0. General introduction

The main point I would like to make in this contribution is that facts of individual languages or of individual language groups cannot be really understood in depth if viewed in isolation. Broad typological comparison of data from many genetically and structurally different languages is necessary in order to be able to describe phenomena of single languages as what they really are, namely individual manifestations of the all-encompassing linguistic faculty of man. Therefore, individual branches of the language sciences, such as Romance philology, need to be complemented by typological and universalistic research undertaken in as broad a perspective as possible (the limits being rather of practical than of theoretical nature). Linguistic facts are not just facts; they always reflect, in all their disturbing and confusing variability, the basically uniform linguistic ability of man as a species. Facts of individual languages are transitory results of diachronic developments; as such they seem fortuitous, incidental, contingent, and in a certain sense they are so. But contingency is only one aspect of linguistic variability and language change; the other side is constituted by the basic regularities determining the lines of diachronic evolution. It is impossible to predict exactly whether a specific change will take place at all, but it is possible to predict, at the very least with a high degree of probability, that if it occurs it will take a specific shape and not another one. The individual change itself is an historical, and therefore contingent event; but the evolutionary pathways pursued by this event are of a more general and therefore more calculable nature. The general character of these pathways cannot be seen
if the empirical base of linguistic research is too narrow. Only an overview over a broad range of solutions found in different individual languages permits us to distinguish the essential from the accidental features and to trace the line of force, invisible to the naked eye, which underlie the apparent irregularities of diachronic development and of linguistic diversity. There are limits to this diversity; and it is perhaps the most important and most rewarding task of general linguistics to find out these limits, which are in a sense the evolutionary limits of mankind.

This general methodological and theoretical approach will now be exemplified by a more specific empirical problem. The general empirical question to which I would like to give here a partial and provisional answer can be formulated like this: what happens if a full-fledged case marking system disappears by phonetic erosion? Language development can be described as a continuous process of construction and destruction, of structuring, annihilation and restructuring. The basic syntactic functions, for which the traditional terms “subject” and “object” are a fallaciously convenient approximation, do not form an exception to this rule: case markers disappear, new ones arise, but the fundamental opposition between the two main participants in a prototypical transitive action remains valid over and above the variability of the means which express this relationship.

1. DOM in Romance and Semitic

This general question will now be illustrated by the example of two genetically unrelated language families whose respective development shows a number of striking and (hitherto unnoticed) similarities: Romance and Semitic. Both of these families form subgroups of larger phyla: Indo-European and Afro-Asiatic. It should be stressed that the general theory about the evolutionary dynamism of case marking systems which is presented here is by no means based exclusively on a detailed comparison of Romance and Semitic; these language families are chosen here as examples of a research which includes an extended sample of languages and language families all over the world. The number of language groups and language families where phenomena describable as “differential object marking” can be found is very high; as examples the following ones can be cited: Slavic, Armenian, Neo-Iranian, and Neo-Indoaryan inside the Indo-European phylum; and outside of it Finno-Ugric, Dravidian, Turkic, Mongolic, Tungusian, Tibet-Burmesian, Munda, Bantu, Pama-Nyungan, Micronesian, Uto-Aztecan, Chibcha, and Tupi-Guarani, among others.
For both the Indo-European and the Afro-Asiatic proto-languages a case marking system can be reconstructed where the basic distinction of subject and object is on the whole unambiguously expressed. It is a well-known fact that the Indo-European case system was considerably reduced in Latin, but the nominative and the accusative were still clearly distinguished. A simple and straightforward example of marking with both subject and object being present in nominal form can be found in the following line:

(1) **LATIN**

\[
\text{lupu}-s \text{ arguebat vulpe}-m \text{ furt}-i \text{ crimin}-e
\]

wolf-NOM accused fox-ACC theft-GEN crime-ABL

"The wolf accused the fox of the crime of theft"\(^4\)

The only exception was the neuter gender where no subject-object distinction was made since Indo-European times (this problem will be discussed below). Likewise, the oldest attested forms of Semitic still have preserved the case marking system of Proto-Semitic which was certainly not identical with that of Proto-Afro-Asiatic, having eliminated some of the latter one's irregularities.\(^5\) In the Proto-Semitic system, subject and object are clearly distinguished by the means of the vowel endings \(-\text{tt} \text{ vs. -a} \text{ in the singular, and -}\text{u} \text{ vs. -i} (= \text{GEN}) \text{ in the plural}. \) This system can still be observed in Akkadian, in Ugaritic, and in Classical Arabic (which survives to some extent in the modern written language), as can be illustrated by the following examples:

(2) **AKKADIAN/OLD BABYLONIAN**

\[
\text{nakr-um māt-am u-ša-mqat}
\]

enemy-NOM land-ACC 3ag-CAUS-fall

"The enemy will bring down the land"\(^6\)

(3) **UGARITIC**

\[
\text{lahm-ī bi-tulḥān-ātī lahm-a}
\]

cat-IMPR 2sg f in-table-GEN/ACC pl f flesh-ACC

\[
\text{šat-ī bi-karpān-ima yên-a}
\]

drink-IMPR 2sg f in-cup-GEN/ACC pl m wine-ACC

"Eat from the tables flesh! Drink from the cups wine!"\(^7\)

(4) **ARABIC/CLASSICAL**

\[
\text{hāmala l-hammāl-ū himl-ata-n}
\]

he-carried DEF.ART-carrier-NOM weight-ACC f-INDEF.ART
This system has been partially preserved also in Classical Ethiopian (Ge'ez), where the nominative ending -u has disappeared but the accusative ending -a still subsists.9

The case marking systems of Old Indo-European (as exemplified by Latin, Greek, Sanskrit etc.) and Old Semitic are on the whole very different from each other; however, they agree in one main point which is important for our present discussion: apart from the Indo-European neuter they keep separate the functions of subject and object in all NP's, without distinction. In my terminology I would say that (except for the point just mentioned) they are non-differential.

Both these systems have broken down in the more or less broad daylight of linguistic history attested by written records. Unfortunately, this daylight is frequently obscured by a number of factors, among which lacunae in the written tradition and the conservatism of standardized orthographies are the most important ones. However, it can confidently be assumed that phonetic erosion was the main, if not the only factor of the gradual disappearance of case marking both in Romance and in Semitic. Nominal endings tend to be levelled in the course of time. In the long run consonantal endings of Latin (-s and -m) as well as the vocalic endings of Semitic (-u and -a) were doomed to disappear.10 Generally speaking, two answers are possible in a situation where subject and object are no longer distinguishable by formal means: grammemic marking, once eliminated, may not be restituted at all and replaced by other means, especially by the means of positional marking;11 or it may be replaced by grammemic marking of a new kind. The former solution will be referred to shortly as positional replacement, the latter one as grammemic replacement. It should be noted that in languages with grammemic replacement position can play a more or less important role, too, but the opposite is not true: in the case of positional replacement there is no grammemic means for expressing the basic case relations. Both these solutions are found in Romance as well as in Semitic languages.

Grammemic case marking was replaced by exclusively positional case marking in Standard French, in Eastern and Northern Occitan, in most varieties of Rhaeto-Romance, in Standard Italian as well as in most Northern and Central Italian dialects; as for Semitic, this replacement can be
observed in the majority of the Neo-Arabic languages, especially in the Peninsular, Egyptian, and Maghrebi dialect bundles. Perhaps it is possible to relate this kind of replacement to the relative conservatism of both these areas as far as grammemic marking of subject and object is concerned: it is generally known that the nominative ending -s is well attested in Old French and Old Occitan and that it can be assumed to have existed until relatively recently in Rhaeto-Romance and Northern Italian; likewise, Arabic still had preserved the Proto-Semitic nominative and accusative endings at the beginnings of its history as a written language. Moreover, it calls to our attention that positional replacement of grammemic case marking has taken place in the more conservative original area of Arabic, namely in the Arabian Peninsula itself, and in those regions where Arabic has superseded non-Semitic Afro-Asiatic languages (Coptic and Berber). In the present contribution, the intricate problems of positional replacement will not be discussed further.

The older systems of grammemic marking were replaced by new grammemic systems in the remaining areas. In the domain of Romance these comprise, roughly speaking, the following varieties: Ibero-Romance; South-Western and Central Occitan; Upper and Lower Engadinian; Southern Italian including Corsican and its neighboring dialects, such as the dialects of Elba and of Northern Sardinia (Gallurese and Sassarese); Sardinian; and Rumanian. A few examples will serve to illustrate the new case marking devices found in some of these varieties. For every dialect, an example of the marked and of the unmarked accusative is given:

(5) SPANISH/ÖZARABIC

<table>
<thead>
<tr>
<th>Spanish/Ozarabic</th>
<th>Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>mibi</td>
<td>.non kereš</td>
</tr>
<tr>
<td>dař:acc lsg</td>
<td>neg you + love</td>
</tr>
</tbody>
</table>

“You do not love me”

vs.

beğa mia bokella

kiss my mouth

"Kiss my mouth!”

(6) SPANISH/STANDARD MODERN

<table>
<thead>
<tr>
<th>Spanish/Standard Modern</th>
<th>Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>no quise degollar a</td>
<td>mi perro favorito</td>
</tr>
<tr>
<td>neg 1+ liked behead dat:acc</td>
<td>my dog favorite</td>
</tr>
</tbody>
</table>

“I did not like to cut off my favorite dog’s head”
tenía que ir a matar un zorro
I+had+to go to kill a fox
"I had to kill a fox" ¹⁴

SPANISH/NORTHERN PERUVIAN
buscaré onde l corderito más gordo
I+shall+seek DAT=ACC the lamb most fat
"I shall look for the fattest lamb"

SARDINIAN/NUORESE
a mortu a Serbadore
has killed DAT=ACC Salvatore
“He killed Salvatore”

ITALIAN/GALLOSICULIAN
ddascio da Necoscia
I+leave DAT=ACC Nicosia
“I leave (the city of) Nicosia”

CORSICAN
prete Sartoli cuniscià l’ omi in ginerale e
priest Sartol knew the man in general and
a Ziu Don Santu in particulare
DAT=ACC uncle Don Santo in particular
“Father Sartoli knew man in general and old Santo in particular” ¹⁸
(11) **ENGADINIAN**

*Barnard vaiva maridə a la figlia*

Bernard was going marry \( \text{DAT} = \text{ACC} \) the daughter

d' ùn fuornər rich

of a baker rich

“Bernard was going to marry the daughter of a rich baker”

vs.

*euv nu vügl cha meis figl marida ûna bastarda*

I NEG want that my son marries a bastard

“I do not want my daughter to marry a bastard”

(12) **RUMANIAN**

*l- a adus nenea pe copil*

him has brought uncle \( \text{ACC} \) child

“The uncle has brought the child”

vs.

*a născut o femeie un copil negru*

has born a+f woman a child black

“A woman has given birth to a black child”

Among the Semitic languages, grammemic replacement can be found in the following languages and language groups: Late Akkadian; Hebrew; Aramaic in all of its numerous varieties; some Neo-Arabic languages, especially Iraqi, Syro-Lebanese, and Maltese; South Ethiopic in general (partially already in Classical Ethiopian, and totally in the modern languages, especially in Tigre, Tigrigna, Gafat, Gurage, and Amharic). It should be noted that, in contrast to the previously mentioned group of Neo-Arabic languages, grammemic replacement has taken place mainly in the Fertile Crescent (Iraq, Syria, Palestine) where Arabic has superseded another Semitic language, namely Aramaic. A few examples will serve to illustrate grammemic replacement in Semitic.

(13) **AKKADIAN/NEW BABYLONIAN**

*ana šarr-i bēl-ija l-i-krub-ā*

\( \text{DAT} = \text{ACC} \) king-GEN lord-1sg poss opt-3sg-bless-pl

“May they bless the king my lord!”

(14) **HEBREW/BIBLICAL**

*ymn-xa YHWH tī-ᵊ-rac ‘oyev*

right-2sg poss Yahve 2ag-shatter enemy

“Thy right hand, O Lord, shatters the enemy”
“They crushed the children of Israel”

“You shall love your neighbor as yourself”

“I have sent you two asses”

“You are to send to me Eleazar, son of HTH”

“I found Ahiqar”

“Her father made a great feast and called the 7 princes”
(18) ARABIC/CLASSICAL

\[
\text{\textit{\textbf{qayyafa 'afuù-kum li-'afuî-na}}}
\]

he-invited brother NOM-2pl POSS DAT=ACC\textit{brother}\ GEN-1pl POSS

"Your brother invited ours"\textsuperscript{26}

(19) ARABIC/SYRO-LEBANESE, DAMASCENE

\[
\text{\textit{\textbf{'alla ya-str-o ha-l-mudîr}}}
\]

god 3sg ag-protect-3sg PAT this-DEF ART-director

"May God protect this director"

\[
\begin{align*}
\text{\textit{\textbf{ma la-l-mudîr rakeb}}} \\
\text{\textit{\textbf{bal-brîmo}}} \\
\text{in-DEF ART-first class}
\end{align*}
\]

"He found the director driving in the first class"\textsuperscript{27}

All Romance and Semitic languages with grammemic replacement have one feature in common: not all direct objects are marked as accusatives, but only a part of them, sometimes even only a small fraction. In my terminology I would say that the new system of object marking has become differential, in sharp contrast to the preceding one.

Undoubtedly, there were some irregularities already in the older stages. In particular, it has been mentioned that in Latin, like in other older Indo-European languages, the neuter has no specific form for the nominative. This is a kind of differential split, too, and accordingly Hittite, Sanskrit, Old Iranian, Greek, Latin, etc. can be classified as languages presenting an accusative-neutral split.\textsuperscript{28} However, closer scrutiny reveals that a split of this type cannot be simply described in the same terms as a differential marking system like those found in the aforementioned Romance and Semitic languages (and in hundreds of other languages all over the world). The main difference lies in the fact that the accusative-neutral split of Ancient Indo-European is a petrified grammatical category whereas the more recent DOM systems are living ones. This distinction has two aspects: on the one hand, petrified categories are used mechanically and without exception, they are fully automatized; on the other hand, they are meaningless, or nearly meaningless in the normal synchronic functioning of the language. Without doubt the category of gender still has a recognizable semantic core in those individual Indo-European languages where it has been preserved, but on the whole this category has become a mere servitude gram-
maticale. This is especially true of the neuter gender in its relationship to masculine and feminine nouns denoting objects: there is no gender-related semantic difference between, say, murus, domus and tectum. Differential object marking, on the other hand, is a living category; this implies that it is meaningful, and that it is used with a certain degree of variation, i.e. of liberty of choice left to the speaker in the moment of his utterance. The rules are not strict, or more precisely: even if it were possible to formulate the rules in a strict way their applications still would show a more or less great margin of variability. The case-marking difference in a split system like Latin is clear-cut since it represents a merely intralinguistic distinction; in DOM systems like Spanish or Hebrew this difference is gradual and squishy since it reflects certain aspects of extralinguistic reality.

As has been pointed out, DOM in Romance cannot be correctly described, let alone explained, if its formation is seen merely as an incidental historical event. Traditional attempts for explaining DOM, or as it was usually called, the "prepositional accusative", were mostly made according to the following pattern: in Classical or Vulgar Latin, constructions were looked for (and readily found) where accusative and dative, or accusative alone and ad + accusative were interchangeable; then the growing use of the preposition was explained as "analogous spread" which started from these basic instances; at best, reference was made to the communicative necessity of keeping separate subject and object. It is evident that such an approach is, if not incorrect in itself, then at least necessarily incomplete. The development of a into an accusative marker in Spanish and many other varieties of Romance is viewed as a singular historical event which needs a singular historical explanation. In reality, it is the individual manifestation of one of the commonest pathways of change of case-marking systems in natural language.

This pathway can be very briefly resumed like this: if a non-differential system is eliminated so that subject and object are no longer distinguished, then grammemic replacement normally leads to the rise of a new system which is differential.

Such a differential system may ultimately become non-differential again by the continuous extension of the sphere of positive object marking; at this point of the evolution, the life cycle of case marking may start anew. However, this evolutionary pathway is not very frequently followed; instead, it can be observed that full-fledged DOM systems are often remarkably stable, and instead of being eliminated they rather tend to be
restituted in turn by new differential systems whenever the older differential markers are eliminated for some reason. In some language families, such as Southern Semitic (Ethiopic) or Aramaic, but also Spanish for instance, DOM can be observed as a recurrent pattern in the diachronic evolution of the language: the individual case marking grammemes vary in the course of time, but the underlying systems remain constantly what they were, namely differential. A few examples will show the recurrent character of DOM in the development of individual languages and language families.

In the southern branch of the Semitic language family, Classical Ethiopic had the preposition la- as the ACC' grammeme (in addition to the aforementioned accusative ending -a which had survived from the old Semitic system); la- is identical with the dative marker. The modern languages of Ethiopia present a great variety of grammemes having replaced the older Pan-Semitic DAT=ACC' preposition: we still find là- in some dialects of Eastern Gurage, và- (perhaps from older là-) in Northern and Western Gurage, gàl- in Tigre, na- in Tigrigna, -n in Amharic, Argobba and Gafat, and -u in Harari. Notwithstanding this great formal variability (note that not only the phonetic shape but also the relative position of the grammeme with respect to the lexeme may vary) the DOM pattern as such is recurrent in all Ethiopic languages.

As has been shown, in Aramaic the older preposition yar, whose only function was the marking of the ACC', was soon replaced by the universal preposition l-, whose main function was and still is the marking of the DAT (a similar evolution can be shown to have begun also in Hebrew, but the history of Hebrew as a living language came to its end when this evolution was still at an embryonic stage).

In Spanish, the normal preposition was always a, from the earliest recorded instances in the Semitic-Romance hargas to the present standard language (see examples (5) and (6)). This preposition was replaced in certain dialects of Northern Peru by the new case marker onde (see (7)), which is of course derived from the Old Spanish onde “where?”. The original meaning of onde was certainly “at the place of, or near” (German bei or French chez). In the spoken variety of Cajamarca it has become the DAT marker and at the same time the marker of ACC' inside a system that has remained as differential as it always has been in Spanish. (Note, besides, that this dialect has been dignified in literature by the rural protagonists of Ciro Alegria’s novels La serpiente de oro and Los perros hambrientos.) The
same remark could be applied to the Gallosiculian dialect of Nicosia (see (9)), where the original preposition a was replaced by da without any change in the the basic syntactic configuration.

A still more revealing example of the diachronically recurrent character of the DOM pattern is provided by the cases of grammeme agglutination and grammeme doubling. In Romance linguistics, the case of grammeme doubling in Upper Engadinian is well-known: the preposition a has fused with the personal object pronoun, and a me has come to be felt as a unitary form; as a consequence, the same preposition a (d) was affixed again to the unanalyzable whole in order to yield an unmistakable ACC' marker. The resulting form is ad a me. Similar phenomena are attested in some Neo-Iranian languages. In Central and Southern Baluèi, for instance, the ACC' ending -a is optionally followed by the suffix -rā, which represents a phonetically less reduced form of the same ACC' ending. In the Pamirian language Yazghulami the object pronoun is obligatorily preceded by the ACC' prefix z-/š-; this prefix has fused with the pronoun to the extent that it is felt now as indivisible; as a consequence, the newly formed ACC' prefix may be added, which results in a diachronically triple marking in one synchronic form.32 In this context it should also be noted that in the Romance languages in general the preposition is obligatorily added to the (accusative or dative) personal pronoun, i.e., a form which in itself is sufficiently differentiated from the nominative. In the Mozarabic dialect of the fuar{as (see (a)), we even observe a diachronically triple marking comparable to what is found in Yazghulami: the original dative pronoun mi (from mīhi) is once more marked as a dative by using the ending -bi (in analogy to tibi); to all this, the preposition a is added, and the whole form is used as a differential accusative.

From examples such as these it can be concluded that DOM represents a preferred target of diachronic evolution; therefore, this pattern tends to be rather stable in the development of case-marking systems. Changes do not affect its basic properties, quite to the contrary: even in the case of formal restructuring and lexical substitution the DOM pattern surfaces again and again. Grammeme replacement does not alter the internal structure of the system.

Romance and Semitic share still another feature: in the majority of both these language families the ACC' marker is diachronically and synchronically identical with the DAT marker. This has led some linguists, especially Romanists, to the conclusion that the prepositionally marked
object of Romance must be considered as a dative rather than as an accusative. According to this view the old accusative has simply been replaced by the dative in some instances. This view is superficial in that it does not take into account the syntactic behavior: — the ACC' occurs in connection with verbs that were transitive in Latin and continue to be transitive in other Romance languages; — an ACC' is pronominalized differently from a DAT; — and above all, the ACC' is used differentially whereas DAT is not. There can be no doubt that in spite of the formal identity of their respective markers ACC' and DAT belong to clearly distinct categories.

As for pronominalization, it is evident that the formal identity of the ACC' and the DAT markers may influence the form of pronouns by analogy, but such an influence is far from being frequent. In Romance and Semitic, I found only two examples of it: Northern Peninsular Spanish, and the Eastern Neo-Aramaic dialect spoken in Persian Azerbaijan. In Spanish this phenomenon is generally known as leisma; it consists in using the DAT pronoun instead of the accusative form under approximately the same semantic conditions which are also responsible for the use of the ACC' preposition. In Azerbaijani Neo-Aramaic the DAT forms of the pronoun have undergone cliticization and form now part of the verbal paradigm. These clitics are attached to finite verb forms which originally were participles; curiously enough, these DAT clitics cross-reference not only the ACC' but also the NOM: object and subject are expressed by the same grammemes. On the whole, however, such a kind of pronoun assimilation is the exception and not the rule; it does not exist either in Andalusian and American Spanish, or in other varieties of Aramaic, let alone in other Romance and Semitic languages.

The following sentences illustrate the predominating pattern of separate pronominalization for DAT and ACC'. Campidanese Sardinian is taken here as an example for Romance, to which the case of Lebanese Neo-Arabic, among many others, can be compared:

(20)  SARDINIAN/CAMPIDANESE
Carrabus sighid a Efisia
Carrabu follows DAT=ACC Efisia
Barnardu dda sighidi
Bernard her(ACC) follows
“Carrabus is following Efisia/ Bernard follows her”
Giginu fai signali a Filliccu de aspettai
Gigino makes sign DAT Fillicco of wait(INF)
Carrabusu e Gironi ddi fainti signali de
Carrabus and Girone her(DAT) make sign of
speak
“Gigino gives a sign to Fillicco to wait/Carrabus and Girone
gives her a sign to speak”

(21) ARABIC/SYRO-LEBANESE, LEBANESE
‘ali šāf l-bint
Ali see+3ag DEF ART-girl
‘ali šāf-ha (la-l-bint)
Ali see+3ag-3sg f PAT ACC DEF ART-girl
“Ali saw the girl/(her)”

vs.
‘ali ba’at l-ktab la-l-bint
Ali send+3ag DEF ART-book DAT DEF ART-girl
‘ali ba’at-la l-ktab la-l-bint
Ali send+3ag-3sg f DAT DEF ART-book DAT DEF ART-girl
“Ali sent the book to the girl”

Next, examples of the influence of the DAT=ACC identity on pro-
nominalization in the aforementioned languages are quoted:

(22) SPANISH/STANDARD EUROPEAN (CASTILIAN NORM)
le oiré llorar a mi hijo
him(DAT) I+shall+hear cry DAT=ACC my son
and
todavía me lo encontraba al
still REF him(ACC) I+met DAT=ACC
profesor. Le encontraba, seguro.
professor him(DAT) I+met+him sure
“I could still meet the professor. I could still meet him,
sure!”
Formal identity of the DAT and the ACC' marker is the predominant configurational pattern in the Romance as well as in the Semitic language family. In Romance it is found throughout, even in dialects where grammemes other than $a$ are used (compare the aforementioned cases of onde in Peruvian Spanish and of $da$ in the Gallosiculian dialect of Nicosia). The only exception to this rule is Rumanian. In this language, ACC' is marked by the preposition $pe$ (formerly $pre$) which has, besides its principal function as an ACC' marker, a number of locative meanings derived from its Latin etymon $per$. In Semitic, the DAT=ACC' identity is found in the majority of languages, namely in Late Akkadian, Syriac, most Neo-Aramaic languages except certain Eastern dialects, in all varieties of Arabic with DOM, in Classical Ethiopian, Tigre, Tigrigna, and Gurage. The ACC' has its own independent marker in the following languages: Classical Hebrew, Early and Imperial Aramaic, Amharic, and Gafat. It has already been mentioned that in Hebrew a drift away from the use of a specific ACC' marker was on its way when the language ceased to be spoken; the same drift can be observed in the development of Imperial Aramaic between the 6th century B.C. and the 3rd century A.D. In Aramaic, this drift came to its logical end, namely the final victory of the DAT=ACC' marker. The tendency towards the formal identification of dative and marked accusative was so strong in North Western Semitic that the earlier non-identical markers were systematically eliminated in the course of time.

It should also be stressed that grammeme identity of marked accusative and dative is by no means limited to Romance and Semitic languages; it is a frequent and widespread morphological pattern all over the world, from modern Indo-Aryan languages like Hindi and Punjabi to Amerindian languages like Guarani and Aymara. Broad typological comparison reveals that the DAT marker is by far the most important single source for newly developed ACC' markers. According to my estimates, DAT identity of the ACC' marker is found in more DOM languages than all other cases of
identity taken together. The conclusion can be drawn that the Romance languages, by choosing the dative preposition for the new function of the differential accusative, have shown a perfectly normal typological behavior.

2. Basic principles of DOM

How can DOM be systematically described, and how can it be explained? Here, only a very sketchy outline of some of the most important factors can be given. More details will be found in Bossong (in preparation).

The most general basic principle underlying DOM can be termed the principle of interaction between slot and filler: the case role of direct object, which can be considered as a syntactic and semantic slot, is subdivided into two subcategories according to the specific semantic nature of the NP which fulfills this function. It is the semantics of slot and filler which interact.

The semantic factors which play a role in the subdivision can be arranged according to three basic dimensions which I call the domain of inherence, of reference, and of constituency, respectively. These dimensions can and must be separated in linguistic analysis, but it is evident that more often than not they co-occur, and even interact, in real language use.

The domain of constituency can be subdivided into self-constituent and co-constituent. What is at stake here is the relative dependence/independence of the object NP with respect to the verbal predicate. Prototypical objects form an integrated part of the verbal complex. This is particularly important in the pragmatic domain: verb and direct object prototypically belong to the same pragmatic constituent, usually (although not necessarily) the rheme (comment) of the utterance. On the semantic side, this implies that prototypical objects are intimately connected with the verb; ideally, they do not exist independently of the verb. Formally, these objects tend to be incorporated into the verbal complex. In DOM systems, self-constituent objects, i.e. objects which are independent, or autonomous, with respect to the verb, tend to be positively marked. Compare in this respect the examples of Engadinian and Rumanian quoted above ((11) and (12)). In these examples, it is not only definiteness which is responsible for the distinction of marked and unmarked objects; it is also the factor of dependent vs. independent existence. Another case in point would be the well-known lexical doublets of Spanish of the kind of buscar and querer where the non-use of the preposition a entails a co-constituency with the
verb: the object, in its specificity, does not exist independently from the action of “seeking” and “wishing”. If the preposition is used instead, the object is assumed to exist in its own specific way prior to the action indicated by the verb. There are reports of languages where the factor of constituency seems to play the predominant role in DOM systems. Pâez is a case in point. In this language a systematic difference between affected and effected objects is made. On the whole, however, constituency seems to be a concomitant rather than a predominant factor of DOM in most languages.

In the domain of reference, I distinguish individuality, which presupposes referentiality, on the one hand, and discourse-related definiteness on the other hand. All these features can be further specified; one possible specification of definiteness, for instance, consists of a subdivision into three discourse related zones: identification of the referee by both speaker and hearer; identification of the referee by neither speaker nor hearer (the fourth logically possible case of identification of the referee by the hearer alone does not seem to play any role in the grammatical organization of natural language; it occurs only in marginal discourse types like police interrogation).

What is called here the domain of inherence is often referred to as the animacy hierarchy, especially since the seminal article of Silverstein (1976). I prefer to speak of “inherence” since this term covers the whole domain whereas “animacy” refers only to one (albeit important) distinction inside this semantic dimension. Moreover, this term exactly describes the basic semantic nature of this dimension: semantic features like [+ human], [+ animate], or [+ discrete] are inherently contained in a given NP, whereas features like [+ definite], or [+ referential] are determined by the specific context of the individual utterance. The domain of inherence ranges from deictics and proper names down to non-discrete nouns. Note that the [+ discrete] distinction roughly corresponds to the traditional distinction of count nouns vs. mass nouns. Besides the principal inherential distinctions, two secondary categories are sometimes important for distinguishing marked and unmarked objects, namely kinship terms and nouns denoting animals in a personal way. In both these cases, the result is an upwards shift of the corresponding inherential category: [+ human] nouns are treated as personal proper names in the case of [+ parent]; and [+ animate, −human] nouns are treated as [+ human] in the case of [+ personal]. Spanish examples such as (6) and (7) illustrate the difference between the personal and the non-personal treatment of animals. Similar examples can easily be
found in languages such as Modern Hindi and Paraguayan Guaraní. 

It should be mentioned here that inherence and reference converge in so far as the inherential zones [+ deictic] and [+ proper] are necessarily definite and referential. Such a convergence does not exist at the other end of the scale.

The essential features of the three basic dimensions of DOM are listed for quick reference in the following figures:

**DOMAIN OF INHERENCE**

(+deic) < (+prop) < ([-parent]) < (+hum) < ([-pers]) < (+anim) < (+discr)

**DOMAIN OF REFERENCE**

(+individuality) < (± referentiality) / (± definiteness)

**DOMAIN OF CONSTITUENCE**

(± independent existence) / (± pragmatic constituency)

In most languages with DOM, either inherence or reference can be shown to be the predominant factor in differentiating objects. Sometimes, this predominance seems to be absolute, as for instance the predominance of inherence in Slavic languages and in certain Munda languages, such as Sora; compare the following examples:

(24) **RUSSIAN**

ja vstreče-ju dorog-ix gost-ej  
I receive-1sg dear-GEN=ACC pl guest-GEN=ACC pl

vs.

ja pokupaj-ju dorog-ije vešč-i  
I buy-1sg dear-NOM=ACC pl thing-NOM=ACC pl

"I receive dear guests / I buy expensive things" 

(25) **SORA**

anin pasij-an ad'ěŋ gij-le  
he child-GEN DAT=ACC ("body") see-PAST

vs.

anin konsim(-an ad'ěŋ) tib-le  
he chicken(GEN DAT=ACC) cut-PAST

"He saw the child. / He cut the chicken"

In other cases, the predominance of referential features seems to be absolute, for instance in most Turkic and in some Tungusic languages, such as Mandju; compare the following examples:
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(26) **BASHKIR**

*hin kitap-ii uqi-yhìn*

you 'book-ACC' read-2sg

vs.

*hin kitap uqi-yhìn*

you book read-2sg

"You are reading the book/You are reading a (= any, some) book"\(^{47}\)

(27) **MANDJU**

*bi dengjan-be mukive-bu-he*

I lamp-ACC be extinguished-CAUS-PERF

vs.

*bi bithe ara-mbi*

I letter write-AOR

"I have extinguished the lamp/I am writing a letter"\(^{48}\)

The most frequent case, however, is a mixture of both these dimensions. Even if one of these dimensions seems to be predominant, closer scrutiny reveals that the opposite dimension usually also plays a certain role in the language in question. This becomes evident in Romance as well as in Semitic languages.

As for Romance, it is usually assumed that the inherence factor prevails, as can be seen from examples (5)-(9); however, the reference factor is not inexistent: in example (10), a [+ human] noun remains unmarked because it is non-referential in this specific context. Spanish and Rumanian are the two languages where positive ACC'-marking is more extended than everywhere else in the Romance family; in both of these languages, inherence is the dominating factor. Nevertheless, a systematic comparison of a Spanish novel with its Rumanian translation clearly has shown that there is a difference between these languages which is related not to inherence, but to reference: in Spanish, [+ human] NP's can be positively marked even if they are [− definite], and even [− individual], provided they are still [+ referential]; this is impossible in Rumanian where such NP's are left without ACC' marking. Compare the following examples:

(28) **SPANISH AND RUMANIAN**

*el joven Adolfo había conquistado a una señora en un cabaret > tînarul Adolfo cucerise o doamnă într-un cabaret*
en esa ocasión conoció a una pareja de sabios >
cu acel prilej a cunoscut un cuplu de intelecti
tranquilizó a la familia en voz alta >
cu glas tare a liniștit familia

The exact opposite of this situation can be found in a Semitic language such as Biblical Hebrew; here, the referential feature of definiteness is usually considered as the only factor for distinguishing marked and unmarked objects. However, even there an occasional influence of inheritance related features can be observed. In the following example, two indefinite NP's occur under exactly the same semantic and syntactic conditions, but it is only the [+ human] NP which takes the object marker:

(29) BIBLICAL HEBREW
ki yi-gah šor 'et-iš 'o 'et-iša wa-met
if 3ag-gore ox ACC-man or ACC-woman and-die+3ag
saqal yi-saqel ha-šor
stoning 3ag-be stoned DEFART-ox

vs.
ki yi-gnov 'iš šor 'o še u-tawah-o
if 3ag-steal man ox or sheep and-slaughter+3ag-3PAT
haniša baqar yo-šalem tahat ha-šor
five cow 3ag-pay under DEFART-ox

“When an ox gores a man or a woman to death, the ox shall be stoned / If a man steals an ox or a sheep, and kills it, he shall pay five oxen for an ox”

What is the rationale underlying these marking patterns? I think that essentially differential object marking must be considered as a kind of anti-marking device. In typical DOM languages, only those direct objects tend to be marked which share a more or less great amount of semantic features with prototypical subjects while those direct objects showing prototypical object properties tend to be left unmarked. As one proceeds from right to left in the inheritance scale, prototypical object properties gradually diminish, and at the same time the probability for objects to be positively marked gradually increases. Positive object marking inside a DOM system marks subject-like objects. In this perspective, the formal identity of ACC' and DAT markers in so many languages can easily be explained: prototypical datives have the same semantic properties as prototypical subjects. The interaction of slots and fillers leads to positive marking if the prototypical
semantic properties of slots and fillers disagree, whereas it leads to unmarkedness if these properties are in harmony. The general underlying principle can be described in terms of a natural markedness theory whose domain is in the iconic distribution of morphological markedness patterns: disagreement of slot and filler properties favors markedness, harmony favors unmarkedness. The facts of individual languages are the result of specific diachronic developments which depend, in turn, on some very general principles governing the interaction of meaning and form in language. Ultimately, such principles are based on certain deeply rooted cognitive patterns in man.

3. Methodological conclusion

In traditional Romance philology, which was more or less historically oriented, the question of why the accusative has come to be marked by the preposition of the dative has provoked much debate. If this instance of morphological identity of case markers is analyzed from the perspective of an individual language family all attempts for explanation are necessarily ad hoc. The use of a for the accusative cannot be explained by quoting from Classical Latin sources some isolated instances of constructions which are reminiscent of the later Romance ones.

What is inadequate in such a traditional approach is the level of abstractness. The development of DOM in Romance is not explainable as the analogous spread of certain constructions that were sporadically present already in the common proto-language. First of all, it can and must be explained as the individual manifestation of an evolutionary tendency that is not confined to individual languages but belongs to language in general. DOM in Romance, in Semitic, and in so many other languages is the externally visible result of some deeply rooted lines of force which determine the pathways and directions of linguistic change. One should be very careful with the adjective (or noun) universal. Of course I do not pretend that DOM is a universal phenomenon in the strict sense of the word. But what can be said is that DOM is virtually present in every single language as a predisposition for certain linguistic changes. If certain circumstances are given DOM is a universal phenomenon in the strict sense of the word. But what can be said is that DOM is virtually present in every single language as a pre-universal is perhaps not totally illegitimate.
With all these caveats in mind one might say that the first step towards the explanation of a specific phenomenon like DOM in Romance is to view it as the historically contingent manifestation of a universal of human language. The next step would be, of course, to look for reasons why such a universal exists at all. There are many semantic factors which might be adduced at this point, and it can surely be shown that not one of the general rules of DOM is fortuitous or arbitrary. But the methodological point to be made is that the search for such factors can be undertaken only after the completion of typological and universalistic research. First of all, typological comparison has to make clear that the phenomenon under study is not isolated but typologically related to other phenomena in many distant and different languages. Only then does it make sense to look for causal explanations. To seek the reason why the DAT marker a is used as an accusative marker in Romance is useless; to seek the reason why DOM systems frequently identify DAT and ACC' is not. Only at this level of abstraction can the linguistic sciences hope to raise — and perhaps in the long run, try to answer — the really interesting questions about the nature of man and his language.

Notes

1. The intricate problems connected with these notions cannot be discussed here. These basic grammatical relations can be described as combinations of formal, semantic, and pragmatic features. The specific shapes which these combinations of features take in individual languages and language types is the object of what I call configurational typology (Bossong, forthcoming). For the purpose of the present contribution it is sufficient to understand the terms “subject” and “object” in their current traditional sense.

2. In this context, Romance is taken in a broad sense including Latin. “Italic” would surely be more precise, but since it would still be more misleading “Romance” is preferred instead.

3. Some preliminary results of this research have been published in monograph form in Bossong (1985a) and in a number of articles; a complete version is being prepared (Bossong in preparation).

4. Phaedrus, Fables I, 10.

5. It can be assumed that in the proto-language of the Afro-Asiatic phylum the accusative, and not the nominative, was the basic case of the system; this state of affairs has been preserved until today in some Kushitic languages. This configuration is typologically marked and has been restructured in most branches of Afro-Asiatic, including Semitic.
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8. Adopted from the story of Sinbad, Alf layla wa-layl.
9. For reasons of space limitation, the South Ethiopic languages will not be illustrated by examples in this contribution. See Bossong (in preparation) for details.
10. The fact that -s is phonetically more resistant than -m and -a more resistant than -u is of course important for the development of case marking systems in individual languages. In the Indo-European area, Gothic, Modern Greek, and Old French are examples of the preservation of -s combined with loss of -m; this distribution of case markers is anti-iconic and tends to disappear without compensation. In the Semitic area, the above-mentioned case of Ge'ez (Classical Ethiopian) is an example of preservation of -a combined with loss of -u; this pattern is in accordance with the basic principles of iconic marking. This problem is discussed more in detail in Bossong (1985b).
11. The terms "grammemic" and "positional" are a part of my general typological theory; see Bossong (1979) and (1980) for details. Explicit marking of a grammatical category, such as a relationship between A and B, can take the form AB vs. BA or the form x(A,B). I prefer the term "grammeme" for x since "morpheme" is ambiguous; I use this latter term here exclusively as a cover term for grammeme and lexeme.
12. I prefer this term instead of the traditional designation "Arabic dialects".
13. Harğas 45 and 53, quoted according to sola-Solé (1973: 277, 310) (with text emendation in the first example).
17. C. La Giglia, quoted in Bossong (1982: 32). Note the use of the preposition da instead of the more common a. This use is limited to the dialect of Nicosia; the neighboring Sicilian dialects have a.
22. Ex.15, 6/ Ju. 10, 8/ Lev. 19, 18. The first example is taken from an archaic poetic text where both the preposition 'et and the definite article are still absent in a syntactic and semantic context which would require both of them in later prose. This is exemplified in the next sentence which contains the same verb. The third example shows that in late
Biblical Hebrew 'et was at the point of being gradually replaced by the dative preposition -t, a process which was parallel to what is found in Aramaic (see 15) but which did not come to its logical end in Hebrew.

23. The first two examples exemplify the differential use of the older preposition yat, which seems to be etymologically related to Hebrew 'et (the most plausible hypothesis connects this preposition with the existential particle, which is itay in Aramaic and yeï in Hebrew). These examples are from the letters of Bar Kokhba, as quoted in Fitzmeier & Harrington (1978: 160, 162). The third example shows the use of the dative marker which has prevailed in all later dialects of Aramaic. In terms of absolute chronology, this example is much older than the preceding ones; it is taken from the Story of Ahigar the Sage, Egypt, 5th century B.C., as quoted in Segert (1975: 350).

24. Quoted in Nöldeke (1898: 21).


26. Kitab al-aqūm XI, 24, as quoted in Reckendorf (1921: 248). This example shows that the use of the dative instead of the accusative was occasionally present already in the classical language. This is not sufficient, however, to classify Classical Arabic as a language with a full-fledged DOM system.

27. Folkloristic narrative, see Bloch & Grotfeld (1965: 186, 188).


29. Müller (1971) provides a typical example.

30. According to an hypothesis formulated by Francisco Villar (1983) (see also Bossong 1984), case marking in the reconstructed Indo-European proto-language was originally a DOM system; the later non-differential system of the historical languages would have been, still according to this hypothesis, the result of a spread of positive object marking over all semantic domains. A similar tendency towards a generalization of positive object marking and the resulting loss of differentiality can presently be observed in the Neo-Iranian language Sivandi (spoken near Shiraz) and in the only Caucasian language with DOM, namely Udi (which belongs to the Lezgian family of the Dagestan languages); see Bossong (1985a: 49-52) and Bossong (1985b) for details.

31. We even find one and the same grammeme as both preposition and postposition; compare Tigrigna and Amharic/Argobba/Gafat. A short survey of the grammemes used in southern Semitic can be found in Leslau (1956: 49). A detailed description is contained in Bossong (in preparation).

32. For details on Engadinian, Baluči, and Yazghularni, see Linder (1981) and Bossong (1985: 52-55, 95-98) respectively. A construction similar to that found in Engadinian seems to have existed also in Old Aragonese, see Pensado (1985) (where the use of adaquel in subject function is studied).

33. The standard work on leismo is Marcos Marín (1978). It should be noted that this linguist establishes a specific relationship between leismo and the so-called prepositional accusative in Spanish; he thereby elaborates an idea expressed for the first time by Rafael Lapesa.
This is due to the fact that in Eastern Aramaic the past tenses are expressed by a construction which was originally participial: "I heard" is expressed as "(it) was heard to (= by) me". In the dialect under scrutiny this construction is not limited to the nominal subject but it also comprises the personal clitics of the verb. As a consequence, one and the same verbal clitic may refer to the dative (etymological meaning), to the accusative (DOM-related *leismo*) and to the nominative (note that this construction is still configured according to a nominative-accusative pattern; there is no preterital ergativity).


Quoted in Koutsoudas (1967: 512).


Interestingly enough, in most of these dialects the original DAT preposition *t-* has lost its original function and serves today exclusively as a ACC' marker; the new preposition *qat* is used for the DAT instead.

This is no necessary evolution, however. In some languages, the opposite tendency away from the DAT=ACC' identity can be observed; a well-known example of this opposite drift is modern Persian where the postposition *-râ* has lost its original dative meaning in the course of the last millennium; see Lazard (1970) for details.

Other important sources are locatives, especially directionals, but also ablatives, and existentialis (presentatives). The question of grammeme identity of ACC' markers is treated more in depth in Bossong (1985: 109-121).

It should be noted that, in spite of the use of these terms, the present writer feels no special inclination towards tagmemics.

This Chibcha language is spoken in Colombia. See Jung (1989).

Examples from Guarani are quoted in Bossong (1985c: 22f).

Quoted in Garde (1980: 143).


Quoted in Poppe (1964: 35-37).

Quoted in Haenisch (1961: 65).

The Spanish original is a novel by Vargas Llosa. The analysis has been carried out in Tatbaru (1987).

Ex. 21, 18/22, 1, quoted in Bossong (1985b: 315).
References


Differential Object Marking


