Verbal Modifiers as Argument Taking Predicates: Complex Verbs as Predicate Complexes in Hungarian

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The principal question addressed in this paper is: What is the verb in Hungarian? My answer will lead me, ineluctably and reluctantly, to consider a far less tractable problem: What is a word, or alternatively, Can a word be what certain recent morphological/syntactic theories suppose it is? Although I will not conclude with a definitive characterization of the notion 'word' I will suggest that, modulo the correctness of my answer to the first question, Hungarian and various other languages offer some data necessary for any plausible, future definition.

In the first part of this paper I will introduce the reader to the main assumptions behind my treatment and will also aquaint him with a smattering of the relevant data from Hungarian. I will also be concerned to illustrate why such phenomena are of theoretical interest. In the second part, I will present an overview of Lexical Functional Grammar, which is the theory utilized for my analysis. In the third (and final) section I will work toward a theory of V' based on the analyses of Marantz (1981) and Mohanan (1982, 1983).

Section 1: The Terrain

How can we determine what counts as a V(erb) in Hungarian? I suggest that this question is most profitably addressed by abjuring from talk about verbs per se in favor of talking about argument taking predicates (ATP). I will demonstrate that the Hungarian predicate is a two headed creature: one can speak either about complex predicates i.e. predicates with functionally complex internal structure, or predicate complexes i.e. the observation that the internal composition of complex predicates, ordinarily, consists of two conjoined ATPs. All this apparently punning talk about complex predicates and predicate complexes are merely alternative ways of addressing different aspects of the same phenomenon, namely, a V' constituent with the following structure: (cf. Horvath 1981 for the postulation of a syntactic constituent with a similar structure)

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        V'
       /  \
     VM     V
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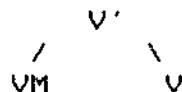
The left sister position within V' is reserved for any single token from a categorially diverse set of elements which I will refer to collectively as Verbal Modifiers (VM). Despite their categorial diversity the majority of VMs exhibit a certain engaging, functional similarity: they are interpretable as ATPs. That is, the V' can be interpreted as a kind of clausal locus of predication. For example, classic secondary predicates such as

infinitives and resultatives are attracted to this position:

1a.   Árpád   uszni   akar
      Arpad   swim-INF want-3sg
      'Arpad wants to swim'

  b. Árpád   feketére festette   a   kerítést
      Arpad   black-SUBL painted-3sg the fence-ACC
      'Arpad painted the fence black'

On the other hand, VMs need not always appear in this position. In fact, under certain specifiable conditions they must not. One such condition is when a non-VM is Focused:

2a.   ARPAD   akar   uszni
      Arpad   want-3sg swim-INF
      'It's Arpad who wants to swim'

  b. Árpád A KERÍTÉST festette   feketére
      Arpad the fence-ACC painted-3sg black-SUBL
      'It's the fence Arpad painted black'

Though the status of such syntagmata as lexical units is questionable there are other V' constructions whose lexical status seems indisputable. For instance, compare the following sentences containing the simple verb _fut_ 'run' and the verbal prefix + V _össze-fut_ 'run into somebody'

3a.   Árpád futott a   feleségével   a   városban
      Arpad ran   the wife-3sg/poss-INST the city-IN
      'Arpad ran with his wife in the city'

  b. Árpád össze-futott a   feleségével   a   varosban
      Arpad together-ran the wife-3sg/poss-INST the city-IN
       'Arpad bumped into his wife in the city'

Beyond the fact that the meaning of _össze-fut_ is not purely compositional it should be noted the argument structure of this verb differs from the argument structure of the simple verb _fut_. In LFG, as we will see, such a difference would be represented in the lexical entries for these verbs. To anticipate a little, we would find the following lexical entries:

4a.   fut V 'run' ‹ (S)
                 SUBJcase=NOM

  b. össze-fut V 'bump into'   (S)(OBL)
                 SUBJcase=NOM
                 OBLcase =INST

Essentially, these lexical entries indicate that _fut_ is a verb

i.e. V, which has the lexical meaning 'run' i.e. whatever is
between the single quotation marks and selects/governs one func-
tion i.e. a SUBJ. Additionally the lexical entry specifies the
case marking required by this verb for its SUBJ. The entry for
the verb össze-fut can be interpreted similarly. The main
difference, of course, consists in the assumption that össze-fut
selects/governs two functions and determines the case marking on
both. The lexical entry proposed for össze-fut together with
certain well-formedness conditions in LFG explain why a sentence
such as 5 is unacceptable:

5. *Árpád össze-futott
   Árpad together-ran
   'Arpad bumped into'

      There is another point that bears mentioning here: in LFG
the fact that össze-fut determines the case feature on e.g. its
OBL function, implicates this function as a selected function of
the predicate.(cf. discussion of government below) A strong
constraint on syntactic rules in LFG is that they cannot alter
argument structure.(cf. Direct Syntactic Emcoding, below) The
fact that 5 is unacceptable owing to the absence of an OBL indi-
cates that this OBL is a selected function of the complex predi-
cate össze-fut. As a selected function it is to be expected that
the predicate will govern its case: the OBL function here must,
indeed, bear a particular case i.e. INST. (cf. disucssion of
government, below)
      Now, on the assumption that össze-fut is a word we are
surprised to see that when some other constituent is Focused the
verbal prefix does not appear in immediately preverbal position:
(all verbal prefixes, incidentally, are separable in this manner)

6. Árpád A FELESÉGÉVEL   futott össze a városban
   Arpad the wife-3sg/poss-INST ran   together the city-IN
   'It was his wife Arpad bumped into in the city'

Why are we surprised to see that össze wanders from its
immediately preverbal position? The source of this surprise is
connected with the so-called Lexical Integrity Hypothesis:
portions of words are not supposed to wander around in a clause.
On certain interpretations, moreover, portions of words are
opaque for semantic processes such as modification and serving as
antecedents in anaphoric relations: Following Simpson (1983):

                  Revised Lexical Intergrity Hypothesis

          "Constituent-structure processes (which include
          annotation of functional information, and index-
          ing of anaphoric information) are blind to the
          internal structure of words." p. 75

Since, as we shall see, c-structure processes in LFG can not move
constituents Simpson's revision includes both the observation
that portions of words don't wander and that words are islands

for semantic processes. (cf. Ackerman 1984 for discussion of argument incorporation and the LIH) This helps us to understand why we are surprised that the arrangement of ossze and fut in 6 departs from their sequencing in sentence 3b and the lexical entry 4b. It does not help us to understand why linguists subscribe to such a conception of the notion 'word'. This is particularly baffling since so many investigations have converged on one domain which is problematic and instructive: verbal derivation. Before elaborating on this it it good to review what we have seen so far.

Hungarian, on my account, has a V' constituent with a heterogenoeus profile. I will claim that V' is both a syntactic and a lexical constituent. Moreover, the typology of V' constructions (cf. Appendix) defines a scale of 'wordiness' from contestable words to incontestable syntactic phrases: the V' is the center of all this bustle. Those familiar with Hungarian linguistic tradition will realize that this claim, in some measure, echoes a refrain from the pretheoretical literature. Soltesz (1959) summarizes this view with respect to one of our VMs, verbal prefixes, in the following way:

> "Ever since Laziczius Gyula called attention
> to the fact that there is no sharp boundary
> between grammatical categories i.e. that be-
> tween the word and the formative, or the com-
> pound word and the derived word there simply
> differences in degree, it has become tradi-
> tional to assume that the prefix is an inter-
> mediate category. We can comfortably place
> the verbal prefix into a transitional cate-
> gory between the word and the formative." p. 7

There is a sense in which this paper is a commentary on the last line of the preceding passage: the problem is that we feel uncomfortable placing e.g. verbal prefixes into "transitional categories, precisely because linguistic theory has not provided us with the suitable "transitional categories".

The logico-semantic structure (cf. discussion of Marantz in section 3) of V' might be represented as follows:

$$
\begin{array}{c}
\text{ATP} \\
/ \quad \backslash \\
\text{ATP} \quad \text{ATP}
\end{array}
$$
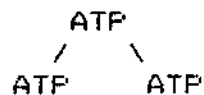
As will become clearer later on, the notion ATP will be related to the notion head and both will be related to the LFG conception of government. I will derive what I will refer to as the 'head-to-head attraction' evident in complex verbs from the LFG assumption that governors are attracted to governors. cf. the discussion of Marantz's notion of 'merger' in section 3.

In the recent past numerous linguists have observed some recurrent, puzzling behavior in the domain of verbal derivation across numerous unrelated languages. In particular, many lan-guages possess verb + particle/affix collocations where, despite apparent lexical unity, the particle/affix has been observed to

wander away from the V stem.   Nash (1983), for instance, refers
to the awkwardness of theoretically treating preverb + Verb
combinations in Walpiri (an aboriginal language of Australia) as
an 'analytical paradox'.   We have already seen that Hungarian V'
represents the same analytic paradox.   In what follows I will
refer to such words as 'twilight words': words that straddle two
worlds.

        Preliminary   investigation   suggests that twilight words
appear to prevail in the domain of verbal derivation.   I will
assume here (as assumed in Komlosy and Ackerman 1983) that the
principle difference between verbal derivation in languages such
as Georgian and Serbo-Croation vs. Walpiri and Hungarian concerns
the role of brackets in word-formation. (Kiparsky 1982, Mohanan
1982b) In particular, in Komlosy and Ackerman (cf. also Simpson
1983b) it is assumed that whereas the word-formation process of
prefix + V combinations in e.g. Serbo-Croation, erases brackets
some time before lexical insertion, these brackets are retained
in Hungarian.   Schematically, we find the following:

                            Table 1

Serbo-Croatian   a.   [baci]
                                    throw

                        b.   [pro][baci]
                                    across throw

                        c.   [probaci]
                                    'throw across'

Hungarian   a.'   [dob]
                                    throw

                        b.'   [át][dob]
                                    across throw

                        c.'   [[át][dob]]
                                    'throw across'

The major difference centers on c vs. c'.   The brackets are
esrased in Serbo-Croatian and retained in Hungarian.   Such an
analysis accounts for the similarity of related phenomena across
languages while pinpointing their diffference in a simple and
principled way.

        To date there has been no theoretical treatment devoted to
the full scalter of lexical and syntactic V' constructions in
Hungarian (barring recent works inspired by the lexically
oriented speculations of Komlosy and Ackerman 1983 cf. Szabolcsi
1984, Kenesei 1984) Even a quick look at the (incomplete)
typology of V' constructions found in the Appendix will suffice
to convince the reader that a thorough treatment is an impossible

goal for a relatively short article.   As a consequence of this I have selected certain constructions to focus on.   They are the constructions which are most serviceable for providing a gestalt of my analysis.   The V' constructions resemble one another in notable ways - they also diverge from one another in notable ways.   For full details of the specific manouvres employed in treating particular types of V's I must refer the reader to Ackerman 1984a, 1984b.

In summary, Hungarian has a large set of verbal constructions which resemble verbal constructions elsewhere: these constructions lead to the 'analytic paradox' mentioned by Nash. Though there is reason (and in many instances, LFG determines we have no choice but cf.below) to regard such collo- cations as words we   feel strange doing so given certain surprising properties of these constructions: they violate some aspect of the LIH.   Finally, the Hungarian V' does not represent a unitary phenomena: the resolution of the lexical status of one V' construction does not necessarily settle the issue for all V' constructions.

Section 2: The Theory

In the first portion of this section I will introduce those assumptions and notational devices of Lexical Functional Grammar central to the discussion in section 3.   At the end of this section I will say a few words about why I have employed this theory.
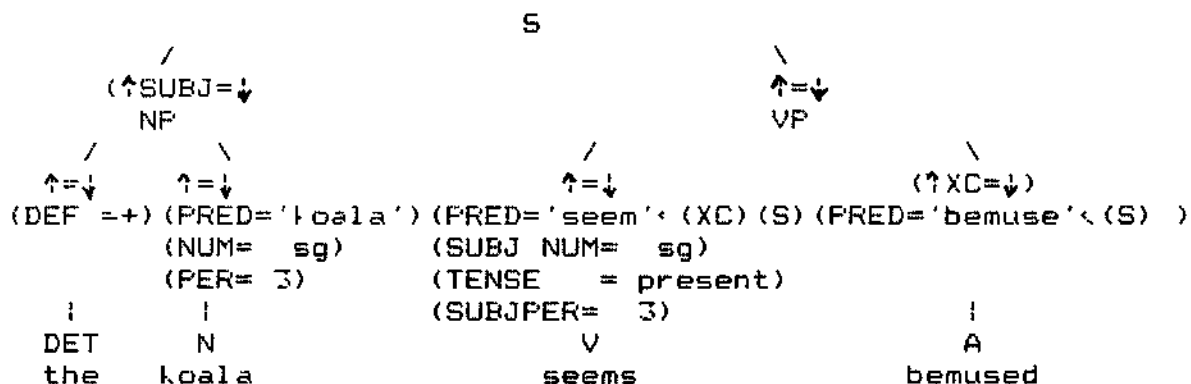
Let's take a sentence such as The koala seems bemused.   In LFG this sentence will receive two representations: a c(onstituent)-structure representation and a f(unctional)-struc- ture representation.   In Table 2 I have given the c-structure and f-structure for this sentence streamlined for expository pur- poses:

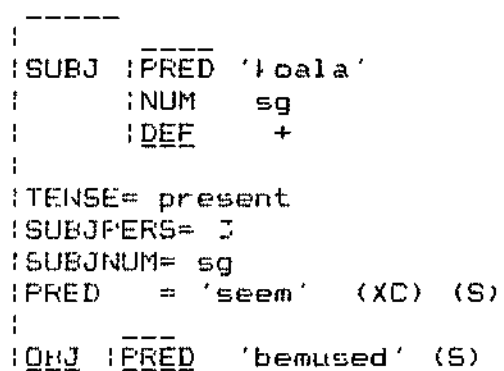<div align="center">Table 2</div>

P(hrase) S(structure) Rules: S --- NP   VP
                                     (↑SUBJ=↓)   ↑=↓

                           VP --- V   AP
                                  ↑=↓ (↑XCOMP=↓)

a. c-structure:

```
                              S
          /                              \
    (↑SUBJ=↓                              ↑=↓
      NP                                   VP
    /        \                      /                      \
  ↑=↓      ↑=↓                    ↑=↓                    (↑XC=↓)
(DEF =+)(PRED='koala')  (PRED='seem'<(XC)(S)(PRED='bemuse'<(S)  )
        (NUM= sg)          (SUBJ NUM= sg)
        (PER= 3)           (TENSE  = present)
    |        |             (SUBJPER= 3)              |
   DET       N                  V                    A
   the      koala             seems              bemused
```

b. f-structure: (S)= SUBJ, (XC)=XCOMP

```
|-----
|      ----
|SUBJ |PRED '}oala'
|     |NUM    sg
|     |DEF     +
|
|TENSE= present
|SUBJPERS= 3
|SUBJNUM= sg
|PRED    = 'seem'   (XC) (S)
|
|     ---
|OBJ |PRED  'bemused' (S)
```

Now some comments are in order to render this somewhat formidable representational schema comprehensible.   Let's begin with the c-structure depicted as a. of Table 2.

C-structures encode the geometrical relations between syntactic elements in terms of linear precedence and dominance relations. (cf.Fall 1982) The phrase structure rules of a language (employing a variant of X' theory) are understood as an inventory of permissable surface patterns for a given language: surface structures are not derived via syntactic rules which map trees on one level of representation onto trees at another level of representation.   Rather, PS rules yield the syntactic structure of each sentence directly. As a consequence of this conception of c-structure sentences 'related' in meaning e.g. active and passive pairs, cannot be related on the basis of sharing some underlying structure: if there are no underlying syntactic structures then one cannot appeal to them for syntactic explanations.   This limitation on the sources of possible explanation for syntactic phenomena is encoded in the following principle:

Direct Syntactic Encoding

"No rule of syntax may replace one function
name with another." Bresnan & Kaplan (1982)
p. 180

The functions mentioned in this principle are the grammatical

relations such as SUBJ(ect) and OBJ(ect) which are employed as primitives in this theory. This will be elaborated on below. The assumption of the universality of grammatical relations in conjunction with a developed theory of the Lexicon replace appeal to structural explanation for certain syntactic phenomena characteristic of such a theory as e.g. Government and Binding.

In addition to encoding phrase structure geometry it should be apparent that c-structures are annotated with various sorts of information. This information comes from two sources. First of all, various nodes are annotated with grammatical function (GF) information. For instance, the PS rules indicate that [NP S] bears the equation (↑SUBJ=↓). This equation should be read as follows: I am the SUBJ of the category dominating me and my features are all the features I dominate. Although the identity equation ↑=↓ will receive greater elaboration below it is worth pointing out now that this should be read as: all the features of the V are features of the S. As can be seen the upward arrows indicate the relation of an annotated element to a dominating category: for the PS rules we find out what grammatical relation certain constituents bear to the S. On the other hand, the downward arrows indicate that the annotated element has certain features. These features are the second sort of information found in c-structures. Where does it come from?

In LFG (following the lexical speculations of Lieber 1980, Mohanan 1982, Sellirk 1982 among others) all inflection and derivation is performed in the lexicon prior to the insertion of lexical items into c-structure. This means that all features of lexical entries accompany the lexical item when it is inserted into a c-structure. By a percolation convention, these features are passed up to become the features of phrases within their percolation domain. For example, let's take a look at the lexical entry for the verb seem. I will focus particularly on one feature i.e. the PRED, which is criterial for subsequent discussion.

An argument taking predicate such as a verb is assumed to have an argument structure:

seem   PROP

An argument structure contains all those arguments over which the predicate has semantic selectional restriction i.e. the predicates thematic roles. The representation of seem indicates that this predicate has a single semantic argument i.e. PROP. In LFG semantic arguments/thematic roles are associated with GFs. Each argument must be associated with one and only one GF. (cf. below for discussion of GFs):

seem   ‹PROP›
         ⁞
       XCOMP

The XCOMP function is a so-called 'open function'. This means that it is functionally incomplete: it contains some argument which must enter into a control relation with some GF of the matrix predicate. Such control relations are entered as portions of lexical entries (cf. Bresnan 1982 for comments about redundan-

cies in these relations):

seem 〈PROP SUBJ
             |
           XCOMP

XCOMP SUBJ = SUBJ

Such a control equation is to be read as follows: The XCOMP's SUBJ is the SUBJ of seem.   Now one should note that such an equation introduces a GF into the lexical entry for seem: a SUBJ appears with seem.   The SUBJ, crucially, appears outside of the angled brackets.   This means that it is not a semantic argument of seems.   The assignment of GFs to a predicate eventuates in a lexical form:

seem 〈XCOMP SUBJ

The full lexical entry for seem will be:(minus various equations)

seem V 'seem' XCOMP SUBJ

The FRED feature for an argument taking predicate is the lexical meaning of the predicate i.e. the entry within the commas 'X' and and its lexical form.   The separability of the three phenomena involved in the FRED feature i.e. argument structure (the thematic roles associated with a predicate), assignment of GFs, and the presence of a meaning, will be crucial later on.   For the time being the independence of these factors is intimated by the following.

  We will somehow want to explain the peculiarity of such a sentence as: The comet seems bemused.   Clearly, the source of aberrancy lies in the incompatibility of the SUBJ with the meaning of the XCOMP: comets cannot be bemused.   In other words, the thematic role of the matrix SUBJ is the thematic role of the XCOMPs FRED. Any creditable theory must explain how the thematic requirements of the XCOMPs FRED become the thematic requirements of the matrix Vs SUBJ.

  A different sort of phenomenon involving relations between thematic roles, GF and XCOMPs is in the domain of SUBJ and OBJ incorporation.   Though this sort of incorporation will not play a large role on the present paper it is not inappropriate to give some idea of what I have in mind since such constructions are one type of V'.   Hungarian possesses constructions such as:

7.   Árpád könyvet olvas   a   kertben
     Arpad book-ACC read   the garden-IN
     'Arpad is book-reading in the garden'

In such constructions, the 'incorporated' element bears a close resemblance to incorporated elements in other languages.   One relevant property is that these elements are non-referential.   That is, such constructions designate complex activities rather than, say, the performance of an action on some particular enti-

ty.   There is good reason to believe that the OBJ of e.g. olvas,
here is similar to the semantic argument of e.g. olvas, when this
verb co-occurs with a referential argument:

8. Árpád olvasta   a könyvet   a kertben   amikor...
    Arpad read-3sg/DEF the book-ACC the garden-IN when
    'Arpad was reading the book in the garden when...'

Evidence for the similarity of thematic roles for the OBJ argu-
ment in these instances is implicated by the identical selection-
al restrictions imposed by the verb irrespective of the referen-
tiality of the OBJ. For example,

9a. *Árpád bolygót   olvasott a kertben
     Arpad planet-ACC   read   the garden-IN
     'Arpad was planet-reading in the garden'

  b. *Árpád   olvasta   a bolygót   a kertben
     Arpad   read-3sg/DEF the planet-ACC the garden-IN
     'Arpad was reading the planet in the garden'

In other words, there seems to be some reason for believing that
we are dealing with e.g. the same verb olvas in both instances.
At least one can say that there is no obvious reason to assume
that the OBJ bears a different thematic relation to the verb in 7
and 8. (cf. Szabolcsi 1984, for a somehwat different interpreta-
tion according to which the incorporated OBJ cannot bear a thema-
tic role). In default of a theory of thematic roles it is, of
course, difficult to maintain that the thematic role is either
identical or different in each case. On the other hand, since
both OBJs require the same case and abide by the same selectional
restrictions one must account for their relatedness. This rela-
tedness is rendered somewhat trivial when one observes that the
basic difference between these OBJs is their referentiality. That
is, since their difference can he pinpointed in terms of referen-
tiality there is no particular reason to assume that they differ
with respect to thematic role. Naturally, these observations
raise a much larger question which cannot be addressed here: What
is the relationship between referentiality and thematicity? For
my purposes it is sufficent to observe that the referentiality of
SUBJ and OBJ arguments appears to play a role in Hungarian con-
trol. For instance:

10a. Árpád ajándékba adta   a könyvet
     Arpad gift-ILL   gave-3sg the book-ACC
     'Arpad gave the book as a gift'

  b.*Árpád ajándékba adott könyvet   '
     Arpad gift-ILL   gave-3sg book-ACC
     'Arpad gave book as a gift'

I assume that ajándékba is an XCOMP. LFG assumes that XCOMPs can
only be controlled by SUBJ, OBJ or OBJ2. If we, further, assume
that only referential functions of these three sorts can serve as

controllers then we have an explanation for the unacceptability of 10b. Since könyvet in 10b is nonreferential it cannot serve as a controller for the XCOMP ajándékba. Argumentation along this line can explain why XCOMP VMs regularly exhibit dependencies with [+spec] arguments i.e. arguments accompanied by either the definite or indefinite article. Moreover, it leads to an explanation for the frequently observed complementary distribution between XCOMPs and incorporated SUBJs or OBJ. Finally, such an approach also has explanatory consequences for several other phenomena involving 'incorporation' such as nominalization. These are discussed elsewhere (cf. Ackerman, in progress) For now it is enough to observe that the XCOMP status of many VMs (excluding, for instance, incorporated SUBJ and OBJ) will play a crucial role in subsequent discussion.

In the preceding discussion I mentioned that arguments must be assigned GFs. This requirement, naturally, raises the question as to the class of GFs which are subcategorizable. These functions are SUBJ(ect), OBJ(ect), OBJ2 (object in so-called 'double object' constructions), OBL (cf. OBL in 4b), COMP (subordinate clause) and XCOMP. Bresnan writes that:

> "The subcategorizable functions correspond
> to governable functions: these are the only
> functions to which lexical items can make
> reference." p.288

We saw above that the predicate seem selects for two functions: XCOMP and SUBJ. We also saw that seem has semantic restrictions only over a subset of these functions, namely over the XCOMP. On the other hand, it is assumed that the predicate can determine various features of all of its selected functions. This determinative influence which one element exercises over another is what is meant, roughly, by the notion of government in LFG. This is why the subcategorizable functions are said to be the same as the governable functions. This conception of government will play a large role in the discussion of configurationality later on. For the present one might exemplify this notion by looking at the SUBJ verb agreement manifest in a. Both the SUBJ and the lexical entry for the V contain the information that the SUBJ is 3sg. The fuller lexical entry for seems will be:

seems V 'seem' <(XCOMP) SUBJ
SUBJ PER/NUM= 3sg (conflated PER & NUM)

The morpheme -s contributes the information that the SUBJ is 3sg. This information, like all the other information. is percolated up to become information about S. That is, all the information about the V is information about the S. This is insured by the identity equation ↑=↓. The V, then, (inasmuch as inflection is a portion of the V), demands something of its selected function SUBJ: it requires that the value for the SUBJ's NUM feature be 3sg. In Hungarian, we will see that the V requires that its SUBJ bear a certain case-marker. In both instances, the verb exerts a determinative influence over a selected function.

There is one final property of c-structures which must be

discussed before moving on to f-structures: the notion of head and its relation to the identity equation.

Simpson (1983) clearly differentiates between two sorts of heads: functional heads and structural heads. The structural head is the X' head: endocentric phrases are projections of lexical categories. For instance, in a. the VP is a projection of the V. In many cases (especicially in configurational encoding cf. below) the structural head and the functional head are identical. However, there are numerous phenomena which warrant the assumption that structural heads can be different from functional heads. For example, in LFG the sentence i.e. S, is assumed to be an exocentric category: the VP, then, is the functional rather than structural head of certain categories. What is a functional head? In Simpson's terms it is:
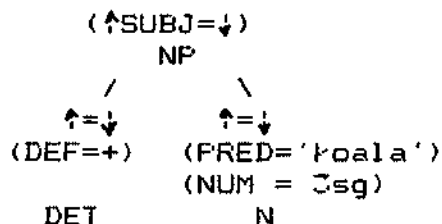
"an element labelled with the equation
↑=↓ which also has a meaning." p. 98

For example in a. of Table 2 the V is both associated with a PRED feature and the identity equation: it is the functional head of S. It is, also, the structural head of VP.

Obviously, the requirement that only certain elements associated with the identity equation can be regarded as heads implies that certain elements associated with this equation are not functional heads. Annotation by the identity equation is a necessary but not sufficient condition on functional headedness. This distinction in the status of elements bearing ↑=↓ is intended:

"to allow an easy representation of syntac-
tically relevent features and function infor-
mation carried by more than one element within
a maximal projection." Simpson p. 96

In other words, there are presumed to be certain phenomena in language where the functional head is not the sole contri-butor of information to a phrase. For instance, in a. we find that the SUBJ NP has the following structure and annotations:

```
            (↑SUBJ=↓)
               NP
            /      \
         ↑=↓        ↑=↓
       (DEF=+)    (PRED='koala')
                   (NUM = 3sg)
         DET          N
```

Both the DET and the N are annotated with the identity equation. This does not mean, however, that the NP has two functional heads. The theory, in fact. prohibits the presence of two functional heads within a single percolation domain. In this NP the N is both the structural head i.e. the phrase is a projection

of N, and functional i.e. it is the constituent annotated with
↑=↓ which carries a PRED feature.   Another constituent i.e. DET,
however, contributes a feature to the NP, namely, that it is
definite.

In section 3 we will see how this distinction between
functional and structural heads interacts with V' constructions
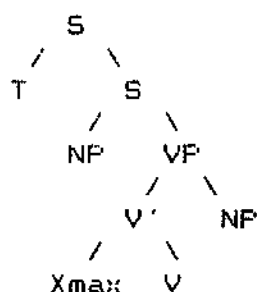and the LFG conception of government.

Now we can return to the second representation of the
sentence 'the koala seems cuddly' in Table 1, namely, the f-
structure b. An f-structure represents a distillation of all the
semantically interpretable information associated with c-
structures.   In LFG, semantic interpretation is done on f-
structures not on c-structures, for example, as in GB theory. F-
structures represent grammatical relations and feature
dependencies in a universal format which is independent of phrase
structure configurations.   The fact that such depedencies are
independent of phrase structure configurations means that the
interpretation of discontinuous constituency is quite simple: a
a discontinuous constituent will receive the same f-structure
representation as its continuous pair since f-structures encode
functional relations not constituency relations.   This aspect of
f-structures will be important for my analysis of V'
constructions since the VM need not be in constituency with the
V. When it is not, however, there is no evidence that its
functional relation to the V is altered.

The difference between c-structure and f-structure finds
clear expression in the treatment of the XCOMP function. Observe
that there is no c-structure position for the SUBJ argument of
the XCOMP function of seem in a. On the other hand, this SUBJ
argument receives an interpretation by virtue of entering into a
control relation with the SUBJ of the matrix predicate seem.
This control relation is a functional relation - not parasitic on
phrase structure configurations and, only debatably entailing the
postulation of an obligatorily empty c-structure node i.e. PRO of
GB theory.   Since we are dealing with a functional relation the
phenomenon receives an explanation within f-structure: the line
connecting the SUBJ of the matrix predicate with the SUBJ of the
XCOMP PRED indicates functional control: all features of the
controller are presumed to be features of the controllee.   (cf.
O'Connor and Ackerman 1984 for a dissenting opinion concerning
the feature identity in functional control)

Thus far I have reviewed those aspects of LFG that will be
criterial for subsequent discussion.   Before turning to the
actual analysis of V' constructions it is proper to provide a
syntactic backdrop against which the reader can view my,
primarly, lexical speculations.   This is all the more motivated
since there have been two recent GB oriented proposals concerning
Hungarian syntax.   I will be particularly interested in the LFG
conception of configurationality and the interaction of this with
the LFG conception of government.

Perhaps, the most expedient way of presenting the proposals
of Horvath (1981) and É. Kiss (1981, in press) is to give the
structures generated by their PS rules:

Horvath:
```
              S
            /   \
          T       S
                /   \
              NP     VP
                    /   \
                  V'     NP
                 /  \
             Xmax    V
```
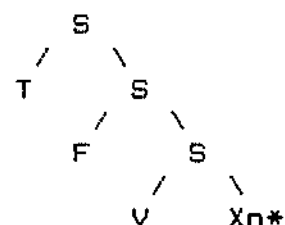
É. Kiss:
```
              S
            /   \
          T       S
                /   \
              F       S
                    /   \
                  V     Xn*
```
where Xn*=
any number of maximal major
categories in any order
T= Topic
F= Focus

On the account of Horvath Hungarian is an 'uncontroversially'
right branching, configurational language which contains a
maverick left-branching V' constituent.1 On the account of E.
Kiss Hungarian is a non-configurational language. This
difference in the configurational status of these frameworks has
consequences for the analysis of several other phenonena e.g.
government, but the notion of configuration presupposed in the
debate between these linguists is lamentably obscure.(cf. below)

For present purposes it is sufficient to note that the
elements I am calling VMs are base generated as the left
sister of V in Horvath's schema while they are moved into F
position by a rule of F-movement on É. Kiss' account. Moreover,
both linguists regard (without argument) VMs as maximal major
categories. É. Kiss' F-movement rule operates, in fact, only on
maximal categories.

My assumption concerning a V' constituent in Hungarian ob-
viously resembles Horvath's. On the other hand, I do not assume
that the VM is always a maximal major category. On the contrary,
inasmuch as some of the VMs participate in lexical V's such a
claim would lead to the theoretically unsupportable claim that
there are maximal major categories in the lexicon. The only
phrasal category in the lexicon for which there appears to be
suggestive cross-linguistic evidence is the V', to my knowledge.

In general, neither linguist discusses the relation of their
syntactic speculations to the lexicon nor, consequently,
dwells on the principled interaction between these two domains.
One cannot help but remark that this neglect of the lexicon (and
phenomena consequent on it) is, in part, attributable to the
theory utilized for these investigations, namely, variants of GB:
it cannot be said that this theory requires its practitioners to
develop fully explicit hypotheses of the lexicon. On the other

1. That Hungarian is a right-branching language is very doubtful
given any criteria for determining predominant directionality of
branchingness I know of. The assertion that Hungarian is
"uncontroversially" right-branching is simply baffling. (cf.
Ackerman, in progress, for a criticism of Horvath's revision of
Emond & Surface Recursion Restriction which relies on the
assumption that the Hungarian S is right-branching.

hand, it does not preclude the possibility of doing so. In a sense, then, the neglect of the lexicon manifest in the work of these two linguists reflects something about the theory they utilize: it does not follow, according to this theory, that if you do syntax you must have a fully explicit theory of the lexicon. (but cf. the promising and carefully detailed work of Maracz within a GB framework utilizing lexical structure as proposed by Hale (1983)) Inasmuch as the hypotheses of these linguists may be marred as a result of ignoring lexical considerations such liabilities would seem to follow from the theory they employ. Once again, such inadequacies are not neces-sitated by the theory (the theory can be augmented) rather the theory doesn't force one to avoid certain sorts of potentially inadequate formulations. Put a bit more positively, the theory doesn't force you to consider the necessary phenomena. If the articulation of a developed lexicon is, as I believe, necessary for understanding Hungarian syntax then the fact that LFG re-quires an explicit theory of the lexicon would appear to be a point in its favor.

I will be assuming that Hungarian is an uncontroversially left-branching non-configurational language with a V': a sort of hybrid of the two previously discussed hypotheses. On the other hand, I will be following Mohanan (1983), Bresnan (1982) and Havans (1982) concerning the interpretation of the notion (non)-configurationality.

In LFG it is assumed that configurationality is, essentially, a matter of how languages encode their GFs. Following Mohanan (1983) one might schematize this difference as follows:

Table 3

```
                                        |dominance
                   configurational------|
                        |               |precedence
   syntactic  _____|
   encoding            |
                        |               |case
                   nonconfigurational--|
                                        |agreement
```

On such an interpretation the relevant question is not so much whether a given language exhibits hierarchical structure (the essence of the debate between Horvath and E. Kiss) but rather how it encodes its GFs. The basic assumption is, contra a parameter setting conception of configurationality, that a given language can exhibit an admixture of configurational and non-configurational properties without rendering this distinction theoretically vacuous.

In configurational encoding we saw that GFs were associated with positions in the PS rules. This is, obviously, an unsuitable assumption for nonconfigurational languages. One method of assigning GFs in nonconfigurational languages is " to

associate pairs of function-assigning and feature assigning
equations with an arbitrary X:" Bresnan 1982 p. 297

a. $\left\{ \begin{array}{l} (\downarrow F) = V \\ (\uparrow G) = \downarrow \end{array} \right\}$

b. $\uparrow = \downarrow$

Without going in to details, one could say, roughly, that in
Hungarian if we might find equations of the following sort:

$(\downarrow CASE) = NOM$
$(\uparrow SUBJ) = \downarrow$

$(\downarrow CASE) = ACC$
$(\uparrow OBJ) = \downarrow$

According to the ideas advanced in Bresnan (1982)
configurational languages differ from nonconfigurational
languages in the following way:

"In configurational encoding, functions are
identified by the category and the order of
maximal constituents within the dominating
phrase while in nonconfigurational encoding
functions are identified by the case and
other inflectional features of unordered,
possibly, submaximal, constituents." p. 298

According to this view a major theoretical difference between
these two types of languages is the possibility of associating
functional information with submaximal categories in
nonconfigurational languages. If the descriptive evidence
concerning the submaximal status of GF bearing VMs is correct
then this would be compatible with independently motivated
assumptions concerning Hungarian nonconfigurationality. Corre-
spondingly, it would not be compatible with evidence for Hunga-
rian configurationality.

There is another important domain where the LFG conception
of (non)configurationality leads to a difference in the anlyses
under consideration: government.

In the GB oriented analyses of Horvath and E. Kiss different
hypotheses concerning the configurational status of Hungarian
lead to correlative differences concerning the domain of
government of V. Since Government is a structurally defined
notion in GB the differences in the domain of government follow
naturally from different assumptions concerning configurations.

On Horvath's account, the V is likely to be rergarded as the governor of [NP VP], while the VP (or, perhaps, INFL) would be regarded as governing [NP S]. On E. Kiss' account, in contrast, we are told that the V governs both the SUBJ and the OBJ.

As mentioned earlier, the LFG conception of government is not parasitic on structural domains. The V, to repeat, governs all of its subcategorized functions (and exerts semantic selectional restrictions over a subset of these). For example, the verb might determine the case marking on its selected functions. This would be an instance of what we might refer to as government by the 'raw' verb i.e. the verb form without additional inflections. In contrast, we saw that the agreement inflection -s could govern i.e. require certain features of, the SUBJ.

Bresnan reviews the LFG position with respect to government as follows:

> "To summarize, we see that several major results
> follow from the theory of syntax proposed here:
> first, that governing morphemes universally ap-
> pear either in the heads (or heads(of heads...))
> or in minor categories of the phrases whose con-
> stituents they govern; second, that similar go-
> vernment relations are instantiated in configura-
> tionally dissimilar structures; and third, that
> the types of stuctural configurations which in-
> stantiate government relations in particular lan-
> guage (type) are predictable from the syntactic
> encoding of functions in that language (type). p.316

These conclusions have been implicit or explicit in our discussion up till now. I would like to focus now on her first observation: governing morphemes appear on heads (or heads(of heads...)) or in minor categories.

We have, in fact, already encountered an instance of this: the person/number agreement inflection in English appears on the V i.e. a governing morpheme appears on the governor of the clause, namely, the V.

In LFG, we find theoretical expression given to the descriptive observation that governing morphemes are, typically, attached to heads while heads are, typically, themselves govern- ors. It needs only to be added that certain governing morphemes can be interpreted as heads as well (this will receive more attention in section 3). This leads to the phenomenon I men- tioned earlier: head-to-head attraction (cf. Nichols 1983). Head to head attraction may be special case of governors tending to appear with governors. One extreme instance of governors appear- ing with governors is inflection: a governing morpheme becomes an incontestable part of another governor. The other extreme is when a separate element retains its independence while still

functioning as a governor in conjunction with another governor:
this is the case we will examine in section 3 under the assump-
tion that VMs are governors, in the relevant sense. A trivial
instance of such a relation is exemplified quite clearly by
certain verbal prefixes:

11a.   áll V 'stand'   <(S)(OBLloc)>

   b. szemben-áll V 'oppose, confront'   <(S)(OBL)
      opposite stand   OBLcase= INST

Discounting insignficant details, it should be observed that the
presence of the prefix has obvious consequences for the case
marking of the OBL argument. That is, in the relevant sense, the
prefix could be interpreted as governing the case on the OBL.
     To summarize, the theoretical assumption that relates
government to headedness, in some sense, predisposes one to
entertain the possibility of a V' constituent: if VMs are
governors and governors are attracted to governors then it is
not preposterous to assume that such attraction might eventuate
in the creation of a V'. This is the sort of constituent which
Nash regarded as constituting an 'analytical paradox'. The
curious thing about instances of this "analytical paradox" is
that they show such close resemblance to one another across such
diverse languages. (cf. Section 3). Hungarian, then, presents a
particular example of a rather well-attested phenomenon within
the domain of verbal derivation. Inasmuch as the relevant
generalization in this domain may be head-to-head attraction and
inasmuch as headedness interacts desirably with the LFG concep-
tion of government, the postulation of a V' by Horvath must be
looked at quite critically.
     Horvath's V' seems to be a linguistic accident: it is
unrelated to any principle of linguistic organization (for in-
stance, there is no motivation for the family resemblance between
VMs nor for their preferred preverbal position), it finds no
motivation from any principle of the theory she utilizes. (cf.
Szabolcsi 1984 for an intriguing attempt to relate the V' to
principles of GB). (cf. É. Kiss in press, Szabolcsi ms., Farkas
1984 for criticisms of the syntactic uses to which Horvath puts
this contituent.)
     As for É. Kiss' hypothesis, we find an agreeable conclusion
concerning the V as the governor of both the SUBJ and the OBJ.
However, we find no attempt to define what the V might be.
Relying on tradition, É. Kiss acknowledges the existence of a
subset of elements which I refer to as VMs but both the actual
nature of their relation to Vs as well as any motivation for
their 'obligatory' movement to preverbal position remains vague.
     In conclusion I would like to comment on my selection of
theory. Why LFG? Bresnan (1982) observes:

"If the formal theory contains the appropriate
concepts and representations, then the linguistic
principles and grammatical descriptions expressed
within it will immediately generalize along the
right dimensions, simplifying both descriptive
rules and theoretical postulates." p. 282

I have selected LFG as the theory within which to formulate my
analysis of Hungarian because I believe that, in Bresnan's sense,
it does what a theory is supposed to do. In particular, the LFG
requirement for fully explicit representations from word
formation to functional structures entails that one cannot ignore
what might be important to consider. The absence of a similar
requirement within GB has permitted the postulation of two
different syntactic analyses which otherwise show a similar
neglect of the principled interaction between the lexicon
(generously interpreted to include morphology) and syntax.

In what follows, to be clear, I am not claiming that ade-
quate analyses of similar data are, in principle, impossible in
other frameworks - Hoelstra's recent analysis (1984) of such
phenomena in terms of small clauses within GB comes readily to
mind. For Hungarian, Szabolcsi's independently motivated GB
oriented analysis covers some of the same ground I cover and
points the way for a connection between certain VMs and the
(in)definiteness effect. This approach is enormously promising
but its ramifications for the whole scatter of V' constructions
awaits a closer investigation into the concept of 'incorporation'
as applied to Hungarian as well as the development of a thorough
typology of V' constructions.

In conclusion, my utilization of LFG is motivated by my
belief that certain basic assumptions and requirements of this
theory interact favorably with pretheoretical intuitions about
Hungarian grammar.

Section 3:   An anlysis of V' constructions

        My   main   task   in   this   section   will   be   to   develop   a
theoretical   treatment   for   several   V'   constructions.   Given   the
diversity of these constructions this is not a trivial task.   On
the other hand,   these constructions resemble one another   enough
so that, in some measure, the treatment of one type points to the
nature   of the treatment for another type.   Following the   hypo-
theses in Komlosy and Ackerman (1983) I will assume that one type
of   V'   construction, namely, separable prefix + V   combinations,
belong to the domain of verbal derivation. These prefixes will be
analyzed   as affixal ATPs associated with lexical   forms.   These
lexical   forms   will contribute to the composite complexion of   the
lexical   entry   associated with the derived verb.   In support   of
these   assumptions I will draw some parallels with Bantu   applied
verb   constructions as well as with certain valence   changing   or
diathetical processes in such widely ranging languages as Chechen
(Caucasian)   and   Walpiri   (Australia).   I will   pay   particular
attention to a hypothesis for representing affix + V collocations
in   terms   of logico-semantic dependencies proposed   by   Marantz
(1981).   In the concluding portion of this section I examine Moha-
nan's   treatments for certain V' constructions in   the   Dravidian
language,   Malayalam. I will investigate how his proposals   might
be applied to certain similar V' constructions in Hungarian.
        I   will   begin my discussion of verbal   derivation   with   an
illustration   of the relevant phenomena taken from Marantz (1981).
Marantz   sets up the discussion of Bantu 'applied' verb construc-
tions in the following context: certain affixes contribute their
argument   structures to the V with which they combine yielding   a
composite   argument   structure   for the affix   +   V   combination.
Marantz   postulates a process of 'merger' whereby these   argument
structures   are   combined.   It should be mentioned   that   he   is
employing   a   theory of the lexicon in which affixes are   lexical
items with lexical entries.   In   contrast   say, to the lexical
entries   for lexical categories the lexical entries   for   affixes
contain   subcategorizational   information e.g.   [_ [v for   verbal
prefixes.   This   is a type of lexicon presupposed by LFG.   The
process   of   merger   occurs at some point between   the   level   of
'logico-semantic'   representation i.e.   " a representation of the
syntactically   relevant semantic interdependencies among   senten-
tial constituents", and surface structure.
        The   fact that Marantz both assumes a theory different   from
the   one   I   employ i.e.   a theory with   underlying   levels   of
representation,   and assumes that 'merger' in the Bantu languages
entails relation changing (it doesn't ordinarily have this effect
in   Hungarian') should   not obscure the   principled similarities
evident between e.g. Chi-Mw:ini and Hungarian. I will turn now to
an   illustration of how merger operates and then will comment   on
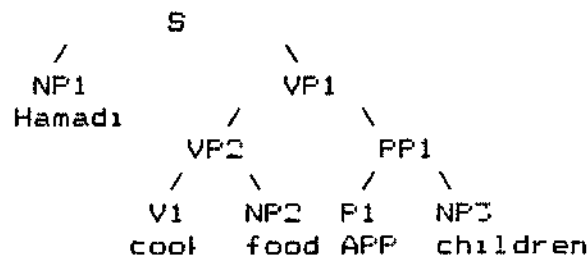the notion of 'logico-semantic' dependency proposed by Marantz.
        Consider the following sentences from Chi-Mw:ini:

13a.   Hamadi 0- sh- pishile chaskuja
       Hamadi SB-OB- cooked   food
       'Hamadi cooked the food'

```
b.   Hamadi  O-  wa-  pil-  il-  ile   wa:na    cha:taju
     Hamadi  SB-OB-  cool-APP-T/A   children  food
     Hamadi  cooled  food  for  the  children'
```

I have underlined both the OB(ject) agreement morpheme and its dependent argument. In 12b we see that the OBJ of the applied verb is the argument of the applied affix. Marantz represents the logico-semantic relations exhibited by such a sentence as:

Table 4

```
              S
           /     \
        NP1       VP1
        Hamadi   /    \
              VP2      PP1
             /  \     /  \
            V1  NP2  P1   NP3
           cool food APP children
```

Certain basic morphological assumptions borrowed from Lieber (1980) are employed to explain the perceived properties of 'applied' constructions. In particular, affixes are considered to be heads which percolate their features up to become features of derived words. This percolation process as well as the assumption that lexical entries for affixes contain subcategorizational information is illustrated in Table 5:

Table 5

```
              -pil - il-
                  V2

        ___                        ___
       ;     assigns 'benefactive'    ;
       ; tales 'patient' & 'benefactive' ARGs;
       ;___                         ___;
              /              \
             /                \
            V1                 P1
           -pil-              v]_], V
                              -il-

     ___        ___      ___           ___
    ;assigns 'patient' ;  ;assigns 'benefactive'   ;
    ;tales 'patient' ARG;  ;tales 'benefactive' ARG ;
    ;___            ___;  ;___             ___;
```
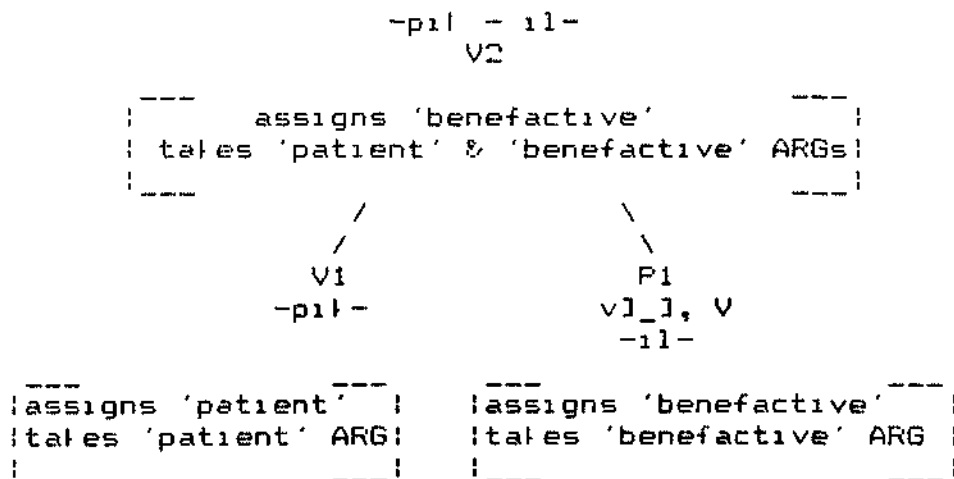
Marantz comments:

> "The merger of P1 and V1 in [Table 4] into
> the derived verb shown in [Table 5] expresses
> the modifier-modifee relation between PP1 and
> VP2, which P1 and V1 head. Therefore the ar-

> gument structure of the derived verb V2 will
> be a combination of the P-A [predicate argument]
> structure of V1 and the modifier-argument struc-
> ture, shown in [Table 5]. p. 269

Marantz describes here a phenomenon which is central to the
anatomy of complex verbs in Hungarian: the head of the logico-
semantic modifier of the V i.e the preposition-like APP, affixes
to the V. This affixation process has two consequences for the
argument of the head of the modifying phrase i.e for Marantz's
P1: 1. this argument becomes an argument of the complex predi-
cate, 2. this argument exhibits a non-contiguous dependency rela-
tion with its former head.

Marantz's description of 'merger' in terms of heads should
be reminiscent of our earlier discussion of 'head-to-head attrac-
tion'. In fact, Marantz describes here one particular instance
where a governing morpheme becomes a portion of another sort of
governor i.e. of the V. This resembles, in some manner,
description we gave of inflectional morphemes as governors
earlier.

An important innovation is that Marantz describes the rela-
tion between these governing morphemes in terms of 'logico-
semantic' dependencies not simply in terms of the mechanics of
subcategorization. That is to say, the palpable dependencies
exhibited by non-contiguous elements in surface structure receive
some explanation. What is the nature of this explanation, howe-
ver? On Marantz's terms the 'logico-semantic' representation
depicts "syntactically relevant semantic interdependencies." This
conception of the role of 'logico-semantic' structure should
sound somewhat familiar: the f-structures we encountered earlier
were distillations of the semantically interpretable information
found in c-structures.

In drawing this analogy between Marantz's 'logico-semantic'
representation with f-structures I do not intend to claim that
they are identical: they are only similar in suggestive ways.
A major difference between these representations of semantic
dependencies (besides the obvious one concerning their encoding
in tree diagrams vs. f-structures) regards the level to which
they apply. Marantz's schema here is intended to account for
word-formation: the modifying PP1, for example, is not presumed
to bear any particular GF to VP2. In contrast, f-structures
encode, among other things, dependencies between GFs.

Although I will not dwell on it here I find this similarity
suggestive since in Hungarian, as I have mentioned, the V' ap-
pears to represent a I line of wordiness: some VMs appear to be
affixal, others appear to function as compounded lexical catego-
ries with GFs, while others appear to be full fledged phrasal
categories with GFs. In many instances, as we shall see, VMs
exhibit non-contiguous dependency relations with some argument
irrespective of the category of the VM. That is, the phenomenon
depicted by Marantz as the abandonment of an argument by its
logico-semantic head during verbal derivation is a phenomenon we
shall see repeated throughout the scatter of V' constructions:
the VM, is typically, the head of some logico-semantic dependency
and its attraction to the verb eventuates in a palpable non-

contiguous dependency with a particular argument. We will see
some graphic illustrations of this momentarily. However before
turning to these examples it is important to say something in
connection with my interpretation of 'logico-semantic' repre-
sentations.

As far as I can tell, the motivation for representing the
semantic dependencies between elements involved in predicate
formation is a diachronically well-motivated intuition with syn-
chronic ramifications.2 On the other hand, I see little evidence
for postulating a synchronic syntactic level of representation
intended to depict these dependencies. This reluctance to postu-
late a syntactic level of representation should not be confused
with a reluctance to represent such dependencies at all. Rather,
I am simply attempting to delimit the proper status of such
dependencies within the grammar without assuming that diachronic
processes should be given synchronic treatments. This, perhaps,
bewildering distinction is best brought out by producing an
Hungarian analogue of the Chi-Mwi:ni derived verb constructions
and illustrating what I take to be an implausible account of
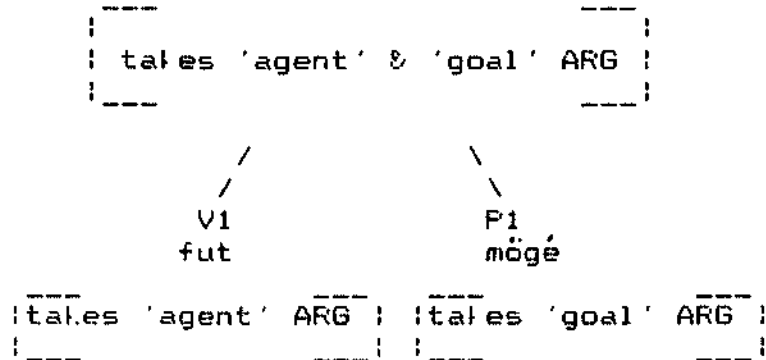these constructions:

13a. Árpád futott   (a *falnal / fal   möge)
     Arpad ran   (the *wall-DAT/wall-NOM to-behind)
     'Arpad ran behind the wall'

  b. Árpád möge-futott   a falnal/* fal
     Arpad to-behind-ran the wall-DAT/* wall-NOM
     'Arpad ran behind the wall'

In 13a we find a simple predicate which co-occurs with an
ADJ(unct) postpositional phrase. An ADJ is a function which is
not a selected/governed function of the V: it is an optional
rather than a possibly omissable argument. The postposition moge
governs the NOM case for its nominal argument. This nominal
argument cannot appear with the DAT case. In contrast, the
nominal in 13b must appear with the DAT case: this is, in fact,
the case governed by most lative postpositions functioning as
verbal prefixes. On an interpretation such as Marantz's we
might find a representation of the following sort (assuming as in
LFG that the V selects for SUBJ i.e. agent here):

2.   In fact, numerous verbal prefixes derive diachronically from
postpositions in Hungarian. This appears to be typical of the
origins of prefixal systems. cf. Nichols 1984. Additionally,
other sorts of complex predicates in Hungarian as well as in
other languages (cf. Ackerman, in progress for Hungarian analo-
gues with other languages) appear to involve the head of some
other category 'drifting' over to become associated in some
manner with the head of the clause, i.e. the V. There is then,
striking cross-linguistic uniformity for the diachronic process
of complex verb creation. On the other hand, it is not clear
that such diachronic uniformity is appropriately expressed by
e.g. synchronic movement rules which, in effect, mimic historical
processes. This will be the main force of my objection to the
spirit of Maracz's GB oriented approach below.

Table 6

mögé- fut
V2

```
 ___                              ___
!                                     !
! tales 'agent' & 'goal' ARG !
!___                          ___!


            /                \
           /                  \
          V1                   P1
          fut                  mögé
 ___          ___    ___              ___
!tales 'agent' ARG !  !tales 'goal' ARG !
!___          ___!  !___          ___!
```

The reader should note that in addition to including the thematic
role of the SUBJ in this representation (i.e. making the
representation comptable with the LFG assumption that the V
governs all of its selected arguments) I have omitted reference
to 'thematic role assignment' since this is not relevant for my
LFG analysis. The result is a mutation which I hope is not so
diverting that the obvious similarities between Chi-Mwi:ni and
Hungarian will be overlooked. In particular, we find in Table 6
that the thematic argument of P1 becomes a thematic argument of
V2. Moreover, the former argument of P1 becomes 'stranded'
configurationally: mögé as a verbal prefix is not contiguous with
its dependent argument talnal in 13b. We also see that the case
government pattern for the derived verb differs from the simple V
plus ADJ. Specifically, the GOAL argument of the derived verb
bears DAT case marking while the goal argument of the ADJ postpo-
sitional phrase bears NOM case marking. Before we comment on
this difference in case marking a major difference between de-
rived verbs in Chi-Mwi:ni and Hungarian should be noted: the
'affix' in the Hungarian derived verb is not a bound morpheme as
in Chi-Mwi:ni. This, I will argue, represents a language speci-
fic difference which should not obscure the overwhelming simila-
rities manifest in verbal derivation cross-linguistically.

Now turning to case-marking (and returning to the question
concerning the status of 'logico-semantic' representations,) it
should be noted that the DAT marking on the goal in 13b might be
argued to follow from the hypothesis that this marking reflects a
former time when the GOAL was part of a possessive construction.
Contemporary Hungarian, in fact, exhibits two alternative posses-
sive constructions:(cf. Szabolcsi (1983) for a recent analysis of
these contructions as well as de Groot (1983) for an alternative
view):

14a. a fiú labdá-ja
      the boy ball-3sg/POSS
      the boy's ball'

b.   a fiú-nal   a labdá-ja
     the boy-DAT the ball-3sg/POSS
     'the boy's ball'

As can be seen, in 14b the possessor bears the DAT case. The form
represented   by   14b   is   the   variant   which   can   appear
discontinuously in a clause. (cf. Szabolcsi (1983) for further
details) Though postpositions cannot function as possessed ele-
ments in standard contemporary Hungarian there was a time and
there are reputedly dialects still where this function was/is
open to them. (cf. Maracz 1984 for an engaging and detailed
analysis of postpositional inflection)   As a consequence of
these DAT variants one might, then, interpret such constructions
as the result of some sort of syntactic movement rule which
separates the postposition from its argument.   This is, I take
it, the spirit of Maracz's treatment of such postpositions under
the rubric 'postposition stranding':   PPs are, alleged to contain
an AGR node which licenses the movement of a P through a COMP-
like escape hatch i.e. through POMP.   I believe that it, in no
manner, impugns the considerable amount of interesting analyses
offered by this author if I contest the appropriateness of postu-
lating a synchronic syntactic rule for these phenomena: this is
precisely the type of rule I find unmotivated. To repeat, it is
not that such a rule cannot adequately describe a synchronic
state of Hungarian (although the marginality of several supposed
synchronic sources for movement as well as the tendency for many
relevant constructions to exhibit idiomatic senses leads one to
wonder about the synchronic state of this phenomenon in any case
3) but rather that it merely mimics a diachronic process.   In
this connection consider the following constructions in which the
postposition does not inflect i.e. cannot have escaped through a
POMP, and yet is clearly discontinuous with its dependent argu-
ment:

15a.   Árpád át-csúszott a   vizsgán
       Arpad through-slid the   exam-SUE
       'Arpad squealed through the exam'

  b.   a ligyó át-csúszott a rácson
       the snake through-slid the grating-SUE
       'the snake slid through the grating'

3. the idiomaticity of certain of these constructions is evident
in the following:
                   i. Árpád föléje   kerekedett Pistánal
                       Arpad above-sg/POSS arose   Pista-DAT
                       'Arpad got the better of Pista'

                  ii. *Árpád kerekedett   Pistánal   föléje
                       Arpad arose   Pista   above-3sg/POSS

The inflected postposition and its dative argument (cf. ii) do
not constitute a synchronic constituent.

c. Árpád az ablakon át ki-csúszott az udvarra
   Arpad the window through out-slid the yard-SUBL
   'Arpad slipped out though the window into the yard'

In 15 we encounter three tokens of the elusive element át: in 15a its collocation with the verb yields an idiomatic sense of 'managing to get through something', in 15b its collocation with the verb yields a more concrete meaning concerning the PATH of an action, while in 15b we find it heading a postpositional phrase indicating, once again, the PATH of an action. Similar to what we will presently see with fut vs. möge-fut, the SUE argument in 15b can be interpreted as a selected function of the complex verb át-csúszik while the postpositional phrase in 15c can be interpreted as an ADJ to the complex verb ki-csúszik: the selected function of this complex verb is, once again, the GOAL which in this instance must bear the SUBL case marker. The significant thing to note is the fact that át in all of these instances governs the SUE case for its dependent argument. 4

The insight offered by both Marantz and LFG is that heads are special sorts of entities with respect to verb formation. This specialness is well-attested cross-lingustically, in some sense, irrespective of the particular 'logico-semantic' 'constituents' they may derive from.

It is not clear, in conclusion, that the dependency relations evinced by heads (i.e. governors) and their non-contiguous arguments is appropriately represented by syntactic rules such as postposition movement rather than in a purely semantic representation of dependencies.

In example 15 we saw an instance where the former postposition preserves its government pattern. The maintainence of a fixed case-government pattern involving a governing head functioning as either prefix or adposition is attested in other languages. For example, Nichols 1984 observes this phenomenon in the Caucasian language Chechen:

"Many verbs with preverbs take the dative, e.g. t'e- d- uxan 'dress, put on' (t'e- on):

33i na:nas bierana + uoc t'a- ju:x
    mother-ERG child-DAT shirt-NOM on-dress
    'the mother puts a shirt on the child'

Such preverbs are former postpositions which left their objects to become attached to the verb. The dative is the stranded former object of the postposition, now an object of the verb. The older situation is still evident in 33:

4.   There are numerous instances, however when the dependent argument of át bears the ACC case. This appears to be connected with greater degrees of idiomaticity or lexicalization. For example, the verb át-fut 'through-run' in the sense of 'skim through (a book)' requires ACC case marking.

```
II.   bjerana  t'e   huma        ju:xan
      child-DAT on   thing-NOM  dress
      'get a child dressed' p. 19?
```

As can be seen the sort of 'postposition stranding' analysis
proposed by Maracz is probably a redescription of the origins of
prefixal systems in many languages: indeed, one might even
describe the present day Indo-European reflexes of such a process
in this manner. If we are not tempted to do so it is probably
because we appear, in most instances, to be dealing with bound
morphemes in e.g Serbo-Croation. In contrast, the synchronic
separability of prefixes in e.g. Hungarian, might entice one to
suppose that syntactic rules are appropriate:it is not obvious to
me, however, that the separability of prefixes licenses a syntac-
tic treatment in terms of postposition stranding. That prefixes
move is incontestable; that they move synchonically through a so-
called POMP node is debatable. If movement is licensed by the
existence of an escape hatch such as POMP (Maracz's PP variant
of COMP) permitting the attraction of P to V then must we
similarly postulate escape hatches for every instance of what I
have been referring to as 'head-to-head attraction'? I would
maintain, in contrast, that headedness is the major generaliza-
tion and PPs are simply one 'logico-semantic' dependency involv-
ed. An account, along the lines of Marantz, captures the phenome-
non at the relevant level of description and connects it with
other similar phenomena independent of syntactic considerations
(i.e. POMPs and COMPs and AGR).
     I have one final objection to a syntactic analysis of the
sort proposed by Maracz: it would appear to trivialize the para-
dox mentioned by Nash. Twilight words (where prefixed verbs are
one sort) are intriguing precisely because of their peculiar
status viz. syntax and the lexicon. What we would like is an
explanation for the alternate argument structures for e.g. fut
'run' and mögé-fut 'behind-run'. It strikes me that this re-
quires more than mechanical appeal to syntactic movement. For
instance, in Ackerman (in progress) I demonstrate that prefixes
such as mögé (i.e elements which have postpositional partners)
behave much like a prefix such as neki 'pro-3sg-DAT' (i.e. ele-
ments without postpositional partners) with respect to cliticiza-
tion: they host person/number inflections and thereby satisfy
argument requirements of the predicate. The interaction between
the lexicon and syntax is far richer than can be revealed by
appeal to mere syntactic movement.
     Those familiar with Hungarian might object to the preceding
(among other reasons) because Hungarian complex verb formation
is still such a vigorous process: according to one descriptive
linguist (Hadrovics) prefixed verbs seem to be created before our
very eyes. A syntactic, synchronic account would seem to address
this productivity - says such an objection. My answer is that
precisely this productivity throws such an account into question.
The vigorous creation of complex verbs touches on more than
prefixes: it touches on all ATFs. That is, examples of 'moved'
postpositions might be more appropriately subsumed under the
category of ATFs participating in 'head-to-head attraction'.

Before turning to an LFG analysis of certain V' construc-
tions it is worthwhile to mention one other theoretical analysis
of prefixes which is incompatible with the facts we have seen so
far. Horvath (1978, 1981) regards verbal prefixes as [-transi-
tive] postpositions. It is difficult to know precisely what this
means, however. If transitivity is understood as constituent
contiguity (as in the Aspects model) than this assumption
correctly describes the difference between the contiguity evident
between át and ablaton in 15c vs. the non-contiguity evident
between át and vizsgán in 15a. On the other hand, an important
similarity between these different uses of the postpositions is
obscured: they both have argument structures and, in this instan-
ce, both govern the same case ending for their argument. Recall
that on Marantz's analysis the affixes were represented as heads
of PPs i.e. even on a subcategorizational account of transitivity
the relevant Ps enter into 'transitive' configurations on some
level of analysis. In some sense, then, we might claim that
under a richer interpratation of transitivity - one, say, in
terms of argument structure - both the verbal prefix and its
postpositional pair are [+transitive]; they differ, simply, with
respect to constituent contiguity. (cf. Komlosy and Ackerman for
other objections to the [-transitive] hypothesis.)
     Before going on to a discussion of Mohanan's treatment of V'
in Malayalam it would be good to sum up what we have seen so far
with some simple examples. The most trivial case of prefix + V
combinations in Hungarian are directional prefixes which co-occur
with motional verbs. We saw an example of this with the verb
mögé-fut run behind'. It is instructive in this connection to
recount Simpson's (1983) speculations concerning the difference
between manner of motion' vs. 'change of location' verbs:

> "I adopt the working hypothesis that if the
> meaning of a verb makes specific reference to
> location or time, the, the location/time is
> probably a syntactically relevant argument of
> the verb... Only some verbs, such as go, come,
> descend, arrive, ascend, leave, enter, actually
> have as a part of their meaning the place left
> or the place arrived at. I call this class,
> change of location verbs... In Walpiri, a verb
> wilypi-pardimi 'emerge, exit, come out of' is
> a change of location verb. It focuses on the
> place left, or Source, but implies an end-point.
> I assume that this focus is reflected in the
> subcategorization: wilypi-pardimi takes an XCOMP
> linked to the semantic role of Source and if an
> end-point is expressed it has the function ADJ.
> On the other hand, manner of motion verbs like
> parnkami 'run' focus on neither the end-point nor
> the Source but imply both."

Now, I have quoted this passage at length because it contains
some central assumptions of my analysis as well. First of all,
the Hungarian verb fut 'run' is much like its Walpiri partner: it
is a manner of motion verb which can co-occur with ADJ (optional)

arguments but need not occur with any other function except a
SUBJ. This explains why in 13a the additional arguments are in
parentheses: 13a, though start without accompanying ADJs, is a
perfectly acceptable sentence:

15. (cf.13a) Árpád futott
             Arpad ran
             'Arpad ran'

In contrast, the derived predicate mögé-fut can be considered a
change of location verb: the SUBJ gets located somewhere as a
result of the activity. The different status of this GOAL argu-
ment with respect to the predicate is evident in a sentence such
as 16:

16. Árpád mögé-futott
       Arpad behind-ran
       'Arpad ran behind it'

As indicated by the English gloss, the acceptability of 16 is
contingent on there being an interpretation of zero anaphora. In
other words, an argument is felt to be missing which is
recoverable from context.
     I find Simpson's working hypothesis quite congenial and will
therefore assume the following lexical entries for the verbs
under consideration:

17 a.   fut V 'run'   (SUBJ)
                                      SUBJcase=NOM

    b.   mögé-fut V 'run behind'   (SUBJ)(XCOMP)
                                      SUBJcase=NOM
                                      XCOMP SUBJ = SUBJ

In particular, with respect to 17b I am assuming that the
thematic role of GOAL contributed by the prefix to the complex
verb is associated with the function XCOMP. In addition. I am
assuming that the prefix bears neither a function nor thematic
role with respect to the V. (cf. E. Kiss 1981, in press where
there appears to be an assumption that V subcategorizes pre-
fixes.5)

5.   Such an assumption within GB would seem to entail that the
prefix bears a theta role. Consider Chomsky (1981) in this
connection:

          "We must require that if a subcategorizes the
          position b, then a theta marks b... We there-
          fore require that subcategorization entails
          theta-marking." p. 37

We can generalize this analysis to other, simple cases of directional prefixes and motional verbs: prefixation here is a lexical process which changes a manner of motion verb into a change of location verb. The thematic argument contributed by the prefix will bear the XCOMP function. The contribution of a thematic argument (as well of a GF) has already been witnessed in both Chi-Mwi:ni and Chechen.

I must repeat that these are the straightforward cases: the reader is advised to consult the Appendix for complicating cases. In fact, there are certain prefixes which invite an interpretation whereby they themselves bear GFs. The GF in question is the XCOMP function. For example, consider the sentences in 18:

18a. Árpád   tele - raĺta a szeĺeret szénával
      Arpad   full - loaded the wagon-ACC hay-INST
      'Arpad loaded the wagon full with hay'

  b. *Árpád   tele - raĺta a szénát a szeĺérre
      Arpad   full - loaded the hay-ACC the wagon-SUBL

  c. Árpád rá - raĺta a szénát/*szeĺeret a szeĺérre/*szénával
      Arpad onto-loaded the hay-ACC/*wagon the wagon-SUBL/*hay
      'Arpad loaded the hay onto the wagon'

In 18a it appears that tele exhibits the same sort of control relation that is usually associated with the resultative XCOMP in e.g. English: that the 'controller' must be an OBJ is evident from the unacceptability of 18b. That the wagon can, however, be marked with the SUBL is evident from the acceptability of 18c. This is not the time to develop an analysis of resultavive constructions but the reader should keep them in mind (I do'').

As a transition to Indic parallels of the Hungarian V' i.e. to Mohanan's discussion of Malayalam, the following observations directed at the expression of aspect in Hindi and Hungarian seems quite suggestive:

> "In Hindi the modified verbal expressions
> expressing perfectivity do not appear in the
> lexicon as entries but only occasionally
> as phrases and then not very regularly. The
> Hungarian prefixed verbs, however, appear as
> lexical entries in every instance, they are
> more fixed morphologically." Debreczeni p. 355

As we shall see momentarily, we not only pass from fairly easily defendable words to phrasal collocations in moving from Hungarian verbal prefixes to Malayalam V's but within Hungarian itself those collocations (should one say 'words'?) parallel with the collocations investigated by Mohanan are themselves less 'wordy' than prefix + V combinations. To say the former collocations are more analytic (as contended by Debreczeni) is to miss an important point: In Hungarian all V' constructions are analytic in the sense that VMs are never bound to the V stem.

In this concluding portion of the paper I will review

Mohanan s attempts to treat certain V' constructions in the Dravidian language, Malayalam. I will present some corresponding V' constructions from Hungarian and inquire as to how one might elaborate on his proposals to make them suitable for Hungarian. It is my intention to present a general outline of an LFG treatment: (in)significant details will be in several instances ignored.

   According to Mohanan, Malayalam exhibits [X' V]v' constructions of several sorts. Consider 19 below:

19. kuttikk a aanayoot a   deesyam wannu
     child-DAT elephant-DAT2 anger   came
     'the child was angry with the elephant'

Before recounting the two different analyses he proposes for these constructions it is worth going over what he finds characteristic about [X' V]v' in this language. (cf. Mohanan 1983 for details) First of all, he maintains that X' is really a phrasal category: this makes it unlikely that a wholly lexical treatment of such constructions can be sustained. Second, he notes that the Vs in this construction are drawn from a rather small set and behave, in some manner, like auxiliaries 6. Third, he describes some significant facts concerning case government. In particular, it appears that even though the thematic roles of SUB and OBL can be argued to be the thematic roles of X' the case marking on these arguments is governed by the V: the V in 19 requires that its SUBJ be DAT and its OBL be DAT2. Finally, Mohanan observes that evidence for the selected/governed status of the OBL (vs. its ADJ status) comes from the unacceptablity of such a sentence as 20:

20. * kuttikk a deesyam   aayi
     child-DAT anger   become
     'the child was angry'

In general, the [X' V]v' constructions involve NPs, PPs (and predicate adjectives interpreted as NPs' 7)

6.   In fact, the resemblance of these verbs to auxiliaries and their behavior as quasi-affixes coincides with similar observations for other languages. To mention two primarily descriptive accounts there is Dixon 1976 Topic E on Australian languages and Kalman et al. (1983) on Hungarian (cf. below as well). From a theoretical perspective we find a developed theoretical expression of this insight in Zubizarreta (1982) and ruminations on this theme in Szabolcsi (1983, 1984).
7.   I find Mohanan's treatment of predicative adjectives a little hard to follow: for example, in addition to proposing that they have the structure: (he motivates PRO but is silent about V)
          he proposes that the lexical entry for an A be:
     V'   nalla V, 'good' (SUBJ) . Why does an A have a
    / \   syntactic category specification V⌐ What is the
   N'   V   role of V here⌐ Is it an affix, an independent
   / \   element⌐ Does A' really have no GF relation to
  A'   PRO V⌐ (cf. discussion below)

Mohanan proposes two different treatments of V' (oddly enough, he does not comment on the fact that Mohanan 1982 differs from Mohanan 1983 in this regard) In Mohanan 1983 we find a proposal that Malayalam has a c-structure V' expansion rule of the following sort:

21. V' --- NP   V
          (↑XCOMP=↓)
          (↑G=↓G)

He comments:

> "The equations under NP identify the NP
> as the complement of the V', and identify
> all of the grammatical functions of the NP
> as the grammatical functions of V', which
> are ultimately the grammatical functions
> of the S that dominates it. " p. 97

The resultant f-structure for 19 is:


```
:SUBJ  :PRED 'child'
:      :case= DAT
:
:OBL   :PRED 'elephant'
:      :case= DAT2
:
:XCOMP:SUBJ  [    ]
:      :OBL   [    ]
:      :PRED  'anger'  (SUBJ)(OBL)
:
:PRED :'be in state of' (SUBJ) (XCOMP) (OBL)
:
```


Certain properties of this representation clearly require explanation. The lines connecting the matrix GFs to the GFs in the XCOMP are supposed to follow from what Mohanan refers to as the 'control equations' under the NP in 21. The lines indicate that the thematic roles of the matrix GFs are the thematic roles of the XCOMP. Finally, it should be observed that the matrix PRED feature contains, on Mohanan's account, a string of GFs which are not associated with any thematic roles: the V be has no predicate argument structure. I will comment on this proposal after we have seen Mohanan's second try.

In Mohanan (1982) we find the proposal that Malayalam has a c-structure V' expansion of the following sort:

22. V' --- X'   V
          ↑=↓   ↑=↓

He says the following about the V in this connection:

>This proposal would essentially require that
>elements such as auxiliary be etc. represented
>without any predicate argument structure. We
>shall regard them as grammatical formatives
>which convert nonverbal predicates into verbs
>for categorial purposes, sometimes modifying
>the meaning of the predicate they are attached
>to." p. 552

The "predicate" referred to in this passage is the X' interpreted as an argument taking predicate (ATP). Recalling our earlier discussion of functional and structural heads we see that the presence of two identity equations in 22 does not lead to an ill-formed f-structure: the V acts as the structural head contributing its category while the X' acts as the functional head contributing its PRED feature. The definition of functional head as that constituent with a PRED bearing the identity equation is upheld. Mohanan notes that V, in fact, does more than determine the categorial status of the V': it percolates its case requirements i.e. SUBJcase= DAl, OBLcase = DAT2.

Now, the differences in these treatments should be evident. In particular the difference in the treatment of V is striking. On the first account, V has a PRED feature (a meaning and a set of non-semantic selected functions). Moreover, the X' which co-occurs with V is one of its selected functions, namely, the XCOMP function. In contrast, the V in the second account has no PRED feature but just a set of associated case government equations. The X' which co-occurs with it is not a selected function.

I believe that both of these accounts are flawed for the same reason: the actual status of V i.e. is it a simple verb", an affix", an auxiliary", as well as its relation to the X' i.e. do they constitute a kind of phrase or a kind of word" how, where and why do they combine" is left extremely vague. On the other hand, each account addresses itself primarily to a different and, I believe, correct intuition about such constructions.

The first approach accounts for why X' co-occurs with V at all: if it didn't the f-structure would be incomplete. That is, one well-formedness condition on f-structures is that the selected functions demanded by the PRED feature find satisfaction: since V here selects an XCOMP there must be an XCOMP for the f-structure to be complete. The practical consequence of this is the following: there is no acceptable sentence in Malayalam which differs from 19 only in that there is no X'. Mohanan does not talk about such a case but if what I have proposed is correct then the XCOMP status of X' viz. the V would explain this. (We will see that similar constructions without an X in Hungarian are unacceptable.) In other words, the first treatment gives a principled explanation for why an X' appears in the sentence at all. It does this at a cost, however: we find that V, diverging from usual assumptions about auxiliaries, has no predicate argument structure. V is, perplexingly, associated with a heap of GFs. NP, on the other hand, bears an equation of dubious theoretical pedigree. This "control equation" is, I believe, necessitated by the desire to contribute certain proper-

ties of the XCOMP to the S despite the barrier represented by the
XCOMP equation. In particular, the thematic roles of the S are
interpreted as the thematic roles of the XCOMP's PRED. These
cannot be simply percolated up since, among other reasons, such
percolation would only be licensed by the identity equation. The
X', however, already bears the XCOMP equation.

The second approach avoids the introduction of peculiar
"control equations" but at the cost of obscuring the relation
between X' and V. In particular, since V has no predicate
feature both V and X' can bear the identity equation with
impunity - and to advantage. The PRED of X' can now become the
PRED of V' (and of S) without postulating questionable control
mechanisms which fix up thematic role interpretations. Now, X'
can bear the identity equation precisely because it is
assumed that V has no selected functions and that consequently,
X' is not a selected function of V i.e. it is not, as in the
former treatment an XCOMP. But if X' bears no functional
relation to V what kind of relation do they exhibit? Are
sentences like 19 but without X' really acceptable? If not, then
why not? The advantage gotten by assuming that we are dealing
with the contribution of both a functional and structural head is
considerable: the meaning of the S, intuitively, does seem to be
the meaning of the X's PRED while the V really does appear to
function as an affix which just passes up certain features (and
determines the category of the dominating phrase).

In sum, the first account gets the GF relation between the
X and the V right while the second account accords with our
intuition that the X' is the functional head while the V is the
structural head of the V'.

Mohanan (1983) hypothesizes that:

> "The specification of a lexical entry of a
> predicative word (verbs, nouns like anger,
> adjectives like angry) includes: i) the de-
> finition of its meaning, ii) the specifica-
> tion of the grammatical functions it takes,
> iii) the specification of the thematic roles
> it takes. My account assumes that any of
> these specifications may be absent in an en-
> try." p. 99

Granting that such a conception of lexical entries should be
argued for rather than simply stipulated, I will nonetheless
accept stipulation i) of this hypothesis without argument. In my
discussion of several related Hungarian V' constructions I will
assume that certain Vs have no meaning, i.e. no entry between
single quote marks, ' '. (cf. Szabolcsi 1984 for similar specu-
lations centered around unaccusative predicates in Hungarian
within a GB framework). In particular I will assume, contrary to
Mohanan's thesis about Malayalam, that Hungarian Vs (of the
relevant sort) have PRED features which contain only lexical
forms i.e they have no lexical meaning. There is nothing in this
assumption which precludes the possibility that a lexical entry
for such Vs can contain all sorts of feature information includ-
ing case specifications for selected functions - Mohanan also

makes this assumption. The V, on my analysis, will be treated
like an auxiliary and will be supplied with a PRED feature simi-
lar to "raising" Vs such as seem (cf. section 1):

seem 'seem' \(XCOMP) SUBJ

The main difference between these auxiliaries and raising
predicates concerns the presence or absence, respectively, of a
lexical meaning. (I will speculate that this difference is only
apparent and that the Hungarian analogues of raising predicates
may, likewise, have no lexical meanings.) The postulation   of
'meaningless' predicates without an accompanying examination and
definition of this notion invites the charge of obscurantism.   I
can only hope that my discussion of the Hungarian examples
diminishes the passion of such a charge and engages the reader's
curiosity.

I advise the reader, once again, that my discussion of the
forthcoming Hungarian examples will be, of necessity, somewhat
superficial: I am more concerned with delimiting the proper
domain for a tentative treatment than in providing a detailed
analysis of these far ranging data.

Now, the data. Let's look at a sentence which is, in some
ways, similar to 19:

23. a bohóc   dühös lett az elefántra
     the clown   angry became the elephant-SUBL
     'the clown got angry at the elephant'

Compare 23 with the following sentences:

24a.   a bohóc türelmetlen lett az elefánttal
       the clown impatient became the elephant-INST
       'the clown got impatient with the elephant'

   b.* a szivárvány dühös lett az elefántra
       the rainbow   angry became the elephant-SUBL
       'the rainbow got angry at the elephant'

In 24a we see that case-marking on the OBL covaries with
different As i.e. the V lett does not appear to govern case on
the OBL.   This contrasts with sentence 19 in which we saw that
the V governs case on the OBL.   In 24b we see that the thematic
roles of the V' are the thematic roles of the A and not the
thematic roles of the V; after all, the V is identical in 23 and
24b but their acceptablity differs.   It seems reasonable to
attribute the unacceptability of 24b to the assumption that
szivárvány does not satisfy the thematic requirements of dühös:
it's hard to imagine an angry rainbow.

Now, consider a sentence like 23 but without an A:

25. * a bohóc lett
       the clown became
       'the clown became'

The unacceptability of 25 is easily explained if we postulate a lexical entry of the following sort for lett: (I will, expediently, ignore certain details)

```
26.     vanl V     (XCOMP)    SUBJ
                   SUBJcase = NOM
                   XCOMP SUBJ = SUBJ
```

Given an entry such as this we cannot create a well-formed f-structure for 25: the V demands an XCOMP and there is none in 25. 25, then, represents a violation of Completion, mentioned above. Unlike in Malayalam, we have no evidence that the V governs the case marking on OBL in Hungarian for these examples.8 I pro-propose that we are dealing with lexical entries of the following sort for As:

```
26a.   dühös          A 'angry'        ‹ (SUBJ)(OBL)
                                        OBLcase= SUBL

   b.  türelmetlen  A 'impatient'   ‹ (SUBJ)(OBL)
                                        OBLcase= INST
```

The c-structure representation for the V' containing duhos and lett will be:

```
                              V'
27.                          /    \
                     (↑XCOMP=↓)   ↑=↓
            (↑PRED='angry'  (S)(OBL) )  (↑PRED=  (XCOMP)   SUBJ
            (OBLcase      =       SUBL)   (SUBJcase=NOM)
                                          (TENSE = past)
                                          (SUBJ PER/NUM = 3sg)
```

In some sense, we arrive back at one of Mohanan's problems: the V' and, consequently, the S mean what the XCOMP means yet this meaning is stranded under the XCOMP: in Mohanan's second treatment the PRED feature of our A could easily become the PRED feature of the S since the left-sister of V was annotated with the identity equation. Our A, on his account, would behave like the functional head while the V could still contribute its information to S since it can also bear the identity equation. The V is, among other things, the bearer of tense and agreement features. If A is associated with the identity equation how would we represent its functional relation to V? If we represent A as XCOMP we must explain how its PRED feature (or a portion of it) becomes identified with features of S. We have,

8. In some instances, however, it appears that a given case marking pattern is not simply reducible to to component portions of V': szót fogad 'word-ACC accept' = obey, takes a DAT argument despite the fact neither szo nor fogad govern the DAT.

indeed, re-entered Mohanan's labyrinth. How do we get out? In particular, I would like a solution that is both faithful to the evidence that V selects an XCOMP and that this XCOMP is the functional head of S. There is an additional twist for the Hungarian V': the functional relation between VM and V must be construable despite constituent discontinuity. Moreover, it would be nice to explain why VM appears within V' in so-called 'neutral' constructions.

Let's make the following assumption: for all Vs devoid of lexical meaning which select an XCOMP function the PRED of this function supplies the lexical meaning for S. 9 This asssumption will account for the LFG claim that every S must have a lexical meaning i.e. must have a functional head, and must have, at most, one functional head.

Looking at our V van1 we see that it is a V without a lexical meaning which selects for an XCOMP. But what might it mean for a V to be meaningless? I would like to suggest that such Vs are essentially feature bearers: they carry grammatical meanings such as stativity, change of state, evidentiality, modality, tense, agreement. I will assume that the verb van1 carries the equation (change of state = +) and that the XCOMP specifies the nature of the change. This would mean that e.g. türelmetlen lett 'became impatient' would be a sort of analytic variant of the deadjectival, simple verb türelmetlenkedett 'was impatient'. In other words, I am suggesting that some Vs (or rather some uses of some Vs) are lexically defective and must be supplemented with lexical meaning: in both Malayalam and Hungarian this lexical meaning is provided by a semantic argument of V, namely, XCOMP. The reason why these Vs have lexical forms which resemble auxiliaries i.e. a raising pattern of GFs, is because they should be considered, in some sense, as auxiliaries themselves. I take it that this is the insight aimed at by Mohanan when he refers to certain AUX elements behaving like 'grammatical formatives' (although he does not associate them with the lexical forms for auxiliaries.)

As for the fact that Hungarian VMs are not always in constituency with the V this is not especially problematic. The necessary relations must be recoverable in f-structure and, as we have seen, this is independent of syntactic constituency. The relation between V and XCOMP is recoverable at this level as is

9 . I have phrased this observation in this manner so as to include other possible instances of lexically empty predicates which do not select for XCOMP functions. In particular, I have in mind a recent analysis of certain 'unaccusative predicates' by Szabolcsi (1984) according to which the meaning of these predicates is the meaning of their 'incorporated' intransitive SUB or transitive OBJ. There appears to be a hierarchy here which parallels a hierarchy for 'incorporation' of functions. In particular if a predicate selects an XCOMP then the PRED of the XCOMP is the PRED of the S, if it selects an OBJ (and is an incorporating V) then the PRED of OBJ is the PRED of S, while if it selects a SUBJ (and is an incorporating V) then the SUBJ supplies the PRED. (cf. Ackerman, in progress, for the relation of this hierarchy to incorporation and nominalization.

the possibility for XCOMP to act as a functional head. But, one can rightly ask, why do XCOMP and V (more generally, VM and V) enter into constituency with one another in so-called 'neutral' (or 'basic' in Keenan's sense) sentences? XCOMP governs the clause in conjunction with V: the S's thematic roles are its thematic roles, the OBL case is its OBL case and the 'lexical meaning' of S is its lexical meaning while the V contributes tense, agreement, SUBJ case and the XCOMP itself. In other words, if governors are attracted to governors (as discussed in section 2) then we have here a classic case of such attraction.

To repeat, certain of the Vs which enter into V' constructions have only grammatical meaning: lexical meaning is contributed by the VM. As potentially ad hoc as such a differentiation between grammatical and lexical meaning may appear to be one cannot help but be encouraged by the frequency of descriptive studies implicating the same distinctions elsewhere. The distribution of verbal properties among the components of a complex verb has precedents, for example, in numerous Austrlian languages. Consider Vaszolyi's characterization of compound verbs in Wunambal:

> "Compound verbs consist of two main com-
> ponents: a head-verb and an auxiliary...
> The non-finite head-verb, reminiscent of
> a gerund or infinitive, functions as the
> semantic nucleus of a compound and carries
> its lexical meaning. It appears that the
> following auxiliary [a finite simple verb FA]
> (at least on a descriptive plane) has but
> grammatical functions, indicating mood, tense,
> subject, object etc." p. 637

He also mentions a phenomenon noted by Mohanan for Malayalam about many Vs which function as "grammatical formatives": they undergo a sort of semantic bleaching:

> "Semantically, the lexical meaning of a simple
> verb appears more often than not obscured
> or neutralized when functioning as an auxi-
> liary." p.641

This property characterizes numerous Hungarian Vs as well.

D. T. Tryon, in a description of the Daly family of languages in Australia, comments on another aspect of complex verbs which differentiates e.g. Hungarian from Malayalam: the separability and clear indepedence of component portions of the complex verb from one another:

> "The auxiliary unit may either precede or
> follow the verb stem [read: Vaszolyi's "head-
> verb FA] and is phonologically separate from
> it. It describes the the general field of
> action, while the verb stem itself describes
> the particular action performed within the
> specified field." p.675

Unfortunately, this is not the time to elaborate on these or
other parallelisms between complex verbs in e.g. Australian
languages and Hungarian. (cf. Ackerman, in progress, for a
fuller discussion). The main point here is that the hypothesis
relating to a distinction between lexical and grammatical meaning
in the domain of complex verbs is not a hypothesis peculiar to
Hungarian: the same pretheoretical interpretations recur in
discussions of unrelated languages.

I will close this discussion with a brief survey of several
V' constructions which strike me as candidates for constructions
which contain a 'meaningless' V.

28a. Árpád   ideges   b.   V'
     Arpad   nervous   /   \
     'Arpad is nervous'   ideges   0

Notice we have no overt copula. I will interpret this as a
paradigmatic gap which signifies 3rd present i.e. 28b. Compare
this with the past tense version in 29:

29. Árpád   ideges   volt
    Arpad   nervous   was
    'Arpad was nervous'

The V van2 which appears in these sentences expresses
'stativity': 10

30.   van2 V (XCOMP) SUBJ
                SUBJ case= NOM
                TENSE = +
                STATIVITY = +
                XCOMP SUBJ = SUBJ

An indication that the thematic role of the S is the thematic
role of the A is given by the unacceptability of 31:

31. * a felhő   ideges   volt
      the cloud   nervous was
      'the cloud was nervous'

Hungarian possesses a single copula which does not demonstrate
either animacy or number restrictions with its selected functions
as do certian verbs in e.g. Georgian, therefore, the unaccepta-
bility of 31 cannot be traced to the presence of an inappropriate
copula but rather to the strained semantic relations between the
predicate represented by ideges and its inanimate SUBJ felhő.

The analytic construction ideges volt has a close,
deadjectival relative in idegeskedett 'was nervous':

10. The reader should regard my corpus of 'grammatical meanings'
as purely utilitarian: the features are, at this stage, clearly
ad hoc. I assume, however, that a final corpus and detailed
feature attribution display will bear some resemblance to the
analysis I set out here.

32a. Árpád idegesł edett
      Arpad   was nervous
      'Arpad was nervous'

   b. *a felhő idegesł edett
      the cloud was nervous
      'the cloud was nervous' 11

An intriguing property of predicate adjective constructions such
as 29 is the number agreement evident between the predicate
adjective and the SUBJ:


```
                ┌───────────┐
                │           │
33a.   a  fiú/ ł    ideges/ ek
       the boy/ pl      nervous/ pl
       'the boy/s is/are nervous
```

```
                ┌───────────── ──────────────┐
                │             │               │
   b.   a  fiú/ł       ideges/ ek      volt/ ak
        the boy/ pl    nervous/ pl     was / pl
        'the boy/s  was/were nervous'
```


This phenomenon is more complicated than can be examined here but
one possible interpretation comes readily to mind: a usual
property of a predicate i.e. number agreement, is distributed
among the constituent portions of the complex predicate.12 The
predicate adjective, then, is a good candidate for number
agreement since it, in effect, is a portion of the predicate i.e.
its PRED feature (lexical meaning and lexical form).

     Copular constructions resemble constructions with evidential
V (or Vs used as evidentials) such as tűnił 'seem, appear',
hangził 'sound', bizonyul 'turn out, prove to be', tełint
'consider' etc.

34.   a hangja   reł edtneł tűnt/ hangzott
      the voice-3sg/POSS   hoarse-DAT seemed/sounded
      'his voiced seemed/sounded hoarse'

Once again, the thematic role of the SUBJ appears to be the
thematic role of the predicate A:

11.   cf.   the   comparison   of   türelmetlen   lett   and
türelmetlenłedett earlier, where we find a distinction between
change of state and stativity, respectively.

12. For a provisional list of agreement and disagreement
phenomena in this domain I would like to thank Anna Szabolcsi.

35. a virág   *reledtnel / hervadtnal   tünt
    the flower hoarse/ withered   appeared
    'the flower appeared *hoarse/withered'

Whereas flowers can appear withered they cannot appear hoarse. On
the other hand, flowers can always appear to be in some state or
another so that one cannot claim that the co-occurence of e.g.
virág and tünil is the source of unacceptability in 35.

         Sentences 34 and 35 illustrate a characteristic property for
constructions of 'subjective evaluation' i.e. for constructions
containing the Vs under consideration: the XCOMP function
appears in the DAT case.   In other words, the V governs the case
marling for its selected function - this characteristic property
of governors has already been encountered elsewhere. A potential
lexical entry for e.g. tunil would, presumably, lool something
lile 36:

   36.   tünil V   (XCOMP)((OBL))   SUBJ
                XCOMPcase = DAT
                OBL case = DAT
                SUBJ case = NOM
                XCOMP SUBJ = SUBJ
                TENSE   = +
                STATIVITY = +
                EVIDENTIALITY = +
                DUBEITY   = +

The feature EVIDENTIALITY is intended to cover those cases of
subjective evaluation which derive from particular sensory and
cognitive modes: sound, taste, feel, seem, consider, judge etc.
The feature DUBEITY indicates that an element of uncertainty is
conveyed by the presence of V. (OBL) signals an omissable EXP.

         Another construction which resembles those already presented
involves the co-occurence of modals with inflected infinitives:13
37. Árpádnal mennie   lellett
     Arpad-DAT go-3sg/POSS must-PAST
     'Arpad had to go' 14

Such constructions alternate with constructions which contain
uninflected infinitives without any discernable difference in
meaning or stylistic effect:

13.   My examples here will be somewhat misleading: they do not
contain VM + V collocations. In such cases, the 'neutral'
sequence of elements is the following: VM-aspectual/modal-INF.
The relevant aspectuals/modals are, among others, alar 'want',
tud 'can', fog 'will', lehet 'possible', probál 'try' etc.
         Only certain aspectual/modals govern for DAT SUBJ.
14.   The inflections here resemble the present day   POSS
inflections.   However, they appear to be a remnant from a period
in the language (and not atypical of Uralic)) when verbals of
all types bore agreement marlers with SUBJs (cf. Aclerman, in
progress, for details)

38. Árpádnak   menni   kellett
    Arpad-DAT go-INF must-PAST
    'Arpad had to go'

There are three relevant properties of the construction in 37: 1)
the V, as in the other constructions, is the TENSE bearer, 2)
typical verbal features are distributed among component portions
of the V' i.e. person/number agreement on the INF and TENSE on
the V, 3) the V governs the case marking on its non-semantic
selected function i.e. it governs the DAT case for SUBJ.

 As mentioned earlier with respect to both Malayalam and some
Australian aboriginal languages, the verb that functions as an
'auxiliary' (i.e. a grammatically meaningful quasi-formative)
often displays different properties in its function as auxiliary
vs. full verb. I close this section with a single example of
this property from the Hungarian sentences we have just seen.

 The verb kell when functioning as an auxiliary does not bear
person/number agreement marking: it appears in the (apparently,
universally unmarked) 3sg form. In contrast, this verb when
functioning as a full verb can inflect:

39. én   kellek   neked
    I   need-1sg/2sg. or pl you-DAT
     you need me

In 39 we see that the verb kell hosts both person/number i.e. the
morpheme -lak/lek indicates 1sg SUBJ/2nd OBJ, and TENSE.

 Throughout this paper I have, somewhat cryptically, alluded
to 'degrees of lexicalization' and referred to a grab-bag
category called 'twilight words'. Unfortunately, this is not the
time to attempt a definition of these notions. On the other
hand, the reader need only recall the similarities and
differences of the small sample of V' constructions surveyed here
to see that our conception of the lexicon (how we view words,
compounds, phrases) will be criterial to our understanding of a
central portion of Hungarian grammar. The boundary between
simple verbs and prefixed verbs as words is hazy. The boundary
between prefixed verbs and lexical categories + V is hazy: both,
to various degrees, seem like compounding. The boundary between
lexical category + V and fixed expressions/idioms is hazy.
Though, in principle, we must postulate a distinct boundary
between VMs which are morpholexical categories and VMs which are
phrasal categories the actual distinctions with respect to the
lexicon are, once again, hazy. A categorially diverse set of
elements share certain lexical and syntactic properties and fi-
gure centrally in the conception of the Hungarian predicate: this
is the problem we started with. This problem resembles similar
problems which arise when we try to interpret predicates in other
languages. To state the problem is to attempt to relate Hunga-
rian to other languages. To state the problem is also to make
suspect analyses of Hungarian grammar which ignore the lexicon
and its principled interaction with syntax.

Conclusions

In this paper I have surveyed several VM + V collocations and have tried to illustrate how Hungarian constructions of this sort both resemble and differ from such constructions in other languages. The problems presented by the twilight status of these constructions viz. syntax vs. the lexicon. is a problem encountered for the analysis of numerous languages in the domain of predication. This problem, necessarily, affects our notions of how we interpret words. More broadly, it challenges us to provide a principled account of how words, however understood, relate to other lexical and syntactic units. I cannot claim to have answered either the question as to how we might best define the notion 'word' nor how words might be best related to 'lexical phrases', 'idioms' or, perhaps, syntactic phrases. I have, instead, demonstrated that for Hungarian as well as for several other languages lexical speculation in the domain of verbal derivation (and, perhaps more generally, in the domain of predication) seems indispensible for an understanding of the operation and organization of Hungarian grammar.

Finally, the theory of Lexical Functional Grammar appears to provide us with the concepts and mechanisms which both enable and compel investigation of an appropriately pluralistic sort. This theory (with, of course, the necessary modifications) is well-suited to the analysis of a language which did not figure in its inception, Hungarian. The fit between theoretical postulates and languages facts touted in Bresnan's desiderata for a theory (quoted in section 2) is a fit that is manifest to a significant degree, I believe, in the relation between the (admittedly, cursory survey of) phenomena in Hungarian and the theory of LFG.

APPENDIX

(This typology of V' constructions is in many respects coincident
with a list of V plus 'closest argument' constructions presented
in Simonyi (1902). This typology is representative not
exhaustive.)

I. Prefixes of various sorts:

1. directional prefixes:

a. be - dobta a labdát a tó-ba/ az asztal alá
   into- threw the ball-ACC the lake-ILL/the table to-under
   'he threw the ball into the lake/under the table'

b. ki-szaladt a szoba-ból
   out-ran the room-EL
   'he ran out of the room'

2. non-directional uses of prefixes:

a. be- kapta az ebédet
   into-got the lunch-ACC
   'he bolted down the lunch'

b. össze- játszott a barát-já-val a kormány ellen
   together-play the friend-3sg/POSS-INST the government against
   'he conspired with his friend against the government'

c. belé- m -bolondult
   into-cl.1sg - went crazy
   'she flipped for me

d. rá - szedte a mamát
   onto- collect the mother-ACC
   'he deceived his mother'

II. Complements of V;

1. "incorporated" transitive OBJ and intransitive SUBJ

a. incorporated OBJ: N = [-ATF]

   fát vágott az erdő-ben
   tree-ACC cut the forest-IN
   'he was wood-cutting in the forest'

b. incorporated OBJ: N = [+ATF]

lehetőséget   adott   az   ivás-ra
opportunity-ACC gave   the drinking-SUBL
'it offered an opportunity for drinking'

c. incorporated SUBJ: N = [-ATF]

kavics volt   a   cipő-m-ben
pebble   was   the shoe-1sg/POSS-IN
'there was/were a pebble/pebbles in my shoe'

d. incorporated SUBJ: N = [+ATF]

lehetőség   volt az   ivás-ra
opportunity was   the drinking-SUBL
'there was an opportunity to drink'

2. idiomatic expression with incorporated OBJ:

a. eleget   tettem   az   ígéret-nek
enough-ACC made-1sg the   promise-DAT
'I fulfilled the   promise'

b. hátat   fordítottam   a   feleség-em-nek
back-ACC turned-1sg the   wife-1sg/POSS-DAT
'I abandoned my wife'

3. Ns with various case markers:

a. számon tartotta   a   költséget
number-SUE keep   the expenses-ACC
'he kept track of the expenses'

b. figyelembe   vette   a   tényt
consideration-ILL take the fact
'he took the fact into consideration'

c. a   terveim   zátony-ra   futottak
the plan-pl-1sg/POSS reef-SUBL   ran-pl
'my plans were aborted'

4. PPs

a. P with [-spec] N: compositional

figyelm-en   kívül   hagyta   azt   a   tényt
consideration-SUE beyond   left   that-ACC the   fact-ACC
' he neglected that fact'

b. P with [-spec] N;   idiomatic

```
tető   alá        hozta  az  első  fejezetet
roof   to-under   brought  the  first  chapter
'he finished the first chapter'
```

5. Constructions of Subjective Evaluation:

a.
```
drágá-nak   tartotta   a   kalapot
expensive-DAT hold      the hat-ACC
'he considered the hat expensive'
```

a.'
```
drágállta              a   kalapot
considered-expensive   the hat-ACC
'he considered the hat expensive'
```

6. infinitives:

a.
```
úszni   akarok
swim-INF want-1sg
'I want to swim'
```

b.
```
(nekem) úszni/úsznom  kellett
1-DAT   swim-INF/swim-1sg must
'I had to swim'
```

c.
```
be   akarja   kapni   az   ebédet
into wants    get     the  lunch-ACC
'he wants to bolt down the lunch'
```

7. predicate adjectives and nominals:

a.
```
beteg/kőmüves lett
sick/mason    became
'he became sick/ a mason'
```

8. resultatives:

a.
```
feketé-re   festette  a   kerítést
black-SUBL  painted   the fence-ACC
'he painted the fence black'
```

b.
```
hűvös-re    fordult   az   idő
cold-SUBL   turned    the  weather
'the weather turned cold'
```

9. heads of 'possessed' constructions:

a.
```
nehez-é-re            esik  (neki)  az   irás
hard-3sg/POSS-SUBL    fall  he-DAT  the  writing
'writing comes hard to him'
```

b. a bosszúság   agyára   ment János-nak
    the revenge   head-3sg/POSS-SUBL went   John-DAT
    'revenge went to John's head'

10. Directional NPs;

a. az asztal-ra tette   a   poharat
    the table-SUBL put   the glass
    'he put the glass on the table

11. Selected Adverbials:

a. jól bánik   a barát-ja- val
    well treat   the friend-3sg/POSS-INST
    'he treats his friend well'

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