In the analysis of basic sentence relations and constituents, a fundamental distinction between case function and pragmatic function (henceforth CF and PF, respectively) seems appropriate, at least as a heuristic instrument. Of course, such a binary, apparently clear-cut distinction can be misleading insofar as it is easily taken for a true picture of reality. The notional distinction between CF and PF is an instrument for analyzing the basic syntactic relations. If such an instrument serves its purpose, it is useful and makes the analysis clearer and more comprehensive; but at the same time, its instrumental character should never be forgotten. In everyday communication, CF and PF are frequently bound together, thus forming morphosyntactic units where the respective contribution of CF and PF is difficult to determine. But even then the differentiation is important for an exact understanding of the categories found in individual languages.

Prototypical case functions can best be described within a framework of the predicate-argument type: one central predicate “dominates” or “binds” a number of “dependent” arguments whose number can vary between zero and perhaps four or five. In most, perhaps in all languages, there exists a – morphologically and/or syntactically definable – word class distinction between verb and noun which is correlated with the predicate-argument domain in the following way: the primary function of verbs is predicativity, the primary function of nouns argumenthood. (Both nouns and verbs can of course be modified in order to serve the opposite purpose, if necessary. Broadly speaking, the domain of verbs in argument function is subordination; the domain of nouns in predicate function is the so-called nominal sentence.) Case functions form a class of semantically defined relations between the core, i.e. the predicate, and the depending argument(s). These relations can be described on different levels of abstraction. Although discrepancies subsist on terminology, the use of certain rather abstract labels...
for CF is fairly widespread. In this paper, the labels AG₁, AG₂, PAT₁, and PAT₂ will be used without further discussion (AG = агент, PAT = патiens; the subscript numbers refer to verbal valency).

Pragmatic functions are not directly connected with the semantic relations between predicate and argument(s). They presuppose that these relations are in fact established at the sentence level, and they serve to integrate the syntactic units thus established in the discourse. They can be described by a number of different, but in general converging parameters: old vs. new information, starting point vs. finality of the utterance, "setting" vs. "core" (Mathesius 1939: fадro), and so on. In this contribution, the differences between these parameters will not be totally neglected, but they are not especially focused on. What is focused on instead is their convergence, their common denominator. This common denominator should be referred to by a pair of widespread and theory-neutral terms. In this contribution, the terms topic (TOP) and focus (FOC) will be used for this purpose. They cannot be discussed here in detail. Suffice it to say that sentences in discourse usually contain topical and focal material, i.e. linguistic units which refer to entities which are old/known from the context or from experience/previously mentioned in the context/backgrounded/linked with preceding units in the text, etc. on the one hand, and linguistic units which are new/unknown to the hearer/not mentioned earlier/foregrounded/linked with following units in the text, etc. on the other hand.

In contrast to CF's, there is no dependency relation between PF's: neither does FOC depend on TOP nor vice-versa. Both are immediate constituents of the sentence, in contrast to the case arguments which fill a framework previously established by the predicate. Of course, one and the same syntactic unit in a real utterance can be looked upon alternatively from the CF and the PF perspective.

The expression of PF differs greatly from what is found with respect to CF. Evidently, the formal means for expressing pragmatic relations are basically identical to those which serve to express case relations, since the possibilities of formal representation of grammatical meaning are rather limited in human language. In fact, the following set of binary oppositions necessarily applies to all instances of formal expression of grammatical categories:

Figure 1  implicit vs. explicit
          
          taxemic vs. grammemic
          
          partial vs. total
"Implicitness" means that the expression of grammatical categories is lacking, i.e. that the meaning of the category is implied. If two constituents, say M and N, are brought into a grammatical relation, this relation may be left implicit by the grammatical system of a given language. It can be deduced either from the inherent meaning of the constituents themselves, or from the specific discourse context of a given utterance. A certain class of temporal adverbs in English (and in many other languages) may serve here as an example for illustration; in a sentence like:

(1) Next week he'll come/He'll come next week

the grammatical relation ADV ^ V is left unexpressed, in contrast to a sentence like:

(2) He was born in 1948

where the preposition functions as a partial grammemic expression of the same relation (substandard French J'y vais à Paris would be an example of total grammemic expression). Note that the construction (1) is called "implicit" not only because of the lack of a preposition, but also because of the lack of a taxematic differentiation: the different placement of the adverb has a bearing on the distribution of pragmatic functions within the sentence, but it does not alter the basic relationship ADV ^ V.

Explicit expression can be purely taxemic or grammemic. This is best exemplified by the SUBJ ^ V and the OBJ ^ V relation. (Note that the traditional terms "subject" and "object" are used here as abbreviations of AG, & AG, and PAT, & PAT, and that they are valid only with respect to languages of the nominative-accusative type; non-accusative languages are not taken into consideration in this contribution: the symbol "&" stands for categorial fusion.) A grammatical relationship between two elements M and N is said to be expressed taxematically if M ^ N ≠ N ^ M. This is the case in Chinese sentences like:

(3) wǒ ài nǐ vs. nǐ ài wǒ

I love you vs. you love me

(Note that the famous English example Dog bites man vs. Man bites dog does not belong to the category of purely taxematic expression: the verbal ending provides a partial grammemic expression which is combined with the taxemic one.) It is evident that the possibilities of taxemic expression are rather limited; in a relation between two members, only two different categories can be expressed, as for instance N ^ V for SUBJ ^ V and V ^ N for OBJ ^ V in the Chinese example just quoted. For more differentiated systems of grammatical relations, therefore, specific elements are neces-
sary; these phonetically material elements are termed here "grammemes" (Pottier 1974, Heger 1976). This term is less ambiguous, less liable to be misunderstood than "morpheme", since this latter term can refer a) to grammatical morphemes (i.e. grammemes) and b) to any minimal meaningful unit in general. I prefer to use the term "morpheme" in the b-sense only. With specific grammemes, any number of categorial distinctions can be made since the number of grammemes is potentially as unlimited as the number of lexical items. However, prototypical grammemes are limited in number, and the fact that they form closed classes is sometimes taken as a definitional criterion (lexemes, of course, form open classes).

There are many possible criteria for classifying grammemic markers — criteria related to semantics, morphology and syntax. Among these criteria, the partial vs. total distinction is considered here as being the most basic and the most universally applicable one. It follows immediately from the very nature of grammatical relations: given a relation between two elements M and N, the grammeme can be added either to one of the elements, or to both of them. Grammemic expression of M \(\wedge\) N can take the form \(pM \wedge N / M \wedge qN\), in which case it will here be called "partial", or the form \(pM \wedge qN\), in which case it will be termed "total". Total grammemic expression is known as "agreement" in some domains of grammar. Note, however, that the notion of total grammemic expression is more abstract and therefore more general than the term "agreement" in traditional grammar and linguistics. It applies not only to certain specific levels of grammatical organization, such as noun and adjective, or verb and subject, but to all kinds of grammatical relations in general. The Turkish genitive construction offers a good illustrative example of the differentiation between total and partial marking within a given relation (noun-noun determination) in a single language:

\[(4)\] ev-in kapi-si vs. ev kapi-si
house-GEN door-its house door-its
‘the door of the house’ vs. ‘the house door’

It is evident that other criteria for distinguishing subclasses of grammemes are important as well. For instance, it can be relevant to distinguish between bound and free grammemes, between suffixation and prefixation, between agglutination and inflexion, and so on. In the present context, such distinctions are of minor interest.

The main point to be made in this paper has to do with the degree of grammaticization of case functions in general, and the individual pragmatic functions in particular. At the outset, it is evident that PF's are far less grammaticized than CF's. The most significant correlates of this high vs. low degree of grammaticization can be summarized in the following way:
- CF is necessary in all sentences. An utterance becomes an utterance by the presence of CF. This statement is valid within individual languages as well as in the perspective of cross-linguistic comparison.

- The reason for this seems to be that the speech act of assertion is primarily bound to the expression of CF. In contrast to CF, the expression of PF is not obligatory in all sentences within individual languages, nor is its formal expression obligatory in a cross-linguistic perspective.

- As will be shown in greater detail below, the expression of PF depends on the degree of pragmatic contrast, i.e. the contrast between topical and focal elements in the sentence. This degree of contrast varies greatly; there is no neat yes-no distinction, but rather a continuous scale with an unlimited number of intermediate values. From the point of view of CF, a given NP either is, or is not, a subject; from the point of view of PF it makes sense to speak of high vs. low topicality and/or focality.

- With respect to CF, there is no clear predominance of predicate over argument or vice-versa; if we consider the grammemic expression of the OBJ Λ V relation, for instance, we find that partial expression is frequent: the grammeme may be added only to the noun (Chinese) or only to the verb (Swahili); on the other hand, total grammemic expression also occurs rather frequently (Basque). In contrast to that, in the domain of PF the marking of TOP clearly predominates over the marking of FOC.

- The degree of grammaticization according to the criteria just outlined correlates with the means of formal expression of grammatical relations as they are classified in figure 1. This figure can be considered as the formal counterpart of the functional hierarchy of grammaticization: implicitness corresponds to the focal point of low grammaticization, total grammemic expression corresponds to the focal point of high grammaticization.

- Accordingly, it can be observed that the expression of CF is very rarely left implicit (e.g. Burmese); usually, it is explicit, either taxematically or grammemically. Total grammemic expression is relatively frequent. (Of course, there are important differences with respect to the individual case functions, but this cannot be discussed here.)

- On the other hand, the expression of PF is usually left implicit. If PF is expressed explicitly, purely taxemic means are by far the most frequent ones. Grammemic expression of PF is comparatively rare.

- Given the predominance of TOP over FOC, it is evident that in the case of partial grammemic expression it is the TOP and not the FOC that will be marked. Total grammemic expression is extremely rare (Quechua, Classical Arabic (see below)).

- If it occurs, there is a clear difference between TOP and FOC insofar as grammemic marking of TOP is frequent or nearly obligatory, whereas
grammatic marking of FOC is always optional and far less frequent in running text than TOP marking.

In this paper, the rare case of grammemic marking of PF will be considered. Two groups of sample languages will be analyzed in some detail: languages with partial and with total grammemic expression of PF. According to what has been stated in the preceding paragraphs, partial grammemic expression in this case means marking of TOP alone, with the exclusion of FOC. Total grammemic expression means marking of TOP and FOC. I do not know instances of exclusive FOC marking.

For each of these two groups, two genetically unrelated but geographically and culturally contiguous languages plus one totally unrelated language have been chosen as a sample. For TOP marking, the sample comprises Japanese and Korean plus Páez, a Chibcha language spoken in Columbia. For TOP and FOC marking, the sample comprises Quechua and Aymara plus Classical Arabic. Special emphasis is given to Japanese, Quechua, and Classical Arabic.

Among linguists all over the world, the Japanese postposition -wa is probably the best-known example of grammemic TOP marking in any language. The opposition of -wa (TOP marker) and -ga (SUBJ marker) has been discussed intensely for the past two decades. It is impossible to summarize here the findings and results of this extended linguistic discussion; I will only stress some points which are important for a deeper understanding of the relationship between the marking of CF and of PF. The peculiarity of the -wa/-ga distinction in Modern Japanese cannot be fully understood without a basic knowledge of its historical development. Therefore, a few remarks on the function of these grammemes in Classical Japanese are in order.

First of all it must be stressed that -ga in the function of SUBJ marker is a relatively recent innovation. In Classical Japanese this grammeme served as a marker of the genitive; -ga was not the only genitive marker: it was used side by side with the postposition -no which is still in use in the modern language. The difference between -ga and -no is comparable to the difference found in the two genitive constructions of Turkish (see above, example (4)): -no marks the determinative relation in general, the determining noun ranks low on the animacy hierarchy, and it is often used non-referentially; -ga puts emphasis on the determining noun which ranks high on the animacy hierarchy and which is usually referential. The most characteristic domain of -ga is the deictic personal pronoun, but it occurs also with personal proper names and other animate and/or specific nouns. The distinction between the -ga and the -no genitive seems to be structurally similar to the distinction of marked and unmarked objects in languages with Differential Object Marking (Bossong 1985). Compare the following example (Lewin 1959: 76):
(5) Masamune-ga katana  vs.  Masamune-no katana
'Masamune's sword'  vs.  'a Masamune sword'

Since the postposition -ga usually occurred in combination with animate nouns (which are of course prototypical agents), and since it was necessarily used for marking the agent in subordinate constructions (where the relation SUBJ A V is "lowered" to DET A N) it came to be used for agents in general. In modern standard Japanese, -ga has become a SUBJ marker. It should be noted that there are dialects where -no has been generalized instead, or where -no and -ga are used alternatively in the subject function.

It is of particular interest to our present discussion that the construction N A no A V is not unknown in the classical language in sentences which we would translate by main clauses, i.e. in constructions which are not subordinate. Compare the following example (Lewin 1959:202):

(6) aki=kaze-no  fuku
autumn=wind-GEN  blow
'The autumn wind is blowing'

A more precise translation would be: "There is blowing of the autumn wind". In colloquial French, the sentence could be rendered as "Il y a le vent d’automne qui souffle". This construction is a typical example of the so-called thetic (as opposed to categorical) judgment (Sasse 1987): there is no pragmatic contrast whatsoever, all differences between TOP and FOC are levelled down. According to a widespread opinion, in such cases the sentence as a whole has rhematic value.

Usually, however, a subject which is not specifically marked as a topic does not take any case marker in Classical Japanese. This language shows a markedness pattern which must be considered as "normal" in a typological perspective: the subject is unmarked, all other case functions are marked by specific grammemes. The opposition of SUBJ vs. OBJ (DAT, ADV, etc.) is morphologically privative: Ø vs. -wo (-ni, -de, etc.). Two simple examples (intransitive and transitive) will illustrate this point (Lewin 1959:201-203):

(7) tsuki  akiraka-ni  teru
moon  bright-ADV  shine
'The moon is shining brightly'

(8) o ōto  mon-wo  hiraku
brother  door-OBJ  open
'Brother opens the door'
All the constructions exemplified in sentences (6) to (8) have disappeared from the modern language. The postposition -ga would be obligatory in all these cases to mark the SUBJ function.

In contrast to CF, there were no such far reaching changes with respect to PF. The FOC marker -wa had in Classical Japanese approximately the same functional range and syntactic behaviour as it has in the modern language. It must be stressed, however, that certain minor modifications of the marking system have taken place in the meantime. In the classical language, -wa was completely independent from the case marking system: this postposition was simply added to the topicalized noun phrase, regardless of its case function. Since the function SUBJ had the marker Ø, this rule implied that a topical subject had -wa as its only ending. The OBJ was marked by the postposition -wo (today pronounced -o, but still written as <wo>); it could be accompanied by the FOC marker -wa, the result being -woba. Note, however, that the postposition -wa alone was sufficient to mark a topicalized OBJ; -wa and -woba were in free variation, in contrast to the dative complement where the regular postposition was obligatory even in presence of the TOP marker -wa; this can be seen in the following examples (Lewin 1959: 93, 207):

(9) ware sake-wa noma-zu
    I sake-TOP drink-NEG
    'I do not drink sake' ("Sake I do not drink")

(10) seihai-woba ten-ni makase-mu
    success=or=failure-OBJ+TOP heaven-DAT entrust-INTENT
    'As for victory or defeat, I will leave the decision to Heaven'

(11) oya-ni-wa musuko ni-zari-ki
    parent-DAT-TOP son resemble-NEG+CONTIN PAST
    'The son did not resemble his parents' ("To his parents, the son did not resemble")

The main features of the system in Classical Japanese may be summarized as follows:

\[ \begin{array}{cccc}
   \text{PF} & \text{-TOP} & \text{+TOP} \\
   \text{CF} & \text{\textbackslash} \\
   \text{SUBJ} & \text{Ø (-no(-ga))} & \text{-wa} \\
   \text{OBJ} & \text{-wo} & \text{-woba/-wa} \\
   \text{GEN} & \text{-gal-no} & \text{-niwa} \\
   \text{DAT} & \text{-ni} & \text{-niwa} \\
   \text{DIR (\ldots)} & \text{-e} & \text{-ewa} \\
\end{array} \]
As for the thetic-categorical distinction, Classical Japanese exhibits a tripartite formal differentiation: there is a neutral form SUBJ-Ø^V, a marked thetic form SUBJ-no^V, and a marked categorical form SUBJ-wa^V. The postposition -no links the subject closely to the verb; -wa separates it from the verb very sharply. Consequently, sentences with -no subjects are event-oriented, whereas sentences with -wa subjects show a clear pragmatic profile: they are constituted by topic-oriented predications. It is natural that nominal sentences (i.e. sentences with a nominal predicate) always have a topicalized subject; compare the following examples (Lewin 1959: 92, 201):

(13) dōsho-wa meishi-no ato-ni tsuku kotoba-nari
    verb-TOP noun-GEN rear-at follow word-is
    ‘The verb is a word which follows the noun’

(14) nihon-wa shima=guni-nari
    Japan-TOP island=country-is
    ‘Japan is an archipelago’

In Modern Japanese, the tendency towards setting off the basic functions of SUBJ and OBJ from all other CF, a tendency which was already discernible in the classical language, was brought to its final consequence. The SUBJ function is necessarily expressed by the postposition -ga, and the OBJ function by the postposition -o (pronounced -o); in the case of topicalization, both these postpositions are replaced by the TOP marker -wa, whereas all other postpositions are combined with it. The new system can be summarized as follows:

<table>
<thead>
<tr>
<th>PF</th>
<th>-TOP</th>
<th>+TOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJ</td>
<td>-ga</td>
<td>-wa</td>
</tr>
<tr>
<td>OBJ</td>
<td>-o</td>
<td>-wa</td>
</tr>
<tr>
<td>GEN</td>
<td>-no</td>
<td>-niwa</td>
</tr>
<tr>
<td>DAT</td>
<td>-ni</td>
<td>-niwa</td>
</tr>
<tr>
<td>DIR (...)</td>
<td>-e</td>
<td>-ewa</td>
</tr>
</tbody>
</table>

In contrast to Classical Japanese, in the modern language the explicit grammemic marking of CF and PF has become incompatible with respect to the basic syntactic relations SUBJ and OBJ: the grammemes must either distinguish AG and PAT, or mark an undifferentiated TOP which can fulfill both functions. The morphological oppositions have changed from privative to equipollent (-wa vs. -o and -wa vs. -ga). This configuration distinguishes Modern Japanese from the great majority of other languages. As for the use of these forms, it would be a simplification to say that -ga is the SUBJ marker
in thetic judgments, and -wa the SUBJ marker in categorical ones. However, such a statement would not be very far from the truth. It would probably be more adequate to say that -wa sentences are always categorical, and that -ga sentences can represent thetic utterances as well as neutral ones, where the thetic-categorical distinction is difficult to establish. The SUBJ slot is frequently empty; the subject is usually left unexpressed if recoverable from the context. To a certain extent, the distinction of topical -wa subjects and non-topical -ga subjects is arbitrary; in many cases, the choice between the grammemes is not governed by strict rules but left to the speaker’s discretion. Coyaud (1977) made an experiment whereby the place of the postposition in a contemporary text on the history of chemistry was left in blank and a number of informants were asked to fill the blanks out. The result is ambiguous: whereas in the majority of the cases, a clear tendency towards the use of either -wa or -ga can be observed, unanimity is rather rare. As one of the informants put it: “on dirait que les gens jouent à pile ou face”. Although such a conclusion may seem somewhat exaggerated, it is nevertheless evident that the rules are far from being compulsory. Topicalization is a shade added to the basic information carried by the verb-argument structure; even if its expression is grammaticized, as it is in Japanese, the constraints governing its use seem to be relatively weak.

The correlation of -wa with categoricalness and -ga with theticness can be illustrated by the following examples taken from the text on the history of chemistry just mentioned (Coyaud 1977: 85ff.):

(16) jikken=teki jijitsu-to kasetsu-to-no aida-ni
    experiment=al reality-and hypothesis-and-RLT interspace-in
    ōku-no mujun-ga araware-ta
    much-RLT contradiction-SUBJ appear-PAST

    ‘Great contradictions appeared between experimental reality and hypothesis’

(17) subete-no kagōbutsu-wa nigen=teki kōsei-o motsu
    all-RLT compound-TOP twofold composition-OBJ have

    ‘All chemical compounds have a twofold composition’

Cross-linguistic comparison shows that verbs meaning “to appear”, or more generally “to come into being”, ordinarily have a rhematic subject, and that the sentences where they occur form prototypical thetic judgments. A sentence like (16) forms one single pragmatic constituent. There can be no doubt about the non-topical character of the subject; therefore, the use of -ga is compulsory in the modern language, and all 17 informants of Coyaud agree with the author with respect to the use of -ga. In contrast to that, (17)
has the typical bipartite constituency of a categorical judgment; all infor-
mants agree in this case in topicalizing the subject by -wa.

It is impossible here to give a complete account of all the intricate
problems of TOP marking in modern Japanese. I would just like to mention
one fact about word order. Japanese is known as being an SOV language of
the most rigid subtype. It is all the more remarkable that in colloquial speech
the topicalized subject frequently follows the schematic predicate. This is the
afterthought pattern which is well attested in numerous other languages, too:
because of its primary importance for the speaker's mind, the focal elements
come first in the sentence; the topic is then added for clarity's sake, but with
a lowered intonational contour. This right dislocated topic must be followed
by the topic marker -wa in colloquial Japanese. This construction thus
provides an indirect proof (if necessary) that in languages without gram-
memic topic marking, e.g. in colloquial French, such afterthought elements
must be considered as ordinary topics, and not as something else. In the
following examples, the French translation shows the similarity of the
constructions (Kuwae 1980: 484):

(18) kirei desu-ne, ano ie-wa
nice is-indeed that house-TOP
'Elle est jolie, cette maison'

(19) yomimashi-ta ka, sono hon-wa?
read-PAST Q that book-TOP
'L'avez-vous lu, ce livre?'

This structural convergence in two languages with exactly opposed word
order properties shows once more that the pragmatic regularities which
influence the order of constituents are independent from the typological laws
and tendencies on the CF level: they are less subject to typological variation
and more governed by universal tendencies (see Bossong 1980 for a more
detailed discussion).

Modern Korean behaves exactly like Modern Japanese: the topi-
calizer replaces the subject and object postpositions, whereas it is combined
with all other postpositions. As in Japanese, the opposition of SUBJ and OBJ
as well as the opposition of SUBJ and TOP are morphologically equipollent.
The only difference between these languages is quite superficial: the
Japanese postpositions do not show any allomorphism, but the Korean ones
do. This allomorphism is conditioned by the phonetic environment: the
markers of SUBJ, OBJ, and TOP have different allomorphs after vowel and
after consonant (symbolized here as x ~ y). In two out of three cases (OBJ
and TOP) the relationship between the allomorphs is synchronically quite
obvious. The system can be summarized as follows:
A few examples will show the striking structural similarities of Korean and Japanese in this domain (Lewin and Kim 1976: 118):

(21) nae-ga sur-ùl masi-mnida
    I-SUBJ sake-OBJ drink-POLITE
    'I am drinking sake' [neutral description]

(22) na-nûn sur-ùl masi-ji=anssû-mnida
    I-TOP sake-OBJ drink-NEG-POLITE
    '(As for me,) I do not drink sake'

(23) sur-ùn nae-ga masi-mnida
    sake-TOP I-SUBJ drink-POLITE
    'Sake, I drink it'

Kholodovič (1954: 235) states that the "subject" takes the form (n)ûn in the great majority of cases; "subjects" with -i ~ -ga are significantly rarer, and even more so are other postpositions followed by the TOP marker. This seems plausible, although no detailed statistic figures are given. As in Japanese, the functional distinction of thetic and categorical judgments is fundamental for the formal distinction of -i ~ -ga vs. -(n)ûn. Since categorical judgments are in general far more frequent in discourse than thetic ones, the above-mentioned statistic predominance of -(n)ûn over -i ~ -ga can be easily explained.

The third language with partial grammemic marking of PF is Páez, the most important Chibcha language which is spoken by approximately 44,000 people in the Cauca province in south-western Columbia. The following structural sketch is based on Jung 1984; in the meantime, Jung has presented a new version of her description (Jung 1989) where several good illustrative examples of the topic-marking construction have been suppressed. I prefer to quote the examples from the older version of her work. The structure of TOP marking in Páez is basically similar as that found in the two East-Asian languages discussed so far. The main difference results from the fact that Páez is a language with Differential Object Marking (DOM), whereby the OBJ is marked by the DAT ending whenever it is definite, but left without
any marker if it is indefinite. Definiteness is not equivalent to topicality, accordingly, we find marked objects with and without the TOP marker; on the other hand, it is obviously impossible for an indefinite object to be topicalized. There is an independent subject form of pronouns and nouns which always ends in a vowel; this can be the original vowel of the stem or the vowel -a which is added to the final consonant. (Indefinite objects lack this final -a.) The TOP marker /'/ (glottal stop) is added to this SUBJ ending; the result is a phonetically conditioned alternation of /\ after vowel, and /a'/ after consonant. After another /', the ending takes the form /sa'/; this latter variant is infrequent and will not be mentioned in the following diagram. The TOP marker can be added to any sentence constituent. The rules can be summarized as follows (same conventions as above, plus Λ for variation according to DOM):

(24)   \[ \begin{array}{c|cc}
         & -TOP & +TOP \\
         \hline
         CF  & Ø ~ -a & -' ~ -a' \\
         SUBJ & Ø Δ ~ -s ~ -a's & -'sa' ~ a'sa' \\
         OBJ₁ & Ø Δ ~ ty ~ tya & -tya' ~ -a' tya' \\
         OBJ₂ & Ø & \\
         GEN  & Ø & \\
         DAT₁ & -s ~ -a's & -'sa' ~ a'sa' \\
         DAT₂ & -ty ~ tya & -tya' ~ -a' tya' \\
         LOC (...) & -te & -te' \\
\end{array} \]

A few examples (from Jung 1984: 167ff., 185; cf. Jung 1989: 174) may illustrate these rules. Note that <j> is pronounced as in Spanish ([x]) and that <y> after consonant marks palatalization; the glosses are somewhat simplified, leaving aside certain subtleties of the verbal system.

(25) een-a yu’ptje-na u’j-ue-ts-na
time-SUBJ change-ing go-IMPF-PROGR-3SG
‘Times are changing’

(26) wagas-a’ tyā’ nasa-yakj-a’ puuty uy
White-TOP DEM Páez-with-TOP each=other see
we=ii-me-nne fi’nze’-
want=ed-NEG-3SG live-HABIT
‘White people and the Páez live without wanting to see each other’

(27) yat pand-na ēs-a’ vs. yat-a’s pand-na ēs-a’
house sweep-ing be-3SG house-OBJ’ sweep-ing be-3SG
‘S/he is occupied with house-sweeping’ vs. ‘S/he is sweeping the house’
(28) Ña'-sa-'s-a' kim=yujva jii-me-a'
DEM-ABS-OBJ -TOP nobody understand
'This isn't understood by anybody'

(29) åch een-su- ' tyâ'wë seena tjëy-sa ûs-a'
today time-in-TOP so too hard-ABS be-3SG
'Today, there is too much hardship'

Sometimes, the topical subject is right-dislocated; as in colloquial Japanese, such constructions are found here despite of the fact that Pâez is basically an SOV language of the rigid subtype (Jung 1984: 165):

(30) tyâa-ty ûus yajky-wa'j ji'p-da'u nasa-
DEM-OBJpl heart think-OBLIG must-1PL Pâez-TOP
'It is about these [schools] that we must take care, we the Pâez'

In most varieties of Quechua, there is one grammeme -qa which marks the sentence topic or the sentence topics, and another grammeme -m(i) which serves to mark the focal element in the sentence. Accordingly, in this language the expression of both topic and focus is equally grammaticized. There is some dialect variation as to the form of these grammemes: -qa may be realized as -ka or -xu; in most dialects, -mi loses its final vowel if preceded by a vowel, keeping it if preceded by a consonant, but in some varieties the form -mi is preserved in all phonetic environments. In some southern dialects, -n is added to -mi, or it replaces -mi. Among the varieties which I have examined there is only one which seems to lack the focus marker -mi altogether (Oto, spoken in Amazonas/Peru).

The main differences between the topic and the focus marker can be summarized as follows:
- There is one absolute rule: whereas the topic marker can occur more than once in a sentence, the focus marker is strictly limited to one occurrence per sentence. This rule is of course a direct consequence of a universal law: if we define the sentence as the minimal independent utterance, it is evident that there must be exactly one assertive speech act per sentence; on the other hand, the topics about which something is asserted can be indefinitely multiplied, at least in theory. It should be noted, however, that, statistically, sentences with more than one topic are but a small minority.
- Two other differences between the two grammemes are not strict laws, but statistical tendencies. First, it must be noted that the topic marker is always relatively more frequent than the focus marker. The frequency of use of these grammemes may vary greatly according to dialect, text class, and individual habits, but regardless of these variations the topic marker always predominates over the focus marker. Secondly, although both the topic and the focus
markers can be added to any sentence constituent, the topic marker is of course particularly frequent in combination with the subject; the focus marker displays more variability, but it is evident that it is more frequent in combination with objects, verbal predicates, and predicative nouns than with subjects. There is no one-to-one correspondence between pragmatic functions and case functions, these dimensions are independent from each other; but there is a close affinity between TOP and SUBJ, and a less close affinity between FOC and OBJ and the other predicate-related sentence constituents.

- Finally, the paradigms to which these grammemes belong show different patterns. The TOP marker is the only member of its class, whereas the FOC marker -mi is the basic element in a paradigm of markers which comprise at least one more other member in most dialects; -mi is the basic element because it marks the assertive speech act in its prototypical form: the speaker has witnessed the asserted fact himself, or he is as sure about it as if he had witnessed it personally. This FOC marker is directly opposed to -s(i) (frequently palatalized to -shü) which marks the assertion of facts known to the speaker by others: the speaker declares that he is not himself responsible of the truth value of what he is saying, but he underlines that he has only heard about it. This grammatical category, which will be termed here "reportative" (REP), is of course a well-known and frequently attested phenomenon in the world's languages. What distinguishes Quechua from other examples of this category is the fact that in this language the REP marker is formally opposed to a basic assertive marker which explicitly expresses the speaker's commitment to the truth of what he is saying. Normally, if a reportative exists in a given language, it is a part of the verbal conjugation, and it is positively marked off against the basic assertion which is left implicit; in Quechua, both the basic assertion and the reportative assertion are marked explicitly by specific grammemes. It should be noted that the reportative marker is particularly frequent in traditional narrative texts when stories are told which could not have been witnessed by the narrator. Apart from basic -mi and reportative -s(h)i some grammarians describe certain other suffixes as "focus markers", but it is doubtful that markers such as the "emotive" -ya, the "impressive" -ma belong to the same category. These grammemes cannot be analyzed here in detail.

Summarizing the main points of the preceding discussion, one might say that the structure of Quechua shows clearly that the typological predominance of TOP marking over FOC marking, which can be established by cross-linguistic comparison, is also valid within a given individual language. Furthermore, it shows a basic difference between the syntagmatic and the paradigmatic axis of language: syntagmatically, the FOC is unique whereas the TOP can be multiple within a given sentence; paradigmatically, there is only one kind of topicalizing, but several modalities of focalizing,
which are related with the different degrees of conviction of the speaker. There is one truth per sentence, but it can be asserted about several topics; on the other hand, there is only one way of establishing a topic, but different forms of telling the truth.

The system of markers of TOP and FOC works independently from the case marking system. Quechua nouns are marked for case by a set of suffixes which is cross-referenced for SUBJ and OBJ by suffixes on the verb. The nominative is formally unmarked, all other cases have their own specific marker; there is no Differential Object Marking, all objects being equally marked by the accusative ending -ta (originally -kta, a form which is preserved in the Huanca dialect). From the perspective of typological comparison of case marking systems, Quechua is a representative of the most frequent and “normal” structure, which is characterized by a privative opposition between the basic case (here the nominative) and all the rest. If such a system is combined with a set of PF markers, the result is obvious; it can be summarized as follows (dialect of Ayacucho):

(31) \[ \begin{array}{cccc}
& PF & -TOP & +TOP & +FOC \\
\text{CF} & \emptyset & qa & -m(i) \\
\text{SUBJ} & -ta & taqa & \text{tam} \\
\text{OBJ} & -pa & -paqqa & -paqmi \\
\text{GEN} & -paq & -paqqa & -paqmi \\
\text{DIR} & \text{...} & -man & \text{...} \\
\end{array} \]

(Syllable-final [q] is pronounced as a uvular fricative; consequently, an ending like -paqqa does not contain a lengthened consonant but a combination of uvular fricative and stop.)

Although they are very frequent in normal running text, the PF markers are not obligatory in sentences with a verbal predicate: the sentence may be topicless, and/or the verb with its agreement markers is sufficient as a focus in itself. There is one type of sentence, however, where the use of both the TOP and the FOC markers is compulsory: the nominal sentence without the copula verb. If the subject of a nominal sentence is explicitly expressed, the copula verb ka- is omitted. The subject must be accompanied by the TOP marker -qa, and the nominal predicate is followed by the FOC marker -mi. In other words: in sentences without a verbal predicate (i.e. without a valency related framework of case functions), explicit grammemic marking of TOP and FOC is necessary and sufficient to constitute the sentence as an assertive utterance.

Since both topic and focus are marked by grammemes, word order is not only “free” but it is not primarily used as a means for expressing pragmatic
functions as such. In many languages, there is a strict separation between grammemic CF marking on the one hand, and taxemic PF marking on the other hand. In a language like Quechua, where PF marking is grammemic, too, word order is freely available for other things. I have the impression (which has to be verified—or falsified—by deepened empirical research) that it is used in Quechua for expressing emotional overtones. In living dialogue, the focal element of the sentence is very frequently found at the beginning of the sentence, and the topic, if present, is relegated to its end. On the other hand, in traditional narratives the order TOP ^ FOC is far more frequent and probably the dominating order of constituents. It seems that the availability of word order had led to an increased frequency of the “emotive” order FOC ^ TOP: since the grammemic marking permits to distinguish not only SUBJ and OBJ but also TOP and FOC, the taxemic distinction of TOP ^ FOC vs. FOC ^ TOP is freely available for expressing a shade of meaning which is provisionally termed here [+emotive].

Whether this term is adequate must still be shown by a detailed analysis of Quechua texts. In any case, the following general conclusion can be drawn. Two constituents which are in a grammatical relation with each other must necessarily be brought into some linear order, because of the linear character of human language. Consequently, taxemic expression is always possible. On the other hand, grammemic expression of a grammatical relation is not a logical necessity; if it is made use of, taxemic expression becomes available for other things. A language system may, but need not, take advantage of this availability. In the case of the fundamental sentence relations, there seems to be a hierarchy with respect to the use of grammemic marking: if there is any grammemic marking, it will apply to case functions, with pragmatic functions being expressed taxematically; if both case functions and pragmatic functions are expressed grammemically, then taxemetics becomes available for still more subtle, less rigid distinctions (such as [+emotive]) which are probably never expressed in a fully grammaticized way.

A few examples will illustrate the use of TOP and FOC marking in Quechua. In the first place, some basic regularities will be exemplified by Ayacucho Quechua. In the nominal sentence, both markers are obligatory:

(32) hatun-mi wasi-qa
    big-FOC house-TOP
    ‘The house is big’

Although the order FOC ^ TOP is extremely frequent, the inverse order is of course also found, especially in the case of TOP contrast; in the following example, the TOP marker is added to a place adverb:
(33) kay-pi-q$a sumaq-ta-m wiña-n kawsay-kuna
\text{this-LOC-TOP good-ACC(=ADV)-FOC grow-3SG crop-PL}
\text{‘Here, the crops are growing well’}

The TOP marker may occur several times in the sentence; in the following example, it is added to the time adverb and to the subject. Note, moreover, that the negation consists of the preverbal sentence adverb \textit{mana} in combination with the verbal suffix \textit{-chu} which serves to mark the interrogative and the negative, i.e. the non-assertive moods; it is highly instructive to observe that the negation adverb \textit{mana} is practically always followed by the FOC marker: in negative sentences, it is the negation itself which attracts the focus, whereas the verbal predicate is unasserted and therefore unfocusable.

(34) paqarin-q$a tayta-q$a mana-m hamu-nqa-chu
\text{tomorrow-TOP father-TOP no-FOC come-FUT+3SG-NONASSERT}
\text{‘Tomorrow, my father will not come’}

Both the TOP and the FOC marker can stand alone in a sentence. The following example provides a minimal pair of different focusing, with no topic specifically marked (Soto Rufz 1976: 117ff.):

(35) pay-pa allqo-n-mi kachu-ru-ra
\text{he-GEN dog-his-FOC bite-‘unexpectedly’-PAST}
\text{‘He was bitten by his dog!’}

vs.

pay-pa allqo-n kachu-ru-ra-m
\text{he-GEN dog-his bite-‘unexpectedly’-PAST-FOC}
\text{‘His dog has bitten him!’}

The reportative focalizer functions in exactly the same way as \textit{-mi} itself. Its use can be exemplified by the following minimal pair:

(36) hamu-nqa-s paqarin vs. hamu-nqa paqarin-si
\text{come-FUT+3SG-REP tomorrow come-FUT+3SG tomorrow-REP}
\text{‘He’ll come tomorrow (they say)’ vs. ‘He’ll come tomorrow (they say)’}

As for text frequency, nothing definitive can be said. There is still much research to be done. However, the count of pragmatic markers in a traditional narrative text may give an approximate idea of the distribution of the TOP and the FOC markers. In 11 pages of running text I found 80 occurrences of \textit{-qa} but only 15 occurrences of \textit{-mi} (Uhle, Kelm and Trimborn 1968: 25-35). The reportative marker \textit{-si} occurs only twice, in the first sentence of the narrative and in a sentence which is quoted below (38). It seems that, once the reportative assertion mood is established, it is no longer necessary to
insist upon the fact that the reported events are known by hearsay and not by personal experience. The category of the reportative is grammaticized formally, but not functionally: it is expressed by a simple suffix which forms a paradigm with the ordinary FOC marker, but its use is not obligatory. The following examples are instructive for the text function of the pragmatic markers (Cuzco dialect). First, the use of the reportative marker at the beginning of a narrative can be observed; the focus is on the main protagonist which is introduced for the first time in this sentence:

(37) hoq kontor-si apuesta-ta rura-sqa hoq atoq-wan
one condor-REP bet [Sp.-ACC make-PAST+3SG one fox-with
'A condor, so it is told, once made a bet with a fox'

The following sentences are taken from a long narrative passage. When the fire-rain is mentioned for the first time, it is accompanied by a focalizer, in this case the reportative -si; later on, it is part of a thetic judgment; finally, it is referred to as a topic in a categorical judgment:

(38) nina=para-s chaya-nqa [...] cheqa-paq-mi nina=para
fire=rain-REP arrive-FUT+3SG truth-for-FOC fire=rain
chaya-sia-sqa [...] cheqa-paq-mi nina=para-qa
arrive-CONT-PAST+3SG truth-for-FOC fire=rain-TOP
chaya-ska-sqa
arrive-'still'-PAST+3SG

'Fire-rain will come, I'm told. [...] Really, fire-rain is coming! [...] Really, the fire-rain is still falling!'

The following sentences exemplify the positional variability of the marked topic; in two successive sentences, the predicate is marked by the FOC marker, whereas the TOP marker is added to the time adverb which may precede or follow the verb; in another occurrence of the same verb, the FOC marker is added to the time adverb, the verbal predicate being left without any pragmatic marker:

(39) (a) kunan-qa wañu-chi-lla-sqa-y-ki-ña-n
now-TOP die-CAUS-'only'-'immediately'-1SG SUBJ-2SG
OBJ-'already'-FOC

(b) miqhu-ru-lla-sqa-y-ki-ña-n
eat-'unexpectedly'-'only'-'immediately'-1SG SUBJ-2SG OBJ-
'already'-FOC

kunan-qa
now-TOP
Aymara is genetically unrelated with Quechua, although the contact between the two languages has been very close since immemorial times. This case is comparable in some respects to the relationship between Japanese and Korean. As a consequence of long and intensive contacts, there is not only a great amount of lexical borrowing, but also of mutual grammatical influence. Aymara resembles Quechua in much the same way as Korean resembles Japanese. This means that, despite the absence of genetic relationship, the grammatical categories are more or less identical in both these language pairs. Frequently it is possible to translate Quechua into Aymara, and vice-versa, not only word by word, but morpheme by morpheme. Of course, there are also differences, but on the whole the two languages are strikingly similar in their grammatical structure. In the domain of the basic relations, the most important difference is the fact that Aymara has Differential Object Marking whereas Quechua does not. As we have seen before, in Quechua any object takes the marker -ta; in Aymara, only animate and/or definite objects take the marker -ru, which is identical with the obligatory dative marker. The structure of Aymara resembles that of Spanish in this respect.

The marking of PF works as in Quechua: there is a TOP marker -χa and a FOC marker -wa. In the dialect spoken in the Peruvian province of Puno, from which most examples are taken, there is a morphonological rule comparable to what is found in Quechua: after most consonants, the final -a is preserved, after vowel and nasal consonants it is deleted. As in Quechua, the TOP marker is frequent and may occur several times in a sentence, whereas the FOC marker is restricted to one occurrence per sentence; it is less frequently used than the TOP marker. In a short narrative of approximately 10 pages of running text (Porterie-Gutierrez 1981), I have counted 71 occurrences of the TOP marker -χa and 18 occurrences of the FOC marker -wa. These proportions are roughly equivalent to what has been found in Quechua. The rules are also very similar. A few selected examples will serve here to illustrate this point. Nominal sentences necessarily have the FOC marker and the TOP marker, usually in this order (compare (32)):

(40) pʰaχsi-ki-w uka quta-n-χ
    moon-'only'-'FOC' that lake-in-TOP
    'The moon was on that lake'
The focus frequently precedes the topic, but it may also follow it (compare (33)):  

(41) pobre tiwula-χ apena-w mistř-iritajna  
poor [Sp.] Tiwula-TOP with difficulty [Sp.-]FOC come out-PAST  
‘Poor Tiwula came out with great difficulty’

The topic marker may occur more than once in a sentence (compare (34)):  

(42) uka-ru-χ uka pu$l$a=pu$l$a acakana-χ wali winy=at-iritajna  
that-DAT-TOP that cactus thorn-TOP much cover-PAST  
‘Moreover, he covered him thickly with that thorny cactus’

The negation marker necessarily attracts the FOC suffix; as in Quechua, the negated verb is followed by the non-assertive suffix -ti which is also a question marker; moreover, the negative suffix -k(a) is added (compare (34)):  

(43) xani-w iras-k-t(a)-ti  
no-FOC take out-NEG-1SG-NONASSERT  
‘I didn’t take it out’

Classical Arabic provides another example of grammemic marking of both TOP and FOC. In this language, a clear distinction is made between truly “verbal” sentences and “nominal” sentences. The latter ones may contain a fully conjugated verb, but they differ from the truly “verbal” sentences with respect to the order of constituents: “verbal” sentences begin with the verb, which is followed optionally by SUBJ, OBJ and/or other nominal arguments; “nominal” sentences consist of a sentence initial TOP and a predicate, which may be purely nominal (X is Y), or be composed of a verb and its complement(s). It seems reasonable to argue that the “verbal” sentence type is a grammaticization of the thetic judgment, whereas the “nominal” sentence pattern provides a grammaticized frame for categorical judgments: in the verb-initial sentence, the whole utterance is rhematic, there is no pragmatic foregrounding; on the other hand, the syntagmatic contrast between topical and focal elements is constitutive of the “nominal” sentence which can be described as verb-second. Normally, we are accustomed to languages where the categorical judgment constitutes the “basic” or “unmarked” case; in Classical Arabic, thetic judgments lie at the base of the unmarked sentence pattern, and categorical judgments are morphologically and functionally marked. This pattern of markedness distribution of PF is perhaps generally valid in verb-initial languages.

The text frequency of the “verbal” and the “nominal” pattern depends largely on the discourse type. In narrative discourse, the “verbal” pattern
prevails whereas all kinds of argumentative discourse show an inclination towards the "nominal" pattern. When reading narrative prose, like for instance the Arabian Nights, the order of constituents is V(S)(O) over pages and pages, without any topicalization or focalization of sentence constituents. It is a continuous flow of successive actions and events. On the other hand, scientific, or religious, or philosophical prose shows a much more "dramatic" contrast of pragmatic "peaks" and "valleys".

Formally, a "nominal" sentence may be marked by the order of constituents only; as in all other languages considered so far, morphemic marking of PF is by no means compulsory. The order TOP ^ PRED is sufficient in itself for marking a sentence as "nominal"; i.e. categorical. However, grammemic marking of PF is very frequent in Classical Arabic. Here again, it can be observed that TOP marking is far more frequent in running text than FOC marking. Both the TOP marking and the FOC marking grammemes are sentence-bound, not word-bound. These markers are not integrated in some morphological paradigm, and they are not cliticized. The only formal constraint is a syntactic one: both the TOP and the FOC markers must be placed at the beginning of the respective pragmatic constituent.

The TOP marker behaves like a verb in one respect: it governs the accusative case, as if it were a transitive verb. This particle, which is 'inna in Arabic, has preserved its verbal character to a higher degree than in Hebrew (hinne). It is not a true verb, however, but rather a kind of interjection. Its original meaning is perhaps best be rendered into English by the particle 'lo! The corresponding FOC marker la-, on the other hand, behaves rather like a sentence adverb. Its original meaning must have been something like "truly, verily".

The particle 'inna must be followed by a noun phrase of some kind. This can be a noun not accompanied by a preposition, or a prepositional phrase. Prepositional phrases do not change their form. Other noun phrases are normally put in the accusative, regardless of their case function. It is also possible to leave the SUBJ= TOP in its original nominative form if 'inna is used in its "lightened" form 'in (a construction called muhaffaf 'lightened' in native grammars); in this case, the use of the FOC marker la- is obligatory. This construction is rather rare, however. Normally, the marked topic consists of 'inna + N_acc. or 'inna + PP (after a preposition, the noun is automatically in the genitive). The FOC marker la- can be followed by any part of speech or sentence constituent. The most frequent cases are predicate nouns and predicate adjectives, but prepositional phrases and conjugated verbs are also possible.

As for text frequency, a count of the first 100 verses of the third sura of the Koran has given the following results: 'inna occurs 38 times, and la- 6
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times; in 35 cases, it is the SUBJ which is topicalized, in 3 cases it is a PP; as for the focalized predicate, be it with or without the explicit FOC marker *la-*, it is nominal in 20 cases, and verbal in 15 cases. Once more, we find that grammemic TOP marking is more frequent than grammemic FOC marking. Surprisingly enough, the figures found in this text passage of the Koran are not too far away from those found in Quechua and Aymara narratives. The ratio of TOP : FOC marking ranges from approximately 6 : 1 in Koranic Arabic to 5.3 : 1 in Quechua and 4 : 1 in Aymara. Of course, none of the analyzed samples is representative, and much more research is necessary in this domain before anything can be said with certainty.

A few examples will show some of the regularities of PF marking in Classical Arabic. The following cases are the most frequent and important ones (finer subdivisions are of course possible and necessary, but they are omitted here for reasons of space):

(44) TOP_{nm} (NP^{ACC}) \wedge FOC_{nm} (nominal)

'inna l-dīnā

TOP DEFART-religion by God GEN DEFART-devotion NOM

'The religion by God is devotion' (Q 3,20)

(45) TOP_{nm} (NP^{ACC}) \wedge FOC_{nm} (verbal)

'inna l-lāh-a șṭafā

TOP God-ACC choose+3SG PERF Adam-ACC and Noah-ACC

'God has chosen Adam and Noah' (Q 3,34)

(46) TOP_{nm} (NP^{ACC}) \wedge FOC_{nm} (nominal)

'inna l-lāh-a l-a-huwa l-‘āzīz-u

TOP God-ACC be HE DEF ART-almighty NOM

l-ḥākim-u

DEF ART-omniscient-NOM

'God is almighty, all-knowing' (Q 3,63)

(47) TOP_{nm} (NP^{ACC}) \wedge FOC_{nm} (verbal)

'a-‘inna-kum la-ta-3ḥad-ûna ‘anna ma‘a l-lāh-i

Q-TOP-2PL FOC-2IMP-testify-PL that with God GEN

'ālihat-an ‘uhrā

gods-ACC others

'Do you testify that there are other gods with God?' (Wright 1874-5: II, 86)
(48) $\text{TOP}_m \ (\text{NP}_{\text{Nom}}) \ ^{\text{FOC}}_m \ (\text{nominal})$

'in hâ{-âni la-Éâhir-âni
TOP \_\_\_\_\_\_\_this-DUAL NOM FOC-sorcerer-DUAL NOM
'These two are sorcerers' (Wright 1874-5: II, 88)

(49) $\text{TOP}_m \ (\text{PP}) \ ^{\text{FOC}}_m \ (\text{nominal})$

'inna fî ḍâlika la-ˈāyat-an la-kum
TOP in that FOC-token-ACC for-you
'Therein there is a token for you' (Q 3,50)

(50) $\text{TOP}_m \ (\text{PP}) \ ^{\text{FOC}}_m \ (\text{verbal})$

'inna bi-hî tu-ˈtā l-ˈumūr-u
TOP by-him 3IMP PASS-cicatrizet DEF ART-thing+PL-NOM
wa-tu-rˈabu and-3IMP PASS-repair
'By him all things are healed and restored' (Nöldeke 1897: 41)
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