle be reduced to the simplified hierarchies (29) and (30).

(29) The cause hierarchy 2: after full interpretation

$$[+c+m], [+c-m] \succ [-c-m], [-c+m]$$

(30) The mental state hierarchy 2: after full interpretation

$$[+c+m], [-c+m] > [+c-m], [-c-m]$$

The same two clusters can be ranked differently on different hierarchies. This reflects the fact that different grammatical processes may in principle be sensitive to different aspects of thematic structure. The only two clusters that have a uniform status in the hierarchies are [+c+m] and [-c-m]. The former is always among the highest ranking roles, and the latter is always among the lowest ranking ones. These two project the canonical transitive construction, which is generally regarded as the configuration characterized by the greatest level of asymmetry (reflected in mapping proposals like that of Dowty 1991).

How is this relevant for us now? Let me repeat the thematic structure classes in (24) as (31).

```
(31) a. tetszik 'appeals to' < [-c-m]_2 [-c]_2 >
b. fontos 'important' < [-m] > ( [-c] )
c. k\"{o}lcs\"{o}nad 'lends' < [+c+m]_1 [-c-m]_2 [-c]_2 >
d. segit 'helps' < [+c]_1 [-c]_2 >
e. k\"{o}sz\"{o}n 'greets' < [+c+m]_1 [-c]_2 >
```

The two clusters in (31a) only differ in prominence in the 'mental state hierarchy' (28): [-c] ranks one place higher than [-c-m]. The two clusters (31b) differ in both the 'mental state hierarchy' and the 'cause hierarchy', but in the reverse order: $[-m] \succ [-c]$ by (27) and $[-c] \succ [-m]$ by (28). The difference is only a single place

in the hierarchies in each case. I assume that thematic structures (31a) and (31b) contain clusters that are not radically different in prominence. If the binding data to be discussed are mainly sensitive to thematic prominence relations (as I argue they are in Hungarian), these predicates are expected to show a largely symmetrical behavior, i.e. in principle either dependant can be binder or bindee. I will show that this is the case.

The thematic structures (31c,d,e) contain an argument that outranks the dative on each ([+c+m]) or at least on two ([+c]) hierarchies. These predicates are expected to show asymmetric binding behavior, which is in fact the case. I will use them mainly for purposes of setting up minimal pairs with [-]-subject datives.

That binding is constrained directly by thematic structure has been argued specifically for Hungarian in É. Kiss (1991, 1994, 2002) and in Alberti (1998). E. Kiss points out that linear order can also affect the acceptability of most binding configurations in Hungarian, inasmuch as the binder-bindee order can be weakly preferred. I keep linear order constant in the examples below to filter this factor out. In general, I will concentrate on the problem at hand: I want to show that datives of predicates in the *tetszik* 'appeals to' and the *fontos* 'important' classes do not behave as superior to the nominative. The two dependants have largely equal thematic rank. This reinforces my claim that the nominative is a syntactic subject, and the dative is not a subject at any level of representation in Hungarian.

5.3.2. Dative experiencers in theta-sensitive constructions

5.3.2.1. Anaphors

Postal (1971) was the first to point out that dative experiencers have unusual binding properties. Contrary to what could be expected, the dative position can only marginally be acceptable as a host for an anaphor in English (all the judgments are with respect to neutral prosody).¹⁶

(32) ?? *John appeals to himself.*

The essence of Postal's explanation based on the idea of crossover has not been superseded. He argues that the experiencer is superior to the target (*John*) at the level of deep structure, an order which is the inverse of the surface order. The

¹⁵ See Anagnostopoulou & Everaert (1995), Jackendoff (1990), Wilkins (1988), and Williams (1987), among others, for proposals that allow thematic structure to directly interfere with binding.

¹⁶ The judgment is from Culicover & Jackendoff (2005:220). Postal (1971) gives a star to all his psych-movement examples, most of which actually involve predicates that only license non-thematic dative adjuncts (see Chapter 4), such as *horrifying*, *amusing*, etc. In my analysis, the reason why **I am amusing to myself* is ungrammatical is not crossover, but simply the fact that the anaphor is outside the thematic domain (i.e. it is a regular, non-thematic adjunct), and is thus outside the scope of Principle A.

mismatch between the two levels cannot be properly resolved for binding theory, assuming that Principle A is an anywhere condition (as in Belletti & Rizzi 1988). This sort of explanation crucially relies on the notion that the experiencer is superior to the target at some level.

Though judgments on these binding data are not always clear, speakers appear to find dative thematic adjuncts somewhat worse in these constructions than arguments.

(33) a. ??? John matters to himself. b. ??? John is important to himself

This is not a surprise. I have shown in 4.4.2.5 that arguments and thematic adjuncts may be treated non-identically by binding phenomena. To get a better picture of what is going on, it would be useful to test the reverse binding configuration, too. But this configuration is ungrammatical for independent reasons: anaphors cannot appear in a (surface) subject position in English.

(34) a. *Himself appeals to John. b. *Himself is important to John.

This restriction is sometimes attributed to a morphological deficiency (anaphors cannot get nominative case, Bresnan 2001), or to the claim that anaphors cannot participate in agreement (Rizzi 2000 (1986):163).

In Hungarian, there exists a complex anaphor *önmaga* 'himself' which can be a syntactic subject.¹⁷ *Appeal to*-predicates, as well as *important*-predicates, can have either a nominative or a dative anaphor, whereas in the case of *help*-predicates only the regular binding configuration is grammatical. I assume appropriate pragmatic contexts for the felicitous use of the following sentences.

- (35) a. *János tetsz-ik önmagá-nak*. John.NOM appeal-3SG himself-DAT 'John appeals to himself.'
 - b. *János-nak tetsz-ik önmaga*. John-DAT appeal-3SG himself.NOM *lit*. 'Himself appeals to John.'
 - c. *János fontos önmagá-nak*. John.NOM important himself-DAT 'John is important to himself.'

¹⁷ Önmaga is the complex of the combining form ön 'self' and the anaphor maga 'oneself'. It tends to be used to achieve greater emphasis than what the simplex anaphor would convey, and it is probably for this reason that it is generally stressed. The morphological complexity of önmaga is utilized in Everaert & Szendrői (2002) in an attempt to explain why it can occur as a syntactic subject (cf. Anagnostopoulou & Everaert (1999) for a general discussion of this issue).

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- d. *János-nak fontos önmaga*.

 John-DAT important himself.NOM *lit*. 'Himself is important to John.'
- e. *János segít önmagá-nak*. John.NOM help himself-DAT 'John helps himself.'
- f. *János-nak segít önmaga.

 John-DAT help himself.NOM

 '*Himself helps John.'

The binding behavior of *segit* 'helps' is non-surprising. What is of direct interest is that for most speakers, the dative of *tetszik* 'appeals to' and the dative of *fontos* 'important' can be either successful antecedents or anaphors. Hungarian crucially contrasts with English in licensing a grammatical dative anaphor, which is only marginally acceptable in English with these predicates (32). If the marginality of the English (32) is to be explained by some version of the crossover account, and hence with the assumption that the dative experiencer is superior to the nominative target argument at some covert level of representation, then the grammaticality of the corresponding Hungarian (35a) and (35c) can be viewed as an argument against a crossover analysis. ¹⁸ In other words, these data do not support the view that the dative experiencer is a subject at any level of representation in Hungarian. This complies with the flat-VP analysis. Furthermore, on the assumption that anaphoric binding is primarily theta-governed in Hungarian, these data support the view that these two thematic dependants are not significantly different in thematic prominence.

5.3.2.2. Backward binding

Backward binding data are sometimes utilized to argue for the quirky status of experiencers (cf. Belletti & Rizzi 1988, Pesetsky 1987, 1995). The construction involves an anaphor embedded inside the subject, and is generally licensed by psych-predicates, but not by non-psych agentive predicates. These examples are from Pesetsky (1995:53, 54). ¹⁹

(36) a. Each other's remarks appealed to John and Mary.

b. *Each other's stupid friends eventually killed John and Mary.

 $^{^{18}}$ (35a) and (35c) remain fully grammatical if the complex anaphor $\ddot{o}nmaga$ 'oneself' is substituted for the simplex anaphor maga 'himself.' Thus the grammaticality of (35a) and (35c) is not due to the presence of a special anaphor, but is a consequence of the independent factors discussed in the main text.

¹⁹ The speakers I have consulted found backward binding worse than fully acceptable if it involves dative thematic adjuncts, rather than arguments.

⁽i) [?]Each other's parents are important to the children.

If this sort of binding is also subject to c-command, then the grammaticality of (36a) is an argument for the assumption that there is a level at which the experiencer c-commands the nominative subject. However, several researchers have pointed out that such anaphors are logophoric in nature, and sometimes can be so deeply embedded that no possible definition of c-command can cover them (cf. Bouchard 1992, Landau 2005, Reinhart & Reuland 1993).

Nevertheless, backward binding is still sensitive to the thematic properties of the participating expressions (see also É. Kiss 2002:39): the anaphor cannot be successfully embedded in a thematically more prominent argument. Our predicates behave as expected: *tetszik* 'appeal to' is symmetric, but *köszön* 'greet' is not.

- (37) a. Egymás szül-e-i tetsz-ett-ek a gyerek-ek-nek. each.other parent-POSS-PL.NOM appeal-PAST-3PL the child-PL-DAT 'Each other's parents appealed to the children.'
 - b. Egymás szül-e-i-nek tetsz-ett-ek a gyerek-ek. each.other parent-POSS-PL-DAT appeal-PAST-3PL the child-PL.NOM 'The children appealed to each other's parents.'
 - c. **Egymás szül-e-i köszön-t-ek a gyerek-ek-nek. each.other parent-POSS-PL.NOM greet-PAST-3PL the child-PL-DAT '*Each other's parents greeted the children.'
 - d. *Egymás szül-e-i-nek köszön-t-ek a gyerek-ek.* each.other parent-POSS-PL-DAT greet-PAST-3PL the child-PL.NOM 'The children greeted each other's parents.'

In the case of *tetszik* 'appeal to', the anaphor can be buried inside either argument, but it cannot be part of the agent subject of *köszön* 'greet'.

Dative thematic adjuncts can also either host or antecede such embedded anaphors (or, in fact, *logophors*). Recall that these datives have either an experiencer ([-c+m]) or a non-experiencer ([-c-m]) reading. The first reading is slightly preferred if the anaphor is inside the subject (38a), and the second reading is much preferred if the anaphor is inside the dative phrase (38b).

- (38) a. Egymás szül-e-i fontos-ak a gyerek-ek-nek. each.other parent-POSS-PL.NOM important-PL the child-PL-DAT lit. 'Each other's parents are important to the children.'
 - b. Egymás szül-e-i-nek fontos-ak a gyerek-ek. each.other parent-POSS-PL-DAT appeal-PAST-3PL the child-PL.NOM 'The children are important to each other's parents.'

Thus the likeliest interpretation of (38a) is that the children themselves find each other's parents important to them. (38b), on the other hand, is most probably interpreted from an external point of view: the speaker thinks that the children are important to/for the parents. The experiencer reading of the dative is only marginally

available. Such variation cannot exist in the case of the dative argument of *tetszik* 'appeal to', since the experiencer interpretation is the only possibility. It seems to me that the [/+m] feature plays a role in licensing this sort of logophor, inasmuch as the likeliest antecedent will contain this feature. The antecedent refers to the individual from whose perspective the event is pictured, and to whose mental model the logophor is anchored conceptually. Consequently, the configuration in which the [-m] nominative subject is the antecedent for the dative with [-c+m] interpretation ((38b) on the experiencer reading) is expected to be degraded, since it is the inverse of the optimal licensing context for these logophors.

5.3.2.3. Adjunct control

Dative experiencer predicates in the *appeal to* and the *important* classes differ from datives of *help*- or *give*-verbs in many languages in being grammatical controllers of the subject of adjunct clauses or depictive predicates (cf. Landau 2005, Maling 2001, Perlmutter 1984, a.o.). I illustrate this with the German depictive predicate *betrunken* 'drunk'.

(39) *German*, Maling (2001:444)

- a. Betrunken gefällt ihm diese Frau am besten. drunk appeals he.DAT this.NOM Frau best 'Drunk he likes this woman best.'
- b. #Der nüchterne Gast hat seinem Wirt betrunken gedankt. the sober guest has his.DAT host drunk thanked 'The sober guest thanked his host drunk.'

(39a) is ambiguous: either he or this woman can be understood to be drunk. (39b) is non-ambiguous. The only grammatically possible controller of the subject of the depictive predicate is the nominative subject, which scenario results in this case in a contradiction. The Relational Grammarians' account of such data is to generalize over what we can translate for our purposes as surface subjects and deep subjects (the experiencer in (39a)), and claim that adjunct controllers have to be subjects at some level in the derivation (Perlmutter 1984). Landau's proposal (2005) is a notational variant of this. Recall that his tree (7) has two Spec, TP positions: a higher one for the 'LF-subject' experiencer, and a lower for the regular subject. Assuming that (i) the adjuncts under discussion attach at the TP level and (ii) predication between these adjuncts and their controllers requires mutual c-command, it follows that only the two types of 'subjects' in the two Spec, TP positions can be the grammatical controllers in these constructions. Both proposals share the assumption that adjunct control is a purely structural phenomenon. (39b) is out then because the dative argument of danken 'thank' is not a subject at any point in the derivation, hence it is not a possible adjunct controller.

Given that a flat-VP analysis is propagated here for Hungarian, there is some motivation to assume that adjunct control is not structurally constrained. On closer

inspection, it indeed turns out to be the case. Let us investigate first the control relations in -vA-participle constructions. ²⁰ (40a) may either mean that it was *John* or *Kate* who was jumping on the trees, whereas in (40b) there is at least a very strong preference for *John*. This complies with Perlmutter's or Landau's account. However, (40c) is grammatical on the pragmatically only felicitous reading (on which *Kate* was jumping), contrary to what these proposal would predict. ²¹ *Kate* does not have to be an experiencer, she might not even have realized that the crutch did not help her.

- (40) a. A fá-k-on ugrál-va, Kati-nak tetsz-ett János. the tree-PL-SUP jump-PART Kate-DAT appeal-PAST John 'Jumping on the tress, John appealed to Kate.'
 - b. A fá-k-on ugrálva, Katinak segít-ett János. the tree-PL-SUP jump-PART Kate-DAT help-PAST John 'Jumping on the tress, John helped Kate.'
 - c. A fá-k-on ugrálva, Katinak nem segít-ett a mankó. the tree-PL-SUP jump-PART Kate-DAT not crutch-PAST the crutch *lit*. 'Jumping on the trees, the crutch did not help Kate.'

Since the dative argument in (40c) cannot be treated as an 'LF-subject', it is not possible to propose a structural account for this sort of adjunct control in Hungarian. Instead, I assume together with Tóth (2000b) that -vA-participles are possibly logophorically controlled, in which case thematic prominence relations should have the final say in determining what can be a possible controller.

The same can be observed of the control of depictive secondary predicates (contra Dalmi 2002, 2005). Consider the following data.

- (41) a. Kati-nak nem tetsz-ett János részeg-en.

 Kate-DAT not appeal-PAST John drunk-SUP

 'John did not appeal to Kate drunk.'
 - b. *Kati-nak nem segít-ett János részeg-en*. Kate-DAT not help-PAST John drunk-SUP 'John did not help Kate drunk.'
 - c. Kati-nak nem segít-ett a mankó részeg-en. Kate-DAT not help-PAST the crutch drunk-SUP 'The cructh did not help Kate drunk.'

In an event denoted by (41a), either participant might have been drunk, whereas in (41b) there is a (non-absolute) preference for taking the nominative subject (*John*) to be the controller of the adjunct. But as we can now expect, (41c) is also fully

²⁰ This participle formation involves the saturation of the original subject of the input verb. The subject of the participle is controlled from the matrix clause.

²¹ Some speakers find (40c) degraded.

grammatical with the only possible controller being the dative (*Kate*). It is not true therefore that every adjunct controller has to be either a surface subject or an experiencer. Consequently, these data do not force us to treat experiencers as subjects at some syntactic level of representation in Hungarian.

5.3.2.4. On word order

Hungarian has been described in 1.3 as a language in which grammatical functions are not coded by word order. I repeat (24) from that section as (42) here to illustrate this point on a relevant example.

- (42) a. Kati tetsz-ik Péter-nek. Kate appeal-3SG Peter-DAT 'Kate appeals to Peter.'
 - b. Kati Péternek tetszik.
 - c. Tetszik Kati Péternek.
 - d. Tetszik Péternek Kati.
 - e. Péternek tetszik Kati.
 - f. Péternek Kati tetszik.

Dyadic predicates with [+]-subjects - *köszön* 'greets', *segít* 'helps', or *int* 'beckons' - are also fully grammatical in each of 6 the permutations represented in (42). In general, any possible constituent order is grammatical with the right intonation.

What is really interesting is the question of which orders are possible without any special prosodic and/or discourse support, i.e. which orders count as neutral prosodically and discoursewise. It turns out that as in many other languages (5.1), [-]-subject datives (the *tetszik* 'appeal to' and the *fontos* 'important' classes) tend to sound neutral in both the NOM-V-DAT and the DAT-V-NOM orders. The other orders require either the verb or one of the arguments to be focus or contrastive topic. On the other hand, the NOM-V-DAT is generally the only neutral choice with [+]-subject dative predicates.

Intuitions concerning neutrality of a given clause can be tested by, for example, embedding it under conjunctive *because*, but judging what counts as natural can still be a task of considerable sophistication. To substantiate intuitions, I carried out a small corpus search of three [-]-subject dative predicates and three [+]-subject dative predicates. A hundred examples have been collected of each predicate. Sentences with personal pronoun subjects (i.e. the nominative argument) have been excluded, as Hungarian is a *pro*-drop language and the inclusion of such examples would have biased the sample by overrepresenting non-neutral contexts. Otherwise no other conditions have been controlled, I just make the simplistic assumption that all other factors level out to an extent acceptable for the current purposes. The

results are summarized in Table 1.22

	[(-c)-m] subject verbs			[+c (+m)] subject verbs		
	tetszik 'appeals'	kell 'needs'	sikerül 'succeeds'	<i>int</i> 'wave'	segít 'helps'	köszön 'greet'
NOM>DAT>V	3	4	26	0	6	6
NOM>V>DAT	20	19	24	85	76	63
V>NOM>DAT	4	10	2	4	1	7
NOM>>DAT	27	33	52	89	83	76
DAT>NOM>V	14	39	26	0	2	3
DAT>V>NOM	54	21	17	2	6	8
V>DAT>NOM	5	7	5	9	9	13
DAT>>NOM	73	67	48	11	17	24

Table 1. Dative verbs in texts

Every column contains hundred examples altogether, and the sums of the occurrences in which the nominative precedes the dative (NOM>...>DAT) and vice versa (DAT>...>NOM) are indicated in separate rows with bold italics.

The limitations of such data collection are acknowledged, and no claim is made here with respect to the statistical relevancy of what Table 1 represents. Nevertheless, the distribution of the different orders among the predicates does reflect certain native intuitions. What we see in general is that while in the case of [+]-subject dative predicates the NOM>V>DAT order is dominating, [-]-subject datives are much more varied in distribution, with a (non-absolute) tendency for the dative to precede the nominative.²³

I concur with É. Kiss (1987, 1994, 2002, 2003) that there is no need to propose a distinguished (pre-verbal) subject position in Hungarian to account for these observations. The distributional tendencies that Table 1 represents can be explained as the result of the operation of the constraints governing topic selection. This preempts a strict syntactic account based on the notion that certain datives are syntactic

²² The data have been primarily collected from my own newspaper corpus and the *Hungarian National Corpus*. If needed, I also made use of the *Historical Dictionary Corpus* (texts no written after 1970) and searches of the *World Wide Web*.

²³ Some of the constraints on surface realization are non-syntactic in nature. The position immediately following the verb generally hosts unstressed elements, which is the reason why pronouns (irrespective of their syntactic function) almost always show up before any other elements in the postverbal domain. This phonological constraint accounts for the relatively high number of V>DAT>NOM examples with the [+]-subject verbs in Table 1: these clauses typically have a dative pronoun of some sort.

subjects of some sort. They are not, they are just more likely candidates for the topic function.

Non-contrastive topics have to be [+specific] and [+referential] by definition. Recall from 1.3 that [+human] noun phrases are preferred as topics over [-human] noun phrases. This is the reason why (43) is felicitous without any contextual or prosodic support. In other words, (43) can be both discourse and prosody-neutral.

(43) Anná-nak segít-ett az intimtorna.

Anna-DAT help-PAST the sanitary.gymnastics 'Sanitary gymnastics helped Anna.'

The cause subject of the verb *segít* 'helps' is an external argument by any standards, but the [+human] dative can still outcompete it for topichood. Other things being equal, i.e. if both participants are [+specific] and [+human], the thematic structure will determine topic choice by default. This is why in (44) the neutral order is NOM-V-DAT for *segít* 'helps', since both arguments refer to humans (which in fact is the most frequent scenario with this predicate).

(44) Péter segít-ett Anná-nak.
Peter help-PAST Anna-DAT
'Peter helped Anna.'

É. Kiss points out further that the constraints relevant for topic selection also seem to be relevant in determining the most likely order of constituents in the postverbal field. But syntactic function does not have a direct influence either on topic selection or on linearizing postverbal constituents.

The [+human] semantic feature is entailed by the [/+m] thematic feature of the Theta System. We can expect therefore that a [/+m] dependant is a better candidate for topichood than a [/-m] dependant, even though the [/-m] thematic feature is still compatible with the [+human] semantic feature. I also assume that other things being equal, the thematically more prominent argument is selected as topic by default. Since köszön 'greet' and int 'beckon' always, and segit 'helps' usually have a [+human] nominative subject which is more prominent thematically than the dative argument, it is expected that these nominative subjects will generally be selected as topic in neutral sentences.

In the case of [-]-subject predicates (the *piacere*-class and the *important*-class), the subject is specified as [/-m], and it most often denotes a non-human entity. The dative, on the other hand, is necessarily interpreted as [/+m] if it is an argument, and this is also the most frequent option for dative thematic adjuncts. Furthermore, I have argued that these predicates have two dependants that are roughly indistinct in thematic prominence. Hence, if, for example, both arguments of *tetszik* 'appeals to'

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²⁴ I am abstracting away from the fact that higher-order (animate) entities are often treated on a par with humans in language.

are [+human], either NOM-V-DAT or DAT-V-NOM are possible neutral orders. But if one of them is [-human], then it will be dispreferred as a topic. As a result, the DAT-V-NOM order is preferred as the most neutral choice in the following case.

(45) János-nak tetsz-ett a film. John-DAT appeal-PAST the film. 'The movie appealed to John.'

This coincides with the order which has been grammaticalized in other languages to the extent that the dative behaves as a syntactic subject. The Hungarian data that I have discussed here can be simply explained by the notion that datives of [–]-subject predicates are more likely topics than datives of [+]-subject predicates. But they are not syntactic subjects at any level.

If, for the sake of the argument, we suppose that there is a neutral preverbal subject position available in Hungarian, which is distinct from topic, then a presumed dative *subject* is expected to be able to occupy this position. This predicts that a [-specific] dative, which cannot be a topic by definition, can occur preverbally in a neutral sentence. But this prediction is not borne out. Such constructions are only acceptable if the dative receives contrastive stress and is interpreted as a contrastive topic, or if it receives focus stress as in (46a).

- (46) a. KUTYÁ-K-NAK kell nyakörv.
 dog-PL-DAT need collar
 'It is dogs that need a collar.' [... and not cats or cows.]
 - b. *Kutyá-k-nak kell nyakörv. dog-PL-DAT need collar 'Dogs need collar.'

In the lack of contrastive- or focus-stress, the sentence is ungrammatical (46b). This means that there is no preverbal subject position available for the dative. Without special prosody, the dative could only be a topic, but it cannot, since it is non-specific. With this, I consider it proven that dative experiencers do not occupy a designated (possibly covert) subject position in Hungarian. The dative argument of *piacere*-predicates and the dative thematic adjunct of *important*-type predicates are not quirky subjects in Hungarian.

5.4. Subject clauses in Hungarian

5.4.1. Introduction

So far in this chapter I have concentrated on constructions in which a dative argument or a dative thematic adjunct co-occurs with a nominative DP. I have argued that this nominative DP is the syntactic subject of these predicates in Hungarian, and the dative cannot be a quirky subject.

Dative predicates in the *piacere*-class and in the *important*-class may take an argument clause instead of the nominative DP. This clause (whether a *that*-clause or an infinitival clause) is traditionally referred to as a *subject clause*. In this section, I want to argue briefly that it is indeed possible to analyze clausal arguments of [–]-subject dative predicates as syntactic subjects. This is an expected possibility, since these predicates are not quirky in Hungarian, and the dative does not outcompete the clause for subjecthood.²⁵

5.4.2. Extending the non-quirky analysis

The subject position of *appeal to*-verbs and the *important*-class can host an expletive, which is associated with an infinitival or a *that*-clause complement.

- (47) a. It did not occur to me [IPinf to stay there].
 - b. It did not occur to me [CPfin that I should stay there].
- (48) a. It was important to me [IPinf to stay there].
 - b. *It was important to me* [CPfin that I stayed there].

These clauses can also occur clause-initially, without the support of an expletive.

- (49) a. [IPinf To stay there] was important to me.
 - b. [CPfin That I stayed there] was important to me.

It is for this reason that traditional grammars call these clauses *subject clauses*. Generative research on Germanic languages has shown that the term is a misnomer, since these clauses cannot occupy the canonical subject position (see Koster 1978). 'Subject clauses' cannot invert with the auxiliary verb in English, nor can they follow a topicalized phrase.

- (50) a. *Was [IPfin to stay there] important to you?
 - b. *To me, [CPfin that I stayed there] was important.

Koster (1978) proposed an analysis in which these clauses are base-generated in a left-peripheral topic position and are linked to a phonetically null expletive, which occupies the subject position of the clause.²⁶

²⁵ Part of the material in 5.4 has previously been published in Rákosi (2004) and in Rákosi & Laczkó (2005).

²⁶ Alrenga (2005) updates Koster's account in a Minimalist framework. He argues that the null pronoun linked to sentential subjects is in fact the same null [+wh] operator that Chomsky (1977) proposed for topic constructions. So the structures of the following sentential subject and sentential topic constructions are closely related.

Notice that it is not immediately obvious whether such an account should carry over to Hungarian, for I have argued for a clause structure that has no designated subject position. Whatever constraint blocks clauses from occupying a subject (or EPP) position in English, can only vacuously apply to Hungarian in the lack of a target subject position. It should not be ruled out as a theoretical possibility that clauses can be syntactic subjects, and are targeted as such in raising constructions, for example. Notice that entertaining this possibility rests on the assumption that clauses are possible realizations of arguments of a predicate. I find it noncontroversial that propositional arguments exist and receive thematic specification qua arguments. In the lack of independent constraints to the contrary, the categorial realization of an argument is expected to be free up to the limits dictated by its semantic type. In terms of the Theta System, we do not, for example, expect an argument with the feature [/+m] to be realized categorially as a clause, since propositions cannot relate mentally to an event. *To walk there likes me is not only ungrammatical, but also completely meaningless. But arguments specified thematically as [-m], or arguments underspecified for the *m*-feature can in principle have a clausal realization, provided it is compatible with the selectional restrictions of the given argument slot. Indeed, the [+c] argument of help can be a clause (To go there in person wouldn't help us much), and the [(-c)-m] argument of our dative experiencer predicates can also be realized as a clause (see above).²⁷

I have already shown that dative experiencer predicates can have clausal arguments in Hungarian.

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(51) a. Nek-em kellemetlen [IPinf itt lenni].

I-DAT unpleasant here be.INF

'To be here is unpleasant for me.'
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b. Nek-em kellemetlen, [CPinf hogy ő itt van].

I-DAT unpleasant that he here is 'That he is here is unpleasant for me.'
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It is one of the puzzling facts of Hungarian syntax that while finite clauses can have an overt pronominal associate, infinitival clauses cannot. Therefore the English expletive constructions (47a) and (48a) do not have an exact equivalent in Hungarian.

The only important difference is that the spec of IP position is filled by an overt DP in the (b) sentence, whereas in the (a) sentence it is filled with the trace of the covert operator associate of the 'subject' clause. Alrenga argues that this operator is categorially a DP.

⁽i) Alrenga (2005:193)

 $a. \quad [_{CP} \textit{ That the Giants would lose}]_i \ [_{CP} [_{DP} \textit{Op}]_i \ C^0 [_{IP} [_{DP} \textit{t}]_i \textit{ was expected } [_{DP} \textit{t}]_i]].$

b. [CP] That the Giants would lose [CP] [CP]

²⁷ This is independent of whether these clauses occupy a subject position or they only have their proxy there, as in the Koster/Alrenga approach. Even if the subject position is filled by an expletive, the semantic argument of the predicate is the clause.

- (52) a. *Az nek-em kellemetlen [IPinf itt lenni]. that I-DAT unpleasant here be.INF int. 'It is unpleasant for me to be here.'
 - b. Az nek-em kellemetlen, [CPinf hogy ő itt van]. that I-DAT unpleasant that he here is 'It is unpleasant for me that he is here.'

In this section, I investigate these constructions from the perspective of the preceding discussion, with focus on the following questions in particular. First, can the predicates in (51) and (52) be treated as realizations of the same lexical entry as the predicate with a nominative DP subject, such as (53)?

(53) Nek-em kellemetlen a te ittlét-ed.

DAT-1SG unpleasant the you presence-POSS.2SG
'Your presence is unpleasant to me.'

Second, what is the syntactic function of the propositional arguments in (51)? Third, how does the construction without a pronominal associate (51b) relate to the one where there is such an associate (52b)? Fourth, why is such an associate impossible with infinitival clauses (51a)?

My answer to the first question is that a single lexical entry, without stipulated c-selectional restrictions, suffices to derive the constructions I am discussing in this dissertation. As discussed above, a [(-c)-m] argument can by default be realized either as a noun phrase or a clause. Second, continuing the agenda that I have been pursuing in this chapter, I argue that the infinitive (51a) and the that-clause can be syntactic subjects of the dative predicate, contra Dalmi (1994, 2002, 2005) and Kenesei (2001), for whom the dative is a quirky subject in the infinitival construction. Third, together with É. Kiss (1987, 2002) and Tóth (2000a), I analyze the pronoun in (52b) as an actual pronoun, and not an expletive. The clause itself is an adjunct to this pronoun. I present evidence from focus-extraction constructions to argue that no such pronoun is present structurally in (51), and the clause is directly selected as a subject argument of the matrix predicate (contra É. Kiss 2002 and Kenesei 1994). Thus the clause is an argument in (51), but it is an adjunct to the subject pronoun in (52b). Fourth, I outline a possible explanation for the ungrammaticality of (52a) based on Rákosi & Laczkó (2005), who suggest that (52a) is unacceptable because DPs (whether headed by a pronoun or a noun) cannot take non-finite modification in Hungarian.

5.4.3. Clauses targeted in subject-sensitive constructions

I have argued in 5.2.2 that the strongest argument for the quirkiness of Icelandic datives comes from the fact that they can be targeted as subjects in control, raising, and ECM constructions. These tests give us a different result in Hungarian: they prove that the nominative argument has to be selected as a syntactic subject. In the

same constructions, the clausal arguments under discussion pattern up with nominative subjects in Hungarian. I illustrate this briefly below.

As noted by Kenesei (2001:93), the subject raising predicate *látszik* 'seem' is stress-avoiding, which forces it to follow a stress-bearing element in neutral contexts. It typically follows its own complement, the *piacere*-type *sikerül* 'succeeds' in the examples in (54) below. For expository purposes, I use sentences in which the dative argument is implicit.

- (54) a. Sikerül-ni látsz-ott [DP a vizsga]. succeed-INF seem-PAST the exam.NOM 'The exam seemed to succeed.'
 - b. Sikerül-ni látsz-ott [IPinf meg-old-a-ni a problém-át]. succeed-INF seem-PAST PTCL-solve-INF the problem-ACC 'To solve the problem seemed to succeed.'
 - c. Sikerül-ni látsz-ott, [CPfin hogy meg-old-j-am a problém-át]. succeed-INF seem-PAST that PTCL-solve-SBJ-1SG the problem-ACC 'That I should solve the problem seemed to succeed.'

The bracketed constituents are different categorial realizations of the [-c-m] argument of the predicate *sikerülni* 'to succeed', and they show an apparently converging behavior in this construction.

There is a small number of control predicates which, although they select a semantic subject argument, do not necessarily constrain this to be [+human]. *Kezd* 'start' is a prime example and it is important in the present context as not imposing special semantic restrictions on its subjects, it is in principle expected to license a clausal subject.²⁸ This indeed is the case.

- (55) a. *Kezd-ett szükséges len-ni* [DP *a változás*.] start-PAST necessary be-INF the change 'The change started to be necessary.'
 - b. Kezd-ett szükséges len-ni [IPinf csinál-ni valami-t]. start-PAST necessary be-INF do-INF something-ACC 'To do something started to be necessary.'
 - c. Kezd-ett szükséges len-ni, [CPfin hogy csinál-j-ak valami-t]. start-PAST necessary be-INF that do-SBJ-1SG something-ACC 'That I do something started to be necessary.'

²⁸ Kenesei (2000:175) assumes that *kezd* 'start' has two lexical entries: one is an agentive control predicate, and the other is a subject-raising predicate, just like *látszik* 'seem'. It is not crucial in the present context whether *kezd* 'start' is a control or a raising predicate in (55). What is important is that the clausal arguments in (55b) and (55c) appear to pattern up with the nominative subject in (55a).

Szükséges 'necessary' is a modal adjective, and it forms a complex predicate with the infinitival form of the copula (*lenni* 'to be') as a complement of the matrix control verb. Whether its [-m] argument is nominal or clausal, it seems to behave as a syntactic subject.

Notice that there is no dative in any of the examples in (54) and (55). The predicate *sikerül* 'succeed' takes a dative argument, and I have argued in 4.4.2.2 that missing dative arguments are always interpreted as definite implicit arguments. In (54), this implicit argument is identified with the speaker by default. On the other hand, the predicate *szükséges* 'necessary' has a dative thematic adjunct, which is truly optional, and can thus be genuinely absent in (55). Since the construction requires an embedded subject (which is raised or controlled, depending on the analysis), and since there is no dative present, it is evident that something else must act as a syntactic subject. The quirky analysis cannot apply therefore to any of the sentences in (55). In (55b) and (55c) in particular, the clauses themselves present themselves as likely candidates for subjecthood.

But there is still some leeway not to regard these clauses as subjects. As has already been noted, a pronoun can be inserted if the subordinate clause is finite. This is a possibility in (54c) as well as in (55c). The pronoun can appear in any position in the matrix where regular subjects can, separated from or string-adjacent to its clausal associate. Here is an illustration with the raising construction.

- (56) a. Az sikerül-ni látsz-ott, [CPfin hogy meg-old-j-am a problém-át]. that succeed-INF seem-PAST that PTCL-solve-SBJ-1SG the problem-ACC lit. 'It seemed to succeed that I solve the problem.'
 - b. Sikerül-ni látsz-ott az, [CPfin hogy meg-old-j-am a problém-át]. succeed-INF seem-PAST that that PTCL-solve-SBJ-1SG the problem-ACC lit. 'It seemed to succeed that I solve the problem.'

I am going to argue directly that az 'that' is a true pronoun and not an expletive in (56), and it acts as the raised subject of sikerülni 'to succeed'. One can possibly generalize this analysis to the rest of the data in (54) and (55) and assume that in the absence of an overt az 'that', its covert counterpart is the syntactic subject. This is the essence of the analysis Koster (1978) and Alrenga (2005) propose for Germanic. To show that their approach does not give the right predictions for Hungarian, essentially two addenda are needed to the main line of argumentation. The first is a discussion of the pronominal properties of az 'that' in (56), and the second is a small detour on long focus-raising constructions in Hungarian.

5.4.4. No expletives in Hungarian

The literature is divided on the status of *az* 'that' as an associate of finite clauses. Kenesei (1994) and Lipták (1998) treat it as a regular expletive, essentially of the same type as the English *it*. The other camp, including É. Kiss (1987, 2002), Rákosi & Laczkó (2005), and Tóth (2000a), regards the associate of finite clauses as

a pronoun.²⁹ The main arguments for the second approach can be summarised as follows.

First, the *that*-clause associate *az* is in fact identical with the distal demonstrative in Hungarian.

(57) Csak AZ szükséges. only that necessary 'Only THAT is necessary.'

Second, the *that*-clause associate typically occurs in operator positions, such as distributive quantifier (58a) or focus (58b).

- (58) a. Az is szükséges, hogy János el-jö-jj-ön. that too necessary that John away-come-SBJ-3SG 'It is also necessary that John come along.'
 - b. Csak AZ szükséges, hogy János el-jö-jj-ön. only that necessary that John away-come-SBJ-3SG 'What is only necessary is that John come along.'

Tóth (2000a) calls attention to the fact that true expletives (such as the English *it*) cannot bear primary stress, but the focused pronoun in (58b) does. *Az* 'that' seems to function as a general proxy for its associate clause: it represents the clause in surface syntactic positions where it could not appear for independent reasons. *That*-clauses, for example, cannot be in focus, as they are not compatible with its special prosodic requirements.³⁰

On this account, (59) is ungrammatical (also) for the reason that the focused constituent, a *that*-clause, is head-initial (on the assumption that the complementizer is the head of the clause).

²⁹ The same claim has been put forward for, among other things, the Dutch *het* in Hoekstra (1983) and Bennis (1986), and for the German *es* in Berman (2001).

 $^{^{30}}$ Vogel & Kenesei (1987) argue that the focus constituent must constitute a single phonological phrase with the following verb. This is not possible if this constituent is already a fully-fledged phonological phrase in itself. É. Kiss (2001:56) points out that syntactic factors may also be stake, as whatever phrase occupies Focus, it has to be head-final. Thus postmodified noun phrases cannot occur in focus either, even though postmodification is possible, albeit somewhat restricted, in Hungarian.

⁽i) *Csak [DP a fiú a második-ról] fontos nek-em. only the boy.NOM the second-DEL important DAT-1SG 'Only the boy from the second floor is important for me.'

⁽ii) Csak NEK-EM fontos [DP a fiú a második-ról]. only DAT-1SG important the boy.NOM the second-DEL 'The boy from the second floor is important only for ME.'

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(59) *Csak [CPfin hogy János el-jö-jj-ön] szükséges.

only that John away-come-SBJ-3SG necessary

'*Only that John come along is necessary.'

If the clause itself is not to be associated with any discourse function, then az is regularly not present.

(60) Szükséges, hogy János el-jö-jj-ön. necessary that John away-come-SBJ-3SG 'It is necessary that John come along.'

(60) is the most neutral version of this sentence, and this is the one which needs no special contextual support.

The third piece of evidence in support of the pronominal status of az 'that' is that it can be replaced by its proximal counterpart, ez 'this' in appropriate discourse settings.³¹

(61) Tényleg EZ szükséges, hogy János el-jö-jj-ön?
really this necessary that John.NOM away-come-SBJ-3SG
lit. 'Is THIS really necessary that John come along?'

This, again, is quite unsurprising in an analysis in which *that*-clauses have pronominal and not expletive associates. It is thus the pronoun approach that I commit myself to.

5.4.5. Long focus-raising: what it tells us about subject clauses

Long focus raising is used here as a descriptive term to refer to an operation in which material from an embedded argument clause is focused in the matrix clause.³² The matrix verb has to be a bridge verb (i.e. marked in the lexicon as licensing interclausal extraction processes), but there are no strong constraints on the focus-raised constituent itself: it can be an argument as well as, for example, an instrument-type thematic adjunct.

(62) Csak CSÓNAK-KAL lehetséges, hogy átkel-j-ünk. only boat-INS possible that cross-SBJ-1PL 'It is only with a BOAT that it is possible that we cross here.'

³¹ The prosodic boundary between the two clauses is more pronounced in this case.

³² The following works, among others, provide a detailed description of long focus raising phenomena in Hungarian: É. Kiss (1987, 2002), Gervain (2002), Kenesei (1994) and Lipták (1998). Focus raising from object clauses, which may involve the assignment of accusative case to extracted subjects, is not discussed here.

Not every subject clause is an equally successful licensor of this type of extraction. In general, long focus raising may be less acceptable from indicative subject clauses than from subjunctive ones. *Fontos* 'important' may take either the indicative or the subjunctive. In the former case, it expresses the speaker's evaluation of a known state of affairs, while in the latter, it expresses a speech act of demand or command. Focus-raising is fully grammatical in the latter case, while it is quite marked in the former.

- (63) a. ^{??}Csak JÁNOS-T fontos, hogy le-rajzol-od. only John-ACC important that down-draw-2sG 'It is only important that you draw JOHN.'
 - b. Csak JÁNOS-T fontos, hogy le-rajzol-d. only John-ACC important that down-draw-SBJ.2SG 'You are only required to draw JOHN.'

According to Lipták (1998:96), focus raising from subject clauses is marginal in Hungarian. In the light of (63), this statement has to be restricted to (a subset of) indicative clauses, but subjunctive subject clauses are generally not islands for extraction. É. Kiss (2002:252) explains the possibility of extraction from subject clauses by pointing out that in her theory of the structure of the Hungarian clause, the subject is in the government domain of the verb.³³

The reason why focus raising is relevant for us is that it is incompatible with the presence of the pronoun associate az 'that' in the matrix clause.

(64) Csak JÁNOS-T szükséges (*az), hogy le-rajzol-d. only John-ACC necessary that that down-draw-SBJ.2SG 'It is only necessary that you draw JOHN.'

Rákosi & Laczkó (2005) call attention to the importance of approaching this incompatibility from the perspective of the subordinate clause, rather than focusing on the pronominal associate itself. The subordinate clause shows adjunct properties in the presence of the pronominal. For example, extraction is known to be ungrammatical from adjunct clauses, which holds for Hungarian, too.

(65) *Csak JÁNOS-T ül-t-em le, hogy le-rajzol-j-am.
only John-ACC sit-PAST-1SG down that down-draw-SBJ-1SG
'I sat down to draw only JOHN.'

Thus the ungrammaticality of the pronoun in (64) can be explained by assuming that it is the argument of the matrix predicate and the clause is an adjunct to it. Suppose

³³ We will also see below that clausal subjects have no nominal properties in Hungarian, and thus are not expected to be islands in the proposal of Davies & Dubinsky (2001), who attempt to reduce the islandhood of subjects to the constraint against extraction from complex noun phrases.

the clause itself is the subject argument of the modal predicate *in the absence of the pronoun*, and the possibility of focus extraction follows.

The parallel between regular adjunct clauses and clauses with a pronominal associate can be further strengthened by the following considerations. Gervain (2002) notes that if focus-raising takes place, then no pause is grammatical at the clause boundary.³⁴

(66) Csak JÁNOS-T sikerül-t, *(#) hogy le-rajzol-j-am. only John-ACC succeed-PAST.3SG that down-draw-SBJ-1SG 'I only managed to draw JOHN.'

If focus-raising does not take place, as in the presence of the pronominal associate, then a prosodic boundary is grammatical. The same is true of adjunct clauses.

- (67) a. Az sikerül-t, (#) hogy le-rajzol-j-am János-t. that succeed-PAST that down-draw-SBJ-1SG John-ACC 'It was successful that I draw John.'
 - b. Le-ül-t-em, (#) hogy le-rajzol-j-am János-t. down-sit-PAST-1SG that down-draw-SBJ-1SG John-ACC 'I sat down to draw John.'

And finally let me note that the syntactic behavior of *az* and its associate *that*-clause parallels the behavior of pronouns and their postmodifying relative clauses in Hungarian.

- (68) a. Az, ami-t én rajzol-t-am, nem sikerül-t. that which-ACC I draw-PAST-1SG not succeed-PAST 'That which I drew did not succeed.'
 - b. Az, hogy le-rajzol-j-am a fá-t, nem sikerül-t. that that down-draw-SBJ-1SG the tree-ACC not succeed-PAST 'It was not successful that I draw the tree.'
- (69) a. Csak AZ sikerült, ami-t én rajzol-t-am. only that succeed-PAST which-ACC I draw-PAST-1SG 'Only THAT which I drew succeeded.'
 - b. Csak AZ sikerül-t, hogy le-rajzol-j-am a fát. only that succeed-PAST that down-draw-SBJ-1SG the tree-ACC 'What was successful was only that I drew the tree.'

Both clause-types can occur string-adjacent to their associate pronouns (68), or the two can be separated from each other (69).

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³⁴ She motivates this by suggesting that focus-raising brings about a unification of the two intonational domains associated with the two clauses. In the absence of focus-raising, each clause is associated with its own intonational phrase.

Let me take stock at this point and provide a summary of the preceding argumentation. One of the questions I have posed at the beginning of this section concerned the relation between (51b) and (52b), which I repeat here as (70).

- (70) a. Nek-em kellemetlen, [CPinf hogy ő itt van].

 I-DAT unpleasant that he here is 'That he is here is unpleasant for me.'
 - b. Az nek-em kellemetlen, [CPinf hogy ő itt van]. that I-DAT unpleasant that he here is 'It is unpleasant for me that he is here.'

I have argued here that (i) az 'that' is a regular pronoun and not an expletive in (70b), and (ii) it is this pronoun that is the subject of the matrix evaluative predicate *kellemetlen*, and, finally (iii) the that clause is an adjunct to this pronoun. The reason why focus-extraction is not possible in the presence of the pronoun associate is that adjunct clauses are islands for extraction. In (70a), however, the clause is directly selected as the subject argument of the matrix predicate, and there is no covert associate present. That is why long-focus raising is possible.

5.4.6. Subject clauses do not have a DP-cap in Hungarian

É. Kiss (1987, 2002) provides a different account of the focus-raising data presented above. She assumes that *az* 'that' forms a complex noun phrase with its clause associate, the head of which is occupied by the pronoun *az*, or by *pro* in the absence of *az*. I repeat (67a) as (71a) for illustration. (71b) is a structure based on hers (2002:235).

- (71) a. Az sikerül-t, hogy le-rajzol-j-am János-t. that succeed-PAST that down-draw-SBJ-1SG John-ACC 'It was successful that I draw John.'
 - b. [DP [DP az/pro] [CP [Chogy] [TopP lerajzoljam Jánost]]]

Her analysis differs from mine in the following three aspects. First, the pronoun and the clause are assumed to make up a constituent, from which the clause can be extracted (or *extraposed*). Second, in the absence of the overt pronoun, the head of this constituent is a *pro* (in the spirit of the analysis of Koster 1978 and Alrenga 2005). Third, argument clauses, and subject clauses in particular, have a DP-cap.

That the pronoun and the clause make up a constituent is difficult to prove empirically.³⁵ For example, the two cannot be inserted into a focus position together for prosodic reasons (see footnote 30), which is a standard constituency test in

 $^{^{35}}$ That the two can make up a constituent is also part of Lipták's (1998) analysis of focusraising. She claims that az 'that' is inserted into the specifier position of the CP cap of the argument clause.

Hungarian. The pronoun and the clause are certainly not required to be adjacent (cf. 68-69), and most often they are separated by some other material. My claim is that the clause is an adjunct to the pronoun, and I will simply assume without further comments that they may form a constituent at some level during the derivation.

The second crucial assumption É. Kiss makes is that the pronoun associate can be a phonologically zero *pro*. In this setup, her explanation of the above focusraising data is as follows. She derives the incompatibility of the pronoun and focus raising from the Complex Noun Phrase Constraint: by (71b) the pronoun and the subordinate clause make up a complex noun phrase, which is an island for extraction. The immediate problem is that in the absence of an overt pronoun, *pro* is argued to be present together with the DP-cap over the clause, which should have the same blocking effect. It does not, which she also notices and tries to explain by the assumption that "a projection containing no phonologically realized material is transparent for subjacency" (2002:253). This assumption, she acknowledges, is in need of further substantiation: "Naturally, the transparency of phonologically vacuous projections would have to be confirmed by independent evidence" (2002:254). In the analysis that I have proposed, such problems do not arise since extraction is only possible if the clause is directly selected as the subject argument of the matrix predicate, and there is no *pro* present.

The third ingredient of É. Kiss' analysis, the projection of a DP-cap over the unit of the clause and the pronoun is also problematic from a cross-linguistic perspective. As McCloskey (1991) observed, conjoined subject clauses can trigger plural agreement in English.

(72) McCloskey (1991:564)

[$_{DP}$ That he'll resign] and [$_{DP}$ that he'll stay in office] seem at this point equally possible.

Davies & Dubinsky (2001) point out that in English PPs and APs can also be syntactic subjects and then they may also trigger plural agreement.

(73) Davies & Dubinsky (2001:249)

- a. Sandy talks a lot about her beach house and the family's Appalachian camping trips. As a result, [PP along the coast] and [PP in the mountains] remind me of Sandy's retirement fantasies.
- b. [AP Very brawny] and [AP very studious] are what Cindy aspires to be.

This, among others, they take to be a DP-property, which they aim to capture by postulating a DP-shell above non-nominal subjects in English.³⁶ Languages are parametrically divided in allowing or not allowing such a DP-shell, and this variation is concomitant with a cluster of properties. In languages with such a DP-

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³⁶ Thus their account is not obviously compatible with that of Koster (1978) or Alrenga (2005), who do not specifically address the issue of the islandhood of non-nominal subjects.

shell (like English), all subjects are expected to be islands. In languages without such a DP-shell (such as Russian or Bulgarian), not all subjects need be islands. In essence, Davies & Dubinsky (2001) attempt to reduce the islandhood of certain subjects to the Complex Noun Phrase Constraint: if subjects are uniformly required to have a DP-shell in a language, then we expect them to be obligatory islands, as in English. They also claim that non-nominal subjects only show agreement with the main predicate if they have a DP-shell.

We have seen that with respect to islandhood facts, Hungarian subject clauses pattern up with Bulgarian or Russian, as they are possible extraction sites for focus-raising. Besides, conjoined subject clauses do not trigger plural agreement on the verb in Hungarian. Two preverbal singular noun phrases can optionally show plural agreement (74a), but this option is strictly ruled out for clauses.

- (74) a. $[DP \ A \ gy\"{o}zelem]$ és $[DP \ a \ buk\'{a}s]$ egyar\'{ant} lehetséges(-ek). the victory and the fall equally possible(-PL) 'Victory and fall is/are equally possible.'
 - b. Itt [IPinf győz-ni] és [IPinf veszít-eni] egyaránt lehetséges(*-ek). here win-INF and lose-INF equally possible(*-PL) 'To win and to lose are equally possible here.'
 - c. [CPfin Hogy győz-ünk] vagy [CPfin hogy veszít-ünk] that win-1PL or that lose-1PL egyaránt lehetséges(*-ek). equally possible(*-PL)

'That we win or that we lose are equally possible.'

These facts follow if there is no DP-cap on subject clauses in Hungarian: they are either finite CPs or infinitival IPs, as I have been assuming throughout.

5.4.7. Infinitival clauses cannot have pronoun associates

Let us finally return to the somewhat mysterious constraint against the use of the pronoun *az* 'that' beside infinitival constructions. I repeat (52a) as (74).

(74) a. *Az nek-em kellemetlen [IPinf itt lenni]. that I-DAT unpleasant here be.INF int. 'It is unpleasant for me to be here.'

In the light of the previous discussion, we can now reformulate the original question in terms of an inquiry into why infinitival clauses cannot be adjuncts to pronominal heads in Hungarian.

Rákosi & Laczkó (2005) point out that it may be possible to draw a parallel between the structures in (75) and (76) in English. In (75), an 'extraposed' infinitival

clause is in a syntactic relation with a preceding expletive, and in (76), a noun phrase contains an infinitival clause as a postmodifier. Notice that the head of the noun phrase can possibly be a pronoun (76c-d).

- (75) *It is good to be back.*
- (76) a. [DP The command to evacuate] was unexpected.
 - b. *They obeyed* [DP the command to evacuate].
 - c. [DP The ones to watch] are the ones you never hear about.
 - d. The workers are [DP the first ones to suffer].

PP postmodification is marginally possible in Hungarian (see footnote 30), but an infinitive can never be a postmodifier, nor a premodifier of a noun phrase.

- (77) a. *Teljesít-ett-ék [DP a parancs-ot evakuál-ni]. obey-PAST-3PL the command-ACC evacuate-INF 'They obeyed the command to evacuate.'
 - b. *Teljesít-ett-ék [DP az evakuál-ni parancs-ot]. obey-PAST-3PL the evacuate-INF command-ACC 'They obeyed the command to evacuate.'

Thus there is no literal rendering of the English construction in (77) in Hungarian.

It is not clear what exactly the problem with (74) is, but it seems a legitimate assumption that it is the same kind of problem that rules (77) out. Infinitival clauses cannot be adjuncts to DPs in Hungarian. This is, of course, only an observation and at most the beginning of an explanation. In any case, this correlation, if valid, strengthens the view I have developed in the previous sections: clauses are adjuncts to pronominal associates in Hungarian, and there are no true expletive structures in the language.

5.5. Summary

I have argued in this chapter that [-]-subject dative predicates, that is, predicates in the *tetszik* 'appeals to' and the *fontos* 'important' classes do not have quirky properties in Hungarian. I have shown that these Hungarian datives lack the strong subject properties that the much-discussed Icelandic quirky datives have. Furthermore, (non-quantified) preverbal datives in neutral sentences are regular topics, and they do not occupy a distinct subject position. That the DAT-V-NOM order is more frequent with [-]-subject dative predicates than with [+]-subject dative predicates - such as *segít* 'helps' or *köszön* 'greets' - is a fact that can in part be derived from thematic structure differences. Predicates in the *tetszik* 'appeals to' and the *fontos* 'important' classes have dative dependants that are not sufficiently distinct from the nominative argument in terms of thematic prominence, which fact

also provides an explanation for their peculiar binding properties. Therefore, [-]-subject dative predicates do not force us to give up on the flat-VP analysis of Hungarian.

What has been in the focus is how Hungarian differs from other languages. I believe that what connects these Hungarian datives to quirky datives in other languages, namely the lack of a [/+c]-cluster in the thematic structure of their governing predicates, is what should be considered the cross-linguistically relevant common property of the predicate class under discussion. These datives are not 'LF-quirky' but 'theta-quirky', and it depends on the interplay of the status of dative case, clause structure and possible idiosyncratic grammaticalization processes in any given language whether it will have quirky dative subjects; and if yes, then exactly what sort of subject properties it will distribute over them.

Finally, the preceding discussion is also a case study in the spirit of the *Lexicon Uniformity Principle* (2.1.1), by which there is assumed to be a default one-to-one mapping between concepts and lexical entries. I have argued that the [-c-m] argument of *appeal to*-predicates and the [-m] argument of *important*-predicates can be categorially realized as a noun phrase, an infinitival clause or a *that*-clause. In each case, this argument is mapped onto syntax as a subject in Hungarian. There is no need to assume that distinct lexical entries underlie these categorially non-identical realizations. In particular, it is massively redundant to suppose in each case that there exist an agreeing entry with nominative subjects, and a non-agreeing or *impersonal* entry with clausal arguments. These clausal arguments are also subjects, just like the nominative noun phrase, but since non-nominal subjects cannot agree in Hungarian, the predicate will remain in a default 3sG form.

5.6. Appendix: The semi-auxiliary modals

In the main text of this chapter, I have devoted most of my attention to constructions in which the subject of the dative predicate is a DP or a finite CP. I have also claimed that infinitival IPs too can be syntactic subjects of these predicates. I certainly believe this to be a default possibility, but it does not necessarily follow that all infinitival structures projected by these predicates should be considered biclausal with the subordinate infinitival clause being a subject.

There exist three modal verbs in Hungarian which, I argue, do not fit the above picture at all in that they do not have a thematic structure and they necessarily take a complement, rather than a subject infinitival clause. These are the modal verbs *kell* 'must', *lehet* 'can, may' and *szabad* 'may', which are regularly discussed together with the rest of the [–]-subject dative predicates in Hungarian in all the works that I am citing here. Tóth (2000a, 2001, 2004) in particular argues that the syntax of these modal verbs and that of modal adjectives like *szükséges* 'necessary' are identical in all the important respects. Superficially, they may look very similar: both can take an agreement-marked infinitive and a dative DP.

- (78) a. Miért szükséges nek-em marad-n-om? itt why necessary DAT-1SG here stay-INF-1SG 'Why is it necessary for me to stay here?'
 - b. Miért kell nek-em itt marad-n-om? why must DAT-1SG here stay-INF-1SG 'Why must I stay here?'

I briefly motivate below why I have not included these three modal verbs among the modal dative predicates in the empirical survey in Chapter 3 and in the subsequent discussion, and why I believe Tóth's conviction is not necessarily right.

The analytical problem at hand is that Hungarian infinitival constructions, including the ones under discussion, show a varying distribution of mono- and biclausal properties (cf. É. Kiss & Riemsdijk eds. 2004, Szabolcsi & Koopman 2000). It is possible, for example, even in the case of the least coherent³⁷ types of infinitives to jumble up arguments of the main and the subordinate predicates. Utál 'hates' is a standard example as a verb showing the least amount of coherence with its infinitival complement. Still, the object argument of the infinitive is sentence initial and the matrix subject is sentence final in (79).

(79)a dal-t utál-ja hallgat-ni János. this-ACC the song-ACC hate-3SG.DEFOBJ listen-INF John 'John hates to listen to this song.'

On the other hand, even the most coherent types of infinitives can be shown to have biclausal properties. Kenesei (2001) argues that fog 'will' is an auxiliary, which has no thematic structure and which takes an infinitival VP as its complement. On the strictest possible analysis, as in Tóth (2000a:193), this auxiliary is inserted into a monoclausal construction with a single left periphery realized to its left. But on closer inspection it turns out that even fog 'will' licenses the core of the left periphery on its complement as long as there is also focus (or at least focus stress) in the left periphery of fog 'will'.

- (80) a. János NEM FOG [IPinf nem fizet-ni]. John not will not pay-INF 'John will NOT not pay.'
 - b. CSAK JÁNOS fog [IPinf CSAK A SZOBÁ-BA men-ni be]. John will only the room-in go-INF in 'ONLY JOHN will go only ONLY INTO THE ROOM.'

The second focus in (80b) must belong to the infinitive (rather than being the postverbal focus of the finite verb), since it triggers verb modifier inversion between menni 'to go' and be 'in'. Nonetheless, it is true that this is a marked option and the

³⁷ I use the term *coherent* here to describe infinitival clauses that show strong clause union effects.

small left periphery that may turn up on the infinitive appears to be dependent upon prosodic licensing from the matrix.

Coherence phenomena of the strongest kind have been recently discussed in terms of a revised notion of restructuring (a.k.a. verb(al) clusters, reanalysis, clause union) in Cinque (2004, 2006a) and Wurmbrand (1998, 2001, 2004). Cinque argues for a radical understanding of restructuring, according to which a 'restructuring' verb is always directly inserted into a functional projection in the left periphery projected by the infinitive. In actual fact, there is no restructuring involved at all in the original derivational, structure-changing sense of Rizzi (1976).

(81)
$$\left[CP \ldots \left[FP \ldots \left[FP V_{1 restr} \cdot (* \theta_1) \ldots \left[FP \ldots \left[V_P V_2 (\theta_2) \right] \right] \right] \right]$$

A restructuring verb does not have a thematic structure, and it does not project a clause, therefore the main predicate of the clause is the infinitive. Wurmbrand (esp. 2004) argues that this view is too radical and is not fine-grained enough to account for relevant Germanic data. For her, restructuring has two modes. Functional restructuring is understood as in (81) for Cinque, and it basically characterizes verbs that are traditionally called auxiliaries. There is also a second mode of restructuring, which she calls lexical restructuring, which applies in many languages to verbs like try, dare, forget, intend, etc. Lexical restructuring is always optional, and it involves thematically fully specified verbs. The infinitive is "very small", and the restructuring verb projects its own VP and left periphery.

(82)
$$\left[\text{CP} \dots \left[\text{FP} \dots \left[\text{VP V}_{1 \text{restr}} . (\theta_1) \dots \left[\text{VP V}_2 (\theta_2)\right]\right]\right]\right]$$

(81) and (82) provide us with an extended theoretical space to classify verbs beyond the traditional auxiliary - main verb dichotomy.

I concur with Kenesei (2001) that *fog* 'will', as well as *szokott* 'usually does' and *talál* 'happens to' are auxiliaries roughly in the sense of (81). With respect to the modal verbs *kell* 'must', *lehet* 'can, may' and *szabad* 'may', Kenesei (2001), as well as Dalmi (1995, 2002, 2005) and Tóth (2000a, 2001, 2004), assumes that they have dyadic and monadic entries. Epistemic *kell* is monadic, and Kenesei takes it to be a separate, *semi-auxiliary* entry with a reduced argument structure containing only a single propositional argument. I adopt this term with a different interpretation: the three modals are semi-auxiliaries in the sense that they do not have an argument structure, but they project their own CP and they also take a possibly fully-fledged, CP-level complement. Schematically:

(83)
$$\left[_{CP} \ldots \left[_{FP} \ldots \left[_{VP} V_{semi-aux} \ldots \left(\left[_{CP} \ldots \right) \left[_{VP} V_2 \left(\theta \right) \right] \right] \right] \right] \right]$$

What crucially distinguishes these from the dative predicates discussed in the main text is that the semi-auxiliaries do not have a thematic structure, irrespective of what sort of modal reading they have. In that sense, they are operators semantically and

³⁸ See the opus cited for detailed arguments.

not predicates. But they have a somewhat richer syntax than regular auxiliaries or functional restructuring verbs.

All these three modals have both a semi-auxiliary and a main predicate use. I assume these two are associated with different lexical entries. Table 2 gives a brief overview.

	SEMI-A	UXILIARY	MAIN PREDICATE		
	MEANING	CATEGORY	MEANING	CATEGORY	
kell	'must'	stress avoiding v	'need'	verb	
lehet	'can, may' non-epistemic	stress avoiding v	'may be'	copula + possibility suffix	
szabad	'may'	stress avoiding v	'allowed, free'	adjective	

Table 2. Semi-auxiliary modals

I distinguish the respective entries by category-denoting tags, where cop refers to the copula, and saux to semi-auxiliaries. The main predicates $kell_v$ 'need' and saux and saux to semi-auxiliaries. The main predicates $kell_v$ 'need' and saux and 'allowed, free' have been included among dative modal predicates in Chapter 3. I have shown that they have an optional dative thematic adjunct. $Kell_{saux}$ is a stress avoiding predicate with the meaning 'must'. The semi-auxiliary use of szabad is easy to distinguish morphologically from the adjectival use: the adjective relies on the copula to pick up verbal morphology, whereas the semi-auxiliary behaves as a regular verb in this respect.

(84)		ADJECTIV	'AL USE	SEMI-AUXILIARY USE
	a.	szabad allowed 'was allo	was	szabad-ott may-PAST.3SG
	b.		len-ne be-COND.3SG allowed'	szabad-na may-COND.3SG

There is no productive adjective-verb conversion in Hungarian (there is always some deadjectival morphology present), and *szabad* is in fact a highly exceptional case in having undergone zero derivation. The semi-auxiliary use of *szabad* is relatively new, but it seems to be spreading (Kenesei 2001:106). Finally, *lehet*_{cop} is the complex unit of the copula (bound stem) and the *-het* possibility suffix.

(85) János itt le-het.

John.NOM here be-POSSUF.3SG

'John may/can be here.'

The semi-auxiliary *lehet* 'can, may' is a frozen lexical entry, which has lost its morphological complexity. This is shown by the fact that it can take the infinitival form of the copula.

(86) Itt jól el lehet len-ni.
here well away can be-INF
'One can spend his time here well.'
[lit. '(One) may be away well here.']

Each semi-auxiliary differs from the main predicate to which it is historically related in idiosyncratic ways, which is one reason why the two uses should be distinguished already in the lexicon.

What is more important, however, is that they as a group have the following list of properties.

(87) **Semi-auxiliary properties**

- (i) They cannot take nominative subjects.
- (ii) They cannot take thematic dative dependants.
- (iii) They only have infinitival or subjunctive complements.
- (iv) They allow non-compositional verb modifiers (VM) to climb from their infinitival and subjunctive complements alike.
- (v) Dialectally, they allow the deletion of the complementizer of their subjunctive complement even when VM-climbing has taken place.

Each of these properties distinguishes them from [–]-subject predicates. Properties (iv) and (v) distinguish them from any other predicates in Hungarian. I illustrate now these properties one by one.

Let us consider *szabad* 'may' or 'be allowed to' first. Compare the semi-auxiliary *szabad* (88b) with the adjectival *szabad* in (88a): only the former can have a nominative subject.

- (88) a. *Itt* szabad_{adj} len-ne a táborozás. here allowed be-COND the camping.NOM 'Camping could be allowed here.'
 - b. *Itt szabad-na_{saux} a táborozás. here may-COND the camping.NOM int. 'Camping could be allowed here.'

Semi-auxiliaries can take a *that*-clause complement. I have argued in 5.4 that a pronoun associate of a *that*-clause acts itself as the subject argument of the matrix predicate. If semi-auxiliaries cannot have nominative subjects, it is predicted that they cannot co-occur with such a pronoun. Az 'that' is indeed unacceptable with the semi-auxiliary.

- (89) a. Az nem len-ne szabad_{adj}, hogy itt táboroz-z-anak. that not be-COND allowed that here camp-SBJ-3PL 'It should not be allowed that they camp here.'
 - b. (*Az) nem szabad-na_{saux}, hogy itt táboroz-z-anak. that not may-COND that here camp-SBJ-3PL 'It shouldn't be allowed that they camp here.'

If $szabad_{saux}$ does not have a thematic structure, it cannot have a dative thematic dependant either. Remember that I have adopted the strategy to test such claims first on non-infinitival structures, which represent a more transparent syntactic context to decide on which predicate the dative belongs to. In particular, a thematic dative can co-occur with a *that*-clause.

- (90) a. (Nek-ed) nem len-ne szabad_{adj}, hogy itt marad-j.

 DAT-2SG not be-COND allowed that here stay-SBJ.2SG
 'It shouldn't be allowed for you that you stay here.'
 - b. (*Nek-ed) nem szabad-na_{saux}, hogy itt marad-j.

 DAT-2SG not may-COND that here stay-SBJ.2SG 'It shouldn't be allowed that you stay here.'

It is important that *szabad*_{saux} does not license a thematic dative, irrespective of its particular modal reading.³⁹

The same observations carry over to kell. In main-predicate contexts (in the presence of a nominative subject or a dative phrase) the familiar $kell_v$ is used with the meaning 'need'. $Kell_{saux}$ is only licensed in the absence of a clausemate nominative subject or dative phrase.

- (91) a. János-nak kell, hogy alud-j-on egy kicsi-t.

 John-DAT need that sleep-SBJ-3SG a little-ACC

 'John needs (it) that he sleeps a bit.'
 - b. ITT kell, hogy alud-j-on János. here must that sleep-SBJ-3SG John 'It is HERE that John must sleep.'

In (91b), the adverb *itt* 'here' is long-focus raised from the subordinate clause to satisfy the need of the stress avoiding $kell_{saux}$ to cliticize phonologically to preceding material. In (91a), the dative $J\acute{a}nosnak$ is base-generated in the matrix as the thematic adjunct of the predicate $kell_v$. There is a clear interpretive difference between the two uses, which translates well into English as indicated.

The third modal *lehet* 'may, can' or 'may be' is a somewhat more complex case.

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³⁹ *Szabad* most often has a deontic reading, which is associated with a dyadic structure in the literature on Hungarian modals. If this were really so, then (90b) should be grammatical. I discuss this issue in some detail in 6.3.4.

On its epistemic reading, it usually governs indicative mood in its *that*-clause, and it allows a nominative pronoun associate with it (92a). On its non-epistemic reading (deontic or circumstantial in (92b)), it governs the subjunctive and it cannot have the nominative pronoun.⁴⁰

- (92) a. (Az) Lehet, hogy marad-unk egy kicsi-t. that be.POSSUF that stay-1PL a little-ACC 'It may be that they we stay here for a while.'
 - b. (*Az) Meddig lehet, hogy marad-j-unk? that how.long can that stay-SBJ-1PL 'How long can we stay?'

By the force of our reasoning epistemic *lehet* 'may be' in (92a) must be the copula, and not the semi-auxiliary - semi-auxiliaries cannot have a nominative subject. This is strengthened by the fact that the copula can take an indicative *that*-clause in Hungarian.

(93) Az van, hogy marad-unk egy kicsi-t. that is that stay-1PL a little-ACC '(The thing) is that we stay here for a while.'

The semi-auxiliary *lehet* 'may' is the non-epistemic entry that we find in (92b). I have mentioned above that semi-auxiliaries either take a subjunctive *that*-clause or an infinitive. If *lehet* is inserted into an infinitival construction, it can only have a non-epistemic reading.

(94) Nek-ünk itt lehet marad-n-unk.

DAT-1PL here can stay-INF-1PL

'We can stay here.' [√deontic, √circumstantial, *epistemic]

The judgments are very clear on the possible interpretations of (94). I conclude that the semi-auxiliary *lehet* is non-epistemic and can take an *infinitival* or a *that*-clause complement. The epistemic *lehet* is in fact the copula, and it takes a *that*-clause subject.

Now that I have shown why the semi-auxiliaries should not be conflated with their respective main predicate counterparts, let us see what makes them a distinct group of verbs. The semi-auxiliaries belong to the group of verbs that trigger what has come to be called verb-modifier (VM) climbing in neutral sentences. VM-climbing, first described in Kálmán et al. (1986, 1989), is the movement of the verb modifier of the infinitival complement into the matrix VM-position in front of a stress-avoiding verb (or the AspP in the clause structure I have adopted in 1.3). As a result, the moved VM picks up sentential stress, and the finite verb that triggers VM-climbing can stay unstressed, being prosodically cliticized to the VM. This drive is

⁴⁰ This use of *lehet* 'can' is restricted to polarity contexts.

so strong that it even separates non-compositional VM+V units, such as *bele-szól* 'interrupt (a conversation)', literally *into+say*. The grammaticality contrast between the stress-avoiding verbs in (95b-c) and the non-stress avoiding *utál* 'hates', which does not allow VM-climbing, is very clear.

- (95) a. *Bele utál-ok szól-ni. into hate-1SG say-INF int. 'I hate to interrupt.'
 - b. Bele kell szól-n-om. into must say-INF-1SG 'I must interrupt.'
 - c. Bele akar-ok szól-ni. into want-1SG say-INF 'I want to interrupt.'

VM-climbing in infinitival clauses is something that semi-auxiliaries share with a relatively large group of verbs. 41

The reason why semi-auxiliaries are special is that they allow non-compositional VM-climbing even through a *that*-clause boundary (96a-c). Moreover, only they allow such VM-climbing, which is at best very marginal even with the strongly stress-avoiding predicate *akar* 'wants' (96d).

- (96) a. Bele kell, hogy szól-j-ak a vitá-ba. into must that say-SBJ-1SG the debate-ILL 'I must interrupt the debate.'
 - b. Bele szabad-na, hogy szól-j-ak a vitá-ba? into may-COND that say-SBJ-1SG the debate-ILL 'Might I interrupt the debate?'
 - c. Bele lehet-ne, hogy szól-j-ak a vitá-ba? into can-COND that say-SBJ-1SG the debate-ILL 'Could I interrupt the debate?'
 - d. ^{??}János bele akar-ja, hogy szól-j-ak a vitá-ba. John into want-3SG that say-SBJ-1SG the debate-ILL 'John wants me to interrupt the debate.'

That VM-climbing is possible across a that-clause boundary is pointed out in É. Kiss

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⁴¹ The complete list of these verbs, which Kálmán et al. (1989) regard as the Hungarian auxiliaries is as follows. My semi-auxiliaries are underlined.

akar 'wants', bír 'is able to, can', fog 'will', <u>kell</u> 'must', <u>kezd</u> 'begins', <u>kíván</u> 'wishes', <u>lehet</u> 'may, can', mer 'dares', <u>óhajt</u> 'longs', <u>próbál</u> 'tries', <u>szabad</u>_{adjv} 'may, is allowed to', <u>szándékozik</u> 'intends', <u>szeretne</u> 'would like to', <u>szokás</u>n 'it is a custom', <u>szokott</u> 'generally does', <u>talál</u> 'happens to', <u>tetszik</u> [polite auxiliary], <u>tud</u> 'can; know'

(1994:59). She, as well as Szabolcsi & Koopman (2000:23) and Szendrői (2004), uses this fact to argue that VM-climbing is not head movement, unlike Romance-style clitic climbing. ⁴² The same observation leads Tóth (2000a:195) to reject the idea that any of the modal predicates are restructuring in Hungarian, and to propose that all of them are regular predicates with their own thematic structure.

But this conclusion is not necessarily warranted. First of all, none of these authors notes the fact that VM-climbing out of finite clauses is a very restricted phenomenon (as opposed to VM-climbing in infinitival constructions). In particular, non-compositional VM-climbing is only licensed by the three semi-auxiliaries. Second, Cinque (2006a:20-21) discusses data from Italian dialects, French, and Serbo-Croatian, in which clitic climbing is attested from an apparent finite clause complement. He points out that such phenomena are very restricted and need not threaten the notion that clitic climbing is monoclausal, because the respective constructions show very strong clause union effects.

There are indications that non-compositional VM-climbing indeed creates intensively coherent structures in Hungarian. É. Kiss (1998:159) shows that nothing but the complementizer can intervene between the matrix and the subordinate verbs in data of the kind in (96). Compare (97) with (96a).

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(97) *Bele kell, hogy a vitába szól-j-ak.
into must that the debate-ILL say-SBJ-1SG
'I must interrupt the debate.'
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Further, the complementizer generally cannot be deleted in subjunctive clauses in Hungarian, and this constraint becomes absolute if long-focus raising or, more restrictedly, (compositional) VM-climbing takes place.

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(98) Haza akar-om, *(hogy) men-j.
home want-1SG that go-SBJ.2SG
'I want you to go home.'
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In the Hungarian spoken in Transylvania, and increasingly in the eastern part of Hungary, which borders with this area, the complementizer is more or less regularly deleted if VM-climbing takes place, but *only in the case of the semi auxiliaries*. ⁴³ The two verbs are strictly adjacent.

⁴² But see É. Kiss (1999) for arguments for the head movement analysis of VM-climbing.

⁴³ É. Kiss (1998:159) also notes this with respect to what I gloss *kell*_{saux} 'must', but in fact this behavior characterizes each of the semi-auxiliaries. This complementizer deletion is likely to have arisen as a result of areal contact with Rumanian, which has similar Balkantype subjunctive clauses.

- b. ^{%?}Be lehet-ne jöj-j-ek egy perc-re? in may-COND come-SBJ-1SG a minute-SUB 'Could I come in for a minute?'
- c. ***Be szabad-na jöj-j-ek egy perc-re?
 in may-COND come-SBJ-1SG a minute-SUB
 'Might I come in for a minute?'

In this dialect, the semi-auxiliaries evidently behave as the functional restructuring verbs of the Romance or Germanic languages.

To sum up the preceding discussion, I have argued that the modal verbs *kell* 'must', *lehet* 'can, may' and *szabad* 'may' make up a special semi-auxiliary group. Semi-auxiliaries can have only infinitival or subjunctive complements, but they cannot have nominative subjects, nor can they take a dative thematic adjunct (or argument). This is the reason why they are not included in the main text. They are glossed as semi-auxiliaries because they can take a finite-complement, but they do not have a thematic structure. That they need to take a clausal complement follows from their operator-properties.

They can show very strong coherence, especially if VM-climbing takes place. In the eastern dialect of Hungarian, they seem to have developed into functional restructuring verbs of the Cinque-type.

$$[CP \dots [FP \dots [V_{saux}, [VP V_2(\theta)]]]]$$

In the standard, they allow more structure on their complements, which can possibly be a CP. In the absence of coherence-phenomena, the semi-auxiliary and the embedded verb can both project their left-periphery.

(101)
$$\left[C_P \dots \left[C_P \dots C_P \dots C_P \dots C_P \dots C_P \dots C_P \right] \right] \right] \right] \right] \right] \right] \right] \right] \right]} \right]$$

But they do not assign a thematic role to their clausal complement even in the absence of obvious coherence phenomena. This is what distinguishes them from the dative predicates discussed in the main text.

One consequence of this analysis is that the dative phrase that appears by these predicates can only be generated as the subject of the infinitive (it can then be extracted to the left periphery of the semi-auxiliary).

I show in Chapter 6 that there are independent reasons to assume that infinitival clauses can have overt dative subjects in Hungarian, which gives further warrant to this analysis. Notice that this does not make these datives quirky. Quirky subjects, as

they have been discussed in this chapter, occur in finite clauses projected by designated groups of predicates.

Finally, it should be noted that there is some dialectal and/or stylistic variation in the group of verbs that license VM-climbing, the crucial test I have been using here. Kálmán et al. note (1989) that some of our [–]-subject dative predicates, notably *illik*_v 'is proper to, fits', *sikerül*_v 'succeeds', *szükséges*_{adj} 'necessary, required', *muszáj*_{adj} 'must, necessary', license VM-climbing in the vernacular. This, however, is restricted to infinitival constructions, but VM-climbing is not very successful from *that*-clauses even in informal, spoken language.

- (103) a. *Még időben haza sikerül-t ér-ni. still in.time home succeed-PART get-INF 'We managed to get home still in time.'
 - b. %?? Még időben haza sikerül-t, hogy ér-j-ünk. still in.time home succeed-PART that get-SBJ-1PL 'We managed to get home still in time.'

This suggests that these dative predicates may optionally be treated as restructuring verbs, possibly of the lexical restructuring type of Wurmbrand (2004). I only make note of this variation, the importance of which is that it seems a plausible hypothesis that these predicates may optionally take clausal complements, rather than clausal subjects.

Datives and agreement-marked infinitives

6.1. Agreement-marked infinitives in Hungarian

The predicates that license a dative thematic adjunct ([-m]-subject predicates for short) can take agreement-marked infinitives in Hungarian. Such infinitives are also licensed by (i) the semi-auxiliaries discussed in the Appendix in 5.6, by (ii) evaluative nominal predicates (e.g. *gonoszság* 'viciousness'), and by (iii) permissive predicates (e.g. *hagy* 'lets', *segít* 'helps'). I refer the reader to Tóth (2000a) for a comprehensive survey of the contexts in which agreement-marked infinitives can appear in Hungarian. In this chapter, I concentrate on [-m]-subject dative predicates (the *important*-class), which, together with the semi-auxiliaries, are the most typical licensors of infinitival agreement marking in Hungarian.

The common denominator to all the contexts where infinitival agreement marking is licensed is that any overt DP that agrees with the infinitive is dative-marked.² From a purely descriptive perspective, four combinations are possible, which I illustrate with the [-m]-subject dative predicate *fontos* 'important': the dative can occur with (1a) or without (1b) infinitival agreement, infinitival

¹ I prefer to use the descriptively more transparent term *agreement-marked infinitive* to *inflected infinitive*, which has gained currency with respect to Portuguese (cf. Raposo 1987, 1989) and Hungarian (Tóth 2000a). These infinitives bear overt morphology coding the number and person features of subject agreement, but they do not bear overt tense marking. Though one can have assumptions about the presence or absence of 'dependent tense' on infinitives, it is a fact that there is no overt morphological reflex of tense on infinitives either in Hungarian or Portuguese. The term *agreement-marked infinitive* makes this fact clear.

² Contra Tóth (2000a), who claims that infinitival agreement can appear also in the presence of a matrix ablative-marked phrase, such as the following (her judgment).

 ⁽i) Butaság volt János-tól itt marad-ni-a. stupidity was John-ABL here stay-INF-3SG 'It was a stupidity of John to stay here.'

É. Kiss (2002:215) evaluates this construction as '?*'. For me too, (i) is only acceptable if the infinitive is not marked for agreement, and since the native speakers I have consulted all shared this view, I maintain that only dative DPs can agree with infinitives.

agreement is grammatical without an overt dative (1c), and both the dative and infinitival agreement may be absent.

- (1) a. Nem fontos nek-em itt marad-n-om. [+DAT, +AGR_{inf}] not important DAT-1SG here stay-INF-1SG 'It is not important for me to stay here.'
 - b. Nem fontos nek-em itt marad-ni. [+DAT, -AGR_{inf}] not important DAT-1SG here stay-INF
 'It is not important for me to stay here.'
 - c. Nem fontos itt marad-n-om. [-DAT, +AGR_{inf}] not important here stay-INF-1SG 'It is not important for me to stay here.'
 - d. Nem fontos itt marad-ni. [-DAT, -AGR_{inf}]
 not important here stay-INF
 'It is not important to stay here.'

Though agreement-marked infinitives have attracted considerable attention in generative research on Hungarian, there is no general consensus on how exactly the distribution of the dative phrases correlates with agreement-marking on the infinitive.³ Existing analyses may build on incompatible empirical claims concerning the very data they aim to explain.

The major aim of this chapter is to reconsider the data and the debate concerning agreement-marked infinitives in the light of the distinction that I have made between dative arguments and dative thematic adjuncts. In particular, I wish to give further substantiation to É. Kiss' proposal (2001, 2002) through the data I have been investigating, and assume together with her that the presence of agreement-marking on the infinitive correlates with the dative phrase being the subject of the infinitival clause. In the absence of infinitival agreement-marking, the subject of the infinitival clause is PRO. Therefore in (1a) the dative pronoun is most likely to be the subject of the infinitive, but in (1b) the dative is in the matrix and it controls the PRO subject of the infinitive. The structure that É. Kiss assigns to these sentences, and which I adopt, is schematically represented in (1').

(1') a. not important [IPinf I.DAT to-stay-AGR]
b. not important I.DAT [IPinf PRO to-stay]

The dative thematic adjunct of *fontos* 'important' has been shown to be truly optional in Chapter 4. Consequently, (1a) need not involve an implicit dative

³ Infinitival agreement marking in Hungarian is discussed in, among others, Csirmaz (2001), Dalmi (1983, 1995, 2002, 2005), É. Kiss (1986, 1987, 2001, 2002), Kenesei (1993), Komlósy (1994), Rákosi & Laczkó (to appear), and Tóth (2000a, 2001, 2002, 2004).

argument in the matrix clause, and thus need not be a case of implicit control. The same applies to sentences (1c) and (1d). I will show that this approach gives the right predictions with respect to how these structures are used and interpreted, contra analyses in which these constructions are thought to involve obligatory implicit dative control (as in Tóth 2000a or Landau 2001).

The claim that infinitival clauses can have dative subjects in Hungarian does not contradict my argumentation in Chapter 5 against the existence of quirky dative subjects in Hungarian. The quirky datives in Icelandic are thematic datives, i.e., they are licensed to be subjects even in finite clauses, but only with certain types of predicates (usually in the case of non-agentive predicates). As I have shown in Chapter 5, datives cannot be quirky subjects in finite clauses in Hungarian. This is independent from the possibility that structural dative case can be assigned to the subject of an infinitive. Notice that this case-assignment is not sensitive to what theta-role is assigned to the non-finite subject by the infinitive: any overt infinitival subject receives dative case in this syntactic context.⁴

A methodological caveat is in order before further elaboration. Agreement-marking is not an across-the-board property of infinitives in Hungarian even in contexts which otherwise license it. In fact, for many native speakers its productive use is practically confined to a handful of predicates, which are usually *kell* 'must', *szabad* 'may', and *sikerül* 'succeeds'. In general, most speakers tend to disprefer agreement-marking, and they use the plain infinitive whenever it is possible.⁵

Sometimes this dispreference appears to be purely functional. *Lehet* 'can', for example, is very rarely used with agreement-marked infinitives. Most probably, the reason is that instead of the infinitival construction, speakers simply use the possibility suffix -*hAt* on the relevant verb to convey essentially the same meaning. So (2b) is generally preferred over (2a).

(2) a. Nek-em itt lehet marad-n-om.

DAT-1SG here can stay-INF-1SG
'I can stay here.'

⁴ The same considerations apply to English. English does not have quirky datives, but infinitival subjects are nevertheless licensed by the preposition *for*.

⁽i) It is unpleasant for Peter for his brother to be in prison.

⁵ It needs to be admitted though that agreement-marked infinitives are relatively frequent in corpora. Bottyán & Sass (2005) report that they have found 228367 tokens of agreement-marked infinitives in the Hungarian National Corpus, which contained 153.7 million words at the time their research was conducted. This is a frequency of roughly 1.5‰, which is relatively high (on the average, 3 out of every 2000 words in the corpus is an agreement-marked infinitive). Nevertheless, the majority of these occurrences are licensed only by a handful of predicates.

⁶ I have made some preliminary corpus counts, and it turns out that less than 2-3 percent of the infinitives governed by *lehet* 'may' are agreement-marked.

b. *Én itt marad-hat-ok*. I here stay-POSSUF-1SG 'I can stay here.'

The infinitival construction predominantly appears without infinitival agreement marking and without a dative phrase, and then it has an arbitrary interpretation on the subject of the infinitive.

(3) Itt lehet dohányoz-ni.
here can smoke-INF
'It is possible/allowed to smoke here.'

The construction represented by (3) is the same as (1d), and in any corpora of Hungarian, it is by far the most common of the four constructions in (1) for the majority of predicates that license agreement-marked infinitives in Hungarian.

In fact, many speakers are uncertain in their judgments concerning relevant data and the reason may be that infinitival agreement-marking is possibly dying out slowly. It has certainly been on a steady decline ever since the Middle Ages in Hungarian. Until the end of the medieval age, agreement-marked infinitives appeared in various syntactic contexts where they are plain ungrammatical today, including control, raising or ECM constructions (cf. Károly 1956). As Rákosi & Laczkó (to appear) point out, it is easy to find agreement-marked infinitives even in nineteenth century texts that no speaker would accept today.

Unfortunately, very little empirical research has been done on the synchronic status of infinitival agreement-marking. Bottyán and Sass (2005) have conducted a search of the Hungarian National Corpus, and they found 197 predicates which can govern agreement-marked infinitives (the majority does so only very infrequently). Tóth (2002) constructed two questionnaires to test native speakers' intuitions on the use of agreement-marked infinitives governed mainly by modal and evaluative predicates. Part of her evaluation of the data is that there is much dialectal and idiolectal variation, which I concur with. Besides, the occasional uncertainty of the informants is reflected also by the fact that on closer inspection the results of the two questionnaires turn out to be partially inconsistent.⁷

The second questionnaire contained 13 sentences with 3PL datives and the choice of 3SG or 3PL agreement-marking on the infinitive, to test if anti-agreement is acceptable or not. One

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⁷ All the sentences in the second questionnaire, and half of the sentences in the first contained monadic matrix predicates that can license agreement-marked infinitives (modal predicates and evaluative nominal predicates). The first questionnaire contained 11 such sentences, and speakers had to decide whether they thought agreement-marking was obligatory, optional or obligatorily absent in the given context. For seven sentences, 0% of the informants said that agreement marking must be absent; 5% condemned agreement marking in 2 sentences, 11% did not accept agreement marking in further 2 sentences. Thus, in more than half of the cases, agreement-marking was at least optional for these informants, and for the remaining 4 sentences, there was an average rejection rate of agreement marking by 8% of the speakers.

These factors need to be taken into consideration in the overall evaluation of the data to be discussed below. Whenever possible, I try to use minimal pairs that are judged to be in contrast for most speakers. In certain cases, however, speakers find no essential difference in grammaticality or in interpretation between the agreement-marked and the plain infinitive in a given context. I will suggest a possible explanation for these cases in 6.3.

6.2. Previous accounts

6.2.1. Introduction

In this section, I give a brief overview of the previous literature on contexts in which agreement-marked infinitives occur in Hungarian. I review the proposal as well as the empirical claims in each case. There is a surprising amount of variation in both domains.

In case the matrix predicate is thought to have a dative argument in these analyses, I will refer to the predicate and the construction as "dyadic", and if the dative is thought to be the subject of the infinitive, I use the term "monadic" to describe the matrix predicate and the construction. This is partly done for expository purposes, and partly to remain faithful to the original terminology used in these papers. In my analysis, the dative in a "dyadic" structure can in principle be either a thematic adjunct or an argument of the matrix predicate, but I gloss over this difference in the overview of these proposals.

6.2.2. Komlósy (1994)

For Komlósy, every modal predicate is monadic, including what I call the semi-auxiliaries (e.g. *kell* 'must') and the modal adjectives (e.g. *tilos* 'prohibited').

[MODAL_{v/adj} [
$$_{IPinf}$$
 DP_{dat} V_{inf}(AGR)]

Every dative evaluative predicate (e.g. *kellemes* 'pleasant') is assigned a dyadic structure, in which the dative controls the *PRO* subject of the infinitive. The most important motivation for this is that this dative, which is necessarily an experiencer for Komlósy, can appear in the matrix in *that*-clause paraphrases.

$$[EVALUATIVE_{v/adj} DP_{dat} [IPinf PRO V_{inf}(AGR)]$$

option was to indicate whether neither agreement morpheme is acceptable. It was just one sentence that all the informants required to have infinitival agreement-marking, but in the rest of the cases both agreement markers were rejected by 5% of the speakers at the lowest to 37% at the highest, the average being 18.5%. It is clear that in a different experimental setting, the same speakers expressed increased intolerance towards infinitival agreement-marking in the same construction types that were involved in the first questionnaire.

Komlósy does not attach much significance to the presence or absence of agreement-marking on the infinitive, he simply remarks that whether it is there or not depends on the matrix predicate and the dialect, but this has no direct bearing on the choice between (4) or (5). Though he represents the infinitival subject is as a PRO in (cf. (5)), he remarks that the dative can be pro-dropped in the presence of infinitival agreement. Missing datives are claimed to be represented as pro_{arb} in the lack of infinitival agreement.

6.2.3. Dalmi (1983, 1995, 2002, 2005)

In a series of articles, Dalmi has developed an analysis of agreement-marked infinitives which has changed in theoretical assumptions together with the times but stayed constant in its essential message. She takes evaluatives to be obligatorily dyadic, whereas modals can *optionally* be dyadic (contra Komlósy 1994). These are analyzed in a control frame, essentially identical to that of Komlósy (5). Monadic modals, however, are thought to project a sort of a raising structure. I represent the structure schematically.

The major difference between (6) and (4) is that in Dalmi's analysis dative case is not available from within the infinitival clause, but is always assigned by the matrix predicate when the dative has moved to the matrix clause. The difference between a dyadic modal (as in 5) and a monadic modal (as in 6) lies in where the dative receives its theta-role from: the source is the matrix predicate in the former case, and the embedded infinitive in the second.

Dalmi, just like Komlósy, does not attach particular attention to the exact relation between the dative and the agreement-marking on the infinitive, though she remarks that in the presence of a dative phrase, the agreement marker on the infinitive can generally be dropped. The underlying assumption is that the agreement marker is only necessary if the dative is absent and the infinitival subject needs to be identified.

Dalmi (2002, 2005) argues for a quirky analysis of modal and evaluative predicates, in which the dative is either a subject controller or a raised subject in the infinitival constructions. I have extensively argued against the quirky analysis in Chapter 5, but the essence of Dalmi's proposal - that datives can control or be raised - does not in principle depend on whether they are subjects or not.

6.2.4. *Tóth (2000a, 2001, 2002, 2004)*

Tóth (2000a) and her subsequent work, in addition to presenting the most comprehensive discussion of agreement-marked infinitives in Hungarian, also

develops an elaborate analysis adopting Borer's (1989) control theory based on the notion of anaphoric Agr. It is a consequence of Borer's theory that a controlled subject is represented as *pro*, rather than *PRO*, which I take over from Tóth for the purposes of representing her structures, but I refer the reader to Tóth (2000a) for the technical details of the analysis.

Her basic empirical claims coincide with those of Dalmi: modal predicates are thought to be optionally monadic or dyadic, whereas evaluatives are always dyadic. She also assumes that infinitival agreement-marking is by and large optional in the presence of a dative phrase. If a dative phrase is not present, then infinitival agreement is obligatory to identify the subject of the infinitive, or it has an arbitrary reading. I represent her proposal by quoting her sample structures (2000a:75).

In (7), there are two examples for the monadic structure: the subject of the infinitival clause is a dative DP in (7a) and a *pro* in (7b). The modal adjective *muszáj* 'must, necessary' has an epistemic reading in both.

- (7) a. Muszáj [IPinf valaki-nek otthon len-ni(-e)].
 must somebody-DAT home be-INF-3SG
 'Somebody must be at home.'
 - b. Muszáj [IPinf pro otthon len-ni*(-e)]. must home be-INF-3SG 'He must be at home.'

The dyadic evaluative *kellemetlen* 'unpleasant' is thought to project the following two structures, with (8a) or without (8b) an overt dative in the matrix.

- (8) a. Kellemetlen volt Kati-nak_i [pro_i az igazság-ot bevalla-ni(-a)]. unpleasant was Kate-DAT the truth-ACC admit-INF-3SG 'It was unpleasant for Kate to admit the truth.'
 - b. Kellemetlen volt pro_i [pro_i az igazság-ot bevalla-ni*(-a)]. unpleasant was the truth-ACC admit-INF-3SG 'It was unpleasant for him to admit the truth.'

The subordinate subject position is occupied by *pro*, as is assumed in the anaphoric Agr analysis of control. It is two other aspects of Tóth's proposal that will be relevant for us. First, the matrix dative and the subordinate subject are necessarily coindexed. In other words, this is claimed to be an obligatory control configuration. (9a) is indeed unacceptable, in striking contrast with its English equivalent (9b).⁸

⁸ Notice that Tóth's Borerian proposal (2000a) does not *per se* explains this contrast between the two languages. Borer's (1989) account of control is based on the assumption that (obligatory) control is essentially an anaphoric dependency, which arises when the subordinate INFL moves to the subordinate COMP, where it becomes accessible to the matrix controller (by transitivity, the infinitival subject will also get the same index as the controller). (i) and (ii) are both fine because the preposition *for* occupies the COMP position, and the subject of the infinitive is not accessible to the matrix controller.

- *Kellemetlen volt Katinak [Péter-nek az igazságot bevalla-ni(-a)] (9)unpleasant was Kate-DAT Peter-DAT the truth-ACC admit-INF-3SG int. 'It was unpleasant for Kate for Peter to admit the truth.'
 - b. It was unpleasant for Kate for Peter to admit the truth.

Second, Tóth explicitly addresses the issue of what happens if the matrix dative is not present phonologically. For her, evaluative predicates and dyadic modals are necessarily dvadic, and though the dative can be implicit, it is represented in syntax as a pro. This carries over to the construction where neither the dative, nor the infinitival agreement marker is present. I am quoting (10) from her (2000a:124). She does not use indices on proarb, but she explicitly claims that structures like (10) are to be interpreted under coindexation. That is, learning English is useful for whoever does the learning.

(10)Nagy hasznos pro_{arb} [pro_{arb} angolul tanul-ni]. very useful English learn-INF 'It is very useful to learn English.'

Since I assume that 'dyadic' modals and evaluatives have a truly optional thematic adjunct, my proposal is not compatible with Tóth's analysis. In 6.3.3., I will show that her analysis does not give the right predictions, and the claim that [-m]-subject dative predicates are not necessarily dyadic can be maintained. But before elaborating on that, I give a brief summary of É. Kiss' (2001, 2002) approach to agreement-marked infinitives.

Tóth (2000a) does not in fact elaborate upon what could be the source of difference between the two languages. In her analysis, the subject of the infinitive is always accessible to the matrix controller in Hungarian because the subordinate Agr always moves up to the infinitival CP (2000:67). I refer the reader to her monograph for the precise technical details, but what her suggestion seems to boil down to is that nothing is base-generated in the C head of infinitival CP in Hungarian, which is therefore always open to attract the subordinate Agr. Alternatively, we could suppose that infinitives are never larger than IP in Hungarian (as in Rákosi & Laczkó 2005). Given that it is customary to correlate the presence of obligatory control with a smaller-sized infinitive (cf. Landau 2001 and Wurmbrand 2001), it could be that what explains the above difference between Hungarian and English is the size that is maximally allowed for an infinitival clause. I do not have anything more illustrative to add to this problem.

⁽i) It would please John for Bill to win.

⁽i) It was unpleasant for John for Peter to admit the truth.

6.2.5. É. Kiss (2001, 2002)

É. Kiss' proposal (2001, 2002) differs from the others in two crucial respects. First, she claims that the presence of infinitival agreement-marking strictly correlates with the dative phrase being a clause-mate subject. In other words, if the infinitive is marked for agreement, the matrix predicate is monadic and the dative is base-generated as the subject of the infinitive (or can be *pro*-dropped).

(11) Fontos [IPinf János-nak részt ven-ni*(-e) a verseny-en]. important John-DAT participate-INF-3SG the competition-SUP 'It is important for John to participate at the competition.'

In the absence of infinitival agreement-marking, the subject of the infinitive is *PRO*, and the dative is base-generated outside the infinitive as the argument of the matrix predicate.

(12) Fontos János-nak [IPinf PRO részt ven-ni(*-e) a verseny-en].

important John-DAT participate-INF-3SG thecompetition-SUP
'It is important for John to participate at the competition.'

The dependency between the matrix dative and the embedded PRO is a regular control relation.

É. Kiss assumes all the evaluative and modal predicates to be structurally ambiguous between (11) and (12), though she does not specifically argue this point empirically. My analysis shares with hers the conviction that the dative is optional with all these predicates. In what follows, I argue that the choice between (11) and (12) can have an effect on the interpretation of these structures, and the proposed correlation between the presence of infinitival agreement-marking and the subordinate-clause internal status of the dative indeed seems to hold at least as a strong tendency.

The second crucial assumption in É Kiss (2001, 2002) is that agreement-marked infinitives and possessive constructions can be treated on a par. The two indeed appear to be quite similar: possessors are marked with dative case if they are extracted from the core of the noun phrase, and they agree with the possessed noun. The possessive agreement paradigm is almost identical with the infinitival agreement paradigm. Compare the infinitival (13a) and the possessive (13b) constructions.

⁹ É. Kiss (2001, 2002) is a revised version of É. Kiss (1986, 1987). Since her latest work supersedes the earlier proposal in important respects, I do not discuss É. Kiss (1986, 1987).

¹⁰ See É. Kiss (2000, 2002) and Szabolcsi (1983, 1992a, 1992b, 1994) for details.

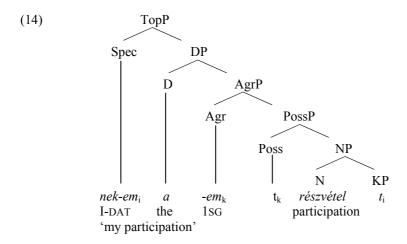
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- (13) a. Nek-em nem sikerül-t résztven-n-em.

 DAT-1SG not succeed-PAST participate-INF-3SG
 'I did not manage to participate.'
 - b. Nek-em nem sikerül-t a részvétel-em.

 DAT-1SG not succeed-PAST the participation-POSS.3SG 'My participation did not succeed.'

The possessive noun phrase in (13b) has the following structure in the proposal of \acute{E} . Kiss (2000). 11

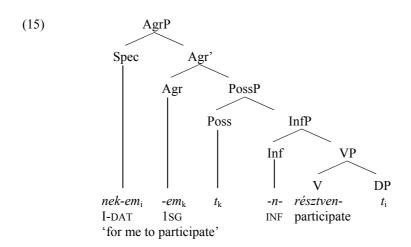


The dative possessor is base-generated to the right of the head of the noun phrase. It can be topicalized inside the noun phrase, and then possibly extracted, as it happens in (13b).

É. Kiss takes the infinitival marker -ni to be a nominalizing suffix, which creates a nominal cap over agreement-marked infinitives. Above InfP, the structure is nominal, and the verbal properties are buried inside the InfP projection. (15) represents the structure of (13a), based on É. Kiss (2001).

-

¹¹ I assume that the heads of the AgrP and Poss(essive)P are spelled out by the same morpheme *-em* in (13b). See Bartos (1999) for why it is necessary to postulate these two functional projections in the noun phrase.



DP is not projected on infinitives. This layer is only projected in possessive structures if the head noun is [+spec], but infinitives cannot be specific.

The categorial identification that É. Kiss postulates between agreement-marked infinitives and possessive noun phrases does not withstand closer scrutiny, as is argued extensively in Rákosi & Laczkó (to appear). In particular, neither agreement-marked, nor plain infinitives have the external syntax of noun phrases in Hungarian, in contradistinction to, among others, Portuguese agreement-marked infinitives. In Portuguese, agreement-marked infinitives can optionally take the definite article, and they can be complements of prepositions (cf. Raposo 1987, 1989).

(16) *Portuguese*, Raposo (1987: 97, 88)

- a. Nós lamentamos o eles terem recebido pouco dinheiro. we regret.1PL the they.NOM have.INF.3PL received little money 'We regret that they have received little money.'
- b. Eu entrei em casa sem os meninos verem.

 I enter.PAST.1SG the house without the children.NOM see.INF.3PL 'I entered the house without the children seeing (me).'

In Hungarian, such constructions are strictly ungrammatical. An infinitive never can have a determiner (17a), and it cannot be complement to a postposition (17b).

- (17) a. Nem fontos (*a) nek-em (*a) haza-men-n-em. not important the DAT-1SG the home-go-INF-1SG 'It is not important (*the) for me to go home.'
 - b. *En-n-em-en kívül in-n-om is fontos. eat-INF-1SG-SUP in.addition.to drink-INF-1SG too important int. 'In addition to eating, it is also important for me to drink.'

See Rákosi & Laczkó (to appear) for an array of further arguments against the

assumption that agreement-marked infinitives have a nominal cap in Hungarian. In fact, this claim subsumes the generalization I have made in Section 5.4: recall that clauses (and non-nominal phrases in general) do not have a nominal shell in Hungarian. It is not surprising that infinitival clauses, whether agreement-marked or not, do not show the same distribution as noun phrases.

These reservations notwithstanding, there are obvious parallels between agreement-marked infinitives and possessive constructions. Most importantly, in both cases a dative phrase agrees with the head of the extended projection in which it occurs, and from which it can be extracted. This parallelism also has been noticed in passim in Komlósy (1994:169) and Tóth (2002:153), but they do not elaborate on the observation. Kálmán (2005) explicitly argues that the parallel between possessive and infinitival constructions is better captured through analogy, without necessarily setting up an explanation based on categorial identification. This I find a plausible approach to address this problem properly, but I will not make an attempt at it here. I only discuss one further aspect of the parallelism between the two structures in 6.3.4.

6.3. Revisiting infinitival agreement

6.3.1. *Overview*

I follow É. Kiss (2001, 2002) and assume that the following generalization holds.

(18) Generalization on agreement-marked infinitives

a. If an infinitive is agreement-marked, then the subject of the infinitival clause is a dative DP or *pro*.

[
$$_{CPfin}$$
 PRED [$_{IPinf}$ DP $_{dat}/pro$ V $_{inf}$ +Agr]

b. If a dative predicate takes a non-agreement-marked infinitive, then the subject of the infinitive is PRO, which the (optional) dative dependant of the matrix predicate can control.

For É. Kiss, the difference between the two constructions is absolute: if a monadic predicate (such as the nominal *butaság* 'stupidity') takes an infinitive without agreement-marking, then the structure is ungrammatical. As I noted in the introduction to this chapter (6.1), native speakers' judgments tend to show much variation and often both the presence and the lack of infinitival agreement is found acceptable in a given construction. We have also seen that most of the literature basically takes infinitival agreement-marking optional in the presence of a dative. I show below that (18) is valid, at least as a weak generalization, and minimal pairs do exist. If, however, judgments are too delicate, I will provide the relevant examples

with verbal comments, rather than referring to grammaticality markers. From a theoretical perspective, it would be more convenient to assume that if the dative does not agree overtly with the infinitive in a monadic structure, then infinitival agreement is still present but it is phonologically null. This is explicitly suggested in É. Kiss (1998:121) and in Tóth (2002:150). Needless to say, the massive application of this device makes the generalization in (18) impossible to prove empirically, or at least to prove it in a non-stipulative manner. I will therefore not resort to it, but try to seek an alternative explanation in 6.3.4.

I concentrate on showing that the proposed analysis of dative predicates, coupled with the generalization in (18), gives the right predictions for the infinitival constructions under discussion. In 6.3.2., I show that there is independent evidence that infinitives can have dative subjects in Hungarian (contra Dalmi 2005). Furthermore, it also holds that dative arguments are not compatible with agreement-marked infinitives, since they are required to be regular controllers by (18). In 6.3.3, I scrutinize evaluative predicates once again, and show that the previous claim that their dative is an *optional* thematic adjunct can be maintained, contra Tóth (2000a, 2002), Komlósy (1994) and Dalmi (2002, 2005). Finally, I investigate modals from the perspective of agreement-marked infinitives in 6.3.4. I have argued in Chapter 3 that the dyadic - monadic alternation does not in fact correlate with the partition of modal readings that is generally assumed in the literature on Hungarian. This has consequences on how modals are expected to behave in infinitival constructions, and I show that these expectations are borne out. In particular, this approach will help us accommodate the semi-auxiliary modals in the larger picture.

6.3.2. Datives as subjects of infinitives

We have seen that it is ungrammatical in Hungarian to spell out a dative infinitival subject together with a referentially distinct matrix dative, whereas this is possible in English. I repeat (9) for illustration. The source of the difference between the two languages is far from being obvious, I simply state that (9a) is an obligatory control construction but (9b) is not (see footnote 8).

- (9) a. *Kellemetlen volt Katinak [Péter-nek az igazságot bevalla-ni-a]. unpleasant was Kate-DAT Peter-DAT the truth-ACC admit-INF-3SG int. 'It was unpleasant for Kate for Peter to admit the truth.'
 - b. It was unpleasant for Kate for Peter to admit the truth.

The immediate relevance of this fact is that since only one of the two datives in (9a) can be realized at a time in Hungarian, it takes some effort to prove that a dative phrase can be generated directly as the subject of the infinitive. I substantiate the claim that this possibility exists in Hungarian with three types of arguments. First, we can argue that predicates that otherwise do not license a thematic dative can cooccur with a dative in the infinitival construction because the dative is the subject of the infinitive. Second, predicates that take dative arguments are not expected to

license agreement-marked infinitives by (18). If this is so, then it supports in turn the claim that infinitival agreement-marking is a relation with a clausemate dative subject. Third, we may try to find root infinitives with dative subjects - their existence provides independent support for the claim that infinitives can have dative subjects in Hungarian.

The first argument has been utilized by É. Kiss (1986, 1987) and Tóth (2000a). They both point out that nominal predicates of evaluation, such as *butaság* 'stupidity', *kár* 'no use' or *tévedés* 'mistake', cannot license a dative thematic dependant (19a). But they can license agreement-marked infinitives with a dative subject.

- (19) a. Butaság volt a részvétel (*János-nak). stupidity was the participation John-DAT 'Participation was a stupidity (*for John).'
 - b. Butaság volt [IPinf részt ven-ni-e János-nak]. stupidity was participate-INF-3SG John-DAT 'For John to participate was a stupidity.'

The raising-account of Dalmi (2002, 2005) cannot explain (19b), unless it is assumed that the predicate *butaság* 'stupidity' has two lexical entries: one that cannot assign dative case (19a), and another one that can (19b). This, however, would be an *ad hoc* assumption, which is not justified by anything else than the exigencies of the explanation pursued.

The second type of argument builds on dative predicates which we know independently to take dative arguments. One small group of such predicates are the permissive verbs of Tóth (2000a): *segít* 'help', *enged* 'allow', *hagy* 'let'. The dative argument of these predicates can only control a plain infinitive.¹³

(20) Segít-ett-em János-nak haza-men-ni(*-e). help-PAST-1SG John-DAT home-go-INF-3SG 'I helped John go home.'

This is what we expect under (18). Furthermore, it is also expected that the dative of

See Tóth (2000a) and É. Kiss (2001, 2002) for possible explanations for the difference between (20) and (i). Though example (i) is intriguing, it does not threaten the claim that overt dative arguments cannot agree with their controlled infinitives. It must also be noted that many speakers do not accept (i).

¹² They can, of course, license non-thematic, event-external dative adjuncts. Such high-level datives have different grammatical properties than the thematic datives under discussion, cf. 4.4.3.

¹³ If the dative argument is implicit, agreement-marking is possible on the infinitive.

⁽i) Segit-ett-em haza-men-ni(-e). help-PAST-1SG home-go-INF(-3SG) 'I helped (him) to go home.'

two-place dative unaccusatives (the *appeal to-*class), which have a dative argument, and not a dative thematic adjunct, cannot agree with their controlled infinitives either. This has not been noted in the literature before.

- (21) a. *János-nak derogál vel-em mutatkoz-ni*(*-*a*).

 John-DAT feels.derogatory COM-1SG show.up-INF-3SG 'It feels derogatory for John to show up with me.'
 - b. Nek-em nem jön be itt ácsorog-ni /*ácsorog-n-om
 DAT-1SG not come in here stand.around-INF stand.around-INF-1SG
 'I don't enjoy standing around here.'
 [lit. 'It does not come in for me to stand around here.]

These datives control a PRO in the infinitival complement, hence infinitival agreement-marking is not possible. Recall also that a 'dative' thematic adjunct can in fact be marked by the postposition <code>számára</code> 'for'. Since <code>számára</code> is a P-element with semantic content, it cannot mark the subject of the infinitive, which receives structural dative case. It can only mark thematic adjuncts in the matrix clause. Consequently, it is expected that a <code>számára-PP</code> can control into an infinitival clause, but it cannot trigger agreement on the infinitive.

(22) Számomra; fontos volt [PRO; ez-t lát-ni /*lát-n-om]. for.me important was PRO this-ACC see-INF see-INF-1SG 'It was important for me to see this.'

This gives further support both to the generalization in (18) and to my analysis of dative predicates presented in Chapter 4.

Dalmi (2005) mentions that a possible argument against the claim that infinitives can have dative subjects in Hungarian is that datives are not licensed in root infinitives in this language. It is well-known that Russian has such root infinitives. Consider the following example from Moore & Perlmutter (2000), who render the deontic flavor of the construction with the English phrase "in the cards".

(23) *Russian*, Moore & Perlmutter (2000:387)

Mne ne sdat' èkzamen.

I.DAT not pass.INF exam.ACC

'It's not (in the cards) for me to pass the exam.'

Moore & Perlmutter analyze these constructions as root infinitives with a dative subject. For Sigurðsson (2002), the structure is biclausal with a covert deontic matrix predicate; but for the sake of the argument, I assume the monoclausal analysis.

Dalmi's remark that there are no root dative subjects in Hungarian is not true, though the construction does seem to be quite marked (in contrast to Russian). Bartos (2002: footnote 5) notes that dative subjects are marginally acceptable in

imperative root infinitives. I personally find (24) better than '??', what I am quoting is his judgment.

(24) ^{??}A lány-ok-nak le-ül-ni, a fiú-k-nak sapká-t le-ven-ni! the girl-PL-DAT down-sit-INF the boy-PL-DAT cap-ACC down-take-INF 'The girls should sit down, and the boys should take off their caps.'

There is at least one root infinitive construction which licenses a grammatical dative subject. It involves questions with the wh-word *minek* 'what for, why', and the dative has been commented upon as fully acceptable by my informants.

(25) Minek nek-em iskolá-ba jár-ni / jár-n-om? why DAT-1SG school-ILL go-INF go-INF-1SG 'For what reason should I go to school?'

It is true though that the infinitive cannot be agreement-marked in (24), and infinitival agreement-marking is only an option in (25). Nevertheless, dative subjects can occur with root infinitives in Hungarian, and therefore Dalmi's contention towards the generalization in (18) does not withstand closer scrutiny. Though it is a marginal possibility, root infinitives can have dative subjects. As I have pointed out in the introduction (6.1), this is not in contradiction with the claim made in Chapter 5 that Hungarian does not have quirky subjects. This claim concerns finite clauses, where quirky dative subjects are not grammatical in Hungarian.

6.3.3. Evaluative predicates in the infinitival construction

Tóth (2000a, 2002) makes three important claims concerning Hungarian evaluative predicates that take an infinitival clause. First, she claims that they are always dyadic. In the absence of a phonologically realized dative, the argument is represented as a syntactically active *pro*. Second, the matrix dative argument obligatorily controls the subject of the infinitive. If the matrix experiencer is *pro*, implicit dative control (a la Borer 1989) obtains with the subordinate subject. Third, the presumed dative *argument* of evaluative predicates is always an experiencer. É. Kiss (2001, 2002) shares the third assumption, but rejects the first (and she does not comment on the second). As we have seen, she argues that if the infinitive is agreement-marked, the evaluative predicate is monadic; and if the infinitive is not marked for agreement, then the dative is the argument of the matrix evaluative.

I have argued that all evaluative predicates take an optional thematic adjunct, which can, but need not be an experiencer. But recall that the data we have considered in Chapter 3 and Chapter 4 did not include the infinitival construction. In principle, it could be assumed that the evaluative predicates that take infinitives are non-identical with the ones that take a *that*-clause or a nominative subject. I find such a solution non-satisfactory, and I believe it to be against the spirit of the lexicalist assumptions that I am presupposing. By default, different categorial realizations of an argument of a predicate are not expected to be projected from

distinct lexical entries. To extend my proposal to infinitival constructions, I have to prove then that Tóth's claims do not hold, which is what I set out to achieve. In particular, I want to show with respect to the infinitival constructions that evaluatives can be monadic: the dative thematic adjunct is inserted into the matrix clause only optionally, as I have argued in Chapter 4. Furthermore, even if the dative thematic adjunct is inserted, it does not have to be interpreted as an experiencer, contra Tóth but in compliance with my analysis in Chapter 4.

Let me first present Tóth's arguments as in Tóth (2002). She concentrates on predicates like *kellemetlen* 'unpleasant', *kellemes* 'pleasant', or *kinos* 'awkward, embarrassing'. If these predicates have an obligatory dative experiencer argument, she argues, they should always show selectional restrictions on the dative expression that appears in the infinitival construction. If they do not show such selectional restrictions, it means that the dative is not an argument of the matrix predicate but it is directly selected as the subject of the infinitive. She presents data that support the first option. In (26a), an inanimate dative renders the sentence ill-formed. In (26b), the subject idiom *A szög kibújik a zsákból* 'The truth gets out' (literally: 'The nail pierces through the bag') is embedded under the modal and the sentence is non-acceptable. The judgments are not influenced by the presence or absence of agreement-marking on the infinitive.

- (26) a. *Kínos volt a hajó-nak elsüllyed-ni(-e). awkward was the ship-DAT sink-INF-3SG 'It was awkward for the ship to sink.'
 - b. *Kínos volt a szög-nek ki-búj-ni(-a) a zsák-ból. awkward was the nail-DAT out-get-INF-3SG the bag-ABL 'It was awkward for the truth to get out.'

The necessarily dyadic nature of these predicates is also taken to be supported by the fact that they cannot embed possession sentences. A possession sentence in Hungarian involves the copula, the possessor in dative case, and the possessum subject in nominative. The dative agrees with the nominative possessum (cf. Szabolcsi 1992, den Dikken 1999, and É. Kiss 2000).

(27) Nek-ed sok pénz-ed van.

DAT-2SG much money-2SG is

'You have a lot of money.'

[lit. To you is a lot of your money.]

The logic of the argument is as follows. If the datives predicates in (26) are obligatorily dyadic, then they always control the subject of the infinitive. Therefore, they cannot embed possession sentences, since the dative experiencer cannot control the possessum (because of selectional restrictions). We have also seen in (9) that a matrix dative controller and the dative subject of the infinitive cannot both be spelled out at the same time. Therefore the proposed bracketing explains the ungrammaticality of (28).

(28)*Jó nek-ünk [IPinf sok pénz-ünk-nek len-ni-e1. be-INF-3SG good DAT-1PL much money-1PL-DAT int. 'It is good for us to have a lot of money.'

Modals, which can optionally be monadic in Tóth's analysis, are expected to embed possession sentences.

[IPinf nek-ik(29)Muszái sok pénz-ük-nek len-ni-e]. DAT-3PL much money-3PL-DAT be-INF-3SG necessary 'They must have a lot of money.'

Here the possessor gets dative case as the complement of the copula (as in 27), and the possessed DP gets dative case as the subject of the infinitive. (29) is expected to be grammatical in the monadic (epistemic) use, which is in fact the case. It must be noted though that speakers prefer to drop the possessor dative (whose identity is recoverable from the agreement morphology on the possessed noun), probably to avoid having two dative expressions within the same clause. I use therefore examples below in which the dative possessor is *pro*-dropped.

I agree with Tóth's judgments, but her choice of predicates is somewhat misleading. First of all, she tests her claims with predicates that select for animate datives, and which I am going to show to be non-representative of the class of evaluatives. If we rerun the tests with other evaluative predicates, such as elég 'enough', fontos 'important', korai 'early', nehéz 'difficult', könnyű 'easy' or nem árt 'does no hurt', then a different picture arises. In fact, Tóth (2000a) also includes most of these predicates in her list of evaluatives, but does not consider them from the perspective of the current issue. Consider these examples with the predicate *nem* árt 'does no harm', which form a minimal pair with (26) and (28).

- $[IPinf \ a \ hajó-nak \ elsüllyed-ni^{??}(-e)].$ (30) a. Nem árt the ship-DAT sink-INF-3SG not hurt 'It does no harm for the ship to sink.' [... in order to be absolutely sure that we get the insurance.]
 - [IPinf a szög-nek ki-búj-ni??(-a) a zsák-ból]. b. Nem árt the nail-DAT out-get-INF-3SG the bag-ABL not hurt 'It does no harm for the truth to get out.' [... in order that we get a clear picture of what's going on.]
 - pénz-ünk-nek $len-ni^{??}(-e)$]. c. Nem árt [IPinf sok not hurt much money-1PL-DAT be-INF-3SG 'It does no harm for us to have a lot of money.' [... if we want to go on holiday in Norway.]

The predicate *nem árt* 'does no harm' must be monadic in these sentences, which is also indicated by the fact that there is a strong preference for agreement-marking to

be present on the infinitive. This is to be expected by the generalization on infinitival agreement-marking (18), but I should stress that there is no absolute contrast between the agreement-marked and the plain infinitive in this context.

Since these predicates take an optional dative thematic adjunct, it is to be expected that they can also take a non-experiencer dative (cf. 4.4.2.4). Sentence (31a) describes a property of *the house*, just like its *that*-clause paraphrase.

- (31) a. A ház-nak nem elég csak egy új tető-t kap-ni(²-a) the house-DAT not enough only a new roof-ACC get-INF-3SG 'It is not enough for the house only to get a new roof.'

 [... it needs complete renovation.]
 - b. A ház-nak nem elég, hogy csak egy új tető-t kap. the house-DAT not enough that only a new roof-ACC get 'It is not enough for the house that it only gets a new roof.'

The dyadic nature of the predicate in (31a) is shown by the fact that agreement-marking on the infinitive is slightly dispreferred.

I should hasten to add that Tóth's remarks concerning *kinos* 'awkward' or *kellemetlen* 'unpleasant' are valid. Not only is (26a) unacceptable, but its *that*-clause paraphrase is also out.

- (26) a. *Kínos volt a hajó-nak elsüllyed-ni(-e). awkward was the ship-DAT sink-INF-3SG 'It was awkward for the ship to sink.'
- (32) **Kínos volt a hajó-nak, hogy elsüllyed-t. awkward was the ship-DAT that sink-PAST '#It was awkward for the ship that it sank.'

This, however, is an effect that is restricted to episodic contexts. These predicates are factive in such contexts, just like their English counterparts. In both cases below, the truth of the embedded proposition is asserted together with asserting the truth of the matrix proposition.

- (33) a. It was unpleasant for us [to be there].
 - b. It was not unpleasant for us [to be there].

If the same predicates occur in non-episodic contexts, then the constraints described by Tóth disappear. This change is most robust in conditionals. Consider the following two sentences. (34a) directly contrasts with (26a).

(34) a. *Kinos len-ne* [IPinf *a hajó-nak elsüllyed-ni*?*(-e)]. awkward be-COND the ship-DAT sink-INF-3SG 'It would be awkward for the ship to sink.'

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b. Kellemetlen len-ne [IPinf ennyi katoná-nak meghal-ni?*(-a)]. unpleasant be-COND this.many soldier-DAT die-INF-3SG 'It would be unpleasant for so many soldiers to die.'

That the matrix predicate is monadic is strongly suggested by the fact that agreement-marking has been found to be much preferred by my informants for this reading to be available. The *soldiers* in (34b) cannot be interpreted as experiencers: the sentence means that somebody else would find it unpleasant if so many soldiers died. This is a consequence of the fact that this dative is not a thematic adjunct of the matrix predicate, but is directly inserted as the subject of the infinitive.

I do not have an account of why (26) and (28) are unacceptable, i.e., why certain evaluative predicates cannot felicitously be used monadically in episodic contexts. What I have just shown is that the same predicates do occur without their dative thematic adjunct in a monadic infinitival construction in non-episodic contexts. Furthermore, many other evaluative predicates do not have the episodicity-constraint: their dative seems to be optional in just about any context. I therefore conclude that the infinitival construction, rather than refuting it, provides further support to my analysis.

6.3.4. *Modal predicates in the infinitival construction*

Except for Komlósy (1994), for whom all modals are monadic, we have seen that all the literature on Hungarian takes modals to be dyadic on certain readings. Using Barbiers (1995) terminology, deontic modals can have directed or non-directed interpretations. The directed interpretation singles out an individual, who is assumed to get a thematic role from the modal. The same goes for modals with a circumstantial reading. Non-directed deontic modals are monadic, and they have only a single propositional argument, just like epistemic modals. I repeat (23) and (24) from Chapter 3 as (35) and (36) for illustration.

(35) *Monadic modals*

- a. John must be at home, as the lights are on. [epistemic]
- b. *The essay must be ready by tomorrow.* [non-directed deontic]

(36) **Dvadic modals**

- a. John must stay at home by Peter's orders. [directed deontic]
- b. John had to take a taxi, as the buses did not run. [circumstantial]

Thus the standard view in the literature on Hungarian is that the equivalents of (36a) and (36b) are dyadic: the two arguments are *John* (in dative case in Hungarian) and the proposition expressed by the clause that the modal takes. I have argued against this view in Chapter 3, pointing out that if deontic or circumstantial modals really assigned a thematic role to their datives, then we should expect them to do so not

only in the infinitival, but also in the *that*-clause construction. But modals with strongly deontic lexical semantics only marginally license a dative (37a). If a dative is licensed by a modal (37b), then it has none of the readings in (35) or (36). It is interpreted as denoting certain dispositions or properties of the dative referent: *John* has the capabilities that qualify him to be the winner.

- (37) a. [?]Csak JÁNOS-NAK tilos, hogy itt marad-j-on. only John-DAT forbidden that here stay-SBJ-3SG lit. 'It is forbidden only for JOHN that he stays here.'
 - b. *Csak JÁNOS-NAK lehetséges, hogy nyer-j-en.* only John-DAT possible that win-SBJ-3SG *lit.* 'It is possible only for JOHN that he wins.'

My claim has been that dative modal predicates can have an optional thematic adjunct, but not on the readings described by (35) and (36). Those readings correspond to a monadic construction. Furthermore, in the Appendix in 5.6, I have claimed that the three semi-auxiliary modals (*kell* 'must', *lehet* 'can' and *szabad* 'may') are to be treated as a distinct group. They do not have a thematic structure. Let us reinvestigate modals now in view of the generalization in (18). By (18), only the infinitival equivalent of (37b) is expected to take a plain infinitive. In the other cases, the modal has no thematic dative dependant. If the structure still has a dative, then it is expected to be the subject of the infinitive and trigger infinitival agreement.

This seems to work as expected for (37b). Infinitival agreement-marking is very marginal at best in (38). This supports the claim that there is a thematic dative present in the matrix, which controls the *PRO* subject of the infinitive.

(38) Csak JÁNOS-NAK lehetséges nyer-ni-(^{?*}e). only John-DAT possible win-INF-3SG 'To win is only possible for JOHN.'

There is, however, basically no contrast between the lack and the presence of infinitival agreement-marking in (39). In this, I agree with the judgments of Komlósy, Dalmi and Tóth (see 6.2), and disagree with É. Kiss, for whom only the non-directed reading (39b) should allow (in fact *require*) infinitival agreement-marking. Agreement with the infinitive is generally found optional in both sentences.

- (39) a. János-nak tilos a lakás-ban marad-ni-(a).

 John-DAT forbidden the flat-INE stay-INF-3SG

 'It is forbidden for John to stay in the flat.'
 - b. A bicikli-nek tilos a lakás-ban marad-ni-(a). the bike-DAT forbidden the flat-INE stay-INF-3SG 'It is forbidden for John to stay in the flat.'

Some speakers have reported though that they prefer agreement-marking in both

cases, but these speakers have found the plain-infinitive version grammatical, too.

With respect to the semi-auxiliaries, the picture is somewhat more complex. The statistically most frequent pattern is to have the agreement-marking if an overt dative is present. This is strongly preferred on the epistemic reading, though some speakers also accept the plain infinitive (cf. Tóth 2002).

(40) János-nak már otthon kell len-ni^{?*}(-e).

John-DAT already home must be-INF-3SG

'John must already be at home.' [... since the lights are on.]

The deontic or circumstantial readings, however, are characterized by the same optionality as what we have observed in (39).

(41) János-nak otthon kell marad-ni(-a).

John-DAT home must be-INF-3SG

'John has to stay at home.' [... since his parents told him to stay at home.]

Deontic or circumstantial modals thus do not behave regularly: they license both agreement-marked and plain infinitives without an observable difference in meaning.

By (18), deontic and circumstantial modals would be expected to have both a dyadic and a monadic version, but I have argued against such a claim. In any case, such variation should be concomitant with an interpretive change, as we have seen with previous examples. But (41) means the same with or without the agreement-marker: *John* is a bearer of an obligation to stay at home. We could argue that the agreement-marker is always present, but sometimes it is phonologically null. Instead of such an explanation, I would like to resort to the parallel between possessive and infinitival constructions that has been noted in 6.2.5.

I have already mentioned that a dative possessor can be extracted from a possessive noun phrase in Hungarian. This extraction is known to be possible only in case the possessor is somehow directly involved or affected in the event denoted by the matrix predicate (cf. Alberti 1995, Bartos 1999, or É. Kiss 2001). Consider the contrast between the following two sentences (É. Kiss 2001:51).

- (42) a. *Mari-nak*_i *én vigyáz-t-am* [e_i *a lakás-á-ra*]. Mari-DAT I take.care-PAST-1SG the flat-POSS.3SG-SUB 'I took care of Mary's flat.'
 - b. *Mari-nak_i összevesz-t-em Péter-rel [e_i a lakás-á-ban].

 Mari-DAT quarrel-PAST-1SG Peter-COM the flat-POSS.3SG-INE int. 'I quarreled with Peter in Mary's flat.'

The affectedness of *Mary* in (42a) is due to semantic/pragmatic factors that do not fall under the coverage of thematic theory. The extracted dative DP can be thought to get some sort of an extra semantic/pragmatic role, but this extra role cannot be

analyzed in terms of theta-role assignment.

Furthermore, Den Dikken (1999) argues that in certain cases the dative is in fact not extracted, but is base-generated in a position adjoined to the possessive construction and is coindexed with a *pro* possessor instead of the empty category I have indicated in (42). That this structure is available in Hungarian is manifest from the fact that it is marginally possible to have an overt resumptive pronoun inside the possessive phrase, even though such constructions have a strong archaic flavor (Bartos 1999).

(43)
%Mari-nak_i én vigyáz-t-am [az ő_i lakás-á-ra].

Mari-DAT I take.care-PAST-1SG the she flat-POSS.3SG-SBL
'I took care of Mary's flat.'

In sum, it is possible to base-generate a dative possessor as an adjunct to a (possibly covert) pronominal possessor, if the referent of the possessor is somehow involved in the event denoted by the matrix predicate, or at least if it receives discourse prominence in its own right.

Notice the parallel between possessive constructions and deontic or circumstantial modals: these latter also have a dative that bears some sort of semantic role as a directed participant (for example, it can be an *obligee*). As I have pointed out in 4.2.4, Zubizarreta (1982) and Thráinsson & Vikner (1995) analyze this in terms of *adjunct-theta role assignment*, which in their interpretation is a secondary theta-role assigned to, for example, an obligee in a deontic construction. I do not assume that this sort of semantic/discourse specification falls under the coverage of thematic theory. Suppose the dative of a deontic modal can possibly be base-generated as an adjunct in the matrix clause, *without any thematic role*, but possibly as a participant that bears some semantic/pragmatic role towards the predicate. Suppose further that in this case the dative can control a PRO in the infinitive, and the possibility of having plain infinitives beside deontic or circumstantial modals follows. I assume that the default is still to base-generate the datives of deontic and circumstantial modals directly as the subject of the infinitive, in which case they show obligatory infinitival agreement.

The reason why native speakers tend to accept both the presence and the lack of infinitival agreement-marking with deontic and circumstantial modals is thus that the dative can be base-generated inside the infinitival clause, but it can also be licensed as a simple adjunct in the matrix, controlling a PRO. In the second case, the infinitive does not show agreement. The dative adjunct of deontic and circumstantial modals does not receive a theta-role. Rather, it is licensed as a bearer of a semantic/discourse role, just like extracted dative possessors (42a). Epistemic modals are in no direct semantic relation with the subject of their complement. Hence, epistemics do not allow for a dative to be base-generated in the matrix clause as an adjunct. A dative phrase by an epistemic modal is always inserted into the infinitival clause, which therefore is strongly preferred to be agreement-marked.

6.4. Summary

Dative experiencer predicates can take agreement-marked infinitives in Hungarian. In this chapter, I have investigated these infinitival constructions and have argued that they provide further support to the analysis that I have developed in Chapter 4.

I took É. Kiss' (2001, 2002) empirical generalization as a starting point. According to É. Kiss, agreement-marking is only licensed on the infinitive in the presence of a clause-mate dative subject. In this case, agreement-marking is in fact obligatory. A dative in the matrix clause can only control a PRO subject in the infinitival clause, but a matrix dative cannot license infinitival agreement-marking.

I have provided data that have not been noticed previously to support this generalization. I pointed out that *piacere*-predicates cannot take agreement-marked infinitives in Hungarian. This is so because they have an obligatory dative argument. *Important*-type predicates have an optional dative thematic adjunct. If this adjunct is not inserted, these predicates can take agreement-marked infinitives. This possibility is ruled out if the matrix dative thematic adjunct is inserted: then the infinitive is not marked for agreement. I scrutinized the behavior of evaluative and modal predicates to substantiate this claim.

Conclusions

In this thesis, I investigated dative experiencer predicates in Hungarian such as the *appeal to/piacere*-type predicates in (1).

- (1) a. Ez tetsz-ik Péter-nek. this appeal-3SG Peter-DAT 'This appeals to Peter.'
 - b. Ez számít Péter-nek. this matter Peter-DAT 'This matters to Peter.'

In the classical psych-movement analysis of experiencers predicates (cf. Lakoff 1970, Postal 1971), (1a) and (1b) are derived from an underlying structure in which the experiencer is superior to the nominative argument. The appeal of such an analysis has not been lost, and the assumption that dative experiencers are underlying "logical subjects" is maintained in proposals like Belletti & Rizzi (1988) or Landau (2005). These authors also argue that dative experiencer predicates, subject experiencer predicates (e.g. like), and object experiencers (e.g. worry) are essentially of the same thematic-conceptual type. Any syntactic difference between them is thought to be due to largely idiosyncratic case-marking conventions.

My main objective in this thesis was to develop an analysis of dative experiencer predicates which does not share these assumptions. I presented a lexicalist account in which dative experiencer predicates are thematically distinct from other experiencer predicate classes. Dative experiencers are in the same natural class as recipients, benefactives or goals, and their dative marking is not idiosyncratic. Dative case is used consistently across this thematic domain crosslinguistically. I also argued against the claim that dative experiencers should be considered underlying subjects in Hungarian. Moreover, they are not inserted into a designated projection, as, for example, the applicative phrase of Pylkkänen (2002), and Cuervo (2003). In general, a dative experiencer is not licensed *into* a universally constant syntactic position. It is licensed *via* the argument structure of its predicate. It is in the lexicon where a universally valid characterization of dative experiencers is to be sought and to be attained.

In Chapter 2 of the thesis, I introduced the Theta System of Reinhart (2000, 2002) as the theoretical framework of my analysis. The Theta System is a thematic theory which is built on the notion that thematic roles can be decomposed into two thematically relevant binary features: [+/-c(ause)] and [+/-m(entally involved)]. I reviewed the mapping proposal of the Theta System, as well as the assumed lexical operations that are relevant for this work. In the second half of this chapter, I used this inventory to describe Belletti & Rizzi's (1988) three experiencer predicate classes. In concord with Reinhart's (2000, 2002) proposal, I showed that subject, object, and dative experiencers each have their own unique thematic structure. In particular, dative experiencer predicates make up a distinct class of their own, which cannot be reduced to either subject or object experiencers (the *like*- and the *worry*-classes, respectively).

This gave me a certain vantage point for an inquiry into Hungarian dative experiencers. In Chapter 3, I overviewed the most important predicate classes that may take dative experiencers in this language. I observed that these predicates fall into two larger sets. The dative of core *piacere*-predicates (1a) and of verbs of mental appearance is obligatory and is indeed always interpreted as an experiencer. The dative of modal, evaluative and *seem*-type predicates, as well as the dative of *számít* 'matters' (1b) and a handful of other verbs, is not obligatory and it is not necessarily interpreted as an experiencer.

To account for these data, I proposed a particular kind of extension of the Theta System in Chapter 4, and introduced the notion *thematic adjunct*. It is not infrequent to assume that there exist a non-core thematic domain, cf. Fillmore (1994), Cinque (2006b), and especially Marelj (2004), who proposes within the research frame of the Theta System that non-argument locative goals receive thematic specification. I argued that instruments, benefactives, comitatives, as well as optional datives can all be analyzed as thematic adjuncts. A thematic adjunct is not introduced in the lexicon (i.e. it is not on the argument list), but is *licensed* into the derivation in the presence of a designated type of argument. Thematic adjuncts make up a thematic domain of their own in the sense that thematic well-formedness constraints are now thought to operate distributively over the set of arguments and over the set of thematic adjuncts.

I elaborated the initial observations made in Chapter 3, and I pointed out that dative thematic adjuncts differ systematically from dative arguments, which gives motivation to an analysis in which the two are not treated on a par. In particular, I have argued that (i) dative thematic adjuncts are optional syntactically as well as semantically, that (ii) their morphology is not fixed, and that (iii) they do not necessarily have to be interpreted as experiencers. These properties were shown to follow from the lexicalist analysis that I proposed. A predicate that takes a dative experiencer argument has the lexical entry in (2a). A predicate that licenses an optional dative thematic adjunct has a monadic entry (2b). I adopted the convention to add thematic adjuncts in brackets outside the argument list.

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(2) a. tetszik 'appeals to' < [-c-m]_2 [-c]_2 >
b. számit 'matters' < [-m] > ([-c])
```

The two datives have the same thematic content ([-c]), but they do not have identical syntactic status. Moreover, it is the consequence of the proposed difference in argument structure that the two predicates have a radically different derivation: (2a) projects an unaccusative construction, whereas (2b) is unergative. I showed that this analysis is empirically correct. The peculiar nature of the argument structure in (2b) is also the key factor in licensing dative thematic adjuncts. Such thematic adjuncts are licensed in the presence of an argument that is a potential cause, underspecified for the [c]-feature ([-m]). The [-m] argument licenses a [-c] dative thematic adjunct since, by default, a complete causality chain includes not only the cause, but also a possibly affected non-cause participant.

I also showed that there also exist event-external, non-thematic dative adjuncts, such as (3).

(3) János-nak szép ez a kép. John-DAT nice this the picture. 'To John, this picture is nice.'

Though these datives have experiencer semantics, they do not receive a thematic role and I argued that their syntax differs from that of thematic datives. Most importantly, they can be inserted into any clause, irrespective of the nature of the predicate. The emerging view was that dative experiencers can be of three distinct grammatical types: some of them are true arguments, many are licensed as thematic adjuncts, and a dative experiencer can also be licensed as a non-thematic adjunct.

In the last two chapters, I applied this approach to a study of the basic syntax of dative experiencer predicates in Hungarian, with the aim of revising some of the claims of the previous literature. In Chapter 5, I argued against the quirky analysis of dative experiencer predicates in Hungarian. I showed that the dative (whether an argument or a thematic adjunct) is not a syntactic subject in Hungarian in any useful sense of the term. The nominative argument shows all the properties expected of a syntactic subject. The reason why these predicates are special is that neither thematic dependant is significantly more prominent thematically than the other. This generally makes either a grammatical anaphoric host if independent conditions are satisfied, and this makes either a likely candidate for topichood. I argued against a configurational treatment of such phenomena.

I generalized this account to constructions in which these predicates take finite *that-*clauses or infinitives.

(4) (Az) Fontos János-nak, hogy itt marad-j-on. that important John-DAT that here stay-SBJ-3SG 'It is important for John that he stay here.'

Following Rákosi & Laczkó (2005), I argued that if the pronoun az 'that' is present, then it is the subject of the matrix dative predicate and the *that*-clause is an adjunct to this pronoun. In the absence of the pronoun, the clause itself is the subject of the matrix predicate. This is a natural extension of the non-quirky analysis to these

constructions. Three modal verbs do not fit this picture, as they are semi-functional elements which do not assign a thematic role. These were discussed in an appendix to this chapter.

Dative experiencer predicates are generally claimed to license agreement-marked infinitives, cf. (5). I investigated this construction from the perspective of my analysis of dative predicates in Chapter 6.

(5) János-nak fontos itt marad-ni(-a).

John-DAT important here stay-INF-3SG
'It is important for John to stay here.'

Together with É. Kiss (2001, 2002), I claimed that infinitival agreement-marking is not optional. It is obligatory if the dative is not related thematically to the matrix predicate, i.e. when it is base-generated as the subject of the infinitival clause. Infinitives were argued to be able to assign structural dative case to their subject in Hungarian. Infinitival agreement-marking is obligatorily absent if the dative is inserted into the matrix clause as a thematic dependant of the matrix predicate. In this case, the matrix dative controls the PRO subject of the infinitive. This setup makes the following predictions, which I have shown to be empirically correct. Predicates that have dative arguments (like the *piacere*-class) cannot take agreement-marked infinitives. Predicates that license thematic adjuncts (like (5)) take an agreement-marked infinitive if the dative adjunct is not inserted. In this case, the dative phrase is the subject of the infinitive. If the dative thematic adjunct is inserted, the infinitive is not marked for agreement.

In general, I hope to have shown in this thesis that the lexicon is a richer store of syntactically relevant information than is often thought in much of current linguistic theory. I argued against the constructionist notion that lexical items can freely be inserted into the derivation and their syntax emerges from the way they are inserted. Instead, I argued that the basic syntax of dative experiencer predicates is determined already in the lexicon.

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Samenvatting in het Nederlands

In dit proefschrift heb ik datieve *experiencer*-predikaten (psychologische werkwoorden met een *recipiens* argument, een entiteit die een emotionele toestand ondergaat) in het Hongaars onderzocht, zoals de voorbeelden in (1).

- (1) a. Ez tetsz-ik Péter-nek dit aanspreken-2SG Peter-DAT 'Dit spreekt Peter aan.'
 - b. Ez számít Péter-nek. dit belangrijk Peter-DAT 'Dit is belangrijk voor Peter'

In de klassieke verplaatsingsanalyse van *experiencer*-predikaten (vgl. Lakoff 1970, Postal 1971) zijn (1a) en (1b) afgeleid van een onderliggende structuur waarin de *experiencer* boven het nominatieve argument gegenereerd wordt. De aantrekkingskracht van een dergelijke analyse is nog niet verloren gegaan, en de aanname dat datieve *experiencers* onderliggend "logische subjecten" zijn wordt gehandhaaft in voorstellen zoals Beletti & Rizzi (1988) of Landau (2005). Deze auteurs stellen ook dat datieve *experiencer*-predikaten, subject *experiencer*-predikaten (bv. *aardig vinden*) en object *experiencers* (bv. *zich zorgen maken*) ten diepste van hetzelfde thematisch-conceptuele type zijn. Men veronderstelt dat alle syntactisch verschillen te wijten zijn aan grotendeels idiosyncratische regels voor naamvalsmarkering.

Mijn hoofddoel in deze dissertatie was het ontwikkelen van een analyse van datieve *experiencer*-predikaten die deze aannames niet deelt. Ik heb een lexicalistische verklaring gepresenteerd waarin datieve *experiencer*-predikaten thematisch verschillen van andere klassen van *experiencer*-predikaten. Datieve *experiencers* vallen in dezelfde natuurlijke klasse als *recipients*, *benefactives* en *goals*, en hun datief-markering is niet idiosyncratisch. De dativus wordt crosslinguistisch consistent gebruikt in dit thematische domein. Ook heb ik de stelling tegengesproken dat datieve *experiencers* in het Hongaars als onderliggende subjecten gezien zouden moeten worden. Ze worden ook niet ingevoegd in een daarvoor bestemde projectie, zoals bijvoorbeeld de *applicatief*-frase van Pylkkänen (2002) en Cuervo (2003). Over het algemeen wordt een datieve *experiencer* niet

gelicenceerd in een universeel vaststaande syntactische positie, maar via de argumentsstructuur van het predicaat. Het lexicon is de plaats waar een universeel geldende eigenschap van datieve *experiencers* gezocht en gevonden moet worden.

In Hoofdstuk 2 van de dissertatie heb ik het Theta Systeem van Reinhart (2000, 2002) geïntroduceerd als het theoretisch kader van mijn analyse. Het Theta Systeem is een theorie over semantische rollen die gebaseerd is op het idee dat semantische/thematische rollen uiteengerafeld kunnen worden in twee thematisch relevante binaire eigenschappen: [+/-c(ause, oorzaak)] en [+/-m(entaal betrokken)]. Ik bespreek de wijze waarop in het Theta Systeem thematische rollen geprojecteerd worden in de syntaxis en de veronderstelde lexicale operaties die relevant zijn voor dit onderzoek. In de tweede helft van dit hoofdstuk heb ik deze principes en regels gebruikt om Beletti & Rizzis (1988) drie klassen van experiencer-predikaten te beschrijven. In overeenkomst met het voorstel van Reinhart (2000, 2002) heb ik laten zien dat subject, object en datieve experiencers ieder hun eigen unieke thematische structuur hebben. In het bijzonder zijn datieve experiencer-predikaten een klasse op zich, die niet gereduceerd kan worden tot subject of object experiencers (respectievelijk de klassen van aardig vinden en zich zorgen maken).

Dit gaf me een zekere strategische uitgangspositie voor een onderzoek naar Hongaarse datieve *experiencers*. In hoofdstuk 3 heb ik de belangrijkste predikatenklassen besproken die in deze taal datieve *experiencers* kunnen hebben. Ik heb geobserveerd dat deze predikaten in twee belangrijke sets uiteen vallen. De datiefnaamval van zogenaamde *piacere*-predikaten (1a) en van de predikaten van werkwoorden van mentale manifestatie is verplicht en wordt inderdaad altijd geïnterpreteerd als een *experiencer*. De dativus van modale en evaluerende predikaten, van predikaten van het type *schijnen*, maar ook de dativus van *számít* 'belangrijk zijn' (1b) en van een handvol andere werkwoorden is niet verplicht en wordt niet noodzakelijkerwijs geïnterpreteerd als een *experiencer*.

Om deze gegevens te verklaren heb ik in Hoofdstuk 4 een speciaal soort uitbreiding van het Theta Systeem voorgesteld en het begrip 'thematisch adjunct' geïntroduceerd. Het is niet ongewoon om aan te nemen dat er een secundair thematisch domein is, vgl. Fillmore (1994), Cinque (2006b) en in het bijzonder Marelj (2004), die binnen het onderzoekskader van het Theta Systeem voorstelt dat niet-argumentele locatieve goals thematische gespecificeerd worden. Ik heb gesteld dat instruments, benefactives, comitatives en optionele datieven allemaal geanalyseerd kunnen worden als thematische bepalingen. Een thematische bepaling wordt niet in het lexicon geïntroduceerd (i.e. staat niet op de lijst van argumenten), maar wordt in de derivatie gelicenseerd in aanwezigheid van een bepaald type argument. Thematische bepalingen vormen hun eigen thematische domein in die zin, dat het idee nu is dat beperkingen op thematische welgevormdheid distributief gelden over de set van argumenten en over de set van thematische bepalingen.

Ik heb de observaties uit Hoofdstuk 3 verder uitgewerkt en heb laten zien dat datieve thematische bepalingen systematisch verschillen van datieve argumenten. Dit motiveert een analyse waarin de twee verschillend behandeld worden. Ik heb in het bijzonder betoogd dat (i) datieve thematische bepalingen zowel syntactisch als

semantisch optioneel zijn, dat (ii) hun morfologie niet vast ligt, en dat (iii) ze niet als *experiencers* geïnterpreteerd hoeven te worden. Ik heb laten zien dat deze eigenschappen volgen uit de lexicalistische analyse die ik voorgesteld heb. Een predikaat dat een datief *experiencer*-argument selecteert heeft de lexicale specificatie in (2a). Een predikaat dat een optionele datieve thematische bepaling licenseert is maar voor één eigenschap gespecificeerd (2b). Ik heb de gewoonte overgenomen om thematische bepalingen in haakjes buiten de lijst argumenten toe te voegen.

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(2) a. tetszik_v 'aanspreken' < [-c-m]_2 [-c]_2 >
b. sz\acute{a}m\acute{t}_v 'belangrijk zijn' < [-m] > ([-c])
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De twee datieven hebben dezelfde thematische inhoud ([-c]), maar ze hebben niet dezelfde syntactische status. Bovendien is de consequentie van het voorgestelde verschil in argumentsstructuur dat de twee predikaten totaal verschillende afleidingen hebben: (2a) projecteert een onaccusatieve constructie, terwijl (2b) onergatief is. Ik heb laten zien dat deze analyse empirisch correct is. De exclusieve aard van de argumentsstructuur in (2b) speelt ook de hoofdrol in het licenseren van datieve thematische bepalingen. Zulke thematische bepalingen worden gelicenseerd in aanwezigheid van een argument dat potentieel een veroorzaker is, dus ondergespecificeerd voor het [c]-kenmerk ([-m]). Het [-m] argument licenseert een [-c] datieve thematische bepaling omdat, zonder tegenindicatie, een volledige causaliteitsketen niet alleen de oorzaak inhoudt, maar ook een mogelijk betrokken niet-veroorzakende deelnemer.

Verder heb ik laten zien dat er niet-thematische datieve bepalingen bestaan die los staan van de gebeurtenis, zoals in (3).

Hoewel deze datieven de semantiek hebben van een *experiencer*, krijgen ze geen thematische rol en ik heb betoogd dat hun syntaxis verschilt van die van thematische datieven. Het belangrijkst is dat ze in iedere zin kunnen worden toegevoegd, onafhankelijk van de aard van het predikaat. Het beeld dat ontstond, is dat datieve *experiencers* van drie verschillende grammaticale typen kunnen zijn: sommige zijn echte argumenten, de meeste worden gelicenceerd als thematische bepalingen, en een datieve *experiencer* kan ook gelicenceerd worden als een niet-thematische bepaling.

In de laatste twee hoofdstukken heb ik deze benadering toegepast op een onderzoek naar de basale syntaxis van datieve *experiencer*-predikaten in het Hongaars, met het doel om een aantal beweringen uit de bestaande literatuur te herzien. In Hoofdstuk 5 heb ik stelling genomen tegen de grillige analyse van datieve *experiencer*-predikaten in het Hongaars. Ik heb laten zien dat de datief (of het nu een argument of een thematische bepaling is) geen syntactisch subject is in

het Hongaars, in welke zin van het woord dan ook. Het nominatieve argument vertoont alle eigenschappen die van een syntactisch subject verwacht worden. De reden waarom deze predikaten bijzonder zijn, is dat geen van de thematisch afhankelijke posities thematisch significant prominenter is dan de andere. Dit maakt een van de twee over het algemeen tot een grammaticaal anaforisch aanhechtpunt als wordt voldaan aan onafhankelijke voorwaarden, en dat maakt een van beiden weer tot een geschikte kandidaat om topic te zijn. Ik heb stelling genomen tegen een constructionistische visie op zulke fenomenen.

Deze verklaring heb ik gegeneraliseerd naar constructies waarin deze predikaten finiete *dat*-zinnen of infinitieven selecteren.

(4) (Az) Fontos János-nak, hogy itt marad-j-on. dat belangrijk Jan-DAT dat hier blijven-SBJ-3SG 'Het is belangrijk voor Jan dat hij hier blijft.'

In navolging van Rákosi & Laczkó (2005) heb ik gesteld dat als het het voornaamwoord az 'dat' aanwezig is, dit het subject is van het datieve matrixpredikaat en de dat-zin een bepaling is bij dit voornaamwoord. Als het voornaamwoord afwezig is, is de dat-zin zelf het onderwerp van het matrixpredikaat. Dit is een vanzelfsprekende uitbreiding van deze analyse van deze constructies. Drie modale werkwoorden passen niet binnen dit plaatje, omdat het semi-functionele elementen zijn die geen thematische rol uitdelen. Deze zijn besproken in een appendix bij dit hoofdstuk.

Er wordt over het algemeen van datieve *experiencer*-predikaten gezegd, dat ze door flectie gemarkeerde infinitieven licenseren, vgl. (5). In Hoofdstuk 6 heb ik deze constructie onderzocht vanuit het perspectief van mijn analyse van datieve predikaten.

(5) János-nak fontos itt marad-ni(-a).

Jan-DAT belangrijk hier blijven-INF-3SG
'Het is belangrijk voor Jan om hier te blijven.'

Met É. Kiss (2001, 2002) heb ik gesteld dat infinitieve flectie-markering niet optioneel is. Het is verplicht als de datief niet thematisch gerelateerd is aan het matrix-predikaat, i.e. als die basisgegenereerd is als het subject van de infinitief. Ik heb betoogd dat infinitieven in het Hongaars in staat zijn de datief toe te kennen aan hun subject. Infinitieve flectie-markering is verplicht afwezig als de datief in de matrixzin ingevoegd wordt als zijnde thematisch afhankelijk van het matrixpredikaat. In dit geval heeft de matrixdatief controle over het PRO-subject van de infinitief. Deze structuur doet de volgende voorspellingen, waarvan ik heb laten zien dat ze empirisch correct zijn. Predikaten die datieve argumenten hebben (zoals de *piacere*-klasse) kunnen geen geïnflecteerde gemarkeerde infinitieven selecteren. Predikaten die thematische bepalingen kunnen hebben (zoals (5)) selecteren een door flectie gemarkeerde infinitief als de datieve bepaling niet toegevoegd wordt. In dit geval is de datief-zin het subject van de infinitief. Als de

datieve thematische bepaling wel in de structuur opgenomen wordt, is de infinitief niet geflecteerd.

In het algemeen hoop ik in deze dissertatie te hebben laten zien dat het lexicon een rijkere opslagplaats is van syntactisch relevante informantie dan vaak verondersteld wordt in veel van de hedendaagse taalkundige theorie. Ik heb stelling genomen tegen de constructionistische visie dat lexicale items vrijelijks ingevoegd kunnen worden in de derivatie en dat hun syntaxis volgt uit de manier waarop ze ingevoegd worden. In plaats daarvan heb ik gesteld dat de basale syntaxis van datieve *experiencer*-predikaten al in het lexicon bepaald wordt.

Curriculum vitae

György Rákosi was born on the 2nd of January 1977 in Hajdúszoboszló, Hungary. He matriculated from Hőgyes Endre Secondary Grammar School in 1995 and began his studies at the University of Debrecen in the same year. In 2000, he obtained his MA in history and in English language and literature.

After graduation, he enrolled as a PhD student of linguistics at the University of Debrecen. Since December 2000, he has worked at this university as a junior lecturer at the Institute of English and American Studies.

He was a Marie Curie fellow at the Utrecht Institute of Linguistics between September 2002 and May 2003. In September 2005, he joined the international PhD program of this institute. This dissertation is the result of the work he carried out there.