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**Meaning at the level of discourse: from lexical networks  
to conceptual frames and scenarios<sup>1</sup>**

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**Summaries of studies related to the problem of meaning at the level of  
discourse published in the volumes of *Officina Textologica***

*Officina Textologica* has devoted volumes to the analysis of meaning at levels higher than the clause. Vol. 10 is a collection of papers on conceptual schemes, Vol. 14 is devoted to scenarios. The summaries of the papers included in these volumes are given below. Throughout the volumes of the series, a number of papers are (at least partially) concerned with meaning at different levels of representation: in argument structure, in the organization of the tense--aspectual frame of a clause, in coreference relationships, etc. We cannot undertake to discuss them all here.

After the summaries, we propose to give a more or less consistent sample of how an originally sentence-oriented theory, holistic cognitive grammar is capable of bridging the traditional gap between sentence linguistics and text linguistics, by applying methods originally proposed for describing larger units to the analysis of a number of factors that are essential in the organization of the clause. This is based on some of the papers by Péter Pelyvás.

***Officina Textologica 10, Aspects of the analysis of the organization of texts:  
conceptual schemas***

Conceptual schemas play a central role in the analysis of the compositional organisation of texts. The thorough exploration of its various aspects was the core subject of a thematic conference held at the University of Debrecen on December 10<sup>th</sup>, 2004, the presentations of which are included in volume 10 of *Officina Textologica*.

In '*Various aspects of the analysis of the relations providing context*', JÁNOS S. PETŐFI directs attention to the representation of constringency (i.e. the verbal manifestations of the real or assumed relationship between facts, see 1.3) as a fundamental aspect of the analysis of the context. Among the various relations

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providing context, the author points out the relations between microcompositional units of text and conceptual schemas. In this respect, he deals with a special thesauristic representation of cognitive frames.

In her study '*Cognitive frames, reference, pronouns*', ANDREA CSÜRY gives a representation of the role of certain indefinite pronouns of the French language by way of performing a detailed analysis of four text segments. Her considerations are based on conceptual schemas, that is, cognitive frames and scripts.

In '*The role of cognitive frames in poetic texts*', KÁROLY I BODA and JUDIT PORKOLÁB elaborate a specific cognitive model for the interpretation process of poems. Their approach to the interpretation process is based on the selection of appropriate concordances from various sources which can be linked to the poem to be interpreted. The corpus, which is the source of the concordances, forms a computer-based world of texts. Its hypertextual organisation leads to a specific model for the interpretation process where the examination of cognitive frames plays a central role.

In her study '*Conceptual frames and context in the short story «Omlette à Woburn» by Dezső Kosztolányi*', ÁGNES DE BIE KERÉKGYÁRTÓ gives a cognitive analysis of the short story. The central concept of the author's theory is that the successful interpretation of a text — that is, the text-based process of its meaning — is based on the harmonised mobilisation of the writer's and reader's knowledge of the world.

In his study '*WRITING as a specific cognitive objectivation*', LÁSZLÓ JAGUSZTIN discusses the different aspects of the relationship between writing (or text) and the world as it is reflected in the short story "Kinevez... Tetik hadnagy" by Tinyanov.

In '*Filling in indefinite places*', FRANCISKA SKUTTA interprets a few introductory paragraph from the novel "*A gyertyák csonkig égnek*" by Sándor Márai. The author concentrates on features of the context that can only be interpreted with recourse to information that is based — beyond the verbally expressed context — on the reader's own knowledge of the world. Her final conclusion is that the "indefinite places" (Roman Ingarden) may never be filled in entirely.

In his study '*Ways of decoding*', SÁNDOR KISS analyses the first chapter of the novel "*Fanni hagyományai*" by József Kármán in order to elucidate the decoding process of interpretation during which the reader's knowledge of the world of text develops. In order for this process to be successful, the author attributes a special role to the knowledge of the cognitive frames that can be attached to text to be interpreted.

In '*How to create strange vocabularies?*', ISTVÁN CSÜRY deals with the representation possibilities of cognitive frames and scripts. The author takes

standard lexicological practice as the starting point of his considerations in order to raise theoretical and practical issues concerning a thesaurus which can serve as a representation of conceptual schemas. As for the problems of describing conceptual schemas, the author analyses selected examples to illustrate the problems that arise while describing conceptual schemas.

In ‘*Analysing and ways of formalising cognitive frames in specialised texts*’, EDIT DOBI and ÁKOS KUKI try to reveal the role and significance of the formal description in the characterisation of the semantic relations occurring between the elements of the cognitive frames that can be attached to the same text. Analysing a relatively simple part of a specialised text as well as the cognitive frames that cover it, the authors try to explore and formalise the structure of the semantic relations between the elements of the cognitive frames which reflect the semantic structure of the analysed text.

#### ***Officina Textologica 14, The scenario as a dynamic force in organizing texts***

This volume of *Officina Textologica* deals with the (partly or completely) semantic aspects of *context*. Following previous volumes which dealt with co-referential relationships, thematic progression and (cognitive) frames respectively, this volume contains selected essays on *scripts*<sup>2</sup>.

The essays are written versions of the presentations held at the conference *Scripts as dynamic text organisers* in Spring 2007. We might also well add “.. *first approximation*” to the title since, as is usual with *Officina Textologica*, further detailed and in-depth discussion of the topic will follow in a subsequent volume.

The assumptions that the authors elaborate in this varied and colourful volume emanate from different theoretical backgrounds and views. There may, for instance, be substantial differences in how the authors define and interpret the basic concept of *script*. They may consider a *script* as

- specific parts of background knowledge that belong to the collective knowledge of a community, or (in a perhaps slightly more individual interpretation),
- a level of subjective knowledge that assumes some specialised knowledge regarding e.g. the creation process of a literary work, a poet’s course of life, etc.

KÁROLY ISTVÁN BODA and JUDIT PORKOLÁB adopt two different approaches to the concept of *script*. In a textological framework, they try to explore an interpretation of the concept of *script* that could be appropriate in the

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<sup>2</sup> Some contributions use the term *script*, others use *scenario* to talk about essentially the same concept. My personal preference is for the latter due to its extended use in the cognitive literature. But I will leave other authors’ choices unchanged and regard the two terms as synonymous in this discussion.

communication, text processing and understanding process. Within a *cognitive science* framework, the interpretation of the concept of *script* is based on the background knowledge that can be arranged in a script-like form. As a consequence, it is necessary to examine different types of knowledge first. The authors describe four types of knowledge, along with the types of scripts that can be associated with them. This approach provides a broad interdisciplinary framework for research on the use of textological methods in the representation of cognitive process.

In her essay EDIT DOBI examines the possible relationship(s) between the type of text and the type(s) and organisation of the script(s) which are to be explored in the text. In general, two conclusions of the research can be outlined: first, the analyses indicate that promising and well applicable results can be foreseen in the field of textology and text typology. Second, the results depend crucially on the way the concept of *script* is defined, that is, how the degree of complexity of its constituents is established. For example, we may assume that one possible script for the event of “arrival at a restaurant” is as follows: we enter, look for a table, take off our coat, sit down etc. (with some concessions regarding relative order). At some point, we have to decide whether this script provides satisfactory detail of description or we must take into consideration specific scripts concerning the way *how* we take off our coats, the various rituals of sitting down at the table etc. Beyond these issues, in the summary of the essay further questions are formulated for the future research of *scripts*.

In his essay, ISTVÁN CSÜRY discusses some basic theoretical and practical questions of script research. The author evaluates, among others, the significance or “linguistic/textological usefulness” of the study of scripts either on the macro level (i.e. in the whole text) or the micro level (i.e. in specific parts of text). In the analysis of scripts, he finds it important to pay special attention to *connectives*, which can be characteristic of certain organisations of scripts. In order to demonstrate his ideas on scripts, he examines the place and function of connectives in dialogues.

Distinguishing between the language-related and real-world aspects of scripts, SÁNDOR KISS outlines the phenomenon of the so-called “*shifting script*”. Shifting scripts are defined as “modified patterns” which describe a “modified course of events”. The author’s approach to the concept of *script* is basically traditional but can also be characterised as innovative in a sense: he refines the classical interpretation of the *script* by emphasizing the fact that there can be more than one linguistic realisations of a script describing a typical course of events. The author characterises the concept of “*shifting scripts*” by the use of the four rhetorical operations (addition, deletion, substitution, and rearrangement). In order to illustrate his ideas, the author gives colourful literary examples from short stories by *Iván Mándy*.

ANDREA CSÚRY studies the scripts of dialogues and, similarly to Sándor Kiss, concentrates on those characteristics that are different from accepted prototypes. While analysing dialogues, she intends to reveal and illustrate the process of *misunderstanding*. Relying on Roman Jakobson's model of communication, the author examines all aspects of communication that, as possible sources of errors, can lead to misunderstanding. These aspects are as follows: linguistic and non-linguistic knowledge of the sender and receiver, the message, code, medium and context. The varied and vivid sample texts, which come from both everyday life and literature, all serve the author's intention to give instructive models for the process of misunderstanding which is basically stereotyped but can nevertheless have a number of interesting variations.

In her essay, FRANCISKA SKUTTA examines the relationship between two remarkable and complex phenomena: she investigates the related elements of, and differences between *script* and *synopsis* with the aim of exploring connections between them. The comparison is facilitated by the fact that both can be considered as systems (i.e. sets of organised elements). After outlining an elaborate typology of synopses the author focuses on the *narrative synopsis*, the study of which is most helpful in exploring relationships between script and synopsis. She establishes that one evident similarity between scripts and synopses is as follows: events and participants in both of them are "*beyond time*" and exist "*in themselves*", i.e. they are in a "*timeless present*" and do not have the "*narrator's contribution*". The two phenomena can be seen as being even more closely related: the author demonstrates a kind of mutual dependence between script and narrative synopsis, which leads to the conclusion that "textological and narrative research can both provide major contributions to the other's scientific enrichment".

ANNAMÁRIA KABÁN interprets the concept of *script* in a way which reminds one of the applied sciences. She considers *scripts* basically as dynamic plans or strategies of organisation underlying the construction of texts. To demonstrate her ideas, she analyses the poem *Psalmus Hungaricus* by Jenő Dsida. In the interpretation process she emphasizes a special function of *scripts* which activates, as a loosest script, certain regions of the interpreter's background knowledge concerning the history of literature. Therefore she considers some crucial elements of background knowledge related to the interpretation process—e.g. the religious faith of the poet, Psalm 137, which provides a frame of genre for the interpretation process, rhetorical devices, etc.—as *scripts*. As a final conclusion she proposes that the overall script of Dsida's poem consists in "how the refusal of values becomes a value".

In his essay BÉLA LÉVAI also relies on a literary work as a framework for analysing the concept of *script*. While examining the poem *Favágó* (Woodman) by Attila József in Hungarian and in its Russian translation, he focuses on the

writing process of the poem and adopts Gábor Tolcsvai-Nagy's definition of the *script*. He compares the original Hungarian poem with its Russian translation regarding the appearance and organisation of *poetical script*, and finds substantial differences. It is very interesting for the reader to follow how the original script of the poet can be recognised in, or interpreted into, the Russian translation. The differences come mainly from the characteristics of the two languages.

As it was mentioned before, the analyses and interpretations of the concept of *script* in the essays of this volume of *Officina Textologica* emanate from more or less different theoretical backgrounds. As a result, the conclusions and questions of the authors and the results of their research provide various suggestions for future directions of script research or, more generally, for the investigation of the semantic organisation of text.

Finally, a highly relevant paper from a regular author of *Officina Textologica*, which was published in a different collection:

CSÚRY I. 2011. A forgatókönyv mint elméleti kategória és kommunikációs eseménytípus multimodális megközelítésben. [The script as a theoretical category and as a type of communicative event in a multimodal framework.] In: Enikő Németh T. (ed.): *Ember-gép kapcsolat. A multimodális ember-gép kommunikáció modellezésének alapjai*. Budapest: Tinta Könyvkiadó. 145–178.

## **From lexical networks to conceptual frames and scenarios: the cognitive framework**

### ***1. Characteristics of the cognitive framework***

#### ***1.1. Generative grammar and the traditional linguistic paradigm***

Since many of the *Officina* papers discussed in this section are part of an endeavour to apply Langacker's holistic cognitive grammar to the analysis of structures beyond the clause/sentence level, it is natural to begin our discussion with a brief introduction to the principles and methods of this approach to language and its use.

Cognitive grammar differs significantly from traditional approaches to text in that its interest in structures larger than clauses or sentences develops organically from its psychologically based holistic view of all phenomena connected with language and its use – already at the lowest levels of organization. The system was originally developed in the 1980's with an aim to overcome at least some of the difficulties and contradictions inherent in traditional sentence grammars (especially Chomsky's Generative Grammar and truth-functional semantics) but it was soon realized by its founders (Lakoff and Johnson 1980, Langacker 1987, 1991) that this could only be achieved by breaking away from almost all the

tenets of the Saussurian and Chomskyan tradition that had been at the foundation of a system-based modular approach to grammar. This tradition emphasized predictability and compositionality at all levels of linguistic description by stating that the task of linguistics was to account for the ideal native speaker's ability to create and understand novel sentences on the basis of an autonomous system of rules that were clearly separable from general processes of human cognition to the extent that they had to be presumed to be innate.

The most obvious objection to the generative system in the 1980's was that, in order to achieve full predictability of grammatical phenomena, it had to continually impose severe limitations on what was to be regarded as part of grammar (originally formulated by Chomsky (1964: 62) as observational adequacy: '*the lowest level, indicating whether the grammar has properly identified the phenomena that need to be accounted for*'). In addition to the distinction of *competence* vs. *performance*, already present in the Saussurian tradition, this led to the dichotomies of *grammar* vs. *lexicon*, *core grammar* vs. *periphery*, *UG principles* vs. *parsing rules* at various stages in the development of Chomskyan theory, all with the net effect of reducing the scope of grammar and, as Newmeyer (1991) claims for the last distinction, a separation of innate linguistic knowledge from non-innate general conversational (parsing) principles. This is a special point of interest in our discussion here since it creates an enormous gap between the language system and its use for communication – ultimately between sentence grammar and text linguistics.

Formal semantics (in its weakest interpretation) is the application of the rules of formal logic to meaning in natural language (to the extent that that is possible). There are a number of objections even to this weak interpretation that space does not allow us to discuss in detail here. I would only like to emphasize that a combination of the generative interpretation of linguistic competence (defined as the ability to create and understand novel sentences) with its strict separation from any non-linguistic knowledge must naturally lead to the rule of full compositionality that is also inherent in formal semantics. After all, if novel sentences are *not* understood relying only on the meanings of the component parts and their syntactic arrangement, what other factors could be involved? On the other hand, the question arises of how much of actual language remains semantically analyzable if the rule of strict compositionality is retained? Is there a difference in terms of compositionality between (1a) and (1b)? If there is one, how can it be accounted for?

- (1) a Mary has a chocolate in her mouth.
- b Mary has a cigarette in her mouth.

1.2. *The cognitive alternative*

Owing at least partially to these considerations, the most important point of departure of a cognitive alternative has had to be a break away from system linguistics, formal semantics and the rule of compositionality. We do not have the space here to give anything like a thorough introduction to Cognitive Grammar, we will only concentrate on some of its basic assumptions (based on Langacker 1987, 1991) that are most relevant to our purposes in this paper.

- Cognitive Grammar is psychologically rather than logically based. It defines language as a means of cognition as well as communication, claiming that the system bears every mark of having been elaborated for use for both purposes by humans. As a result, it is a usage-based approach that does not make a distinction between linguistic competence and performance on the one hand, or between linguistic and non-linguistic knowledge on the other.

- As a result, it does not need to rely on the principle of strict compositionality. The meaning of complex structures (or *units*, in the cognitive terminology) is only motivated by the meanings of the component parts and the way they are assembled, additional information comes from the general (and often varying) cognitive background of language users. It is true that the grammar loses some predictive power in this way, but as we have referred to it in Section 1.1, this power seems to have been a burden rather an asset to generative grammar as well, forcing it to continually restrict its professional interest to structures that do not resist their kind of analysis. Cognitive grammar, on the other hand, is capable of accounting for the (strictly semantic, communicative or social) motivation of the structures that are actually used, making predictions as to what other structures might or might not be used for the semantic purposes on hand.

- Cognitive grammar denies the direct reflection of logical relationships in grammatical structure (often referred to as *logical-grammatical relationships*). A discrepancy between the logical and the grammatical form is the sign of a transformation for the generativist. Cognitive grammar does not admit transformations, holding the view that different grammatical structures result from different conceptualizations. A key issue in this approach to language is the notion of construal.

- Construal gives the language user considerable freedom in deciding the question ‘*What is going on?*’ when a set of events needs to be conceptualized. Different construals are (often only slightly but sometimes radically) different conceptualizations of a situation, which will in turn lead to different linguistic forms at all levels of organization beginning with lexical networks (argument structure) to questions related to the organization of discourse.

The generativist and the cognitive approaches to relationships of meaning and form are compared in Figure 1.

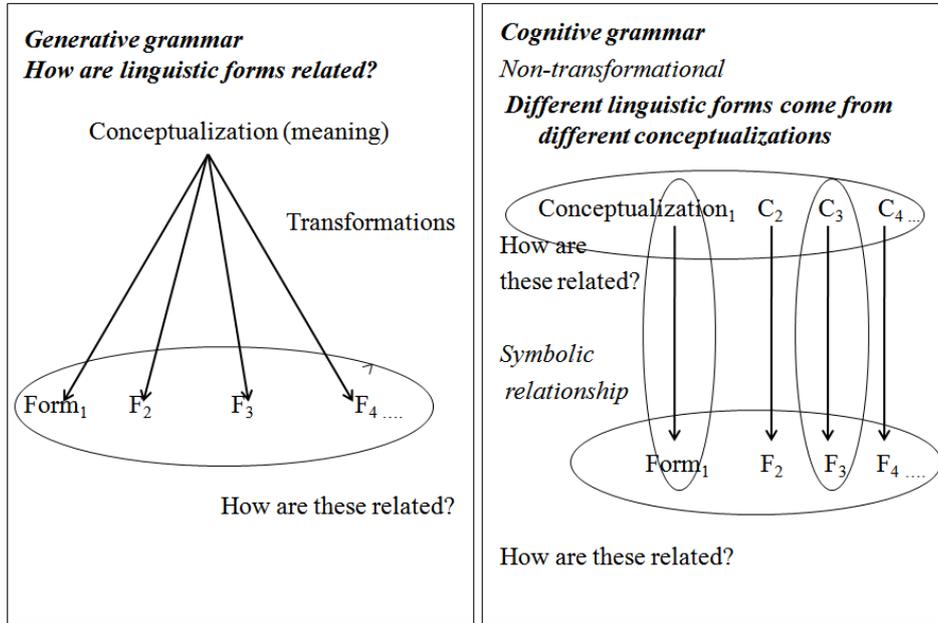


Figure 1: Generative and cognitive grammar

The psychological process of construal is essential in the organization of the cognitive framework. The key notions of *scope* (deciding what is in profile, what is essential or marginal in a conceptualization), *prominence* (the primary distinction of figure and ground and a secondary one within the figure) and *perspective* (the degree of speaker involvement: objective vs. subjective viewing arrangement) are all based on construal, and they in their turn are determining factors in the grammatical organization of language structures at all levels.

The secondary distinction of *trajector* and *landmark* within the figure, for instance, determine subject and object selection: a crucial factor in organizing a clause. This view of grammatical functions can also explain why purely semantic definitions of subject and object have always failed in linguistics: the determining factor is *attention* (tr/lm selection) and semantic factors may (or may not) have only an indirect influence on this choice.

- A related factor that has a very important role in the shaping of grammatical form is the formation of Idealized Cognitive Models (ICMs). The conceptualizer, in assessing a situation, is not given ready-made solutions. With an active effort, (s)he has to make some sense of what is going on or form an ICM: *a situation, its participants and the relationships that hold among them, as construed by the conceptualizer* (Lakoff 1987).

*In summary:* Over the years, attempts have been made to apply the methods of sentence linguistics to texts--with little success, owing to the inefficiency in this field of the tools it was able to use. Holistic cognitive grammar, based on the language user's assessment of a situation (ICM) relying on a full knowledge of the world available to him/her from all possible sources, seems capable of bringing sentence linguistics and text linguistics closer together because it already analyses sentences with tools designed for the analysis of larger contexts or scenarios. In the following sections I will give examples of how this could work, beginning with the relevance of alternative cognitive construals in argument structure, through the significance of ICMs in communication and in the construal of scenarios, and concluding with a brief cognitive analysis of epistemic grounding (modality), a process that anchors what is said to the knowledge of the speaker and the hearer about the world.

## **2. Attempts at cognitive solutions: lexical networks and conceptual frames**

### **2.1. Argument structure: load**

A simple case of the choices involved in the formation of an ICM is the selection of an image schema, but that selection will determine argument structure in the clause, as in the case of the English word *load* (Pelyvás 2001 in *Officina Textologica* 5, an English version can be found in Pelyvás 1996).

Pairs of sentences like (2a) and (b) have been something of a problem for modern theories of language ever since Fillmore (1977) brought them into the focus of attention:

- (2) a John loaded hay onto the truck.
- b John loaded the truck with hay.

Early generative grammar attempted to analyze the pair as transformationally related, but the attempt had to be given up partly because no transformational mechanism could be found or created to link them (especially in GB) and partly because there is an obvious difference in the meaning of the two. Since cognitive grammar holds the view that different (but related) forms come from different (but related) conceptualizations, our task is now to find out what these conceptualizations are and how they are related.

The first thing to notice is that the event described (which may be, 'objectively' speaking, 'identical' in the two sentences), can be divided into two subevents or subtrajectories, since they both involve motion:

1. John's physical activity (prototypically a repeated movement of the arms [tools] along a well-defined trajectory). This part is identical for both *a* and *b*:
2. The subtrajectories 'observed' or conceptualized here are already different:  
    for *a*: the hay changed location

for *b*: a container was filled

As for subtrajectory 2, it could be argued that both events have to occur in both sentences: you cannot fill a container with hay without the hay changing location. Objectively speaking, that may be true, but cognitive grammar has the remarkable characteristic of allowing for the conceptualizer's ability to structure reality in different ways:

A fundamental notion of cognitive semantics is that a predication does not reside in conceptual content alone but necessarily incorporates a particular way of construing and portraying that content. Our capacity to construe the same content in alternate ways is referred to as **imagery**; expressions describing the same conceived situation may nonetheless be semantically quite distinct by virtue of the contrasting images they impose on it. (Langacker 1991: 4)

Owing to the difference in the construal of subtrajectory 2, the selection of landmark is changed: *the hay* is in profile in *a* and *the truck* in *b*. The expected consequence is the change in argument structure. The landmark becomes the direct object in active sentences<sup>3</sup>.

There is substantial evidence from grammar that we have the schema of a container in (2b), which is not present in (2a):

- (2b) is *telic*, (2a) is *atelic*. One of the prototypical properties of a container is that it has a certain capacity or volume and when that volume is filled, the process cannot go on. This corresponds to the requirement that a telic process must have a natural conclusion.

Note that (2a) could only be 'made telic' by limiting the amount of hay available. The simplest way to do this is by using a definite NP:

(3) John loaded the hay onto the truck,

but the rather atypical case of filling a definite volume with exactly the amount of substance that is available is perhaps less than fully acceptable.

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<sup>3</sup> Note that in Fillmore's Case Grammar (Fillmore 1968) *the truck* always had to be locative, partly because there was no separate case for a *container* and partly because of *the objective view taken of the situation*. Preserving deep case relationships was essential during whatever transformations the sentence underwent. In cognitive grammar, since the situation is construed subjectively, there is nothing to prevent the speaker from regarding *the truck* as a container in one case and simply as location in the other.

(4) ?John loaded the truck with the hay (3.8)<sup>4</sup>

• *The ICM of filling a container has some constraints on the substance used.* Gradual, or, in the case of solids, repeated action is typically involved. The substance used must fill the whole volume of the container, so it must have the properties typically expressed by a mass noun or plural count noun. Compare:

(5) John loaded the truck with	hay	(5.0)
	peas	(5.0)
	bricks	(5.0)
	machines	(4.1)
	*a car	(2.4)

None of these NPs would be problematic at all with the structure in (2a).

• *The criteria for filling a container properly and for moving or transporting hay are not exactly the same.* Compare:

(6) John did not load the truck properly:		
a.	a lot of hay was left in the field	(3.6)
b.	it was left half empty	(3.9)
c.	he was certain to lose half of the hay on his way home	(3.4)

(7) John did not load the hay on the truck properly:		
a.	a lot of hay was left in the field	(2.9)
b.	it was left half empty	(3.1)
c.	he was certain to lose half of the hay on his way home	(4.5)

The scores here are not always really definitive, but seem to support our argument.

In this case study my aim has been to show that construal in terms of *imagery* (whether or not to apply the **container** image schema to *truck*) has direct consequences on the argument structure of sentence pairs like (2a) and (b).

## 2.2. Argument structure: correction of an ICM

Sometimes it may be necessary for a speaker to discard a cognitive model seen as appropriate for describing a situation at the time of observation in favour of another one seen now as more adequate. This is typically an issue that would

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<sup>4</sup> The numbers in brackets against this and some of the examples to follow are grades of acceptability (1 to 5) based on a survey of a small group of native and non-native speakers of English.

never come up as such in a system grammar, but the grammatical consequences of such a move would need to be dealt with in a systematic way. Unfortunately, this is very often not the case in traditional grammars, where the transformationally related alternatives given in (8) were clearly treated as synonymous in the 1970's and even more recent developments such as the rule-to-rule hypothesis only state that every syntactic rule has some counterpart in semantics, without feeling the need to examine the nature of the semantic difference.

As we have seen, cognitive grammar changes the relationship of the components arguing that it is changes in conceptualization that have syntactic consequences rather than the other way round. The case of *load* was a relatively simple one. The sentences in (8), traditionally seen as structurally related by the transformation of Raising or by Exceptional Case Marking are of greater complexity (Pelyvás 2001 in *Officina Textologica* 5, for a full English version see Pelyvás 2011b):

- (8)a I saw *Steve steal your car*, but at the time I thought that he was only borrowing it.  
b I saw *Steve stealing your car*, but ...  
c \*I saw *that Steve stole your car*, but ...

In order to understand why the Raising construction is a suitable tool for the purpose, we have to look into the cognitive theory of epistemic grounding. In terms of Langacker (1991) Tense and Modality (which, according to Pelyvás (1996, 2011a,b) can also be expressed by cognitive predicates like *see* or *think/believe*) serve as grounding predications that relate an event to the circumstances of its utterance: speaker/hearer knowledge, time and other deictic elements. It can be hypothesized that the non-finite form occurring in the subordinate clause of the construction, with its less-than-fully grounded status, is in a symbolic relationship with this conceptual content of correction.

The difference between (8a) and (b) on the one hand and (8c) on the other is not in the *grounding* of the whole structure (something that the speaker does at the time of speaking) but in that of the subordinate structure marked in italics. The less than fully grounded non-finite form indicates a (now corrected) problem in conceptualization or ICM formation (*borrowing* vs. *stealing*), something that the conceptualizer does (or rather did) at the time of perception. The event was *not* conceptualized as stealing.

To find further support and also a higher level of generalization for the hypothesis that the forms appearing in the complement of a cognitive predicate are in a symbolic relationship with its status relative to grounding, we can also examine Hungarian. This language almost totally lacks Raising but still seems to

have a much wider array of choices in the expression of ICM correction. Consider the possible Hungarian equivalents of the English sentences in (8):

- (9) a Láttam, *hogy* Pista *\*ellopta* az autódat,  
 I-see-Past *that* Steve *steal-Perf.-Past* your car  
 de akkor azt hittem, *hogy* csak kölcsönveszi.  
 but then that I-believe-Past that only he-borrow-Pres.  
 = relative past
- b *?ellopja*  
*steal-Perf. Present = relative tense*
- c *\*lopta*  
*steal-Imperf. Past*
- d *\*lopja*  
*steal-Imperf. Present = relative tense*

The unacceptable (9a) combines a finite object clause with Past Tense which is to be seen here as *absolute*: it relates the time of the situation to the time of utterance, giving it fully grounded status, in contrast to the *relative tense* appearing in (9b). The Present Tense form of (9b) relates the time of the event ‘only’ to the time of the matrix clause, but even that change will make the sentence only marginally acceptable. The imperfect forms in (9 c and d) only make the situation worse: they appear to strengthen a false link between seeing something and conceptualizing it as stealing at the time of the event.

In (10) the object clause is replaced with a clause of manner, which improves the situation considerably, since the sentence is now *more* about the ingredients of the ICM that were observable to the conceptualizer at the time of conceptualization than about his/her formation of an (incorrect) cognitive model.

- (10) a Láttam, *ahogy* Pista *ellopta* az autódat,  
 I-see-Past *how* Steve *steal-Perf.-Past* your car  
 de akkor azt hittem ...  
 but then that I-believe-Past ...
- b *ellopja*  
*steal-Perf. Present = relative tense*

In (11) we have a time clause in subordination, which only permits absolute tense. The marginal acceptability of (11b) may be attributable to the fact that the imperfect form, in opposition to its role in (9), an object clause, now marks the incompleteness of the experience, making its conceptualization more difficult. This contrast is similar to the difference between the English sentences in (8a) and (8b):

- (11) a Láttam, *amikor* Pista *ellopta* az autódat,  
 de akkor azt hittem ...  
 I-see-Past *when* Steve *steal-Perf.-Past* your car  
 but then that I-believe-Past ...
- b *?lopta*  
*steal-Imperf. Past*

Finally, structures similar to English Raising are also possible in Hungarian, even though only (12a) would be more than a very rough equivalent. In (12b) to (12d) the subject NP is easily seen as part of the conceptual content of the matrix clause as well:

- (12) a Láttam *Pistát* *ellopni* az autódat, de akkor  
 azt hittem ...  
 I-see-Past *Steve-Acc* *steal-Inf.* your car but then  
 ...
- b Láttam *Pistát,* *ahogy ellopta*  
 I-see-Past *Steve-Acc* *as/how he-steal-Past*
- az autódat, de akkor azt hittem ...  
 your car but then that I-believe-Past ...
- c *ahogy ellopja*  
*as/how he-steal-Present = relative tense*
- d *amikor ellopta*  
*when he-steal-Past*

The aim of this Section has been to illustrate on the examples of English and Hungarian how alternative argument structures seen as (often meaningless) transformations in traditional grammar can express subtle differences in the speaker's attitude to what (s)he has to say. Grammatical differences reflect differences in the creation or correction of Idealized Cognitive Models. In Section 3 we will see an example of how different ICMs of the same situation in different people's minds can affect communication.

### 2.3. Tense and Aspect

At a higher level of discourse, it can be shown that the construal of scenarios (both in the sense of apprehending an event and of relating it in conversation) are very consistently reflected in grammatical structure. The Simple Past Tense may be sufficient to relate a set of events 'as they happened'. But humans have a strong tendency to highlight anteriority or simultaneity relations or cause-effect

relationships, etc. as well. This requires more sophisticated grammatical tools even at the level of sentence structure (progressive and perfect forms or passives – universally seen as a means of expressing ‘marked’ topic–comment relations. (The issue is discussed in detail in Pelyvás 2008, in *Officina Textologica* 14.) For a quick illustration, consider the encounter described in (13), the key to an exercise for students of English:

(13) The very moment I saw the man I **found** him suspicious. I **suspected seeing** him somewhere before, but where? **Could** he **be** the man I **had been cheated by** shamelessly just a few weeks before? Before I **had answered** that question, it suddenly **dawned** on me that he **must be** the clerk I **had been having** affairs with at the bank for some time. He **had been said to have been arrested** for some kind of serious offence on the job, but now, obviously, it **could not have been** true. He pretended **not to have noticed** me, just as I **had decided I would do** myself, which **saved** me a lot of trouble. In fact I **had been hoping** he **would do** exactly that. I **do not know** what I **would have done** if he **had decided to come up** to me and **shake** hands. I **am** certainly **not looking forward to meeting** him again, and I’d rather he never **showed up** in the future, if he **could** help it, either!

As native speakers would probably agree, the story *could* be told in simpler terms as well. But something of the message would certainly be lost.

#### 2.4. Coreference: conceptual structure in deontic modality

As we have remarked in Section 1, Cognitive Grammar was from the beginnings deeply dissatisfied with the application of formal logic to the description of meaning (cf. motivatedness vs. compositionality). One of the areas where a clear alternative may offer itself is the description of modality<sup>5</sup>. The first significant step was Sweetser (1990), a work that suggests that

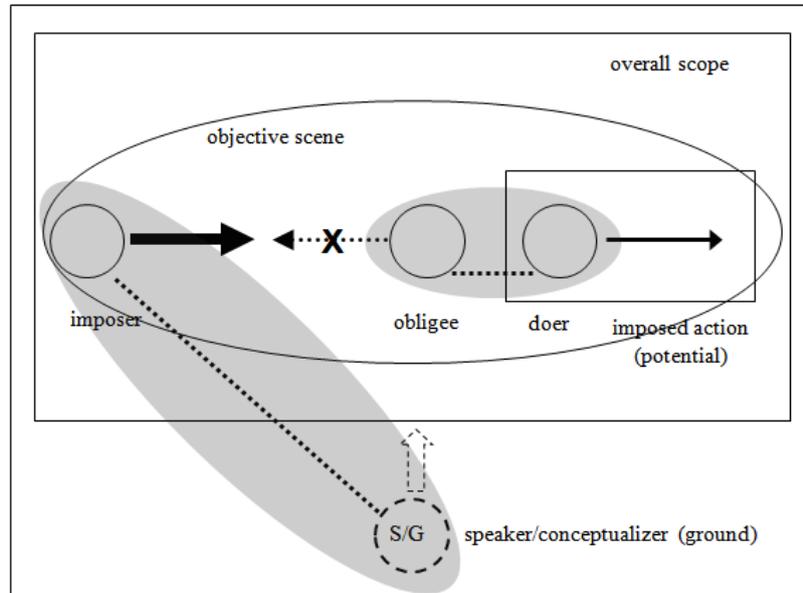
- modals are to be described in terms of force dynamics;
- the epistemic meanings of the modals are the result of metaphorical extension from their root (prototypically deontic) senses.

Sweetser (1990) provides a very simple conceptual schema consisting only of forces and barriers, which, although a good point of departure, can be shown to be erroneous in a number of ways (cf. Pelyvás 1996). In subsequent work (e.g. Pelyvás 2011b) Pelyvás suggests a more sensitive analysis in which barriers are replaced by counteracting forces to account for the potentiality and flexibility in

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<sup>5</sup> This discussion is largely based on based on Pelyvás (2005) in *Officina Textologica* 12. A full English version is available in Pelyvás (2011a).

the modal system and also, more important for our discussion here, that these forces are to be associated by the participants of the situation (an important step in the creation of an ICM, cf. 1.2.).



**Figure 2: The conceptual structure proposed for English deontic *must* in Pelyvás (2011b).**

Scopes and grounding have been added. The arrows of different weights mark the (strengths of) the forces associated with the participants (*'imposer'* and *'obligee'*). The dotted lines mark correspondence: the same participant in alternative roles, our chief concern here.

The deontic scene, illustrated in Figure 2, has two hidden correspondences:

- The imposer of the obligation is normally the speaker;
- The obligee (the subject of the sentence containing the modal) appears in two different roles. One is an agent-like role of performing imposed potential action, the other is the one who receives the order to do something. But, unlike in the standard 'billiard ball model' of a transitive clause (cf. Langacker 1999: 24), where the participant in the middle is entirely passive, the *obligee* has an active role as well: exerts a relatively weak counterforce to the strong force associated with the obligation<sup>6</sup>.

If we associate the revealed roles of the conceptual structure with syntactic cases in the organization of the clause, the prediction is that either role can be 'grammaticalized': Nominative case would grammaticalize the agent-like (doer)

<sup>6</sup> This makes sure, among other things, that the action remains potential rather than actual—a factor that Sweetser's analysis cannot explain.

role, and a Dative would mark the somewhat active but subordinate role of the ‘obligee’, with his/her reluctance to perform the action. In English we only have the Nominative, but in a number of languages, including Hungarian, there is (also) a Dative subject option, as seen in (13)<sup>7</sup>.

- (13) a. *Neked* ki kell tisztítani/(od) a cipődet.  
 You-dat (out) must clean-inf-(2<sup>nd</sup>.sing) the shoes-  
 acc.-2<sup>nd</sup>.sing.poss.acc
- b. *Te* ki kell, hogy tisztítsd a  
 cipődet.  
 You-nom (out) must that clean-2<sup>nd</sup>.sing.subj the  
 shoes-2<sup>nd</sup>.sing.poss.acc  
 ‘You must clean your shoes.’

The correspondence and the differences in the roles that I have described here are largely hidden in the organization of the clause, although they may not be without significant consequences in the organization of larger units, such as ICM’s, scenes or scenarios.

### 3. Construal: Idealized Cognitive Models in communication

#### 3.1. Conflicting models

Since the creation of an ICM, as we have seen, is largely a matter of construal, there is nothing surprising about situations when the participants of a conversation construe the ‘same’ situation in terms of different models. This can often lead to misunderstanding, conflicts or frustration in the conversation, especially if the models turn out to be incompatible with each other. In literary texts the author can use such situations as a source of (often black) humour. (The following discussion is based on Pelyvás (2001), in *Officina Textologica* 5.) Consider the following passage from Joseph Heller’s *Catch 22*:

- (14) (“I’m not joking,” Clevinger persisted.)  
 “They’re trying to kill me,” Yossarian told him calmly.  
 “No one’s trying to kill you,” Clevinger cried.  
 “Then why are they shooting at me?” Yossarian asked.  
 5 “They’re shooting at everyone,” Clevinger answered. “They’re  
 trying to kill everyone.”  
 “And what difference does that make?”  
 ...

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<sup>7</sup> Some languages may even be more sensitive to these conceptual differences. Romanian, for instance, would only have a (conversational) Dative variant if the subject is +HUMAN, i.e. capable of exerting such a counterforce. For a discussion of how relationships change in the epistemic domain, cf. Pelyvás (2011b).

- “Who’s they?” [Clevinger] wanted to know. “Who, specifically, do you think is trying to murder you?”  
“Every one of them,” Yossarian told him.  
10 “Every one of whom?”  
“Every one of whom do you think?”  
“I haven’t any idea.”  
“Then how do you know they aren’t?”  
“Because . . .” Clevinger sputtered, and turned speechless with frustration.  
15 Clevinger really thought he was right, but Yossarian had proof, because strangers he didn’t know shot at him with cannons every time he flew up into the air to drop bombs on them, and it wasn’t funny at all. ...

Clearly, there is nothing humorous about the situation: this is war, the characters are under the constant pressure of being in danger of violent death. Additional tension is provided by the repeated increase of the number of missions they have to fly, to mention just the most important ingredients (lines 1, 6, 15, 17). Yet Heller somehow manages to turn this situation funny: not for the participants, who are on the verge of a breakdown, but for the reader set apart from them and observing these developments.

To find the source of humour in this unfunny situation, we have to return to the participants: to the tension palpable between them. They both have a strong urge to communicate something really important to them but for some reason they cannot come to terms with each other. They feel this and are frustrated (lines 1, 6, 14) but cannot understand or untangle the situation. This is reflected in the obvious contradiction between lines 3 and 5, in the snappy exchanges, in Clevinger’s frustration and Yossarian’s puzzlement in the last lines.

The key to the situation is that the two participants experience and conceptualize the situation in two entirely different cognitive models. It is extremely difficult if not impossible to ‘step out’ of a cognitive model, since ‘there is nowhere else to go’. The further the models are apart, the more difficult understanding will be.

The excerpt reveals that Yossarian thinks in terms of the ICM of *murder*, while Clevinger uses the model of *war*. Despite the apparent similarity, the distance between the two models are great, even though Yossarian posits the naive question in line 6: ‘*And what difference does it make?*’

In the ICM of *murder* there prototypically is a personal element. Murderer and potential victim often know each other well and the murderer has some personal motive of anger, jealousy, hate or potential gain. The words *they*, *me*, *try*, *kill* in Yossarian’s lines refer to these elements, duly challenged by

Clevinger in lines 8 and 10 relying on the model of *war*, where ‘*they are trying to kill everyone*’. This is turned inside out by Yossarian in line 14, finally nailing his opponent.

The ICM of *war* is totally impersonal. In modern warfare the troops hardly see each other, soldiers are trained not to think of the enemy as human and terms like *liquidate*, *annihilate*, *pacify* or *mop up* are used instead of the traditional terms. This is especially true of aerial warfare, which is frequently referred to as ‘clean’. Thinking in terms of this model, Clevinger frequently uses the terms *everyone*, *no one*, and this is what leads to deeper meaning of the contradiction ‘*No one’s trying to kill you [because] they’re trying to kill everyone*’.

Can the characters remain sane in a crazy situation? Heller’s ingenuity makes sure that they cannot, and lines 15 to 17 clearly betray this. Yossarian appears to entertain both cognitive models simultaneously: when *they shoot at him*, that is *murder*, but when he *flies up into the air to drop bombs on them*, that is because of *war*, a natural thing.

This section is an example of how the choice of the cognitive model applied to make sense of a situation can determine the success of communication at higher levels. My aim was to show that the cognitive principle of construal can affect coherent communication. Conflicting or incompatible models in the minds of the partners (or sometimes of one person) can make communication extremely difficult if not impossible but can be an excellent source of humour for the reader of a literary piece (who is of course not part of the situation).

### 3.2. *An inside view on the creation of ICMs: psychotic narration*

Making sense of a situation is harder work than would appear at first sight. After perhaps a brief period of ‘tuning in’, nearly all language users are capable of working out an ICM which is compatible with what is seen or heard. (Just think of what happens when you sit down to watch a film that has been running for a few minutes.)

Experiments conducted by Chaika and Alexander (1986) prove that such a task can be very difficult if not impossible for psychotic patients. (Our discussion of the ‘*ice cream stories*’ is based on Pelyvás (2003) in *Officina Textologica* 9, for a fuller English version see Pelyvás 1996.)

To determine to what extent psychotic patients were able to create a coherent cognitive model of a simple scene, they made a short (2 minute) video story of how a little girl obtains money from her parents and buys ice cream<sup>8</sup>:

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<sup>8</sup> The experimenters had to be very careful in designing the story, as it cannot include anything that could potentially upset the patients. Psychotic patients lack the ability of normal subjects to detach themselves from a situation (objective viewing arrangement) that we referred to as an essential ingredient of the humour of the excerpt taken from *Catch 22*.

(15) The first scene pans a shopping center, with the camera gradually closing in on a little girl looking through the window of an ice cream store.

The next scene shows a woman setting table, with the same girl walking in and asking, ‘Mommy, can I have some ice cream?’ The mother answers (gently), ‘No, honey, it’s too close to suppertime.’

Then a man walks into the house. The child goes up to him, they greet each other, then she asks, ‘Daddy, can I have some ice cream?’ The father looks into the camera with a grin, and his hand moves towards his pocket.

The next scene shows the child entering the ice cream store, leaning against the counter as she waits fidgeting.

(Then she buys a very large double grape ice and leaves the store.)  
(pp. 310-311, abridged)

Even a quick glance at the excerpts from psychotic narratives quoted below can convince anyone that some of the psychotic narratives do not tell the story at all cf (16).

(16) Okay. I was watching a film of a girl and um s bring back memories of things that happened to people around me that affected me during the time when I was living in that area... (psychotic)

Others do, to some extent, but with great deficiencies in the attempt to create a coherent cognitive model. On point of special significance in the story is the part where there is a gap in the video: *the father’s hand moves towards his pocket and then the girl returns to the store and buys an ice cream*. The control group had no difficulty in bridging the gap: *the father must have given the girl some money*, but the task proved too difficult for most of the psychotic subjects. A good example for this is (17).

(17) ... and I noticed a little girl looking into the window and I guess he walked back into the store and then a [kif] thing switched where the girl was at home and I dunno asked her mother for something and she had a kni- got a little memory lapse there. Then it switched again and her father came in...(psychotic)

The more severe cases even had problems identifying objects/participants and the basic relationships among them, the very first step in creating an ICM. This is evident in (18).

(18) I saw a little girl who was moving a counter for some reason and I don’t know what the heck that was about. She was pressing

against it okay. In the beginning I saw a white car with a red vinyl top and then this little girl was looking in the store was looking in the trash can or something and then she turned around and she went on she talked to her mother and her father and neither one was listening to her... (psychotic)

The subject begins by misinterpreting the girl leaning against the counter as an attempt to move or push it, though admitting that (s)he cannot make sense of this relationship. Then the attempt at 'tuning in' is obviously given up when (s)he starts listing details that are discarded as irrelevant at the beginning without difficulty (the car, its vinyl top, etc.) by the healthy control group.

The most interesting detail in this narrative is probably the *trash can*. It is normally taken for granted in the literature that the participants (prototypically 3-dimensional objects) have greater integrity in the ICM than relationships, at least in the sense that they are conceptualized as existing independently of the situation. This narrative suggests that it may not always be so. Even without actually seeing the video we can argue that the psychotic narrator would not have identified the ice cream containers as trash cans if (s)he had understood that the ICM was one of buying ice cream.

Objects may acquire their proper conceptualization from the relationships that they participate in. This appears to be an even more fundamental property of construal than the selection of an appropriate argument structure for verbs.

### 3.3. *The impossible scenario*

In the previous section we have seen something of what it takes to create an Idealized Cognitive Model of a situation through the example of psychotic patients, who are often not capable of the mental operations of distancing themselves away from a situation, of finding the proper scope for the narrative, of identifying participants or simple relationships holding among them, or of bridging gaps in the network. These operations come so naturally to the normal speaker that (s)he is even capable of making sense of scenarios that 'do not make sense'.

Even little children can effortlessly understand and enjoy the cartoon scene in which a character, having reached the brink of a precipice, walks on whistling to himself—until he looks down, gets frightened, and has the nasty fall. This is turning the natural course of events round, making believe that the laws of gravity somehow depend on our observation.

Sometimes we encounter impossible scenarios and we can not only 'accept' them but can also understand the hidden meanings that they are meant to convey. Here is an example of one of István Örkény's grotesque *One Minute Stories*. The discussion is based primarily on Pelyvás (2008) in *Officina*

*Textologica* 14, but see also the other contributions in that volume, especially Kiss S. (2008) and Csúry Andrea (2008).

(19) István Örkény: The Death of an Actor

The popular actor Zoltán Zetelaki collapsed and lost consciousness on a street just off Rákóczi Road early this afternoon. Passers-by called an ambulance and rushed him to a nearby clinic. Despite the application of the latest advances known to medical science including the use of an iron lung, all efforts to revive him were in vain. At 6.30 in the evening, after lengthy agonies the celebrated Thespian died and his remains were transferred to the Institute of Anatomy.

Despite this terrible misfortune tonight's performance of King Lear proceeded as usual. Though a few moments late and **looking rather worse for the wear**—in Act 1 here and there he had to rely on the prompter—Zetelaki **gradually revived and by Act 5 he was so convincing as the dying king** that the audience gave him a standing ovation.

After the performance Zetelaki was invited out to dinner but he declined. 'Thank you very much,' he said, 'but I've had a rather trying day.'

(Translation by Judith Sollosy, emphases are mine)

Sudden death of the actor in real life would make the offered scenario impossible. The reasons that this is not so for Örkény are quite complex and create an artistic effect in a complex interaction that cognitive linguistic theory calls *conceptual integration* or *blend* (cf. Coulson and Oakley 2000, Grady et al. 1999). Admitting that we are now approaching the somewhat unfamiliar grounds of literary analysis, the linguist can observe at least the following factors in interaction:

- It is customary in the modern world to constantly spy on the private lives of celebrities and make all detail visible to the public. Arguably the story satirizes on the appropriateness and reliability of such information by juxtaposing the two parts of the story.

- Even the average man often wonders about the background or source of artistic inspiration. It is somehow felt that an actor must have some sort of personal experience of the situations before (s)he can convey them convincingly to an audience. If this is true, death could only be performed well after really experiencing dying, i.e. it would be impossible unless the scenario developed above could be real (or the dogma about real experience is false).

● With Paragraph 3 we can witness the gradual development of a conceptual blend which integrates the elements of *real death and death on the stage, exhaustion as metaphorical death, being not quite up to the mark, and of the daily routine of an actor's work*, culminating at the point when death on the stage blends with death in real life<sup>9</sup>. Ironically, this is the phase most appreciated by the audience. The finishing lines of the story tell us that this impossible scenario needs to be repeated as a routine day after day after day in life.

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<sup>9</sup> The translation very appropriately uses *revive* twice, both in the literal and the metaphorical sense. In the Hungarian original the two expressions are *életre kelt* and *magára talált*.

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