Event types and discourse linking in Hungarian

Abstract
In every sentence type describing a particular type of event, there is a designated argument functioning as the default information focus. In the case of sentences expressing a change of state, this argument is the theme undergoing the change of state; in the case of sentences describing a change of location, this argument is the terminus, denoting the end-location of the moving theme; in stative sentences indicating the existence or spatial configuration of an individual at a particular location, this argument is the location argument, whereas in sentences expressing a mental or physical state, this argument can be either the theme or the experiencer. In the case of unergative predicates, describing the activity of an agent, the default information focus is not an argument but the verb. A designated argument can represent the information focus irrespective of whether its referent is newly introduced or given in the discourse. If the designated argument conveys known information, i.e., if it is [+referential] and [+specific], it satisfies the criteria of topicalizability; nevertheless, it can only be topicalized if another constituent assumes the role of information focus. An argument other than the designated one can function as the information focus only if it introduces a new discourse referent (i.e., if it is indefinite), or if it identifies a referent from among a set of alternatives, while excluding the others members of the set (i.e., if it occupies the preverbal identificational focus position). A verb can assume the role of information focus in an indirect way, by the contrastive topicalization of an argument (which also implies the contrasting of the verb with its negated counterpart).

1. Introduction
In Hungarian, Topicalization is a movement rule which can, in principle, target any, and any number, of the [+referential] and [+specific] arguments of a predicate. This does not mean, however, that every [+referential], [+specific] argument of every predicate can be topicalized with equal ease. Let us consider, for example, the possible Hungarian realizations of the proposition 'Mary is cutting the grass'. Even though both the agent-subject and the theme-object satisfy the condition on Topicalization, i.e., both are represented by a [+referential] and [+specific] noun phrase, only the Topicalization of the agent-subject yields an unmarked sentence – as in (1a). If the theme-object is topicalized, it must be pronounced with a rising intonation contour indicating that the topic is contrasted with an explicit or implicit alternative – as in (1b). A topicalized theme-object can be interpreted and pronounced as a regular, non-contrastive topic only if the agent-subject is represented by a [-specific] indefinite noun phrase, i.e., if it introduces a new discourse referent – as in (1c), or if the agent-subject is moved into the immediately preverbal A-bar position, where it is associated with an exhaustive identification interpretation – as in (1d).

(1)a. [Topic Mari] [Predicate nyírja a füvet]
   Mary             cuts the grass
   'Mary is cutting the grass.'

b. [Topic A füvet] [Predicate nyírja Mari] (de a bokrokat nem).
   the grass-ACC      cuts Mary (but the bushes not)
   'The grass, Mary is cutting (but the bushes, she isn't).'

c. [Topic A füvet] [Predicate nyírja egy közmunkás]
There is at least one type of sentence in which both of the arguments are equally topicalizable: the class of stative sentences containing an experiencer and a theme argument – as in (2a, b). (The fact that an experiencer-subject behaves differently from an agent-subject indicates that the constraints that we want to identify involve theta-roles rather than grammatical functions.)

(2a) [Topic Jánosnak] [Predicate tetszik Mari]
    John-DAT pleases Mary
    'John likes Mary.'

b. [Topic Mari] [Predicate tetszik Jánosnak]
    'Mary pleases John.'

Although Hungarian allows sentences with multiple topics, the Topicalization of both the experiencer and the theme leads to sentences similar to those observed in (1): one of the arguments is understood to be contrasted – as in (3a, b). If, however, the verb is negated, as in (3c), the contrastive intonation and interpretation of one of the topics is not necessary.

(3a) [Topic Jánosnak Mari] [Predicate tetszik] (de Éva nem).
    John-DAT Mary pleases (but Eve not)
    'Mary, John likes (but Eve, he doesn't like).'

b. [Topic Jánosnak Mari] [Predicate tetszik] (de Péternek nem).
    John-DAT Mary pleases (but Peter-DAT not)
    'John likes Mary (but Peter doesn't like her).'

c. [Topic Mari Jánosnak] [Predicate nem tetszik]
    'Mary, John doesn't like.'

The fact that the topicalizability of the theme is restricted differently in stative sentences and in sentences describing a change suggests that topic selection may be related to event structure. This is the hypothesis that will be tested in this paper.

After summarizing the structural and functional properties of the topic-predicate articulation of the Hungarian sentence in section 2, the paper will examine what determines topic selection from among the potential topic candidates in sentences expressing a change of state (section 3), a change of location (section 4), the existence or spatial configuration of an individual at a particular location (section 5), and a mental or physical state (section 6). Section 7 will generalize the observations, proposing a constraint on predication structure. It will be concluded that in every sentence type an argument (whose identity depends on the type of event expressed by the sentence) is designated as the default information focus. This argument is internal to the predicate phrase in the unmarked case. It can only be topicalized if the function 'information focus' is associated with another constituent. An argument other than the designated argument can function as the information focus if (i) it is indefinite,
introducing a new discourse referent, or (ii) it occupies the preverbal A-bar position associated with exhaustive identification from among a set of alternatives. A way of turning the verb into information focus is to set the topic argument into an implicit or explicit contrast.

2. Background: The basic structure of the Hungarian sentence

Hungarian has been claimed to be a topic-prominent language (cf. É. Kiss 1981, 1987; Kiefer and É. Kiss 1994; É. Kiss 2002a). Most of its sentences have a topic-predicate structure, with the topic referring to an individual already familiar in the discourse – that which will be predicated about in the sentence. Any argument of the verb can be moved into topic position; however, since the topic function is associated with an existential presupposition, a topicalized constituent must be a referring expression, i.e., a proper name or a definite noun phrase as in (4a) and (4b), respectively:

(4)a. [Topic Jánost] [Predicate el- üttötte egy autó]
   John-ACC down knocked a car
   'John was knocked down by a car.'

   b. [Topic A betegnek] [Predicate adott az orvos egy injekciót]
   the patient-DAT gave the doctor an injection
   'The patient was given an injection by the doctor.'

An indefinite noun phrase can also be topicalized if it is [+specific], referring to a member of a previously introduced set. This is shown in the second sentence of (5a), in which egy fiú 'a boy' identifies one of the students mentioned in the first sentence. A non-specific noun phrase, introducing a new discourse referent, has to remain in the predicate phrase – as (5b) shows:

(5)a. [Topic diákok] [Predicate kint vártak az ajtó előtt]. [Topic egy fiú][Predicate be-nyitott]
   the students outside waited the door before a boy in opened
   'The students were waiting in front of the door. A boy stepped in.'

   b. [Be-nyitott egy fiú]
   in opened a boy
   'A boy stepped in.'

Interestingly, non-referential expressions, among them bare nominals, quantifiers, and adjectival and adverbial phrases, whose canonical position is inside the predicate phrase, can also appear in topic position if they are pronounced with a contrastive intonation. É. Kiss and Gyuris (2003) argue, adopting a proposal of Szabolcsi (1983), that contrast is a means of individuation, which can also make a non-referential expression suitable for the topic role. A bare nominal, an adjective phrase, or a quantified noun phrase functioning as a contrastive topic denotes a property, of which the rest of the sentence predicates some higher-order property. Two examples of this are given in (6):

(6)a. [Topic Gazdag] [Predicate nem vagyok]
   rich not am-I
   'Rich, I am not.'

   b. [Topic Minden könyvet] [Predicate nem olvastam el]
Topicalization has been argued to be a movement rule, carrying an argument from the VP into the specifier of a functional projection below CP, identified as TopP (see Kiefer and É. Kiss 1994; É. Kiss 2002a; and Rizzi 1997). Topic movement can be iterated, that is, the number of topic constituents is not limited to one:

(7)a. \[\text{[TopP János [TopP Marit [NegP nem szereti]]]}\]
   John Mary-ACC not loves
   'John does not love Mary.'

b. \[\text{[TopP Marit [TopP János [NegP nem szereti]]]}\]
   Mary-ACC John not loves
   'John does not love Mary.'

The phrase that is predicated of the topic constituent(s) is an extended VP. The Hungarian VP is head-initial, and the order of postverbal arguments and adjuncts is free, that is, it is independent of the grammatical functions of the constituents. At the same time, as Varga (1981) observed, unstressed constituents, conveying old information, tend to precede stressed ones introducing new referents. Consider a VP extended by a particle, as in (8). The projection dominating the verbal particle and the VP is identified as a PredP (following e.g. Koster (1994) and É. Kiss (2002b)).

(8)a. \[\text{[TopP János [PredP be [VP mutatott Máriának egy orvost]]]}\]
   John PRT introduced Mary-DAT a doctor-ACC
   'John introduced to Mary a doctor.'

b. \[\text{[TopP János [PredP be [VP mutatatta Máriát egy orvosnak]]]}\]
   John PRT introduced Mary-ACC a doctor-DAT
   'John introduced Mary to a doctor.'

c. \[\text{[TopP Máriát [PredP be [VP mutat [János egy orvosnak]]]}\]
   Mary-ACC PRT introduced John a doctor-DAT
   'Mary was introduced by John to a doctor.'

d. \[\text{[TopP Az orvosnak [PredP be [VP mutatott János egy kollégát]]]}\]
   the doctor-DAT PRT introduced John a colleague-ACC
   'To the doctor, John introduced a colleague.'

The predicate part of the Hungarian sentence can also contain a structural focus. The structural focus is immediately preverbal – possibly because it is an alternative filler of the specifier of the PredP projection dominating VP, where it expresses specification in the sense of Higgins (1973) (cf. É. Kiss to 2003):

(9)a. \[\text{[TopP János [PredP EGY ORVOST [VP mutatott be Máriának]]]}\]
   John a doctor-ACC introduced PRT Mary-DAT
   'As for John, it was a doctor that he introduced to Mary.'

b. \[\text{[TopP János [PredP EGY ORVOSNAK [VP mutatta be Máriát]]]}\]
In the theory of Brody (1990, 1995), on the other hand, the structural focus occupies the specifier of a FocP, and its immediately preverbal position is a consequence of V-to-Foc movement.

As is clear from the glosses, the preverbal structural focus exhaustively identifies a referent from among a set of alternatives. Whereas *egy orvos* 'a doctor' introduces a new discourse referent in (8a,b) and (9a,b) alike, (8a) does not exclude the possibility of John having introduced to Mary several individuals with different professions, and (8b) does not exclude the possibility of John having introduced Mary to several such individuals. (9a,b), on the other hand, express exhaustivity: it is a doctor and no one else of whom the rest of the predicate is true. (Exhaustivity is a property associated only with a preverbal structural focus. Although a contrastive topic also presupposes the presence of alternatives, a sentence with a contrastive topic, e.g. that in (2), expresses merely that there is at least one alternative among the set of alternative topics of which the given predicate is not true.)

3. Topics in change-of-state sentences

As the various examples in the introduction have suggested, it does seem plausible to treat topic selection as being influenced by the type of event described in a sentence. This hypothesis will be developed in this and the following sections as it pertains to various types of events. The event types that will turn out to underlie the constraints on topic selection in Hungarian are event types identified in various developments (by Tenny 1994; Levin 1991; and Levin and Rappaport 1995) of the predicate typology of Vendler (1957). Tenny (1994) argues for an event nucleus typology in which Vendler’s distinction between accomplishments and achievements is irrelevant; events expressing a change fall into two subtypes on the basis of whether they express a change of state or a change of location of their internal argument. I will adopt this distinction. The fact that predicates describing the existence or spatial configuration of an individual have properties which distinguish them from of stative predicates describing the mental or physical state of an individual was noticed by Levin (1991), and was demonstrated in detail by Levin and Rappaport (1995). I will also adopt this classification of stative sentences.

In sentences describing an unbounded change of state, as in (10a) and (11a) below, the main news to be asserted is the change of state of the theme. Hence the information focus is represented by the verb denoting the change, and the theme denoting the changing individual. In bounded change-of-state sentences, as in (10b) and (11b), on the other hand, the main news is the resulting state of the theme, hence the information focus is represented by the resultative element or resultative particle and the theme. The theme functions as an information focus in both cases, therefore it must be located in the predicate part of the sentence:

(10)a. \[\text{TopP Mari } \text{[PredP nyírja a füvet]}\]
\[\text{Mary cuts the grass}\]
'\text{Mary is cutting the grass.}'

b. \[\text{TopP Mari } \text{[PredP rövidre nyírja a füvet]}\]
\[\text{Mary short cuts the grass}\]
'\text{Mary cuts the grass short.}'

(11)a. \[\text{TopP János } \text{[PredP írt egy jelentést]}\]
John wrote a report
'John wrote/was writing a report.'

b. [TopP János [PredP meg-írt egy jelentést]]
John up wrote a report
'John has/had written a report.'

In the above sentences, the agent is represented by a definite noun phrase, that is, the agent, representing the causer of the change, is already familiar in the discourse. Given this familiarity, and and the fact that the causer is unaffected by the event, the subject does not carry relevant new information. Therefore, if we topicalize the theme object in such sentences, the remnant VP – even if it includes the subject – becomes infelicitous. Consider the sentences in (12):

(12)a. [TopP A füvet [PredP nyírja Mari]]
   the grass-ACC cuts Mary
   'The grass, Mary is cutting.'

b. [TopP A jelentést [PredP meg-írt János]]
   a report-ACC up wrote John
   'A report, John has written.

The theme in (12b), an indefinite NP, is, in principle, topicalizable if it is specific, referring to a member of a previously introduced set. The problem is not the indefiniteness of the topic – as is shown by the fact that the variant with a topicalized definite theme in (12a) is also unnatural; it can only be saved by a particular, contrastive intonation, or by a particular context to be discussed below. It is the predicate phrase that is infelicitous in these sentences.

Naturally, it can happen that the referent of the affected theme is given in the discourse, and the new information predicated of it is that an agent causes a change in its state. In this case, however, the agent introduces a new referent, hence it is indefinite. Indeed, a theme topic with a predicate containing the verb and an indefinite agent subject is perfectly natural, as the sentences in (13) show:

(13)a. [TopP A füvet [PredP nyírja egy közmunkás]]
   the grass-ACC cuts a public worker
   'The grass is being cut by a public worker.'

b. [TopP A jelentést [PredP meg-írt egy Ph.D. diák]]
   a report-ACC up wrote a PhD student
   'The report has been written by a PhD student.'

Actually, an agent represented by a definite NP can also serve to introduce a new referent in special cases; for example when its referent is known to the participants in the discourse, but it has not been mentioned yet in the given conversation. Examples of this are given in (14):

(14)a. Mi történt a füvel?
   'What happened to the grass?'

b. [TopP pro(A füvet) [PredP le- nyírta a szomszéd kertésze]]
   the grass-ACC down cut the neighbor's gardener
'The grass was cut by our neighbor's gardener.'

Apart from such marginal cases, an agent represented by a definite NP, denoting a known referent, can only convey new information if its referent is identified from among a set of alternatives, i.e., if it is a preverbal structural focus expressing exhaustive identification:

(15)a. [\text{TopP A füvet [\text{PredP MARI nyírja}]}]
   the grass-ACC Mary cuts
   'As for the grass, it is Mary who is cutting it.'

b. [\text{TopP Egy jelentést [\text{PredP JÁNOS írt meg}]}]
   a report-ACC John wrote up
   'A report has been written by JOHN.'

c. [\text{TopP A jelentést [\text{PredP JÁNOS írta meg}]}]
   the report-ACC John wrote up
   'As for the report, it was John who wrote it.'

The information focus role of an affected or effected theme can also be taken over by an adverbial in the preverbal identificational focus position describing some aspect of the change-of-state event. In such sentences, either the agent ((16a)), or the theme ((16b)), or both ((16c,d)) can be topicalized:

(16)a. [\text{TopP János [\text{PredP TEGNAP írta meg a jelentést}]}]
   John yesterday wrote up the report
   'As for John, it was yesterday that he wrote the report.'

b. [\text{TopP A jelentést [\text{PredP TEGNAP írta meg János}]}]

c. [\text{TopP János a jelentést [\text{PredP TEGNAP írta meg}]}]

d. [\text{TopP A jelentést János [\text{PredP TEGNAP írta meg}]}]

If in a sentence describing a change of state, the theme is topicalized and the predicate phrase contains only presupposed material (e.g. a non-focussed definite subject) in addition to the verb, the theme topic is automatically pronounced with a contrastive, rising intonation, and is understood to be set into an implicit contrast. This is illustrated in (17a,b):

(17)a. [\text{TopP A füvet [\text{PredP nyírja Mari}]}]
   the grass-ACC cuts Mary
   'The grass, Mary is cutting.'

b. [\text{TopP A jelentést [\text{PredP meg-írta János}]}]
   the report-ACC up wrote John
   'The report, John has written.'

Sentences containing a contrastive topic and a predicate phrase involving no focus or quantifier not only assert that for the topic the predicate phrase holds, but also imply that there is an alternative topic for which an alternative to the predicate phrase – e.g. its negated counterpart – holds (cf. Büring (1997), Gyuris (2002), and É. Kiss and Gyuris (2003)). That is, the contrast of the given topic with an alternative topic also brings about the contrast of the
given predicate with an alternative predicate (e.g. its negated counterpart, or in the case of a negated predicate, its positive counterpart). This is indicated in (17a,b):

(17)a'. [TopP A füvet [PredP nyírja Mari]]
'The grass, Mari is cutting (but some other relevant thing (e.g. the bushes), she is not cutting).'

b'. [TopP A jelentést [PredP meg-írta Péter]]
'The report, Peter has written (but some other relevant paper (e.g. the letter to be attached), he has not written).'</

In these sentences, the contrasting of the topic serves to focus the verb, presenting it as an alternative identified from a two-member set of alternatives.

There are also other indirect means of contrasting the verb with an implicit alternative, and thereby focussing it. For example, the verb can be negated ((18a)), or it can be preceded by the adverbs még 'still' ((18b)) or már 'already' ((18c)). Még nyírja 'is still cutting' expresses an implicit contrast with már nem nyírja 'isn't cutting any more', whereas már nyírja expresses an implicit contrast with még nem nyírja 'still isn't cutting'. In such cases either one or both of the arguments with a known referent can occur in topic position. For example:

(18)a. [TopP Mari a füvet [PredP nem nyírta le]]
'Mary the grass-ACC not cut PRT
'The grass was not cut down by Mary.'

b. [TopP A füvet [PredP még nyírja Mari]]
'the grass-ACC still cuts Mary
'The grass is still being cut by Mary.'

c. [TopP A jelentést] [PredP már meg-írta Péter]]
'the report-ACC already up wrote Peter
'The report has already been written by Peter.'

In sentences with change-of-state predicates whose only argument is a theme, this theme is equally unmarked in topic position ((19a)) and predicate-phrase-internal position ((19b)). In the former case, a change is predicated of the theme; while in the latter case, a change in the theme can be thought of as predicated of an unarticulated time/place argument.5

(19) a. [TopP A ház [PredP fel-épült /épül ]]
'the house up was.built/is.built
'The house has been built/is being built.'

b. [PredP Fel-épült/Épül a ház]

In unergative sentences containing only an agent in addition to the verb, as in (20), the verb is the designated information focus, which is sufficient in itself to fill the predicate phrase.

(20) [TopP Péter [PredP énekel]]
Peter sings
'Peter is singing.'
Summarizing the observations made in this section: in transitive sentences expressing an unbounded change of state, the designated carriers of new information are the theme argument designating an individual undergoing a change, and the V designating the change. In bounded change-of-state sentences, the theme argument undergoing a change, and the resultative element denoting the resulting state of the theme are the default carriers of new information. The theme can only be removed from the predicate phrase so as to be topicalized if its 'information focus' function is taken over by another argument which introduces a new referent, or identifies a known referent from among a set of alternative referents; or if the verb alone is given extra emphasis by some means (e.g. by the contrasting of the topic).

4. Topics in change-of-location sentences
Sentences in which the predicate describes a change in the location of a theme describe a pattern similar to that of the change-of-state sentences described in the previous section, in that one argument — in this case the terminus argument, indicating the final location of the theme — is the designated carrier of new information.

Change-of-location sentences can involve three arguments: an agent, a theme, and a terminus, as illustrated in (21).

(21)a. \([\text{TopP} \text{ János} \ [\text{PredP} \text{ fel-tette a könyveket a polcra}]]\)
   'John put the books up on the shelf.'

b. \([\text{TopP} \text{ Mari} \ [\text{PredP} \text{ oda-adta a könyvet Gábornak}]]\)
   'Mary gave the book to Gabriel.'

Note, however, that the agent can be missing, the theme can sometimes remain implicit, or incorporated into the meaning of the verb, and the terminus is often represented merely by a terminative particle attached to the verb. As just noted, in change-of-location sentences, the argument designated to function as information focus is the terminus argument. Consequently, the theme object is just as easily topicalizable as the agent subject. The following sentences are all unmarked, requiring no special context, intonation, or interpretation:

(22)a. \([\text{TopP} \text{ János} \ [\text{PredP fel-tette a könyveket a polcra}]]\)
   'The books were put by John on the shelf.'

b. \([\text{TopP} \text{ János} \ [\text{PredP} \text{ a könyveket fel-tette a polcra}]]\)
   'The books were put by John on the shelf.'

c. \([\text{TopP} \text{ A könyveket János} \ [\text{PredP fel-tette a polcra}]]\)

d. \([\text{TopP} \text{ A könyveket fel-tette János a polcra}]]\)

If, on the other hand, the terminus is topicalized, the predicate phrase becomes infelicitous, semantically weightless — whether or not it also contains the subject, the theme, or both:

(23)a.\* \([\text{TopP} \text{ János} \ [\text{PredP tette a könyveket}]]\)
These sentences become much better – but are still marked – if the terminus role is represented not only by a topicalized argument, but also by a terminative particle inside the predicate phrase:

(24)a. \[\text{TopP A polcra [PredP fel-tette János a könyveket]]}\]
   \[\text{the shelf-on up put John the books-ACC}\]
   Lit. 'On the shelf, John put up the books.'

b. \[\text{TopP A polcra János [PredP fel-tette a könyveket]]}\]
c. \[\text{TopP János a polcra [PredP fel-tette a könyveket]]}\]

These sentences, again, require a special context in which the books in question are known to the hearer, but are newly introduced into the discourse. The unmarked way of introducing a new referent into the discourse by the theme argument is by using an indefinite noun phrase, as in (25):

(25)a. \[\text{TopP János a polcra [PredP (fel-)tett néhány könyvet]]}\]
   \[\text{John the shelf-on up put some book-ACC}\]
   'On the shelf, John put (up) some books.'

b. \[\text{TopP A polcra [PredP (fel-)tett János néhány könyvet]]}\]

It is harder to imagine a situation in which the theme and its end location are given in the discourse, hence topicalized, and what is asserted is that the theme has moved and that there is some causer of this movement. Such a situation can be evoked by a PredP-internal indefinite agent, introducing a new referent:

(26) \[\text{TopP Az ügyfeleknek a leveleket majd [PredP el- küldi egy titkárnő]]}\]
   \[\text{the customers-DAT the letters-ACC later off sends a secretary}\]
   'To the customers, the letters will be sent by a secretary.'

If the arguments of a change-of-location predicate all have referents that are already familiar in the discourse, and the terminus is topicalized, then the predicate phrase will be felicitous only if the theme or the agent argument is a preverbal identificational focus, indicating that its referent is identified from among a set of alternatives. The various possibilities for such a focus are indicated in (27):

(27)a. \[\text{TopP A polcra [PredP JÁNOS tette (fel) a könyveket]]}\]
   \[\text{the shelf-on John put (up) the books}\]
   'On the shelf, the books were put (up) by JOHN.'

b. \[\text{TopP A polcra a könyveket [PredP JÁNOS tette (fel)]]}\]
   'On the shelf, the books were put (up) BY JOHN.'

c. \[\text{TopP János a polcra [PredP A KÖNYVEKET tette (fel)]]}\]
'On the shelf, John put (up) THE BOOKS.'

d. [TopP A polcra János [PredP A KÖNYVEKET tette (fel)]]
   'On the shelf, John put (up) THE BOOKS.'

e. [TopP A polcra [PredP A KÖNYVEKET tette (fel) János]]
   'On the shelf, John put (up) THE BOOKS.'

The predicate phrase can also be saved by an adjunct in the preverbal identificational focus position:

(28) [TopP A polcra a könyveket [PredP TEGNAP tette fel János]]
   'On the shelf, the books were put up by John YESTERDAY.'

Instead of focussing the theme, or the agent, or an adjunct, we can also put emphasis on the verb – for example, by setting one of the topicalized constituents into an implicit or explicit contrast:

(29) [TopP A polcra János a könyveket [PredP fel-tette], de a CD-ket nem.
   'On the shelf, the books were put up by John, but the CDs were not.'

The above observations also apply to change-of-location sentences in which the agent is not expressed. The unmarked topic of such sentences is the theme subject ((30a)). The [TopP terminus [PredP particle V theme]] pattern is only possible if the theme introduces a new referent ((30b)). Otherwise the VP must contain a preverbal identificational focus ((30c)), or the verb must receive emphasis – either by contrasting a topicalized element with an element describing an alternative to it ((30d)), or by means of a temporal adverb like még 'still' or már 'already' ((30e)):

(30)a. [TopP A labda [PredP be-gurult a kapuba]]
   'The ball rolled into the goal.'

b. [TopP A kapuba [PredP be-gurult egy kő]]
   'Into the goal rolled a stone.'

c. [TopP A kapuba [PredP A KAPUFA MELLET gurult be a labda]]
   'Into the goal, the ball rolled in NEAR THE POST.'

d. [TopP A kapuba a bőrlabda [PredP be-gurult]], de a gumilabda nem.
   'Into the goal the leather-ball in rolled, but the rubber-ball not'
   'Into the goal, the leather ball rolled in, but the rubber ball did not.'

e. [TopP A kapuba [PredP már be-gurult a labda]]
   'The goal already in rolled the ball.'
'Into the goal, the ball has already rolled in.'

Summarizing the observations made in this section: In sentences expressing a change in the location of the theme, it is the reaching of the end location that represents the main news in the unmarked case. Hence the terminus argument, the default information focus, can only be topicalized if the role of information focus is taken over by another argument which introduces a new referent, or whose referent is identified from among a set of alternatives. The focussing of an adjunct, too, allows a known terminus to be topicalized. Otherwise the verb must be emphasized – indirectly, by contrasting a topic constituent, or by employing a temporal adverb like még or már.

5. Topics in locative sentences

Stative sentences expressing the existence or spatial configuration of an individual at a particular location behave similarly to the sentence types described in the previous sections with respect to information packaging, one argument – in this case the location argument – again being the designated information focus. In such sentences the unmarked topic is the theme subject. The predicate phrase contains the verb and the location argument, and optionally also a locative particle. These different possibilities are illustrated in (31)-(33), where the (a) sentences do not have and the (b) sentences do have locative particles:

(31)a. [TopP A könyv [PredP az asztalon van]]
    the book          the table-on     is
    'The book is on the table.'

b. [TopP A könyv [PredP ott van az asztalon]]
    the book          there is     the table-on
    'The book is on the table.'

(32)a. [TopP János [PredP az ágyon fekszik]]
    John           the bed-on    lies
    'John is lying on the bed.'

b. [TopP János [PredP ott fekszik az ágyon]]
    John           there lies     the bed-on
    'John is lying on the bed.'

(33)a. [TopP A taxi [PredP a ház előtt áll]]
    the cab          the house before stands
    'The cab is standing in front of the house.'

b. [TopP A taxi [PredP kint áll a ház előtt]]
    the cab          outside stands the house before
    'The cab is standing outside in front of the house.'

The theme can also remain in the predicate phrase, in which case the predicate is presumably predicated of an unarticulated argument corresponding to the spatiotemporal location of the event.

(34)a. [PredP Ott van a könyv az asztalon]
b. [TopP Az asztalon [PredP ott van egy könyv]]
   the table-on there is a book
   'On the table, there is a book.'

b. [TopP Az ágyon [PredP ott fekszik egy idegen]]
   the bed-on there lies a stranger
   'On the bed, there is a stranger lying.'

c. [TopP A ház előtt [PredP ott áll egy taxi]]
   the house before there stands a cab
   'In front of the house, there is a cab standing.'

A non-specific theme can also be incorporated into the verb, which makes the predicate essentially monadic. As was observed in connection with (19), such a predicate forms a perfectly felicitous predicate phrase on its own:

(36)a. [TopP Az asztalon [PredP könyv van]]
   the table-on book is
   'On the table, there is some book/there are some books.'

b. [TopP A ház előtt [PredP taxi áll]]
   the house before cab stands
   'In front of the house, there is some cab standing.'

In contrast, a definite theme must be moved to the preverbal identificational focus position for the locative argument to be topicalizable:

(37)a. [TopP Az asztalon [PredP A KÖNYV van]]
   the table-on the book is
   'On the table, it is the book that is there.'

b. [TopP Az ágyon [PredP JÁNOS fekszik]]
   the bed-on John lies
   'On the bed, it is John that is lying there.'

c. [TopP A ház előtt [PredP A TAXI áll]]
the house before the cab stands
'In front of the house, it is the cab that is standing there.'

A further means of making the locative argument topicalizable is setting it into an explicit or implicit contrast, which elicits the contrastive interpretation of the verb, as in (38a). We can also emphasize the verb by negating it ((38b)), or by supplying it with an adverb like még/már 'still/already' ((38c)).

(38)a. [[TopP A János cikkében a megoldás [PredP ott van]] (a Péter cikkében nincs ott)
the John's paper-in the solution there is the Peter's paper-in isn't there
'in John's paper, the solution is there (in Peter's paper, it is not there).']

b. [[TopP A levéládában a várt levél [PredP nincs benne]]
the letter-box-in the expected letter isn't in
'in the letter-box, the expected letter isn't in.]

c. [[TopP A levéládában a mai újság [PredP már benne van]]
the letter-box-in the today's paper already in is
'in the letter-box, today's paper is already in.]

What we have just observed for location sentences containing a theme and a locative argument also holds for transitive location sentences. This is that the unmarked locus of the information focus is the locative argument, hence either the agent, the theme, or both can be freely topicalized, as shown in (39a,b):

(39)a. [[TopP János [PredP ott- hagyta a könyvet az irodában]]
John there left the book the office-in
'John left the book in the office.'

b. [[TopP A könyvet [PredP ott-hagyta János az irodában]]
'The book was left by John in the office.'

c. [[TopP János a könyvet [PredP ott-hagyta az irodában]]
'The book, John left in the office.'

The locative argument, on the other hand, can only be selected for the topic role if the theme or the agent in the predicate phrase is indefinite ((40a,b)) or is structural focus, exhaustively identifying a referent from among a set of alternatives ((40c,d)):

(40)a. [[TopP János az irodában [PredP ott- hagyott egy fontos feljegyzést]]
John the office-in there left an important note
'in the office, John left an important note.'

b. [[TopP Az irodában [PredP ott- hagyott valaki egy fontos feljegyzést]]
the office-in there left somebody an important note
'in the office, somebody left an important note.'

c. [[TopP Az irodában [PredP A KÖNYVET hagyta ott János]]
the office-in, the book-ACC left there John
'in the office, John left THE BOOK.'
The locative argument can also be selected as a topic when the verb is emphasized for example by means of a contrastive topic:

(41) [\text{TopP} \text{ A könyvet az irodában} \text{ [PredP ott- hagyta János]} \text{ de a jegyzeteket nem.}
\text{the book-ACC the office-in there left John, but the notes-ACC not}]

'In the office, the book was left behind by John, but the notes were not.'

In sum, sentences expressing the existence or spatial configuration of an individual in a particular location behave with respect of discourse linking in a manner similar to sentences describing a change in the location of a theme: the argument designated to function as the default information focus is that expressing the location of the theme. This argument is topicalizable only if the role of information focus is taken over by another argument which is represented by an indefinite noun phrase introducing a new referent, or which is a preverbal focus exhaustively identifying a referent from among a set of alternatives, or if the verb receives extra emphasis e.g. by means of a contrastive topic.7

6. Topics in mental- or physical-state sentences

A final class of sentences to be discussed in this paper is that describing mental and physical states. In such sentences, which involve a theme and an experiencer, either of these arguments can be topicalized, regardless of their respective case-marking. That is, an experiencer topic may be in the dative ((42a)) or the accusative ((43a)), with the corresponding PredP-internal theme in the nominative ((42a, 43a)); and a theme topic may be in the nominative with the corresponding PredP-internal experiencer in the dative ((42b)) or accusative ((43b)).

(42)a. [\text{TopP} \text{ Jánosnak} \text{ [PredP fáj az igazságtalanság]}]
\text{John-DAT hurts the injustice}

'John is hurt by injustice.'

b. [\text{TopP} \text{ Az igazságtalanság} \text{ [PredP fáj Jánosnak]}]

'Injustice hurts John.'

(43)a. [\text{TopP} \text{ Jánost} \text{ [PredP zavarja a zaj]}]
\text{John-ACC disturbs the noise}

'John is disturbed by the noise.'

b. [\text{TopP} \text{ A zaj} \text{ [PredP zavarja Jánost]}]

'The noise disturbs John.'

If both experiencer and theme arguments are topicalized, however, the predicate becomes infelicitous unless one or the other of the topicalized constituents is contrasted, allowing the verb to be contrasted with an alternative, as shown in (44):

(44)a. [\text{TopP} \text{ Az igazságtalanság Jánosnak} \text{ [PredP fájt]} (de másoknak nem)}
\text{the injustice John-DAT hurt but others-DAT not}

'John, the injustice hurt (but others, it did not hurt).'
b. \[\text{TopP Jánosnak az igazságtalanság [PredP fájt]} \] (de a kudarc nem)
   John-DAT the injustice hurt but the failure not
   'John, injustice hurt (but failure did not).'

The topicalization of both arguments is also possible if the predicate is extended by emphatic material, which may take the form of a structural focus ((45a)), a distributive quantifier ((45b)), or a negative element ((45c)):

(45)a. \[\text{TopP Jánosnak az igazságtalanság [PredP CSAK IFJÚKORÁBAN fájt]} \]
   John-DAT the injustice only youth-his-in hurt
   'John, injustice hurt ONLY IN HIS YOUTH.'

b. \[\text{TopP Jánosnak az igazságtalanság [PredP MINDIG fáj]} \]
   John-DAT the injustice always hurts
   'John, injustice ALWAYS hurts.'

c. \[\text{TopP Jánosnak az igazságtalanság [PredP nem fáj]} \]
   John-DAT the injustice not hurts
   'John, injustice does not hurt.'

What we seem to find, then, is that sentences describing a static relation between a theme and an experiencer can either assert about the experiencer that it is affected by the theme or about the theme that it exerts an influence on the experiencer. What is not acceptable is a predicate phrase consisting only of a stative verb.

7. Conclusion

The Hungarian sentences examined in this paper have not revealed any further constraint on topic selection in addition to the well-known constraint requiring the topic to be referential and specific, referring to an individual already familiar to the participants in a discourse. Although we have encountered various sentence types in which the topicalization of a referential and specific constituent is not acceptable, it has turned out that these sentences are ruled out, or are restricted to a special context, by a deficiency in their predicate phrase.

As we have observed, sentences describing different event types have different constituents designated to represent their information focus. The identity of the designated argument appears to be determined by the characteristics of the given event type. In the case of verbs describing a change of state, the designated argument is the theme undergoing the change of state; in the case of verbs describing a change of location, this argument is the terminus, corresponding to the the end-location of the moving theme, whereas in sentences indicating the existence or spatial configuration of an individual in a particular location, this argument is the locative argument. In sentences describing a mental or physical state, either the theme or the experiencer can function as the information focus. If the designated argument has a referent known to the participants in the discourse, and as such, it is moved into topic position, the predicate phrase becomes infelicitous – unless another argument takes over the role of information focus. An argument other than the designated one can become the information focus if it introduces a new discourse referent (and as such takes the form of an indefinite NP), or if it identifies a referent from among a set of alternatives (and as such occupies the preverbal focus position).

Another way of exempting a designated argument from functioning as the information focus is to turn the verb into an identificational focus. Exhaustive identification is an operation performed on a set of alternatives; it consists in identifying a subset of this set,
while excluding the complementary subset. Verbs, not denoting distinct individuals, do not constitute natural targets of this operation – presumably this is why they can be subjected to it only in a roundabout way, which involves setting up a contrast with the topicalized constituent. A sentence with a contrastive topic (and no focus or quantifier in the predicate phrase) not only asserts that for the given topic the given predicate holds, but also implies that there is an alternative topic for which an alternative predicate – e.g. the negated counterpart of the given predicate – holds. That is, the contrastive topic evokes a set of two alternative verbs (an assertive one and a negated one in the unmarked case), hence the verb spelled out can be understood as identifying a subset of a relevant set. A verb can also be made more emphatic by means of various adverbs with a focussing effect.

These observations can be summarized in the following generalization:

(46) Constraint on predication structure

Predicates have a designated argument, determined by the type of event expressed, functioning as the information focus in the sentence. This argument can be topicalized only if the role of information focus is taken over by another constituent which introduces a new referent, or identifies an alternative from among a set of alternatives.

Constraints with similar consequences, requiring that the predicate phrase in a topic−PredP construction be informative enough, have already been put forward in the literature. These include the requirement of BID (Balanced Information Distribution) proposed by Doherty (2002), and the requirement that "every utterance have a focus that serves to convey new information in the discourse", proposed by Ackerman and Goldberg (2001). Holmberg and Nikanne (2002), on the other hand, suggest a markedly different constraint on topic-PredP articulation. They claim that the trigger for topicalization is the [-Focus] feature of an argument. In fact, a [-Focus] argument can, but need not, be topicalized. Thus in the context of the question Mit csinált János a könyvet? 'What did John do to the book?', any of the following variants would be appropriate:

(47)a. \[\text{PredP Fel-tette János a könyvet a polcra}].

\[\text{up put John the book the shelf-on} \]

\[\text{'John put the book up on the shelf.'} \]

b. \[\text{TopP János [PredP fel-tette a könyvet a polcra]}\]

c. \[\text{TopP A könyvet [PredP fel-tette János a polcra]}\]

d. \[\text{TopP János a könyvet [PredP fel-tette a polcra]}\]

e. \[\text{TopP A könyvet János [PredP fel-tette a polcra]}\]

Adopting the terminology of Holmberg and Nikanne, what is crucial when constructing a sentence is that the predicate phrase contain some [+Focus] information. The unmarked carrier of the [+Focus] feature is a designated argument – in the above case, the terminus a polcra 'onto the shelf'. If the designated argument happens to be [-Focus], then some other constituent must carry a [+Focus] feature in the predicate phrase. A constituent other than the designated argument can be associated with a [+Focus] feature only if it conveys non-presupposed information, which can be of two types. It can be information newly introduced into the sentence, which is expressed canonically by an indefinite noun phrase. This type of [+Focus] constituent appears at the end of the predicate phrase. Or it can be information
identified from among a set of known alternatives. This type of new information appears in the preverbal focus position of the predicate phrase.

References
Ackerman, Farrel; and Goldberg, Adele (2001). The pragmatics of obligatory adjuncts. Language 77(4), 798-814.
Levin, Beth and Malka, Rappaport


**Notes**

1 In the theory of Enç (1991), a noun phrase is [+specific] if its referent bears a subset relation to a referent previously introduced into the discourse. An indefinite noun phrase is [+specific] if it denotes a member of a familiar set. A definite noun phrase is always [+specific], because it has a referent that is already present in the discourse.

2 Thus a topic–predicate sentence corresponds to a categorical judgment in the terminology of Kuroda (1972-73), with the topic functioning as the logical subject of predication.

3 What serves as the logical subject of predication in multiple topic sentences may be a complex topic derived from the topicalized constituents by 'absorption'. This would correspond to the intuition that sentences like (7a,b) make an assertion about John and Mary, or the relation between them.

4 Specification is a type of predication according to Higgins (1973) and Huber (2000). In a specificational sentence the subject of predication, constituted by the presuppositional part of the sentence, denotes a set, and the specificational predicate identifies the members of that set. A specificational predicate implies that its specification of the individuals that make up the set denoted by the subject is exhaustive, that is, other alternatives are excluded.

5 The authors who assume an external spatiotemporal argument in the topic position of apparently topicless sentences include Erteschik-Shir (1997) and Maleczki (1999).

6 The locative particles *ott* 'there', *kint* 'outside' etc. are not expletive topics. They are stressed, and their relation to the locative argument is similar to the relation of a clitic pronoun to the lexical object in a clitic doubling construction.

7 Possession can also be looked upon as a relation akin to existence in a particular location, with the possessum corresponding to the theme and the possessor corresponding to the location. Possession can be expressed by two constructions in Hungarian. In the construction illustrated in (i), the default information focus is the possessor-location – whether it is definite or indefinite, i.e., whether its referent is given or new in the discourse. The theme is topicalized in the unmarked case:

(i) [TopP A könyv [PredP a Péteré /egy hallgatóé]]
The other possessive construction, involving the verb van ‘is’, can only be used if the possessum is a nonspecific indefinite noun phrase, or a bare nominal - as shown by Szabolcsi (1991). In this construction, the default information focus is the possessum, hence the default topic is the possessor. (The possessum, being non-referential, can only be topicalized if it is individuated by being set into a contrast – cf. the discussion of (6a,b).)

(ii) [Top Péternek [PredP van egy könyve /*a könyve]]

Peter-DAT is a book-3SG/the book-3SG

'To Peter, there is a book. [Peter has a book.]

8 In case the given predicate phrase also contains a focus or a quantifier, the implied alternative predicate will contain a focus alternative different from that spelled out in the original predicate, or a quantifier with a value different from that of the original quantifier.