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Pronominal elements: diachrony, typology, and formalization
in Functional Grammar

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PRONOMINAL ELEMENTS:

DIACHRONY, TYPOLOGY, AND FORMALISATION IN FUNCTIONAL GRAMMAR*

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Contents

1. **Introduction**

A basic assumption underlying the work presented in this paper is that linguistic research should progress cyclically from data on language use, language change, and the structure of languages towards some formal model, and back again to a different range of data. That is, with regards to syntax, one should preferably start out with a range of constructions from typologically diverse languages, ideas about the meanings these constructions can be used to express, and about how such constructions evolve diachronically. Then this intuitive understanding of 'how the constructions work' should be formalised within some appropriate linguistic model. To paraphrase Kwee (1979): 'however explicit a description or theory may be, once formalized it will prove not to have been explicit enough'. A formal model forces one to be as precise and explicit as possible, and to fit the analysis in with previous analyses. It also raises new questions to be asked of the data.

In order to be appropriate, the model should at least fulfil the requirement of 'typological adequacy' (cf. Dik 1978:8): it should provide the possibility of describing recurrent patterns in typologically diverse languages (without forcing them into the straitjacket of a theory developed for West European languages), while at the same time accounting for the similarities and differences between these languages.

In this paper we exemplify the very common construction of affix-marked heads (verbs, nouns, adpositions) with loosely connected, optional free NP forms from two languages (section 2.). On the basis of both diachronic development and synchronic relationship to other construction types, we will try to establish the function of the pronominal affixes marking heads (section 3.). Next, our understanding of the construction type will be formalised in the model called Functional Grammar (cf. Dik 1978), which, by providing a universal semantic basis for the description of languages, is particularly suited to this kind of research. We will show that a slight extension of the mechanism by which 'terms' (the structures underlying NPs) are formed can satisfactorily account for our data (section 4.).

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2. Abkhaz and Hungarian

Since pronominal affixes are generally less well studied than the other pronominal expressions (free pronouns, clitics), we will in this section exemplify the former and the constructions in which they are typically used with data from Abkhaz (Caucasian; all data from Hewitt 1979) and Hungarian (Uralic; data by C. de Groot). In Abkhaz, a typical clause looks like (1):

```
(1)a-xàc'a    a-pʰ°əs    a- š°q°'ə̀    Ø-lə̀-yə-te-yt'
   the-man    the-woman  the-book    it-her-he-give (finite)
   'The man gave the woman the book'
```

The verb is preceded by a number of affixes refering to Direct Object, Indirect Object, and Subject respectively. The prefix referring to Direct Object is Ø only if the co-referential NP (here: 'the book') directly precedes it. In all other orders (Abkhaz is statistically SOV, but has free word order), there is a prefix y(ə).

It should be noted that the NPs need not be present for (1) to be a grammatical sentence: the verb with its pronominal prefixes can stand on its own, as shown by (2), where the brackets indicate the optionality of the full pronoun forms[1]:

```
(2)(sarà)  (barà)   (yarà)   Ø-bə̀-s-te-yt'
    I       you(fem) it       it-you-I-give (finite)
   'I gave it to you (fem.sing.)'
```

Prefixes figuring in the verbal complex can also be found on nouns, referring to the 'Possessor' of the entity indicated by the noun. Again, in example (3) the NP referring to the Possessor need not be present for the construction to be well-formed: yə-y°nè in isolation would mean 'his house'. And again, the free pronoun in (4) is optional and does not add to the semantic content of the expression:

```
(3)à-c'k°'ən   yə-y°nè              'the boy's house'
   the-boy     3sm-house

(4) (sarà)   sə-y°nè              'my house'
     I        1s-house
```

Lastly, the prefixes that appear on nouns to refer to Possessor can also appear on postpositions. They then refer to the Object of the adposition (OAdpos.):

(5)a-jǝyas   a-q'+nʾǝ   'at the river'
    the-river   it-at

(6)(saràʾ) s-q'ǝ+n+t°'   'from me'
    I   1s-from

The remarks made concerning (1)-(2) and (3)-(4) apply here as well: if a-jǝyas 'the river' is left out in (5), the expression means 'at something'; and leaving out sarà, (6) still means 'from me'.

The whole pronominal system of Abkhaz is summarised in Table 1. The prefixes of column I are used to refer to the Subject of intransitive clauses and to the Object of transitive ones, while the prefixes of column II refer to the Subject of transitive clauses. The system of pronominal reference is therefore an ergative one, though Subject and Object NPs are not case-marked in Abkhaz. The prefixes of column III fulfil a number of functions. When attached to the verb, they refer to the Indirect Object, when attached to a noun they refer to the Possessor, and on a postposition they refer to its Object[2].

	free pronoun	prefix I (ABS)	prefix II (ERG)	prefix III (IO,POSS,OADPOS)
1s	sa(rã)	s(ǝ)	s//z(ǝ)	s(ǝ)
2smale	wa(rã)	w(ǝ)	w(ǝ)	w(ǝ)
female	ba(rã)	b(ǝ)	b(ǝ)	b(ǝ)
non-human	wa(rã)	- -	- -	- -
3smale	ya(rã)	d(ǝ)	y(ǝ)	y(ǝ)
female	la(rã)	"	l(ǝ)	l(ǝ)
non-human	ya(rã)	y(ǝ)	n(a)	a
1pinclusive	ħa(rã)	ħ(a)	ħ(a)/aħ/aa	ħ(a)/aħ
exclusive	ħart	"	"	"
2pinclusive	s°a(rã)	s°(ǝ)	s°//z°(ǝ)	s°(ǝ)
exclusive	s°art	"	"	"
3p	darã	y(ǝ)	r//d(ǝ)	r//d(ǝ)

Table 1. The pronominal elements of Abkhaz (Hewitt 1979:101ff.).

It should be clear that the forms on any single row are all so similar to each other that they must derive from a single historical source. Since there

are fewer distinctions in the prefixes than in the free forms, we may assume
that the latter are closer to the original forms.

   In Hungarian, the system of pronominal elements shows greater diversity
than in Abkhaz. This holds especially for the verb morphology, in which a
distinction must be made between a conjugation called 'first form', and one
called 'second form'. The first form is used for intransitive verbs, and for
transitive verbs if the Direct Object is first person, second person, or third
person indefinite. The second form is used on transitive verbs if the Direct
Object is third person definite[3]. These forms are given in Table 2 in column I
and II respectively, with the vowel they have when attached to verbs like
olvas 'read' (the exact specification of the vowel is determined by vowel
harmony). The forms of column III are those that are used as suffixes on nouns
to refer to Possessor, and on postpositions to refer to the Object of the
adposition (OAdpos.; the vowel has again been chosen arbitrarily).

	free pronoun	suffix I (1st form)	suffix II (2nd form)	suffix III (POSS., OAdpos.)
1s	én	ok	om	om
2s	te	ol/sz	od	od
3s	ő	∅	(j)a	(j)a
1p	mi	unk	juk	unk
2p	ti	tok	játok	atok
3p	ők	nak	ják	uk

Table 2. The pronominal elements of Modern Hungarian.

Clearly, there are many differences between the free pronouns on the one hand,
and the suffixes on the other. Equally clearly, there are great similarities
between the suffixes themselves, especially those in columns II and III.
According to Seiler (1983a) and Radics (1982), it is generally the case in
languages that Possessor affixes and Object affixes show great affinity. We
therefore assume that the suffixes of column II represent fusions of older
Object suffixes with following Subject forms. Evidence for this can be derived
from the pronominal system of Vogul, a more conservative Ugrian language,
where clear traces of Object suffixes are left. In Table 3, the Direct Object
suffixes consist of such a remnant morpheme followed by a number morpheme:

	suffix I (SUBJ.)	suffix II (OBJ.)	suffix III (POSS.)
1s	^{u}m	il+∅	^{u}m,m
2s	ən,∅	il+∅	ən,n
3s	e	it+∅	te,e
1d	^{u}men,amen	ij+aɣ	men
2d	ən,∅	ij+aɣ	jin,en,n
3d	en	ij+aɣ	ten,en
1p	uw	ij+an	uw,w
2p	ən,∅	ij+an	an,n
3p	anəl,əl	ij+an	anəl,nəl

Table 3. The pronominal affixes of Vogul (Kálmán 1976)

Thus, a verbal form in a clause with a first person singular Subject and second person singular Object would be V-il-^{u}m. It is interesting to note that there exists one rudimentary form in modern Hungarian which refers to first person singular Subject and second person Object at the same time. This is the suffix —lak, which can be analysed as follows:

```
(7) (én)    (téged) lát-t-al-ak      'I saw you'
    I       you     see-Past-2s-1s
```

Since the free pronoun forms are optional (they are only used when in Focus), sentence (7) can be compared to the Abkhaz example (2).

The same holds for sentences with nominal Subject and Object like (8): if the NPs are left out, what remains is still a grammatical sentence meaning 'he/she read it/them', since the verb is in the second form:

```
(8) Laci a    könyv-et olvas-t-a
    Laci the book-Acc read-Past-3s(2nd form)
    'Laci read the book'
```

As stated, the Hungarian prefixes of column III in Table 2 are also used to refer to Possessor when attached to Nouns, and to Object of an adposition when attached to the latter. Examples (9)-(12) below correspond to the Abkhaz constructions (3)-(6).

```
(9)   János kabát-ja          'John's coat
      John  coat-3s

(10)  a(z  én) kabát-om        'my coat'
      the  I    coat-1s

(11)  a    ház    alatt        'under the house'
      the  house  under

(12)  (én-)alatt-om            'under me'
      I    under-1s
```

(11) shows that a postposition in modern Hungarian does not have an affix if its Object is a nominal one. However, from the 15th to the 19th Century one found many examples like (13) side by side with constructions like (11):

```
(13)  a    ház    alatt-a      'under the house'
      the  house  under-3s
```

Concluding this section, we would like to stress that the constructions here exemplified from Hungarian and Abkhaz are extremely common throughout the languages of the world. They are specially frequent in North American Indian languages (cf. Boas 1969a, Seiler 1983a), but also occur in Central and South America, in Niger-Congo and Semitic languages, and many others (cf. Moravcsik 1978, Ultan 1978, Limburg 1985). In these languages one finds pronominal elements on verbs referring to Subject, Direct Object and/or Indirect Object, and sometimes to other Oblique Objects, Instrumentals or Locatives. Usually one also finds in these languages pronominal elements on nouns referring to Possessor and on adpositions to refer to their Objects. More often than not, there are strong similarities, up to complete identity, both between the affixes marking these different categories, and between the affixes and the free pronoun forms. The affix-marked constituents are complete unto themselves and do not need free NP forms to be well-formed.

In the next section we will work out in detail a hypothesis concerning their source in the diachrony of languages, thereby predicting certain characteristics of the constructions involved and of the languages possessing them. The conclusion will be that, synchronically, the function of the pronominal affixes can be understood against this diachronic background, thereby providing a basis for formalisation.

3. Diachrony and typology.

3.1. Pronominal affixes on verbs: 'agreement'

There is an old idea, at least back to Hermann Paul's <u>Prinzipien der</u> <u>Sprachgeschichte</u> (first published in 1880), that agreement arises through cliticization of personal pronouns. We quote here from the fifth edition of Paul's book (1920):

> 'The verbal forms have usually arisen through adjacency of a personal
> pronoun to the tensed stem (...). Further development assumes a double
> filling of the Subject, for which there are analogues in modern language
> stages as well; <u>der Kirchhof er liegt wie am Tage</u> ('the cemetery it lies
> as in daytime', CdG.&MJL) (...); <u>je le sais, moi, il ne voulut pas, lui</u>
> ('I know, me, he didn't want, him', CdG.&MJL)'. [4]

Paul further quotes from Bavarian dialects where it seems that the unstressed Subject pronouns have developed into verbal forms, as in <u>mîr hammer</u> ('we have we') and <u>ess lebts</u> ('you live you') (op.cit.: 311).

Similarly, Givón (1976) claims that verb agreement always arises through anaphoric pronouns in 'topic-shift' constructions (cf. (14)). The former topic-shifted construction is 'de-marked', and the pronouns get re-analysed as agreement markers. Even after re-analysis, they continue to perform their anaphoric function. In the last stage, they disappear again via phonological attrition, due to assimilatory, reductive processes within the verbal word. This entire process can be illustrated by the hypothetical constructions (14)a -c:

(14)a. Me, I see him,   John
     b. (Me,) I-see-him (,John)
     c. (Me) a-see-m   (John)

Though we do not agree with Givón (1976) on all points[5], we think that there is much evidence that points in the direction of a general diachronic process as sketched above. In particular, we will assume that unstressed pronouns cliticize onto verbs, then become affixes which are however still clearly pronominal in nature, and in the last stage wear down to agreement affixes or zero. These agreement affixes (if any) no longer have any

independent reference, but can be regarded as morphological adaptations of a form to the construction in which it is used. Since the agreement affixes may disappear completely, we consider the fact that the pronominal elements are typically realized as free pronouns (rather than as clitics or affixes) as more characteristic of this stage than the possible presence of limited agreement morphology. We will speak, therefore, of 'Free pronoun' types of constructions.

A reformulation of Givón's ideas, using notions from Functional Grammar, makes it possible to predict the co-occurence of a number of characteristics of languages. Thus, we will talk not only of Free pronoun constructions (as (14)a), but also of FREE PRONOUN TYPE languages in which this type of construction predominates. Similarly, we will speak of Clitic constructions (cf. (14)b) and CLITIC TYPE LANGUAGES. We use the term 'Appositional' for the type of construction in (14)c and the characterisation APPOSITIONAL TYPE LANGUAGE for languages such as Abkhaz.

We assume that all languages can be located either within one of the stages A, B, or C, or on some point intermediate between two stages (cf. Figure 1). Since the diachronic process is a gradual one, taking place on at least three different levels of the grammar (viz., the Sentence-, NP-, and PP-levels), we are not forced to assign each language in its entirety to one of the major types.


```
              A. FREE PRONOUN
C. APPOSITIONAL TYPE  ←──────  B. CLITIC TYPE
```
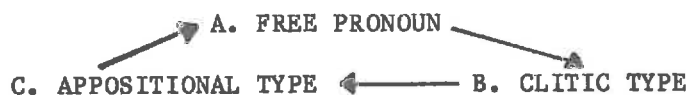
Figure 1. The diachronic cycle

Figure (1) shows the diachronic relationships between the three types. We will now discuss these separately: the FREE NOUN TYPE in section 3.1.1., the CLITIC TYPE in 3.1.2., and the APPOSITIONAL TYPE in 3.1.3.

3.1.1. Characteristics of FREE PRONOUN TYPE languages

FREE PRONOUN TYPE languages are languages in which (though unemphatic pronouns may cliticize) free pronouns are possible without co-referential clitics or affixes. Typical examples are most of the Germanic and Sino-Tibetan languages. We expect co-occurence of the following characteristics:

a. <u>verbal morphology</u>: languages of this type have no, or very few, morphemes to express relations with arguments of the verb. Chinese for instance has none, English has only -<u>s</u> for 3rd person singular, and Dutch has only -<u>t</u> for 2nd and 3rd person singular and -<u>en</u> for plural all persons. In general, we expect to find very few distinctions for number and person, animacy, gender, and honorificity. In fact, we find some person/number distinctions (as in Dutch and English) but none for the other categories. Furthermore, we expect interferences in the expression of Person and Number distinctions by the expression of typically verbal categories such as tense and aspect. These interferences could take the form of amalgamations (as in Hungarian) or of neutralization in other than the unmarked tense/aspect forms (both the English -<u>s</u> and the Dutch -<u>t</u>, for example, are used in the present tense only). We will see below that this prediction is exactly contrary to the predictions made for the CLITIC and, less strongly so, APPOSITIONAL types of languages.

b. <u>syntactic/semantic roles</u>: since agreement with Subject is the unmarked case, there will probably be no agreement with Indirect Object, Beneficiary, Instrumental, Locative, or others. If there is agreement with Direct Object, this may point to a transition stage between APPOSITIONAL and FREE PRONOUN TYPES, especially when there is differential agreement varying with position and definiteness of the Direct Object. Such situations occur in for instance Bantu languages and Hungarian. This will be discussed in section 3.4. below.

c. <u>obligatoriness of arguments</u>: since in the FREE PRONOUN TYPE of languages there is no or very little specification of the arguments of the verb in terms of verbal morphology, one might expect these arguments to be obligatorily present in this type of language. However, it seems to be the case that languages of all types allow so-called 'zero-pronouns', though the degree to which they do so varies widely. Li & Thompson (1979), for instance, show that in Chinese texts the absence of pronouns is more normal than their presence, even though Chinese has no agreement morphology. On the other end of the scale, languages like Dutch and English allow very few zero-pronouns, though they do occur (cf. (15)).

(15) A:Wat vind je van Jan?
     What find you of John?
     'What do you think of John?'

```
B:Vind ik wel    aardig
  Find I  rather nice
  'I rather like him'
```

Therefore, we will posit a slightly more cautious connection between
obligatoriness of arguments and verbal morphology. We will hypothese that if a
language has no or very little possibility of using zero-pronouns, it is a
FREE PRONOUN TYPE language, but not conversely. That is, the CLITIC and
APPOSITIONAL TYPES of languages always allow zero-pronouns (by which we mean
zero _free_ pronouns), while FREE PRONOUN TYPE languages may or may not.

   d. _use of unemphatic, non-contrastive free pronouns_: it is only in the
FREE PRONOUN TYPE language that we expect the occurrence of free, unemphatic
and non-contrastive pronouns. This is because in CLITIC TYPE languages, these
cliticize onto some other constituent such as the finite verb (cf. (16)) while
in APPOSITIONAL languages, such as Abkhaz, free pronouns are optional and
arguably used only to carry special pragmatic values (cf. (2) and footnote 1);

   (16) Standard French:

```
   a. Marie a   vu   Pierre
      Mary  has seen Peter

   b. *Elle a   vu   le
      She   has seen him

   c. Elle l'a vu
```

   e. _marked use of co-referential theme and tail constituents_: this is a
characteristic that distinguishes the FREE PRONOUN and APPOSITIONAL TYPES of
languages on the one hand from the CLITIC TYPE on the other. The following is
meant by the terms 'Theme' and 'Tail': in Functional Grammar expressions are
built according to the scheme in (17).

   (17) Theme, Predication, Tail

According to Dik (1978:19) 'the Theme specifies the universe of discourse with
respect to which the subsequent predication is presented as relevant', and the
Tail 'presents, as an 'afterthought' to the predication, information meant to
clarify or modify it'[6]. The predication proper is the structure underlying
sentences. It follows from the definitions that Themes and Tails are used for

special communicative purposes. A speaker uses a Theme-constituent, such as 'John' in (18), to direct the hearer's attention to a specific subject that he is going to speak about, and a Tail-constituent, such as 'your book' in (18) to clarify to reference of the unstressed pronoun it in case he is unsure that the speaker is interpreting his utterance correctly:

(18) John, he gave it to Mary, your book

A sentence like (18) is therefore a more hesitant way of saying 'John gave your book to Mary'. We will see below that this type of construction becomes unmarked in the CLITIC TYPE of language, where the Theme and Tail gradually lose their special communicative and intonational characteristics.

In the APPOSITIONAL TYPE of language, lastly, there is little need for such special constructions as in (18) since free NP forms are optional anyhow. In the Abkhaz translation of (18), the speaker will leave the NPs out if he assumes the hearer can identify the referents indicated by the pronominal affixes, and will add them only if he is unsure[7].

(19) (John) Mary (wə-š°q°'ə)∅-lə-ye-te-yt'
      John   Mary your-book it-her-he-give (finite)

f. freedom of word order: it is commonly assumed that if languages do not code syntactic/semantic relations by means of a rigid word order, they tend to do so by morphological means, i.e. by case-marking and agreement. And vice versa, a language that has no or little morphological case marking or agreement will tend to have a rigid word order.

Since languages of the type we are discussing here have no or very little agreement, we expect to have a rigid word order (leaving aside the question of case marking), while the APPOSITIONAL TYPE languages with their extensive 'agreement' can be expected to have a more pragmatically determined (i.e. 'free' in traditional terminology) word order.[8]

Susan Steele (1978) presents data from which she concludes that there is a clear correlation between type of agreement and rigidity of word order (though she finds no correlation between presence/absence of case-marking and rigidity of word order). In discussing her data, we must make allowance for the fact that her mode of classifying languages is not directly comparable to ours. She categorizes the 63 languages as rigid word order, free word order, or mixed, according to specific criteria[9]. She also establishes whether a

language has no agreement (including cases as English), inflectional
agreement, 'copy agreement', or 'semi-copy agreement'. She speaks of 'copy
agreement' in languages where the agreement morphemes are transparently
related in shape to the free pronouns, of 'inflectional' in cases where there
is no such resemblance. When there is some resemblance she speaks of 'semi-
copy'. In some cases (indicated by '?') no classification was possible. We
summarize her results in Table 4 below.

| | WORD ORDER | | | |
AGREEMENT	rigid	mixed	free	Total
none	13	1	0	14
inflectional	13	6	1	20
(semi-)copy	10	1	10	21
?	4	3	1	8
Total	40	11	12	63

Table 4. Freedom of word order and agreement type according to Steele
(1978).

Note that Steele's classification of 'agreement type' is morphological
rather than syntactic: she looks at the shape of the morphemes rather than the
organization of the clause and the overall characteristics of the language in
question. But still, Table 4 provides clear evidence for the correlation
between word order and agreement in the direction that we hypothesize: our
FREE PRONOUN and CLITIC TYPES of languages will tend to have no agreement or
inflectional agreement (the latter in the case of a recent transition from
APPOSITIONAL to FREE PRONOUN TYPE), and rigid word order. It will be clear
from Table 4 that this prediction is borne out: of the 14 languages with no
agreement, 13 have rigid word order, 1 is mixed, and none are free. On the
other hand, our APPOSITIONAL TYPE language will have morphology on the verb
which is still pronominal in nature, either both in form and (referential)
function, or in function but no longer in form (inflectional type). These will
have a greater freedom of word order. Note that out of 12 languages with free

word order according to Steele's criteria, 10 have copy or semi-copy agreement, one has inflectional agreement, one is unclassified and none is lacking in agreement. We conclude that these data largely support our typology.

3.1.2. Characteristics of CLITIC TYPE languages

In the CLITIC TYPE languages, unstressed pronouns are obligatorily expressed as forms bound to some constituent in the sentence, and Theme and Tail constituents are regularly used to introduce referents that are thus expressed in the sentence, or to clarify the reference of the same. In these languages, we expect a rather different set of characteristics from the ones discussed above (most of our examples in the following will be from Standard French and Spoken Dutch):

a. verbal morphology: the same lack of distinctions for Person, Number, and Gender is to be expected here. Most verbs in Standard French, for instance, distinguish only first and second person plural (though there are more distinctions in the orthography). In fact, since the phonological attrition of agreement markers is a continuous process, one would expect a FREE PRONOUN language that has developed into a CLITIC TYPE one to lose number-person distinctions in the process. Thus, Old French had more distinctions than has Present-day French, as the orthography shows.

b. syntactic/semantic roles: as with the FREE PRONOUN TYPE, we expect agreement, if any is still present, to be with Subject only. All trace of Object agreement will have disappeared by this stage.

c. obligatoriness of arguments: as stated above, we assume that in languages in which there is no or little specification of the arguments of the verb in terms of verbal morphology, the arguments are usually obligatorily present as free NP forms. In CLITIC TYPE languages, this holds for sentences with nominal NPs or emphatic pronouns such as (20)a. However, in sentences with pronominal unemphatic arguments, these are not expressed through free NP forms but through clitics on the finite verb ((20)b.), that is, through a specific type of verbal morphology. In the latter case, clarification of the intended referents may be given in the form of Theme and Tail constituents outside the clause itself, which is self-contained ((20)c.):

(20)a. Jean a   donné ton livre à Marie/à elle
        John has given your book to Mary to hér

   b. Il-le-lui-a-donné
      he-it-her-has-given

   c. Jean, il-le-lui-a-donné, ton livre, à Marie/à elle

   d. <u>use of unemphatic, non-contrastive free pronouns</u>: there are none, since
these cliticize onto some constituent such as the verb.

   e. <u>unmarked use of co-referential theme and tail constituents</u>: as the
French examples of (20) show, a CLITIC TYPE language has two rather different
sentence patterns. In the case that the arguments of the verb are expressed by
nominal NPs or emphatic pronouns, there is no, or very little, verbal
morphology; in the case of pronominal arguments, there is a lot of verbal
morphology (in the form of clitics), but no free NP forms inside the sentence.
We may expect a regularisation of this situation in the sense that the use of
Theme and Tail constituents becomes unmarked.

The latter is very clearly the case in Non-Standard French (NSF; the term
is from Lambrecht 1981). In this language, there are no sentences like (20)a.
Instead, one uses the option of Theme and Tail to express nominal NPs (as in
(20)c.). Both Lambrecht (1981) and Jeanjean (1981) show how unmarked these
patterns have become in colloquial (spoken) French. Therefore, NSF is closer
to the pure APPOSITIONAL TYPE of language than to the CLITIC TYPE, and will be
discussed in section 3.1.3.

As an example of the development of Theme and Tail constituents into
free NP forms in the sentence, consider Dutch. Dutch is mainly a FREE PRONOUN
TYPE language, but since unstressed Subject, Direct Object and non-case-marked
(i.e. 'dative-shifted') Indirect Object pronouns take up positions adjacent to
the finite verb, these cliticize in spoken Dutch. These clitics and the verb
form one phonological word (cf. Booij 1985). It is in this situation (cf. (21))
that an Appositional construction seems to arise. Themes in Dutch are very
common, especially with a co-referential demonstrative <u>die</u> or <u>dat</u> (depending
on the gender of the noun) in the sentence. Since Dutch is a verb-second
language, in which highly topical constituents (but not more than one) take up
the position before the finite verb, the co-referential <u>die</u> and <u>dat</u> are also
adjacent to it and cliticize (cf. (21)b.):

(21)a. 'k-heb-'t-'m/'kɛpətəm/ gisteren gegeven
      I-have-it-him   yesterday given
      'I gave it to him yesterday'

   b. Jan, die- heb-'k/di'jɛpək/ lang   niet gezien
      John that-have-I   long time not seen
      'John, I haven't seen him for a long time'

   c. Dat meisje die-heeft-'m/di'je:ftəm/ niet ontmoet
      That girl   that-has -him   not met
      'That girl hasn't met him'

In contemporary spoken Dutch, there is a very common sentence-type in which
the sentence begins with an NP and is followed (often without an intonation-
break) by a finite verb prefixed with <u>die</u> or <u>dat</u> (cf. (21)c.). This
construction is as yet possible only with nominal NPs. We will see in 3.2.
that in Dutch, pronominal NPs seem to lag behind in this development.

     f. <u>freedom of word order</u>: since there is just as little (or even less)
agreement in this type of language as in the FREE PRONOUN TYPE, there will be
just as little (or even less) freedom of word order <u>within the sentence</u>. The
placement of NPs in Theme and Tail positions is of course a pragmatically
determined choice, as is the relative ordering of such NPs if more than one is
placed in such a position (cf. (20)). Since this pragmatically determined
ordering is made possible by the clitic elements in the sentence (establishing
case-roles), we expect this freedom to be carried over to the organization of
the clause in the APPOSITIONAL stage, where the clitics have developed into
pronominal affixes. This is discussed in the next section.

3.1.3. Characteristics of APPOSITIONAL TYPE languages

     Abkhaz is a clear example of a purely APPOSITIONAL TYPE language. Since
it was discussed extensively in section 2., we will here exemplify the
characteristics of this type of language mainly from Non-Standard French (NSF)
and Berber, since these languages also provide clear insights into the
development from one type of language to another. Examples of pure
APPOSITIONAL languages can be found in the literature of American Indian
languages, from which we also derive the term 'Appositional'[10].

a. <u>verbal morphology</u>: as we have seen in section 2. above, Abkhaz has a rich system of pronominal suffixes, including not only expression of the categories Person and Number, but also of Gender (male, female, and non-human; see Table 1). The same goes for NSF, where there is a male/female distinction in the 3rd person Subject and singular Direct Object prefixes, and in Berber, as shown in Table 5:

	free pronoun	Subject	D.O.	I.O.	Poss.	Prepositional
1s	nəkk	-x	i	i	-inu	-i
2sm	šəgg	t-d	š	aš	-n(nə)š	-š
f	šəmm	t-d	šəm	am	-nṛəm	-m
3sm	nətta	y-	t	as	-n(nə)s	-s
f	nəttat	t-	tt	as	-n(nə)s	-s
1p	nukni	n-	ax	ax	-nnəx	-nəx
2pm	k^{W}ənni	t-m	k^{W}ən	awn	-nunn	-wən/un
f	k^{W}ənimti	t-nt	k^{W}ənt	ak^{W}ənt	-nk^{W}ənt	-k^{W}ənt
3pm	nihni	-n	tən	asən	-nsən	-sən
f	nihənti	-nt	tənt	asənt	-nsənt	-sənt

Table 5. The pronominal elements of Berber (Afro-Asiatic;Penchoen 1973)[11]

As with Abkhaz, it will be clear that there are great similarities in form between the different forms. Particularly the Direct Object, Indirect Object, Possessive and Prepositional series are nearly identical. The independent pronouns and the Subject affixes, however, show greater divergence, and this corresponds to their use. The Subject forms (and the independent pronouns) are used in a clearly Appositional type of construction, while the other forms are used in constructions that are in different transitional stages between Clitic and Appositional, varying with the dialect studied. Thus, the process of cliticization and phonological attrition must have taken place long ago in the case of the Subject forms - long enough to allow renewal of the paradigm through analogy or borrowing.

The transition from Clitic to Appositional type of construction in Berber will be further discussed in section 3.4. below. Suffice it here to say that the extensive number, person, and gender distinctions in the Berber paradigms show the pronominal nature of the elements, which is lacking in the FREE PRONOUN TYPE languages.

As to interference with other verbal morphology, we said in 3.1.1. that in FREE PRONOUN TYPE languages it is quite common to find neutralization of person/number agreement markers in other than the unmarked tense/aspect forms of the verb (as in Dutch and English), or to find different paradigms in different tenses and aspects. The situation is different in APPOSITIONAL and CLITIC TYPE languages. Though we find different types of constructions in different tenses and aspects in e.g. Kurdish (cf. Van Gaalen 1984), it is always the same paradigm or paradigms that is used in a particular construction type, regardless of tense and aspect. Thus, not only the clitic forms in Table 5 are invariant, but also the Subject forms that are obligatory with all finite verb forms and that allow the expression of a free Subject NP (and thus superficially resemble agreement markers). The same situation obtains in Abkhaz, NSF, and the other APPOSITIONAL TYPES of languages referred to in this paper.

b. syntactic/semantic roles: as stated in section 3.1.1. above, in a FREE PRONOUN TYPE language, the form of the verb may vary with the choice of Subject and occasionally Direct Object, or may show no such variation. In the transition from CLITIC to APPOSITIONAL TYPE language, the function of the agreement markers is taken over by the pronominal elements (though the latter have an additional, referential, function not shared by the agreement markers). In both of these types of languages, we usually find bound pronominal elements co-referring to Direct Object, Indirect Object, and different sorts of Oblique Objects. In Standard French, for instance, there are clitic forms for terms with all these functions (cf. (20)). In NSF, the use of the Oblique clitics y and en has been widened to include reference to +Human arguments (cf. (22)), which is not allowed in Standard French, thereby contributing to the further development of an '"agglutinative" verb complex made up of the verb stem to which one or several bound pronominal or adverbial morphemes are prefixed' (Lambrecht 1981:7).

(22)   Non-Standard French (Lambrecht 1981:6):

    a. J'en rêve   'I'm dreaming of him/her/it'
       I-of+3s dream

    b. J'y pense   'I'm thinking of him/her/it'
       I-of+3s think

This kind of extension of the use of bound pronominal forms, together with the cliticization of pronominally marked adpositions (cf. footnote 2 above, and section 3.3. below), leads to a situation in which many different syntactic/semantic functions are relevant for the verb complex at the APPOSITIONAL stage.

    c. obligatoriness of arguments: in APPOSITIONAL TYPE languages the arguments of the verb are expressed primarily as pronominal affixes. This means that free NP forms are never necessary. In fact, in many of the purely APPOSITIONAL TYPE languages an unmarked sentence type consists of a verb with pronominal affixes plus adverbs, but no free NPs expressing arguments. Free pronouns are used only for pragmatic purposes such as emphasis.

    d. use of unemphatic, non-contrastive free pronouns: there is none, since their function is fulfilled by the pronominal affixes.

    e. marked use of co-referential theme and tail constituents: as stated in section 3.1.1. above, we expect no or very limited use of constituents with these pragmatic functions, since these functions are performed by the (optional) free NP forms within the sentence. This is what distinguishes the FREE PRONOUN and APPOSITIONAL TYPE languages from the CLITIC TYPE. A comparison of Standard French and NSF (Non-Standard French) shows how Themes and Tails can be 'drawn into the sentence', gradually losing their special characteristics in the process. Lambrecht (1981) discusses this in terms of a 'desyntacticization' of free NP forms (cf. footnote 21):

(23) a. Ces   Romains ils sont fous
        those Romans   they are crazy

     a.' Ils   sont fous, ces   Romains
        'They're crazy, those Romans'

    b. Ces   Romains je les aime pas
        those Romans I   them like not

b.' Je les   aime pas,   ces   Romains
    'I don't like them, those Romans'

In this way the erstwhile pragmatically marked construction of Theme +
Sentence + Tail has first become 'demarked' (Givón 1976) in the CLITIC stage,
until the difference between Themes and Tails on the one hand and free NP
forms in the sentence on the other has been virtually obliterated in the
APPOSITIONAL stage (NSF has not quite reached that point; cf. the discussion
in section 3.4.). This phenomenon is discussed under the heading 'markedness
shift' in Dik (1978:111), shown by Figure 2.

MARKEDNESS SHIFT

         obsolete unmarked marked

STAGE 1. E_1 E_2

STAGE 2. (E_1) E_2

STAGE 3. E_2 E_3
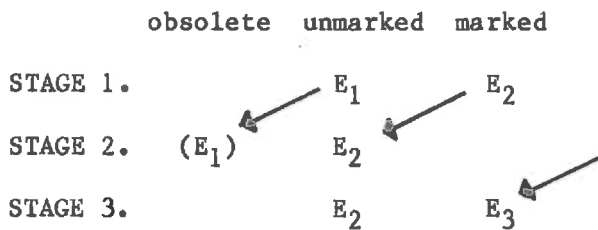
Figure 2. Markedness shift.

The process can be illustrated from Berber. As stated above, all dialects
have a clearly Appositional construction for Subject (cf. (24)a.) which is
indicated by the pronominal affix(-es) on the verb and the special form of the
noun of the Subject NP (the so-called 'état d'annexion'). Now, in the Moroccan
dialects a new Theme + Sentence construction has arisen (cf. (24)b.):

(24) Berber(Afro-Asiatic;Galand 1964):

a. i-krz   urgaz
    3sm-worked man (ÉdA)
    'The man worked'

b. argaz, i-krz
    man(ÉL) 3sm-worked
    'The man, he worked'

The noun in Theme position is in the so-called 'état libre', which is the
citation form. The fact that this construction is pragmatically marked is

shown by the comma intonation which (according to Galand 1964:39-40) is always possible in this construction. Confirmation of this comes from Penchoen (1973) (discussing a dialect of Central Morocco), who does not discuss (24)b. under the heading of 'favourite verbal sentence type' but under 'topicalization' (p.77). In fact, of the 30 main clauses in his sample text, only 2 begin with a topicalized nominal NP, 4 begin with a topicalized pronoun, and 1 with both (ntta ṭṭalb 'he the talib'). Since free NP forms in the Appositional construction have a special morphological marking in Berber, it is clear that the Theme + Sentence construction in (24)b. is innovative. We return to Berber in the section on transitional stages (3.4.).

f. <u>freedom of word order</u>: there are two reasons why we expect the largest degree of freedom of word order in languages of this type, one synchronic and one diachronic. Synchronically, the coding of syntactic and semantic roles on the verb in the form of pronominal affixes makes a greater freedom (i.e. a greater weight of pragmatic factors in determining word order) possible than in languages without such morphology (cf. the discussion in 3.1.1.). Diachronically, this freedom of ordering may be inherited from the CLITIC stage. As was noted in 3.1.2. above, in the CLITIC stage the choice between placing an NP within a sentence or outside it as Theme or Tail must be a pragmatic choice. The same goes for the ordering of NPs vis-à-vis each other in the case of multiple Themes or Tails.

Thus, Lambrecht (1981) notes the extreme syntactic freedom of word order in Non Standard French (NSF) and quotes the orders in (25) as all possible in a context where the referents of all three arguments are presupposed in the discourse (ibid.:55)[12]:

(25)a. Moi j-le-lui-donne   le livre, à ton frère
       me 1sSubj-3sDO-3sIO-give the book   to your brother
       'I'm giving the book to your brother'

b.
Moi le livre			à ton frère
Moi ton frère			le livre
Ton frère			moi, le livre
Ton frère moi	}	j-le-lui-donne, {	le livre
Ton frère le livre			moi
Le livre			moi, à ton frère
Le livre, moi			à ton frère

3.1.4. **Interim summary**

We have seen that in the three types of languages, different characteristics cluster together. On the basis of these characteristics, languages and dialects can be assigned to one particular type or to some transitional stage between two types. We will see in section 3.4. that, after a further refinement in terms of syntactic/semantic roles has been made, languages and dialects can be ordered diachronically vis-à-vis each other, and predictions as to further development can be made. We finish this section by summarizing the characteristics discussed (Table 6), and then turn to pronominal affixes on nouns (section 3.2.) and on adpositions (section 3.3.).

	FREE PRONOUN	CLITIC	APPOSITIONAL
a. verbal morphology	none or minimal; interference with Tense/Aspect	none or minimal; interference with Tense/Aspect	extensive; no interference with Tense/Aspect
b. syntactic/semantic roles expressed in verbal complex	none, or only Subject	none, or only Subject	several
c. free NP arguments of the verb	obligatory or optional	optional	optional
d. unemphatic free pronouns	used regularly	not used	not used
e. use of co-referential Themes and Tails	pragmatically marked	pragmatically unmarked	pragmatically marked
f. order of free NP forms	syntactically fixed	syntactically free	syntactically free

Table 6. Clustering of characteristics of languages of different types

3.2. **Pronominal affixes on nouns: 'possessive affixes'**

The crucial examples from section 2. are here repeated as (26)-(29):

(26) Abkhaz:

à -c'k°'ə n yə-y°nə̀   'the boy's house'
the-boy   3sm-house   (=(3))

```
(27)  (sarà)  sə-y°nè            'my house'
      me      1s-house           (=(4))

(28)  Hungarian:

      János kabát-ja             'John's coat'
      John  coat -3s             (=(5))

(29)  a(z én) kabát-om           'my coat'
      the me  coat -1s           (=(6))
```

In accordance with the theory outlined in section 3.1. above, we assume
that these constructions arise from the cliticization of unstressed pronouns.
That is, at one stage of the development we assume, an NP modified by a
possessive phrase does not change in shape itself.   That the NP refers
to a possessed item only shows up (if at all) in the fact that the Possessor
is marked as such. This can be done by an adposition or genitive case-ending
with nominal Possessor NPs, and either by adpositionally or otherwise case-
marked pronouns, or special possessive pronouns, in the case of pronominal
Possessors. These constructions are exemplified by (30)-(33):

```
(30)     Lisu (Sino-Tibetan;Hope 1974):

         ása ámù                  'Asa's horse'
         Asa horse

(31)     nwu        ámù           'your horse'
         you(plur) horse

(32)     Standard Dutch:

     a.  Jan-s     boek           'John's book'
         John-Gen book

     b.  boek van Jan             idem
         book of  John

(33)a.   mijn boek                'my book'
         my   book

     b.  boek van mij             idem
         book of  me
```

In Dutch, the genitive case ending -s has become obsolete with common
nouns. It is at present only used with shorter proper names (cf. (32)a) and is
rapidly being replaced by an Appositional type of construction (discussed
below). As in English, (33)b is used obligatorily if the Possessed Item is

marked with an indefinite article, demonstrative, etc. Unlike the
corresponding English const ructions, (32)b and (33)b may be used also if
the Possessed Item is definite.

In constructions like (33)a , the unstressed possessive pronoun may
cliticize onto the Possessed NP. In Dutch, this happens regularly with the
singular forms, so that we obtain a paradigm of 'strong' and one of 'weak'
possessive pronouns (cf. (34)).

(34)	Strong	Weak
a.	mijn boek (/mɛɪn/) my book	m'n boek (/mən/,/mə/,/mn̩/)
b.	jouw boek (/jau/) your book	je boek (/jə/)
c.	zijn boek (/zɛɪn/) his book	z'n boek (/zən/,/sən/,/zə/, /sə/,/zn̩/,/sn̩/)
d.	haar boek (/ha:r/) her boek	d'r boek (/dər/,/dr̩/)
e.	hun boek (/hən/)	" " " , or hun boek (/hən/)

Another instance of the same phenomenon is found in Resígaro (Amerind),
where it is the unmarked form of the personal pronoun (there are no special
possessive forms) which may be 'assimilated' (Allin 1976:192):

(35) Resígaro (Equatorial;Allin 1976):

a. na hanígí   'their father'
   3pl father

b. anígí   idem

We now have a situation parallel to the Clitic type of constructions on
the clause-level discussed in 3.1.2., i.e. unstressed pronouns are
obligatorily realized as clitics on the noun, while stressed pronouns and
nominal Possessors are expressed as free NP forms. As on the clause level, we
expect a regularization of this asymmetry leading to Appositional type
constructions. In spoken Dutch, for instance, third person nominal Possessors
are regularly added to the construction of clitic pronoun + Possessed Item:

(36)a. Jan z'n boek   'John's book'
       John his book

      b. Marie d'r boek   'Mary's book'
         Mary her book

      c. Jan en Marie hun   boeken 'John and Mary's books'
         John and Mary their books

In substandard Dutch, this process has gone one step further in that an
Appositional type of construction can be used for third person singular
stressed pronouns (it should be noted that the female form (37)b is more
marked than the male form (37)a , which is sometimes used to refer to female
Possessors):[13],[14]

    (37)a. hem z'n boek   'hís book'
           him his book

       b. ?haar d'r boek   'hér book'
          her   her book

The transition from Clitic to Appositional type of construction can also
be exemplified from French, where stressed pronominal Possessors, marked by the
preposition à, can be added to a construction consisting of unstressed
possessive pronoun + Possessed NP (data from Vet 1983:124ff.):

    (38)a. mon livre à moi   'my book'
           my book to me

       b. ton livre à toi   'yoúr book'
          your book to you

       c. son livre à lui/à elle/à eux   /à elles
              book to him/to her /to them(male)/to them(female)

                                      'hís/hér/theír book'

       d. *son livre à Charles   'Charles' book'
           his book to Charles

It will be clear from the Dutch and French examples that the transition
from Clitic to Appositional type of construction is asymmetric in the sense
that person/number distinctions, and the distinction pronominal versus nominal
Possessors, play an important part in the differential transition from one
language to another. Thus in French, pronominal Possessors can be added in the
above-mentioned construction, but not nominal ones, while in Standard Dutch it
is the singular NP Possessor Appositional construction that is rapidly gaining

ground. Its plural counterpart (cf. (36)c) is more marked and the third person singular pronominal Possessor in this construction is definitely substandard. Third person plural, and first and second person pronouns are ungrammatical in the Dutch examples. Another example of asymmetric development is offered by Wolio, an Austronesion language described by Anceaux (1952). The author explicitly states that the Appositional construction in this language (exemplified by (39)) can be used only with nominal Possessors.[15]

(39)   Wolio (Austronesion;Anceaux 1952):

bulu-na   pani-na   'the feathers of his wings'
feather-3poss wing-3poss

We do not have enough data as yet to make claims about universal tendencies concerning asymmetric transitions. It may be the case that specific languageinternal restrictions collide with universal tendencies. For instance, one might assume that the function of the free Possessor form (further specification of the bound pronominal form, the latter giving only information as to the person/number/gender of the Possessor) favours a lead for the Nominal Possessor NPs. The adding of a free pronominal Possessor form would then be an extension of the pattern set by the nominal NPs. If this is correct, the development shown by Dutch would be the unmarked one. In French, however, Possessor pronouns cannot be stressed if Focus.   Adding   a pronoun in an Appositional construction is therefore the only method of expressing Focus in this language. This may explain the lead that pronominal Possessors have in Possessive constructions, especially since none of the possessive pronouns show the gender of the Possessor (only of the Possessed) and the third person pronoun is unmarked for number of the Possessor also (though it agrees in number with the Possessed Item).

However this may be, the development described here will lead to pure Appositional construction types as exemplified by (26)-(29) from Abkhaz and Hungarian. As these were extensively discussed in section 1. above, we will now summarize the development described in this section:

1. Both nominal and pronominal Possessors are expressed as free NP forms; they may be morphologically or adpositionally case-marked, but the Possessed Item phrase is not marked; in order to show the parallelism with the development sketched in section 3.1., we will call this the FREE PRONOUN stage.

2. Nominal and stressed pronominal Possessors are expressed as in the previous stage, but unstressed pronominal Possessors cliticize to the Possessed Item phrase; this is the CLITIC stage.

3. Bound pronominal forms indicating Possessor become part of the morphology of the Possessed Item phrase; free Nominal and pronominal Possessor phrases can be added by the speaker to give further semantic or pragmatic information; this is the APPOSITIONAL stage.

All three stages of this development in one language (or language-group) can be hypothesized for Mongolian, judging from the evidence presented by Comrie (1980) (see the references cited therein). In Classical Mongolian the genitive-marked personal pronouns preceded the Possessed Item Phrase, but they could be postposed if unemphatic (see (40)a.-b.). In the modern dialects of Buryat and Kalmyk, we find Clitic and Appositional types of constructions which clearly derive from the Classical pattern involving an unemphatic pronoun[16]:

(40) Classical Mongolian (Altaic;Comrie 1980):

   a. mi-nü morin   'my horse'
      1s-gen horse

   b. morin mi-nü   idem
      horse 1s-gen

(41) Buryat (Altaic:Mongolian;ibid.):

   a. miñi   axa   'my elder brother'
      1s(gen) elder brother

   b. axa-m(ni)   idem
      elder brother-1s

   c. *miñi   axa-m(ni)
      1s(gen) elder brother-1s

(42) Kalmyk (Altaic:Mongolian;ibid.):

   a. *mini   mören   'my horse'
      1s(gen) horse

   b. (mini) möre-m   idem
      1s(gen) horse-1s

This development parallels a similar process on the clause-level: Khalka (a conservative dialect) shows a Free pronoun construction, while Buryat has an Appositional one:

(43)   Khalka (Altaic:Mongolian;Comrie 1980):

    a. bi med-ne   'I know'
       I know-Pres

    b. med-ne   bi   idem
       know-Pres I(unemphatic)

(44)   Buryat (Altaic:Mongolian;ibid.):

    (bi) jaba-na-b   'I am going'
     I   go-Pres-1s

Finally a return to the FREE PRONOUN stage may occur by erosion of the
possessive affixes (as we saw in the case of the verbal affixes), or simply by
dropping them[17]. The data on Mangarayi provided by Merlan (1982) seem to point
to this possibility. As (45) shows, Mangarayi is still a clearly APPOSITIONAL
language in the construction with pronominal possessor. According to Merlan,
'it is fairly common to find an "emphatic" use of independent pronoun with a
possessed noun (...)'(1982:29).

(45)   Mangarayi (Australian;Merlan 1982):

    a. ṇa-muyg-ŋanju   'my dog'
       masc.nom-dog -mine

    b. ñagaŋgu ṇaḷa-la-ŋga   'your mother'
       2 sg.gen fem.nom-mother-yours(sg)

However, with a nominal Possessor, the possessive affix may be dropped,
witness:

(46) Ø-baṇam(-ŋayawn)   ŋaya-yilambuṛa
     neut.abs-camp-hers   fem.gen-aunt

This concludes the discussion of pronominal elements marking Possessor. We
now turn to the pronominal elements referring to the Object of adpositions.

3.3.   Pronominal affixes on adpositions: 'inflected adpositions'

We have fewer data of pronominal affixes on adpositions than of pronominal
affixes on nouns and verbs, mainly because they occur less frequently in the

languages of the world. There are languages (of the consistently APPOSITIONAL
type) which have these affixes on all three levels of the grammar, as shown by
the Abkhaz examples (5) and (6) from section 2 (here repeated as (47) and
(48)):

(47) Abkhaz:

    a-jəyas   a-q'+nè   'at the river'
    the-river it-at

(48) (sarà) s-q'ə+n+t°'   'from me'
    I   1s-from

There are also languages which have bound pronominal forms on both nouns
and adpositions in a Clitic type of construction, such as Persian (cf. (50)
and (51)); on   clause level, Persian has an Appositional type of
construction for Subject, and a Clitic type of construction for Direct Object
(cf. (49)):

(49) Persian (Indo-European;Limburg 1982):

    a. (man) to   râ   did-am   'I saw you'
       I   you Acc saw-1s

    b. (man) did-am-at   idem
       I   saw-1s-2s

    c. *man to râ did-am-at
       I you Acc saw-1s-2s

(50) a. ketâb-e   mâle man   'my book'
       book-ezafe[18] of   I

    b. ketâb-e   man   idem
       book-ezafe   I

    c. ketâb-am   idem
       book -1s

    d. *ketâb-am(-e)   (mâle) man
       book-1s-ezafe of   I

(51)a. ruye man   'on me'
      on   I

    b. ruy-am   idem
      on-1s

       c. *ruy-am man
          on-1s I

Lastly, in Modern Hungarian, clearly Appositional type of constructions are
still found on the Clause and NP-levels, but on the Adpositional level the
system is not consistent anymore in that nominal Objects of the adposition are
not coupled with a pronominal suffix in the modern language, witness (52) and
(53) (=(11) and (12)):

   (52) Hungarian:

       a   ház   alatt   'under the house'
       the house under

   (53) (én-)alatt-om   'under me'
       I   under-1s

As stated in section 2, the construction with the pronominal suffix was found
in Hungarian until the 19th century. Even as early as the 15th century,
however, there was some simplification of the system in that the
singular/plural distincion was neutralized with nominal Object of
postpositions (cf. (54) = (13), and (55))[19]:

   (54) a   ház   alatt-a   'under the house'
       the house under-3s

   (55) barat-ok-nak   elewt-e   'before the friends'
       friend-plur-dat before-3s

    All of this suggests that pronominal affixes on adpositions may be more
vulnerable diachronically than those on nouns and verbs, i.e. that the former
arise simultaneously with, or later than, the latter, and disappear
simultaneously or earlier. We know of no language with affixes on adpositions
in clearly Appositional constructions, but with no such affixes on both nouns
and verbs, while the opposite situation (affixes on nouns and verbs, but not on
adpositions) does occur. Of the languages discussed in this paper, spoken
French is an example. Similarly, though in spoken Dutch pronouns regularly
cliticize onto nouns and verbs and Appositional types of constructions arise
under these conditions, the same does not hold on the adpositional level.
Unstressed pronouns do cliticize, and bound forms for 3rd person singular
inanimate pronouns do exist, but there is no tendency to use free NP forms,

not even in apposition to the latter (cf. (56) - (57)):

(56) Spoken Dutch:

Ik heb aan je /aan 'm / aan 'r/* aan 't/er-aan   gedacht
I have of you/of him/ of her/ of it/there-of thought
'I've been thinking of you/him/her/it'

(57) *Ik heb Jan aan 'm// die/dat er-aan   gedacht
I   have John of him// that   there-of thought
'I've been thinking of John/of him/of it'

One reason for the fact that pronominal affixes on adpositions arise no
earlier than those on verbs and nouns could be hypothesized to be the origin
of adpositions themselves. As is well known, adpositions arise historically
from nouns and verbs. Mallinson & Blake (1981: 385-388; see the references
therein) quote a number of examples such as the Sanskrit adaya 'with',
deriving from a participle meaning 'having taken', Jacaltec ul 'in', deriving
from huluj 'to come', Finnish kohdalla 'on the spot of' (from the adessive of
kohta 'place'), side by side with more familiar examples like English because
of (from 'by cause of').

Now, if we assume that adpositional affixes arise from a reinterpretation
of verb + (Object) pronominal affix and noun + (Possessor) pronominal affix,
this would explain why the former arise no earlier than the latter. It would
not, however, explain the earlier demise of adpositional affixes, nor the
consistent use of them with all adpositions in those languages that do have
them.

Furthermore, there are cases where a noun must have become an adposition
before bound pronominal forms could be added. In (58) for instance, the noun
hely 'place' is followed by an old locative case-ending and a pronominal
affix.

(58) Modern Hugarian:
hely-ett-em   'instead of me'
place-loc-1s

If a construction of noun + pronominal affix had been the basis of this
construction, we would have expected the order N - possessive affix -
locative. We must therefore allow for the possibility of pronouns cliticizing
onto adpositions and becoming pronominal affixes, or for analogical spreading of
affixes to adpositions, or both.

We will, for lack of relevant data, leave the discussion of this question and turn to the question of how the assumption of the diachronic development sketched above can help to explain synchronic asymmetries in the grammars of languages, and predict the direction of change.

3.4. **Transitional stages**

The diachronic development summarized in Figure 1 of section 3.1. (here repeated) makes it possible to characterize languages as being of the FREE PRONOUN, CLITIC or APPOSITIONAL type, according to the type of construction that predominates in that language. Thus, English can be said to be of the first type, standard French of the second, and Abkhaz of the third.
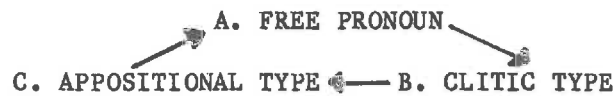

Figure 1. The diachronic cycle

This is of course an idealization in the sense that the diachronic process posited in this paper is a gradual one and that, therefore, many languages will be in transition from one stage to another. In this specific sense, these languages can be called 'inconsistent' as to type.

The inconsistencies one can expect on the basis of the diachronic development fall into two categories which we shall call <u>horizontal inconsistencies</u> and <u>vertical inconsistencies</u>. By the former is meant the situation whereby a particular construction is either between two stages in its development, or, if it has reached a certain stage, displays asymmetries in its characteristics which are left over from the earlier stage. We will exemplify this in section 3.4.1. by the gradual demarking of Themes and Tails on   Sentence level, and the traces left by this process in Appositional constructions.

The other category that of 'vertical inconsistencies', follows from the fact that there may be a differential development on the Sentence , NP , and PP levels. Furthermore, on the Sentence level there may be differences according to the semantic/syntactic roles of the NPs involved, e.g. Subject, Direct Object, or Indirect Object. We will illustrate this from Berber in section 3.4.2.

3.4.1. Horizontal inconsistencies

In the discussion of the Appositional type of construction (on Sentence level) in section 3.1.3., we cited   Non-Standard French (NSF) as an example of this type (cf. (25)b , repeated here as (59)):

(59) Moi le livre
      Moi ton frère
      Ton frère
      Ton frère moi   } j -le-lui-donne, { à ton frère
      Ton frère le livre   le livre
      Le livre   moi, le livre
      Le livre, moi   le livre
                                                  moi
                                                  moi, à ton frère
                                                  à ton frère

There are still some differences, however, between the construction in (59) and a pure, consistent Appositional construction as the Abkhaz examples (cf. (1), (2)). These differences concern

a. intonation; note that in some cases an intonation break is still required in NSF, as indicated in (59) by the presence of a comma;

b. definiteness of NPs; all NPs in the Appositional construction in NSF must be definite; this requirement is further discussed below;

c. case-marking; in NSF all arguments following the verbal complex must be appropriately case-marked if their syntactic/semantic role requires it, while NPs preceding the verb are never so marked (cf. the absence or presence of the Preposition à in (59)).

The last asymmetry follows from the definitions of _Theme_ and _Tail_ as given by Dik (1978:130):

"A constituent with Theme function presents a domain or universe of discourse with respect to which it is relevant to pronounce the following Predication."
"A constituent with Tail function presents, as an 'afterthought' to the predication, information meant to clarify or modify (some constituent contained in) the Predication."

That is, a Theme-constituent can be regarded as an announcement on the part of the Speaker of the topic of the following sentence or sentences. It is natural to suppose that it is generally selected (if not uttered) before the following sentence is planned. That is, while selecting or uttering a Theme, the Speaker does not yet know what semantic/syntactic role the co-referential NP in the

sentence is to play, i.e. he does not yet know how to case-mark it.

The Tail, on the other hand, follows the co-referential element in the sentence as an afterthought, and can therefore be appropriately case-marked (which will facilitate interpretation).[20] We predict, on the basis of the definitions of Theme and Tail given above, that if a language has differential case-marking in an Appositional type of construction, the asymmetry is as in NSF.[21]

It is a well-known (though unexplained) fact about many languages that Theme and Tail cannot be specific indefinite. This characteristic sometimes carries over into the APPOSITIONAL stage, so that there is no 'agreement' in the case of indefinite NPs. Thus, Lambrecht (1981) notes that in NSF neither 'topics' (his term for ex-Themes) nor 'antitopics' (ex-Tails) can have referents that are new in the discourse. As a formal consequence of this, the NPs in Appositional constructions in NSF may be definite (cf. (60)), generic ((61)), or partitive ((62)), but not referentially specific-indefinite ((63); all examples from Lambrecht 1981:61,84,85):

(60) a. Le garçon il-attend devant la porte
        the boy   he-waits before the door
        'The boy is waiting before the door'

    b. Il-attend devant la porte, le garçon

(61) a. Un garçon ça-attend   pas devant la porte, ça-entre   tout de suite[22]
        a boy   that-waits NEG before the door, that-enters straight-away
        'A boy doesn't wait before the door but enters straight-away'

    b. Ça-attend pas devant la porte, un garçon, ça entre tout de suite

(62) a. Des   femmes comme ça   on-en-voit   pas souvent
        Indef.pl.women like that one-of+it-sees NEG often
        'One doesn't often see women like that'

    b. On-en-voit pas souvent, des femmes comme ça

(63) a. *Un garçon il-attend devant la porte

    b. *Il-attend devant la porte, un garçon

A grammatical equivalent of (63) would be the following, rather different construction:

(64) Y-a   un garçon qu'attend devant la porte
     there-is a boy   that-waits before the door
     'There is a boy waiting before the door'

This asymmetry in construction type according to definiteness (Appositional
only for definite NPs) is illustrated by Givón (1976) for Direct Object in a number
of languages, such as Rwanda (Bantu;cf. (65)) and Ge'ez (South-Semitic, (66)):

(65) a.   ya-bonye umunhu   'He saw a man'

     b.   ya-mu-bonye umunhu   'He saw him, the man' or 'He saw the
                                      man'

(66) a.   rɨʔɨyä bɨʔɨse   'He saw a man'
             he+saw man

     b.   rɨʔɨy-o   lä-bɨʔɨse   'He saw the man'
             he+saw-him DEF-man

As also noted by Givón (1976:163), the differential inflectional paradigms of
Hungarian (according to whether the Direct Object is 3rd person definite or
not; see section 2. above) may derive from the same diachronic process as the
definiteness-asymmetry here discussed[23]. We now proceed to the discussion of a
different type of 'inconsistency'.

3.4.2. Vertical inconsistencies

In section 3. above, some examples cropped up of languages with different
types of constructions on Sentence , NP and PP levels. Furthermore, it was
apparent in some places that the syntactic/semantic role of an NP on the
Sentence-level may be relevant. Hungarian for instance was shown to have a
verb morphology that distinguishes all persons and both numbers of the
Subject, but not for the Direct Object. The verbal morphology shows only
whether the latter is 3rd person definite or otherwise. This means that leaving
out the coreferential Direct Object will create more ambiguity than leaving out
the free Subject NP:

(67) Lát-t-am
     see-Past-1s(2nd form)
     'I saw him/her/them'

This in turn will mean in practice that a free Direct Object NP form will be added more frequently than a free Subject NP form, and that the process of transition from APPOSITIONAL type of FREE PRONOUN type is dependent on the role of the argument. In French too there seems to be a similar difference, but this time in the transition from CLITIC to APPOSITIONAL type. For both Subject and Direct (and Indirect) Object, Appositional constructions are possible and very common. However, the statistical analysis of a large sample of spoken French by Jeanjean (1981) shows that most Subjects take the form of a bound pronoun alone (about 90%, cf. ibid.:99), but of the free nominal NPs, about 70% were realized with a co-referential bound form as well.[24] That is, constructions like (68)b far outnumbered constructions like (68)a :

(68) a. et dans ce   cas le patron ne paie aucun frais
        and in   that case the boss   Neg pays any   tax
        'and in that case the boss doesn't pay any tax'

     b. les types ils savaient plus   où   ils étaient
        the guys   they knew   anymore where they were
        'those guys didn't know where they were anymore'

On the other hand, more than 50% of the Direct Objects were expressed by nominal free NPs. Of these, however, only 7% were realized in combination with a bound pronoun. That is, constructions like (69)a far outnumbered those like (69)b :

(69) a. elle a   été obligée d'arrêter ses études   d'architecte
        she had been obliged to-stop   her studies   of-architect
        'she had had to stop her studies of architecture'

     b. et votre mari   on le vois jamais
        and your husband one him sees never
        'and we never get to see your husband'

It is differences like these that may become grammaticalized and thus clearly show up as vertical inconsistencies. We can, for instance, compare different dialects of Berber in this light and hypothesize that one dialect is more advanced than another. Data from Galand (1964) show that the Shluh (or Chleuh) dialect of southern Morocco is predominantly CLITIC in type, while the Kabyle dialect of Algeria has proceeded further (see Table 5 above for the pronominal forms of a central Moroccan dialect quite close to Shluh). Both dialects have a Clitic type of construction for Subject, as well as an Appositional one:

(70) a. argaz, i-krz (Shl.&Ka.)   'The man (he) has worked'

    b. i-krz urgaz   (Shl.)

    c. i-krz wərgaz (Ka.)

However, while the Shluh dialect has Clitic type constructions for Direct and
Indirect Object and for Possessor on the NP-level (and probably for Object of
the adposition on the PP-level[25]), Kabyle has Appositional constructions for
these (we lack data on the Indirect Object in Kabyle since Galand does not
discuss it):

(71)   Shluh:

    a. (igr,) i-krz-t
       field 3sm-work-3smDO
       'The man is working it (the field)'

    b. (argaz,) fki-ġ-as   aġrum
       man   gave-1s-3sm bread
       '(The man,) I gave him bread'

    c. (argaz,) t-fulki   tgmmi nn-s
       man   3sf-beautiful house of-3sm
       '(The man,) his house is beautiful'

(80)   Kabyle:

    a. i-kərz-it   yigr
       3sm-work-3smDO field
       'He has worked the field'

    b. ur-ssin-ġ-ar(a) ism-is   wəqšiš-a
       NEG-know-1s-NEG   name-3sm boy(ĖdA)-that
       'I don't know that boy's name'

    c. šaggɛ-ən ġəṛ-s   uməhbul-ənni
       sent-3pm for-3sm scoundrel(ĖdA)-that
       'They sent for him, that scoundrel'

The situation with respect to these two dialects can be summarized as in
Figure 3. Note that, if our theory is correct, it now becomes possible to
range related dialects on a scale of 'conservativeness' or 'advancedness', and
to predict the direction of change.

One characteristic of Berber that makes it particularly interesting for
our purposes is the special form of the Noun called 'État d'Annexation' (ÉdA;
see discussion in 3.1.3.). Penchoen (1973:19) mentions that this 'state' is
used after prepositions, in noun complements, after certain numerals, and
'when the noun is subject of the (verbal) utterance and is placed after the
verb'. We can now explain the last, somewhat odd, condition for use of the
ÉdA. The function of this form is to indicate a close link with some other
element. The other element can be a preposition, another noun, a numeral, or a
pronominal element with which the noun in ÉdA is Appositionally linked. In the
dialect discussed by Penchoen (1973), only the Subject is used in an
Appositional construction, but in Kabyle nouns with other functions are used
in Apposition and therefore appear in the ÉdA.
The Subject-noun is only in the ÉdA if placed after the Verb, since, if placed
before the verb, it is not in any construction at all with any element of the
main clause but has the function of Theme.

   The Berber data thus give a clear presentation of the process of
syntacticization that takes place when Themes and Tails are drawn into the
Sentence. Though Galand (1964) sometimes translates Appositional constructions
as if they involved Themes or Tails (cf. (72)c.), it is clear from his
discussion of the intonation and from the special form they have that they
have in fact become part of the Sentence.

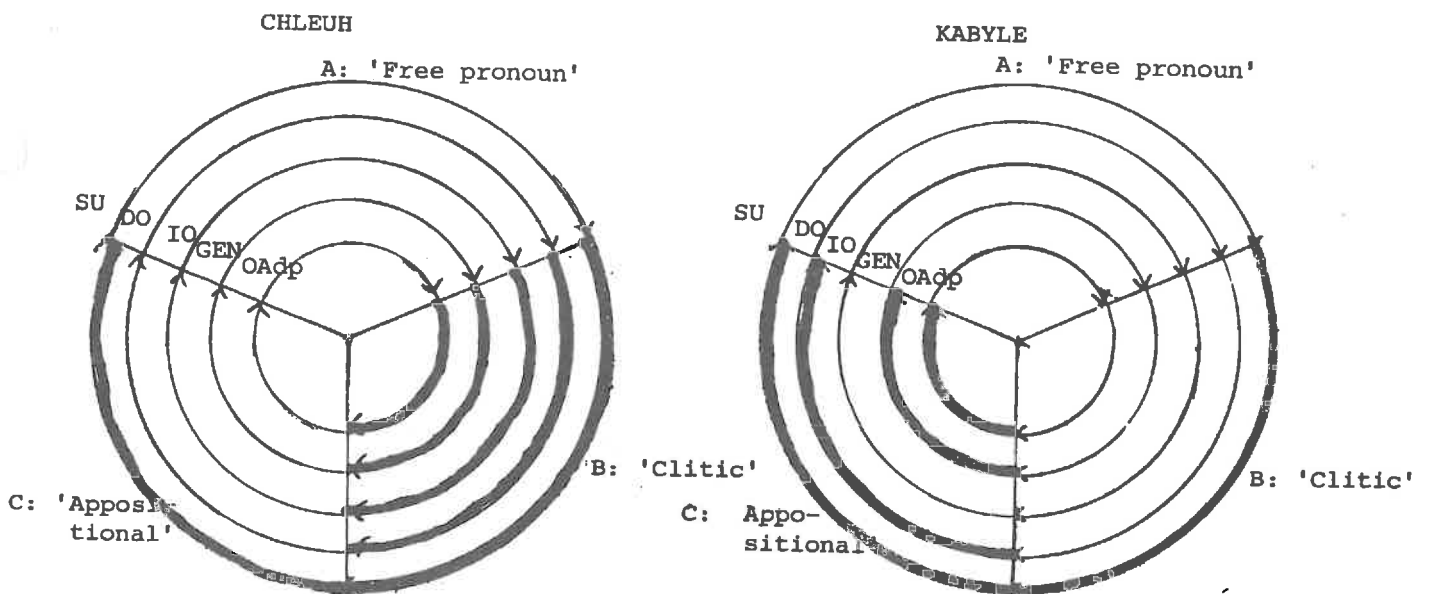   We now turn to the formalization of the types of constructions discussed.

Figure 3. Type of construction varying with level and syntactic/semantic role
in two Berber dialects (SU=Subject, DO=Direct Object, IO=Indirect
Object, GEN=Genitive, OAdp=Object of Adposition)

4.   Formalisation

This section attempts to formalise the construction types discussed in section 3 above within the framework of Functional Grammar (FG) as developed by Dik (1978)[84]. The choice of the theoretical model is motivated by the fact that FG provides a framework which is most suitable to account for the construction types involved, and which is also compatible with the lines of linguistic research favoured here. We will briefly summarize the basic tenets of the theory and illustrate relevant details needed for the present discussion.

4.1. Functional Grammar

FG aims at a maximum of practical applicability in the analysis of diverse aspects of language and language use. An attempt is made to reach this goal by (i) maximizing the degree of typological adequacy, while (ii) minimizing the degree of abstractness of linguistic analysis. By degree of abstractness is meant the distance (as measured in terms of rules, operations, or procedures) between the structures postulated for a given language on the basis of the theory, and the actual linguistic expressions of that language which are constructed in terms of these structures. Constraints restricting the degree of abstractness are the following:

(i)   transformations in the sense of structure changing operations are avoided;

(ii)   empty elements in underlying structure which do not receive expression are avoided;

(iii)   filter devices are disallowed;

(iv)   abstract lexical decomposition is not applied (instead the semantic relations between words are accounted for through meaning definitions).

The lexicon is considered to be a list of all predicates (contentives) of a language. Only those predicates are stored in the lexicon which cannot productively be derived from other predicates. They are called basic predicates. All formations of a basic predicate which cannot be considered the result of some productive rule (this also includes inflectional rules), are given in the lexicon. too. For instance: buy (Past bought), and not walk (Past walked) because the formation walked can be described by a general rule; this form need not be stored in the lexicon. Thus, in a lexicon of English we will find under one lexical entry the forms I, me, my and mine together with the conditions under which these forms must be used[87].

Predicates are expressions designating properties or relations. They are
contained in predicate-frames, structures which specify   fundamental
semantic and syntactic properties, such as (i) the syntactic category of the
predicate (Verbal, Nominal, Adjectival), (ii) the number of arguments, (iii)
the semantic functions of the arguments (Agent, Goal, Recipient etc.). All
predicates have a meaning definition, for instance:

(81) boy_N $(x_1)_{\phi}$

   $\underline{df}$

          $child_N$ $(x_1)_{\phi}$: $male_A$ $(x_1)_{\phi}$

The set of basic predicates (given in the lexicon) can be extended with a
set of derived predicates by means of a productive system of predicate format-
ion rules, such as rules of derivation and composition (cf Dik 1980a Ch.2).
Basic and derived predicates are together referred to as nuclear predicates.
Nuclear predicate can be extended by satellites.   The
semantic funtions of the arguments express the relations between the predicates
and the arguments; the semantic functions of the satellites express the
relation between the state of affairs (designated by the predicate) and the
satellites. Consider:

(82) $[\underline{buy}_V$ $(x_1)_{Ag}$ $(x_2)_{Go}]_{ACTION}$ $(y_1)_{Loc}$

The variables indicating the arguments in extended predicate-frames
can be replaced by terms, i.e. the forms underlying NPs. Two types of terms are
distinguished: (i) basic terms, expressions which can only function as terms
and are given as such in the lexicon (e.g. personal pronouns, proper nouns,
question words) and (ii) derived terms, which can be formed by the following
general schema:

(83) $(\Omega x_i: \bar{\Phi}_1(x_i): \bar{\Phi}_2(x_i): \ldots: \bar{\Phi}_n(x_i))$

Here x_i is the term variable symbolizing the intended referent of the term;
the symbol Ω indicates one or more term operators (operators for definiteness,
number etc.); each $\bar{\Phi}(x_i)$ indicates some 'open predication in x_i', that is, a
predicate-frame all of whose argument positions have been bound except for x_i.
Each open predication in x_i can be regarded as a restrictor specifying some
property which x_i must have in order to qualify as a potential referent of the

term. Restrictors are stacked onto each other through the relation indicated by
':' ('such that'). Usually the first restrictor of a term will contain a
nominal predicate, and be realized as the head of the noun phrase. Later
restrictors will be realized as attributive modifiers or relative clauses. For
instance:

(84) $(d1x_i: \underline{boy}_N (x_i): \underline{buy}_V (Rx_i)_{Ag} (i1x_j: \underline{coat}_N (x_j): \underline{new}_A (x_j))_{Go})$

(84) is to be read as: 'the definite single entity x_i such that $\underline{boy}$ of x_i,
such that $\underline{buy}$ x_i an indefinite single entity x_j such that $\underline{coat}$ of x_j such
that $\underline{new}$ of x_j' (the boy who bought a new coat).
      Terms can be inserted into the argument and satellite slots of predicate-
frames. If such insertion is applied to all open slots of a given predicate
frame, the result is a (closed) predication.
      Terms can also form the input of a predicate formation rule, the so-called
'term predicate formation rule'. This rule enables us to create non-verbal
predicates of the type 'the killer' in 'John is the killer' ((85)a) or 'in the
garden' in 'John is in the garden' ((85)b) (see Dik 1980a, Ch.4).

(85) a. $((d1x_j: killer_N (x_j))_{\phi}) (d1x_i: John (x_i))_{\phi}$

     b. $((d1x_j: garden_N (x_j))_{Loc}) (d1x_i: John (x_i))_{\phi}$

      Alongside the semantic functions given in the predications itself, two
other types of functions, Pragmatic and Syntactic, operate. The pragmatic
functions are of particular interest here. FG distinguishes between pragmatic
functions external to the predication proper, Theme and Tail, and pragmatic
functions internal to it, Topic and Focus. Consider:

(86)   That new coat, he bought it on the market, Peter
           Theme   Predication   Tail

The Theme specifies the universe of discourse with respect to which the
subsequent predication is presented as relevant; the Tail presents, as an
'afterthought' to the predication, information meant to clarify or modify it.
The Topic, one of the two pragmatic functions internal to the predication
proper, presents the entity/entities 'about' which the predication predicates
something in a given setting (he and it in (86)). The other function,

Focus, presents what is relatively the most important or salient information in a given setting ('on the market' in (86)).

Syntactic functions express the perspective in which a certain state of affairs is presented. Different Syntactic function assignment accounts for the difference in the expression of the same state of affairs in (87)a-b:

(87) a.   Past buy$_V$ (Peter)$_{AgSubj}$ (a new Coat)$_{Go}$
           'Peter bought a new coat'

     b.   Past buy$_V$ (Peter)$_{Ag}$ (a new coat)$_{GoSubj}$
           'A new coat was bought by Peter'

The expression rules form the last component in the model. The Expression rules determine the way in which functional structures are mapped onto morpho-syntactic structures of linguistic expressions. This component takes care of constituent order,   case marking, voice, copula support, auxiliary elements, agreement etc. The organization of a Functional Grammar is given in figure 4. below.

Before we turn   to the discussion of Appositional constructions within the theory of FG, we will first discuss how 'person' and 'apposition' can be treated in that theory. A proposal of how 'person' can be represented in FG is given in section 4.2. A more detailed discussion of 'apposition' and its representations follows in section 4.3.
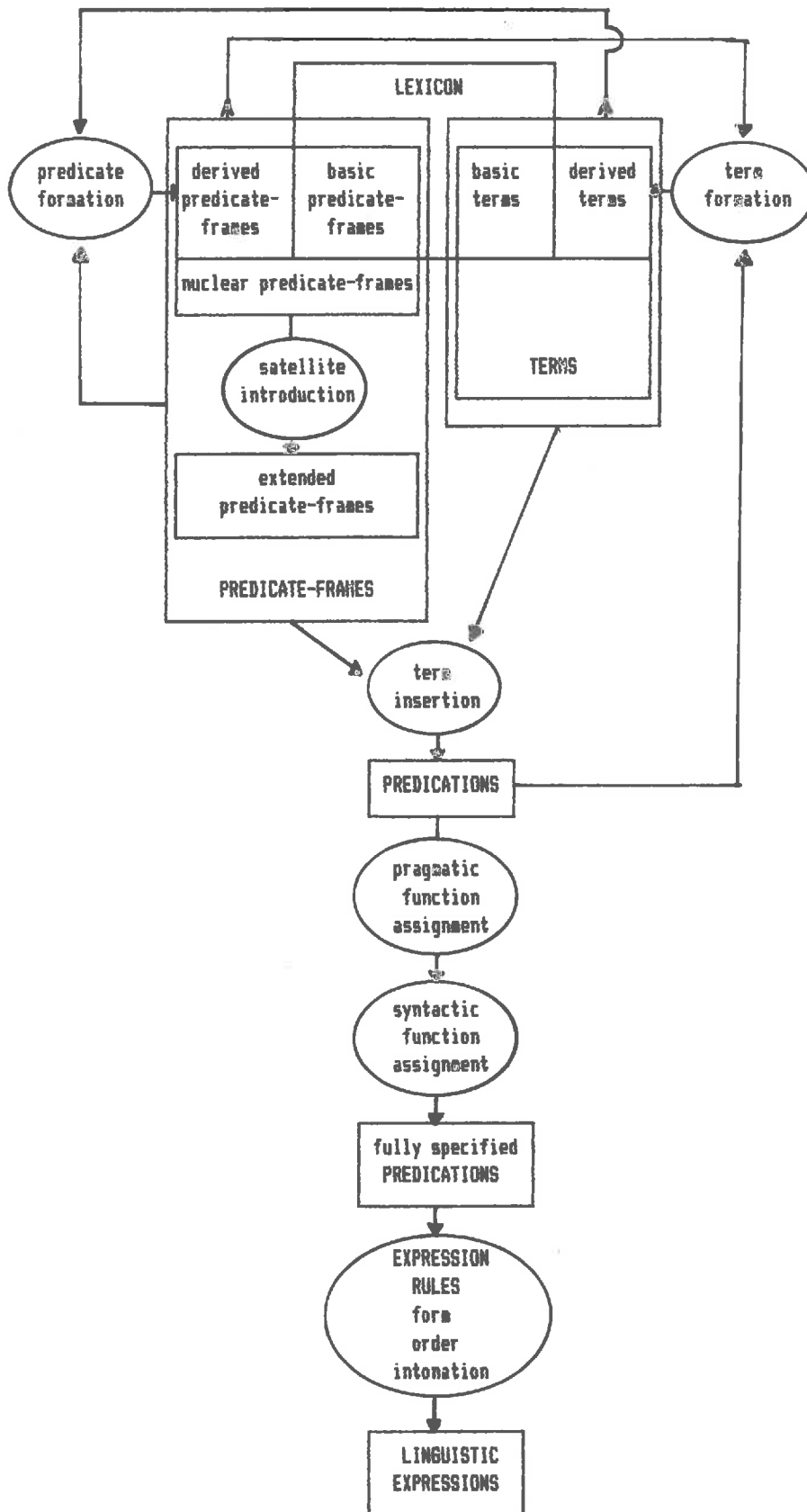
Figure 4. The organization of a Functional Grammar (Dik 1978, third printing, p.23)

4.2. The representation of 'person'

A representation of person must account for two elements: the form and the meaning of 'person'. With regard to personal pronouns we meet the requirements for the expression of person by introducing them as basic terms of the following form (cf. Dik 1980:54):

(88) $(d1x_i : he_{PRO} (x_i))$

The other requirement is fulfilled if such basic terms can be given an appropriate meaning definition. We assume that such meaning definitions can be given in terms of the notion S (Speaker) and A (Addressee), i.e. participants in communicative settings. A principle of functional explanation applied in FG is that a theory of language systems must be easily and realistically incorpor able into a wider theory of verbal interaction. This motivates us to adopt the notions Speaker and Addressee from a general pragmatic theory for an account of 'person' on the level of language system. These notions are different from predicates with a lexical form and meaning. For instance, 'I' refers to the Speaker in a particular communicative setting in contradistinction to the lexical expression 'the speaker'. That is why we introduce them as 'abstract predicates', i.e. predicates without a lexical form, but with the features ±S and ±A²⁸, whose function it is to index the participants in communicative settings.

Abstract predicates are contained in basic terms of the following form:

(89) a. $(d1x_i : \begin{bmatrix} +S \\ -A \end{bmatrix} (x_i))$ (first person singular)

b. $(d1x_i : \begin{bmatrix} -S \\ +A \end{bmatrix} (x_i))$ (second person singular)

c. $(d1x_i : \begin{bmatrix} -S \\ -A \end{bmatrix} (x_i))$ (third person singular)

d. $(d2x_i : \begin{bmatrix} +S \\ +A \end{bmatrix} (x_i))$ (first person dual, inclusive)

e. $(d2x_i : \begin{bmatrix} +S \\ -A \end{bmatrix} (x_i))$ (first person dual, exclusive)

f. $(dmx_i : \begin{bmatrix} -S \\ -A \end{bmatrix} (x_i))$ (third person plural)

etc.

The meaning definition of (88) can now be given in the form of represent-
ation (89c). Consider:

(90) $(d1x_i: he_{PRO} (x_i))$

   $\underline{df}$

   $(d1x_i: \begin{bmatrix} -S \\ -A \end{bmatrix} (x_i))$

Insertion of (88) into the argument slot of $\underline{work}-_V$ results
in (91)a; an expression rule introduces the agreement morpheme in (91)b:

(91) a. $\underline{work}-_V (d1x_i: \underline{he}_{PRO} (x_i))_{Ag}$

   b.   he work-s

With regard to languages such as Hungarian, there remains the question of
how to account for referential affixing on verbs. Recall the diachronic
development of free pronouns into clitics, then into referential affixes which
wear off to agreement affixes (section 3 above).

   As proposed above, free pronouns will be introduced as basic terms, i.e.
lexically. Clitics can be introduced in the same way. Clitics differ from free
pronouns in that clitics are attached to a (lexical) element and
cannot be contrastively stressed. They may be weak forms of free pronouns. A
phonological rule must account for weak forms of strong pronouns. In the case
that weak pronouns or clitics cannot productively be derived from the strong
pronouns all different forms will be listed in the lexicon under one heading
like the irregular verb forms discussed above (see note 27), for instance $\underline{moi}$
and $\underline{je}$ in Standard French. An expression rule accounts for the location of
clitics in the linguistic expression.

   It seems to us that referential affixes must be introduced differently
because of the following considerations. In the development of free pronouns
through intermediate stages into grammatical agreement affixes there is a point
at which the representation of person by lexical items (free pronouns) switches
to non-lexical, grammatical forms, i.e. pronominal affixes. These grammatical
forms will be introduced by expression rules and not by lexical insertion, not
being basic terms. These grammatical forms can be taken to be the expression of
participants in communicative settings, as their proposed form indicates. We
illustrate the application of such (an) expression rule with the following Hungarian
example. Rule (92) accounts for the expression of 'first person singular' in
(93):

(92) $\text{Pred}_V \, (d1x_i : \begin{bmatrix} +S \\ -A \end{bmatrix} (x_i))_{\text{ARG-1}} \quad \longrightarrow \quad \text{Pred}_V\text{-}\underline{ok}$

ARG-1 = 'first argument' (cf. De Groot 1981)

(93)   olvas-ok   (read-1s 'I read')

The free pronoun <u>én</u> ('I') is listed in the lexicon, and may be introduced in certain pragmatic circumstances in addition to the obligatory ending <u>-ok</u>. The rule for doing this is discussed in section 6. Note that this formalization captures the function of the pronominal affixes involved: the latter are the obligatory expressions of underlying referential elements, and not the result of some rule copying features of a constituent that may not be present at the surface.

A consequence of our approach is that forms (such) as <u>moi</u> and <u>je</u> in Standard French will be treated differently from the homophonous forms in Non-Standard French. But this is only right since, as we explained in section 3, the function of these elements is different. In S.F., <u>je</u> and <u>moi</u> are in complementary distribution and are both listed in the lexicon as alternative forms with the same meaning definition. In N.S.F., however, <u>je</u> is introduced by an expression rule comparable to the rule for Hungarian <u>-ok</u>, and only <u>moi</u> is listed in the lexicon. It may be introduced under specific pragmatic conditions as an extension of a verb form already marked by <u>je</u>. Thus the diachronic change in the function of the elements involved is accounted for.

The concept of abstract predicates is not contradictory to the constraint on empty elements in underlying structure as mentioned in section 4.1. above, because abstract predicates are not empty elements. Moreover, it is necessary. Consider the following two cases: (i) zero-marking, and (ii) expressions with covert anaphoric or deictic reference.

(i) In Hungarian there is person-marking on the verb in all cases except third person singular subjects. In that case there is zero-marking. Consider the following examples:

(94) a.   olvas-ok   (read-1s 'I read')
     b.   olvas-ol   (read-2s 'you read')
     c.   olvas-ø   (read-3s 'he/she reads')

Since (94)c with no ending has the specific interpretation 'he/she reads', this must be represented somehow in the underlying form. This is comparable to (95)a, where the noun <u>kabát</u> with no ending has the specific interpretation of

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'coat singular'. Just as the term operator 1 ('singular') expressed by ∅
accounts for the number interpretation, the abstract predicate in (94)c
expressed as ∅ accounts for the interpretation 'third person singular'.

(95) a.   kabát-∅   (coat-sg 'coat')
     b.   kabát-ok   (coat-pl 'coats')

(ii) The concept of abstract predicates seems to be warranted in order to
account for 'empty anaphoric arguments' (see (20)) and 'empty deictic argu-
ments' in, for instance, the Dutch utterance (96), made by a person who looks at
a   plate of   oysters in front of him:

(96)   ∅ lust ik niet
            like I not
          "I do not fancy them"

          This concludes the discussion of the representation of person. We will look in
the next section at the representation in FG of constructions traditionally
labelled 'apposition' in order to be able to formalize in section 5 the
constructions of free NP forms in apposition to pronominal affixes.

4.3. The representation of apposition

      In this section we will mainly follow Quirk et al. (1985:1300ff);   we
refer to their exposé for further information on this subject.
      For linguistic units to be 'appositives', i.e. in apposition, they must
normally be identical in reference. Thus <u>John</u> and <u>the winner</u> in (97) are
coreferential:

(97)   John, the winner, got flowers

For the constituents in constructions such as (97) we will use the term
'appositives' after Quirk et al. and not 'head' and 'apposition' (which will
use later for another type), because syntactically it is impossible to decide
which element is the head and which element is the apposition.
      Properties of constructions such as (97) are:
(i)   Each of the appositives can be separately omitted without affecting the
acceptability of the sentence;
(ii) Each fulfils the same syntactic function in the resultant sentences;

(iii) It can be assumed that there is no difference between the original
sentence and either of the resultant sentences in extralinguistic
reference.

For example, by omitting each appositive in turn from (97) we obtain two
sentences (98)a and (98)b:

(98)   a.   John got flowers
       b.   The winner got flowers

The relation between the two appositives is judged differently in the
linguistic literature. Quirk et al. mention that the relationship denoted by
apposition is analogous to a copular relationship. Pinkster (1984:118ff)
characterizes apposition in terms of head and apposition in the following
fashion. Semantically, appositions contain a predicate of the head; together
with the head they form one referential unit. Therefore they resemble the
head-attribute structure, but they are different: in appositional constructions
the head is omissible, whereas this is impossible in constructions with an
attribute.

At this point it is important to notice that a distinction can be made
between restrictive and non-restrictive appositions[89]. Semantically, they
differ in the same way as restrictive relative clauses differ from non-
restrictive relative clauses. Consider (99)a with a restrictive (Pinkster
1984:119) or close (Bloomfield 1933:186) apposition and (99)b with a non-
restrictive apposition:

(99)   a.   John's brother <u>Charles</u> lives in London
       b.   Charles, <u>John's brother</u>, lives in London

As opposed to non-restrictive appositions (e.g. (99)b), in restrictive
appositional constructions the relation between the two appositives can indeed be
considered a relation of head and attribute, i.e. head and restrictor. Given
the mechanism of term predicate formation (see section 4.1.) the restrictive
appositional construction <u>John's brother Charles</u> can straightforwardly be
assigned the following structure:

(100) $(d1x_i: \underline{brother}_N (x_i) (d1x_j: \underline{John}_N (x_j))_{Ref}:$
         $((d1x_k: \underline{Charles}_N (x_k))_\phi) (x_i)_\phi)$

The structure reads as "the singular entity x_i such that x_i is brother to John such that x_i is Charles". The head of the term is two-place brother (cf. Mackenzie 1983); the apposition, Charles, is represented as a restrictor in the shape of a term predicate which has x_i as its argument. The structure accounts for the view that apposition is a kind of attributive adjunct and that the apposition contains a predicate of the head.

The other type, the non-restrictive apposition, causes more difficulties. In this case, of course, the appositives cannot be represented as head and restrictor. Although (99)b has the entailment that 'Charles is John's brother', no predicative relation between the two appositives is expressed. It cannot be represented as a copular construction with one appositive a predicate and the other its argument. Moreover such representations would lead to unacceptable structures. This can be illustrated by the following example. If John's brother is the predicate of which Charles is the argument, the first argument of the verbal predicate live would contain an embedded predication, viz. a predication meaning 'Charles is John's brother'. The variable x_1 of that argument, however, can never have a predication as referent. Compare (101)a-b:

(101) a. $\underline{\text{live}}-_V (x_1)_{Pos} (x_2)_{Loc}$

     b. $*\underline{\text{live}}-_V (x_1:[\text{pred}_N (x_3)_\emptyset] (x_1)_\emptyset)_{Pos} (x_2)_{Loc}$

The verbal predicate live does not select an embedded predication as a first argument, like for instance say does with respect to the second argument. (101)b would give the nonsensical meaning 'that Charles is John's brother lives in London'.

We conclude that the relation between the appositives in non-restrictive appositional constructions is neither a relation of head and restrictor nor a relation of predicate and argument.

The solution we propose shows some similarity with the coordination of terms, i.e. two or more independent terms are joined to make a new term. We can treat apposition in terms of expansions of given elements of structure into appositional series of similar elements in a similar way as Dik (1980:191) has proposed for term coordination. This can be done by adopting the following general appositional schema (102):

(102) (x_i) $\longrightarrow$ $((x_i)^1, (x_i)^2, \ldots (x_i)^n)$ $(n \geq 2)$

which, operating on some element x_i, expands this element within the term into an n-ary series of appositional elements of the same type[20].

The relation of non-restrictive apposition (indicated by a [,] in (102)[31])
is of ^{a}pragmatic-semantic nature. The Speaker, in using the second (or third,
etc.) term, gives further information about the referent of the first term in
order to improve its identifiability for the Addressee. He may also use the
first term to introduce a referent and the second (or third, etc.) to comment
on its characteristics (cf. (103)), or give a different characterization or
appellation (cf. (104)).

(103)   John, the bastard, never put out a hand to help me
(104)   The Netherlands, often called Holland, borders on the North Sea

Note the similarity of this definition of non-restrictive apposition to those
of Theme and Tail. We assume that appositives fulfil pragmatic functions within
terms that are similar to the pragmatic functions Theme and Tail on the
sentence level[32].

A difference between apposition and coordination is that the elements in a
coordination refer to different entities and do not refer to one and the same
entity as in the case of apposition. Neither can the second element in a
coordination be a term that refers to a set of entities of which the term
referred to by the first element is a member[33]. Consider:

(105) a.   John$_i$ & the winner$_j$
      b. *John$_i$ & the winner$_i$
(106) a.   John and the football players
           (= John is not one of the football players)
      b. *John and the football players
           (= John is one of the football players)

According to scheme (102) the representation of the apposition (107)a will
be (107)b:

(107) a.   The winner, John
      b.   ((d1x$_i$: winner$_N$ (x$_i$)) , (d1x$_i$: John$_N$ (x$_i$)))

Representations such as (107)b account for the following properties of
appositional constructions:
(i)   the two elements united in one term can take one structural position
          in the clause;
(ii)   both elements refer to the same entity;

(iii)   the relation between the two elements is neither the relation of head
         and restrictor nor predication;

(iv)   the two elements are loosely related; they both refer to the same
         entity; the relation is of a pragmatic / semantic nature, either
         appositive can be taken as the nucleus of information.

From this discussion of 'apposition' we conclude that a basic distinction
must be made between restrictive and nonrestrictive apposition. The difference
can be accounted for in the following way. The appositive x_j is presented as
restrictor in (108)a; the non-restrictive appositive is presented as an
expansion of an element with the same referent (x_i) within a term:

(108) a. restrictive apposition

$$(x_i : Pred_{N_1} (x_i) : (Pred_{N_2} (x_j)) (x_i))$$

      b. non-restrictive apposition

$$(Pred_{N_1} (x_i)) , (Pred_{N_2} (x_i))$$

5.   Pronominal affixes

5.1. Pronominal affixes on verbs: 'agreement'

In section 3. we have seen that phenomena usually referred to as 'verbal
agreement' are as a group less homogeneous than the term suggests. A distinct-
ion can be made between referential and non-referential 'agreement' markers on
the verb. We have argued that a treatment of referential affixes as agreement
markers does not do justice to (i) their referential potential, (ii) their
diachronic relation to clitics and free pronouns, (iii) the types of construct-
ions in which they are used, and (iv) characteristics of languages having these
constructions. Moreover, given the theoretical framework such treatment is
highly disfavoured. We now summarize our argumentation against the agreement
approach to referential affixes.

Consider the following Hungarian example which is in itself a complete
expression:

(109)   dolgoz-nak
         work-3p
         'they work'

If _nak_ is considered to be the agreement marker for third person plural subject,
one is forced to posit that in such expressions there is a covert subject, or that

the subject is deleted. A step by step procedure   of this   gives us the
following picture:

    i.   insertion of a pronoun or some empty element in the argument slot (=
        subject);

    ii. agreement between subject and verb resulting in the addition of -nak
        to the verbal stem;

    iii. deletion of the pronoun or non-expression of the empty element.

Within FG such procedure is disfavoured. First of all, deletion is avoided
whenever that is possible. Secondly, from a psycholinguistic point of view, it
is unattractive to assume that a lexical or empty element is introduced only
for an agreement rule to be able to apply, and then to be deleted.

    We have proposed that   referential affixes as the spelling out of
terms consisting of an abstract predicate as discussed in section 4.2. above;
i.e. -nak in (109) is the spelling out of the first argument by a rule such as
(92).

    Free pronouns and NPs can be added as appositives to the referential
affixes. An example is(110), where the NP a fiúk 'the boys' is the appositive:

(110)   a   fiúk dolgoz-nak
         the boys work-3p
         'the boys work'

    In section 3 we argued that the structure of the unmarked clause in FREE
PRONOUN and CLITIC TYPE languages differs from that of APPOSITIONAL TYPE
languages. The former type of languages can be characterized as languages with
extra-clausal Theme and Tail constituents (cf.(111)a), the latter type as
languages with internalized Theme and Tail constituents (cf.(111)b):

(111) a. t_1 ... t_k, [Predication], t_{k+1} ... t_n
        Theme   Tail

     b. [Predication, t_1 .... t_n]
                 Apposition

    The following model of markedness shift accounts for the relation between
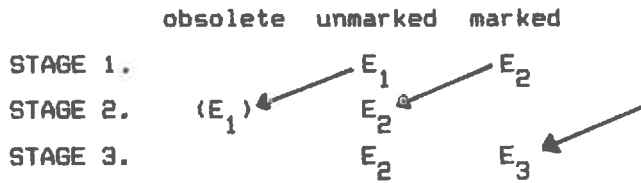these two structures:

MARKEDNESS SHIFT

```
          obsolete   unmarked   marked
STAGE 1.                  E           E
                           1           2
STAGE 2.     (E )         E
                1          2
STAGE 3.                  E        E
                           2        3
```

Figure 2. Markedness shift.

In stage 1 there is an opposition between an unmarked form E_1 and the marked form E_2. In stage 2 the marked form E_2 has become the unmarked form, whereas the unmarked form E_1 has become obsolete. In stage 3 a new marked form has been introduced, and the process of markedness shift may start over again.

The development of constructions with extra-clausal Theme and Tail constituents into constructions with internalized Theme and Tail constituents proceeds according to the pattern of figure 2. Ample evidence for such develop- ment has been given in section 3 above. Consider figure 5, where the construct- ion with extra-clausal constituents is represented as 'NP_{Theme},[Pred],NP_{Tail}' and the construction with internalized Theme and Tail constituents as '[NP ,Pred, NP]': STAGE 1. will be the FREE PRONOUN stage, STAGE 2. the CLITIC stage, and STAGE 3. the APPOSITIONAL stage.

MARKEDNESS SHIFT

```
          obsolete        unmarked               marked
STAGE 1.                    [Pred]            NP     ,[Pred],NP
                                                Theme          Tail
STAGE 2.    [Pred]      NP     ,[Pred],NP
                          Theme          Tail
STAGE 3.                 [NP, Pred, NP]        NP     ,[Pred],NP
                                                 Theme          Tail
```
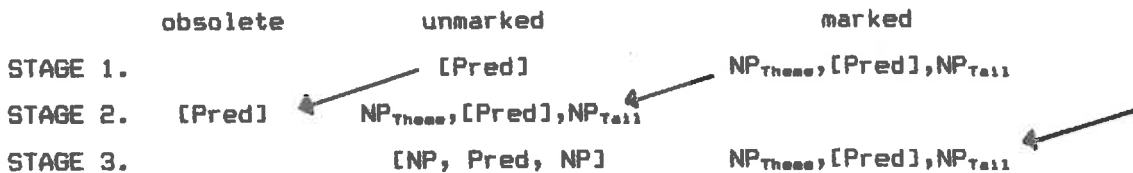
Figure 5. Markedness shift of extra-clausal constituents

After the grammaticalization of Theme and Tail constituents, i.e. when the development of external Theme and Tail constituents into internal constituents is a fact, the internalized constituents have lost the pragmatic Theme and Tail function. There remains the function of specification: they give further semantic (lexical NPs), or pragmatic (pronominal NPs) information or a combin- ation of these two (lexical NPs with Topic or Focus function). We have met this function earlier in the discussion of apposition. Therefore we will now relate the Appositional constructions in APPOSITIONAL TYPE languages to the two types of apposition (restrictive and non-restrictive).

The following example from Hungarian illustrates that the appositional
construction is not a restrictive apposition. Note that the appositives refer
to first person singular:

(112)   én tegnap   a   könyvtár-ban dolgoz-t-am
         I yesterday the library-in   work-Past-1sg
         "I have been working in the library yesterday"

én "I" in (112) must be an extension to the verbal form, because the analysis
of én as a restrictive apposition would lead to a term structure in which the
same restrictor occurs twice: x_i such that x_i is I such that x_i is I.

The Appositional type construction can be related to non-restrictive
apposition. The NPs or free pronouns give further semantic or pragmatic
specifcation. Galand (1964) for instance translates the Berber Appositional
construction i-krz urgaz (3sm-worked man) as 'he, namely the man, worked'.

This type of apposition, however, does not share all properties of
non-restrictive apposition (cf (97)): (i) the person-marking suffix on the verb
is not omissible, whereas the free pronoun is; (ii) the two forms often do not
occur next to each other in the sentence.

The Appositional construction may then be considered a sub-type of non-
restrictive apposition. We will call it 'grammatical apposition'. It can be
formalized in the following way:

(113)   Grammatical apposition
         (pronominal affixes on verbs and apposition)

         $[Pred_V (x_i) \ldots (x_n) , (x_i) \ldots (x_n)]$

The (Verbal) predicate has a number of arguments in the form of terms with
abstract predicates, which are to be expressed as affixes, and, optionally,
coreferential free NP-forms in apposition to these arguments.

5.2. Pronominal affixes on nouns: 'possessive affixes'

In section 3.2. above we have argued that the following NPs contain an
Appositional construction:

(28)   János kabát-ja   'John's coat'
         John coat-3s

```
(29)      a(z én) kabát-om          'my coat'
          the me  coat-1s
```

Jánes in (28) and én in (29) can be considered appositions to the referential
affixes on the nouns. First of all, note that constructions such as (28) and
(29) are considered constituents with a nominal head marked by a Possessive
affix and a free NP form (semantically/pragmatically) specifying the Possessor.
It is not clear whether the appositional terms in these examples originate
diachronically from extra-clausal constituents, as in the case of grammatical
apposition on the sentence-level. If they do, (114)a may be the original
construction, and (114)b the present one:

```
(114) a.  János, ott   van a   kabát-ja
          John    there is  the coat-3s
          'John, his coat is there'

      b.  ott   van János kabát-ja
          there is  John  coat-3s
          'John's coat is there'
```

In Classical Hebrew we find both constructions side by side; in Modern
Hebrew, however, the first one does not occur any longer. On the other hand, no
such reconstruction can be made for Dutch. Consider:

```
(115) a.  Ik heb  Jan  z'n boek gelezen
          I  have John his book read
          'I have read John's book'

      b. *Jan,  ik heb  z'n boek gelezen
          John  I  have his book read
```

If we accept, notwithstanding the example from Dutch, that the apposition-
al construction with a nominal head originates from constructions with an
extra-clausal constituent (cf. 114)a, we must account for the fact that two
distinct although coreferential constituents are united in one term structure
at the APPOSITIONAL stage. At the moment we do not have decisive evidence
favouring or disfavouring this analysis.

A synchronic account of the constructions in (28) and (29), however, will
not make use of an underlying Theme, predication construction, but will
generate both components, both appositives, in one term structure. As a matter
of fact, the formalization of pronominal affixes on nouns can be analoguous to
the one proposed for pronominal affixes on verbs (cf. (113)):

(116) $[\text{Pred}_N \ (x_i)] \ (x_j) \ , \ (x_j)$

(117) $[\underline{\text{kabát}}_N \ (x_i)] \ (\text{d1}x_j : \begin{bmatrix} -S \\ -A \end{bmatrix} \ (x_j))_{\text{Poss}} \ , \ (\text{d1}x_j : \underline{\text{János}}_N \ (x_j))_{\text{Poss}}$

A paraphrase of (117) is: 'his, namely John's, coat'

5.3. Pronominal affixes on adpositions: 'inflected adpositions'

Finally, we apply the formalisation to constructions with an adposition + referential affix and an apposition to the latter. Consider:

(118) a. helyett-e
          instead of-3s
          'instead of him'

      b. ö-helyett-e
          he-instead of-3s
          'instead of <u>him</u>'

      c. János helyett-e (archaic)
          John instead of-3s
          'instead of John'

If we apply the same analysis to the construction exemplified by (118)b, we must allow the adposition to be a predicate. Recall that only three categories of predicates are distinguished in the lexicon in Functional Grammar, verbal, nominal and adjectival predicates. Adpositions are introduced by expression rules, functionally motivated as the expression of a semantic, syntactic or pragmatic function.

It is our opinion that adpositions being predicates can marginally be allowed, possibly being introduced at some point in the derivation (as are auxiliaries and copulas (cf. Dik 1980:ch.4)),   the following reason. Originally many adpositions were verbs, nouns or nouns with a case ending (cf. Mallison & Blake 1981:383ff). Synchronically, we also find constructions with a noun serving as adposition, for instance in the case of <u>hely-ett</u> (literally 'place-Loc') in Hungarian (see (118)). We find the following constructions given in pseudo-English in (119):

(119) a. front-its-in   'in front of it'
      b. the house front-its-in   'in front of the house'

Diachronically, constructions such as (119)a lose their nominal nature and behave more and more as adpositions. This means that in many languages adposition-like elements may be at some intermediate stage between relational nouns

(120) a. semantic function:

    ARG-1 > Goal > Recipient > Beneficiary > Direction, Location

  b. syntactic function:

    Subject > Object

Since the descriptive studies on American Indian languages at the begining of this century very little theoretical work has been done on pronominal affixes and the constructions in which they are used. We hope that this paper is a contribution to a neglected area of linguistic research.

NOTES

1. Hewitt (1979) does not say anything about the pragmatic difference between absence and presence of the full pronouns (e.g. <u>sarà</u>) or the reduced ones (e.g. <u>sa</u>). However, we assume the free forms will only be used if in Focus.

2. Column II prefixes are also used within the verb complex in combination with several other categories of forms. Most of these are clearly nominal or adpositional in nature, so that they can be assumed to have been incorporated into the verb complex along the lines outlined in section 3. below (cf. Hewitt 1979:102). The same phenomenon has been noted for Modern Hungarian by Moravcsik (1984):

    (i) Jancsi nek-i-ütköz-ött   a   fal-nak
         Johnny DAT-3sg-bump-PAST the wall-DAT
         'Johnny bumped against the wall'

    (ii) Jansci nek-em–ütköz-ött
         Johhny DAT-1sg-bump-PAST
         'Johnny bumped against me'

3. This is a simplified picture. See de Groot (1983) for a more complete description.

4. 'Die Verbalformen sind ja zumeist durch Anlehnung eines Personalpronomens an den Tempusstamm entstanden (...). Die Weiterentwicklung geht dann aus von einer Doppelsetzung des Subjekts, wozu es auch auf modernen Sprachstufen Analogien gibt (...)' (Paul 1920^5:310-1; translation ours).

5. For instance, we do not consider the pronominal affixes as 'agreement markers'. We will speak of 'agreement markers' only in the case where the elements involved have lost their referential function. Failure to distinguish between pronominal affixes and agreement markers would obliterate the difference in function between the underlined elements in (i) and (ii), and thereby the typological differences between the languages involved.

    (i) John walk<u>s</u>

    (ii) (sarà) <u>s</u> -q'ə+n+t°   'from me'   (= 6)
          I   <u>1s</u>-from

    Furthermore, we do not agree that it is wrong to say that a verb agrees with the Subject since agreement is essentially a topic-related phenomenon (Givón 1976:151). In our view the latter is only the case in the Clitic type constructions and in the transition from Clitic type to Appositional type (cf. 3.1.2. and 3.4. below).

6. These constituents are sometimes called 'left-dislocated' and 'right-dislocated' respectively. What is called 'Theme' here is discussed by Li & Thompson (1976) under the heading of 'Topic'. The latter term is used in FG only for NPs carrying a certain pragmatic functin <u>within</u> a predication (cf. 4.1. below). Note further that Li & Thompson (1976) discuss under the heading 'Topic prominent languages', languages in which it is normal to have Themes that are not co-referential with an unstressed pronoun inside

the Predication proper, as in (1):

(1) Japanese:

zoo   wa   hana ga   nagai
elephant Theme nose Subject long
'As for elephants, noses are long'

We do not discuss these here, since they are not relevant to the
diachronic development we are concerned with.

7. Hewitt (1979) does not mention the existence of Themes in Abkhaz. Tails do
    seem to exist, since Hewitt states that when more than one NP follows the
    verb, it is marked by comma intonation. We assume that their use is as
    marked in Abkhaz as it is in English.

8. There is another reason for expecting a free word order in the
    APPOSITIONAL TYPE languages, for which see 3.1.2. and 3.1.3. below.

9. Her criteria are, and have been, open to criticism (cf. Mallinson & Blake
    1981:170-2). In general, we assume that the degree to which pragmatic
    factors determine word order, the 'freedom' of word order with respect to
    syntactic factors, is a scalar phenomenon and can best be established by
    statistical methods at the text level. Steele's method (based on the
    variant orders a language allows) definitely gives a predilection for
    rigid word order, as is evident from her classification of e.g. Turkish
    and Japanese as such and from the high ratio of rigid word order languages
    (40 out of 63).

10. Boas for instance states that 'All the syntactic relations between the
    verb and the nouns of a sentence must be expressed by means of pronominal
    and adverbial elements incorporated in the verb, so that the verb is
    skeleton of the sentence, while the nouns or noun groups held together by
    possessive pronouns are mere appositions' (1969b:573). Similar remarks are
    made in Bloomfield (1933). An extensive discussion on Lakhota clause
    structure and its formalisation in Government-and-Binding on the one hand,
    and in Role-and-Reference Grammar on the other, is to be found in Van
    Valin (1985).

11. Simplified for reasons of space; Penchoen (1973:27) also gives a series of
    Possessive forms used with kinship terms only. This series is in fact
    identical to the Prepositional series, apart from the non-existence of a
    1s Possessive Kinship form, and a prefix t- for the plural forms (also
    used in the plural formation of some nouns).

12. Note that there is an asymmetry in case-marking in that the former Themes
    (Lambrecht's 'Topics') are not case marked while the Tails (Lambrecht's
    'Antitopics') must be. We come back to this in section 3.4. Also note that
    one possible sequence of the elements in (31) is not listed. In fact, it
    is unacceptable for reasons which are not entirely clear (Lambrecht
    1981:104):

    (i) ?? Le livre ton frère j-le-lui-donne, moi

13. Seiler (1983b:71) mentions two similar constructions in substandard German
    (cf. (i) and (ii)). He notes that (ii) is ungrammatical with first or

second person singular pronouns, but says nothing about the plural or the male/female distinction.

(i) dem König sein Haus 'the king's house'
   the king his house

(ii) ihm sein Haus   'his house'
   him his house

Note that the article in (i) and the form of the pronoun in (ii) show that the free NP Possessor phrase is in the Dative case. Dutch has no case system apart from a nominative/oblique distinction in the pronouns. It is this oblique form that is used in (37).

14. There is another frequent type of construction in spoken Dutch, arising from the above-mentioned Appositional construction plus the Theme + coreferential die construction discussed on page 16 above:

  (i) Jan, die z'n boek
     John that his book

  (ii) ?Marie, die d'r boek
      Mary that her book

  (iii) Jan en Marie, die hun boeken
      John and Mary that their books

In this construction, the pronoun die is often stressed and the possessive cliticizes to it, rather than to the Possessed Item NP.
 Note that die is unmarked for number but obligatorily triggers plural agreement if referring to multiple participants in the discourse:

  (iv) Jan en Marie, die liep-en (*liep) op straat
      John and Mary, that walked-plur on street
      'John and Mary, they were walking in the street'

It is therefore interesting to see examples like (v), which seem to indicate that ze is becoming an invariant Possessive marker:

  (v) Jan en Marie, die ze kinderen
     John and Mary that his childen

15. Anceaux (1952:40) says about (39) that 'the attribute (i.e. the free Possessor Phrase; C.d.G. & M.J.L.) is never a personal pronoun because such a relation is sufficiently denoted by the possessive suffixes'. Although this is incorrect cross-linguistically, it is true that adding a free pronominal Possessor phrase in most cases only gives pragmatic specification of the bound form (i.e., indicate that the Possessor has Focus), while adding a nominal form gives further semantic specification, and may or may not indicate Focus.

16. Though Comrie (1980) does not state this, we assume that the Appositional pattern of Kalmyk represents a later stage than the Clitic construction of Buryat. Since Buryat has an Appositional construction on the clause level (witness (44)), this would mean that in Mongolian the development on this level precedes the parallel development on the NP-level (i.e., Buryat

shows a 'vertical inconsistency'; see 3.4.2. below).

17. We know of one case in which the diachronic process is different from the
one sketched here, thereby presenting a potential counterexample to our
theory. In Middle English (according to Janda 1980) the genitive -s ending
was reinterpreted as the weak form of the possessive pronoun <u>his</u> (cf. (i)
and (ii)), the use of which also spread to female possessors (cf. (iii)):

  (i) þe king-es suster of France   'the king of France's sister'

  (ii) the Busshoppe of Rome his laws 'the bishop of Rome's laws'

  (iii) Margaret ys doughter   'Margaret's daughter'

For a while, Appositional constructions were used (cf. (iv) and (v)), but
these gave way to the construction with invariable enclitic
postposition '<u>s</u> (cf. the modern translations of (i)-(iii)).

  (iv) Juno hir bedde

  (v) Canterbury and Chillingworth their books

  In terms of the development sketched in this paper, this would mean a
return from the Appositional type of construction to Clitic ones (assuming
that unstressed pronominal possessors could cliticize to the Possessed
Item, as they can in Modern English): the possessive pronouns <u>his</u>, <u>hir</u>,
<u>their</u>, etc., did not develop into possessive prefixes of the noun in the
Possessed NP, as we would predict. It therefore presents a counterexample
to our theory.
  However, we suggest that this case may not be an incidental one, but
that there is a principle involved that predicts a class of such cases.
Note that in Middle English (as in Old and Modern English) several
categories of modifiers of the noun (such as adjectives and numerals)
preceded their head noun, so that in many cases the unstressed possessive
pronoun would not be adjacent to the noun of the Possessed Item NP (the
same situation prevailed in Mongolian, where all modifiers preceded the
noun, but in that language unstressed possessive pronouns could follow the
noun, and it is from this position that they developed into suffixes). We
would predict that wherever this situation prevails, the development we
propose is thwarted. Instead, an unmarked (i.e. 3rd person singular)
possessive pronoun could develop into an invariable particle or a
postposition. This is what the principle concerning adjacency sketched
above would predict for Dutch and German.
  Note, finally, that a similar type of adjacency principle has been
advanced by Kahr (1976) to explain the fact that case-<u>prefixes</u> are so rare
(there are some problems with this explanation, cf. the discussion in Dik
1983).

18. The ezafe-suffix marks the head noun if it is followed by an adjective,
prepositional phrase, or possessor-phrase; it also marks any of the above
modifiers if followed by another modifier of the above mentioned
categories.

19. See the discussion in Bárczi et al. (1978), from which example (55) was
taken (p.396).

20. See the discussion in Dik (1978:135-136,154-156).

21. Note that this gives a slightly different picture of the development of French than is given by Lambrecht (1981): whereas he speaks of the 'desyntacticization' of free NP forms, we would speak of the 'syntacticization' of Themes and Tails. In the case of NSF, this means that as it develops into a fully APPOSITIONAL TYPE of language, the differences between former Themes and former Tails will tend to disappear and all free NP forms will be treated alike. This means that either all case-marking of NPs with co-referential pronominal elements will disappear (the only option that Lambrecht's 'desyntacticization' seems to allow), or, alternatively, that case marking will spread to all such NPs. Rare examples of this may be found, as the following (from Larsson 1979):

    (i)   De la   résistance, il n'a avait rien   à en   dire
          of the resistance there—was   nothing to of—it say
          'There was nothing to be said about the resistance'

22. According to Lambrecht (1981:42, 43) ça (originally restricted to non-humans) has develop_ed into a 'generic agreement marker'. Thus, (i) could be used by a shopper in a large store who doesn̷ot know where the vegetable section is, while (ii) could be used by a shopper who comes home and notices that the vegetables he has bought are not in his bag:

    (i)   Les légumes   c—est   où?
          the vegetables that—is where
          'Where are the vegetables?'

    (ii) Les légumes   i—sont   où?
          the vegetables they—are where
          'Where are the vegetables?'

23. For a different interpretation of these facts, see De Groot (1983).

24. We thank Tine Greidanus for pointing out these data to us.

25. Galand (1964) gives no example, but it is clear from Penchoen (1973) that the dialect that he discusses is quite close to Shluh in forms and has the same types of constructions. On the PP-level, this is also a Clitic type.

26. And further developed in Dik (1980a, 1980b), Dik ed. (1983), Hoekstra et al. eds. (1981), Bolkestein et al. (1981), Bolkestein et al. eds. (1985a, 1985b).

27. See Dik (1979, 1981, in prep.ch.10) for a discussion of the treatment of rules and regularities. Rules are considered to be completely product-ive, where productivity is defined in terms of the ability of competent speakers to apply the process in question in correctly deriving output expressions which he may never have heard before. Patterns such as sing, sang, sung and ring, rang, rung are stored in the lexicon as such. Their common patterning constitutes a regularity in the lexicon.

28. The two features S and A seem to be necessary and sufficient for an account of all forms of person across languages as given in Ingram (1978). (88)d and (88)e show that inclusive and exclusive forms can also be accounted for by means of two features. Problematic are the exclusive and inclusive forms of second person plural, such as 'you without them' and 'you with them'. Consider the following examples from Lisu and Abkhaz:

(i) Lisu (Sino-Tibetan; Hope 1974:108f)

    a.   nuw   'you-pl exclusive'
    b.   nwuwà   'you-pl inclusive'

However, Hope mentions that the form nwuwà can be considered a compound 'you labourers' (wà can have the meaning of 'labourers', 'labour party').

(ii) Abkhaz (Caucasian; Hewitt 1979)

    a.   s°art   'you-pl exclusive'
    b.   s°a(rà)   'you-pl inclusive'

It is not known to us whether Abkhaz exhibits a similar compound structure as in Lisu.
If, for a proper account of these forms, the two features S and A are not sufficient, a third feature could be added, for instance O (Other): (ii)a = -S +A -O; (ii)b = -S +A +O.

29. Other types of apposition can be distinguished. For instance Quirk et al. (1985:1302ff) also distinguish between full and partial appositions and strict and weak appositions. These subtypes of apposition are not relevant for the present discussion. Neither will we deal with the so-called sentential apposition, for instance: "They asked him to come and stay for a fortnight in Geneva, a good opportunity".

30. Appositional constructions can accommodate more than two elements, see for example Quirk et al. (1985:1306).

31. One reason for using a symbol to indicate the appositional relation is that there exist explicit indicators of apposition such as namely, that is, etc. (Cf. Quirk et al. 1985:1307).

32. Many of the examples of non-restrictive apposition by Quirk et al.(1985) in fact involve extra-clausal constituents ('left- and right-dislocation') that would be called Themes and Tails in FG.

33. An apparent counter-example constitutes the following less common construction (Quirk et al. 1985:760), where the two opening noun phrases both refer to the same entity (a statue):

(i) This temple of ugliness and memorial to Victorian bad taste was erected in the main street of the city

However, Quirk et al. discuss this construction under the heading 'coordinative apposition'. They look upon the construction as being more appositional than coordinative:

(ii) This temple of ugliness, memorial to Victorian bad taste, was erected in the main street of the city

34. This is extensively discussed by Lehmann (1985).

35. We have not discussed pronominal affixes on Adjectives. These occur in constructions with predicatively used adjectives without copulas. There are also languages with pronominal affixes referring to Subject on predicate nominals. As far as we know, the elements in these cases behave exactly like the elements on verbs.

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