Historical Development of Auxiliaries

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Historical Development of Auxiliaries

edited by

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Foreword

As part of the 7th International Conference on Historical Linguistics held in Pavia, September 1985, a workshop was organized to discuss the much debated questions of the definition and possible membership of the category AUXILIARY, considered especially from a diachronic point of view, in accordance with the general historical approach of the Conference.

The present volume was conceived in order to publish the proceedings of that workshop, which ranged from contributions drawing their evidence from well-documented linguistic traditions, such as Germanic and Romance, to papers dealing with languages like Warlpiri, lacking any accessible diachronic depth, or pidgins and creoles whose diachronic dimension can be but an indirect one.

Unfortunately, it has proved impossible to publish exactly the same set of papers as that presented at the full-day workshop; neither have we been able to reproduce the stimulating interventions from many competent specialists who took part in the lively discussion. Many of their observations have however been incorporated in the final versions of the papers and the editors thankfully acknowledge all the interesting suggestions raised in the informal and friendly atmosphere of the discussion that followed every paper.

It is useful to reproduce hereafter the original program of the workshop. Some references to missing papers will thus become understandable to the reader of the Proceedings; these references have at times been maintained — not of course in a detailed form — in order to give an idea of the many subjects (and problems!) dealt with by the contributors to the workshop:

(a) *General Problems:* Discussant Paolo Ramat (Pavia)

9.00 — 9.30 Paolo Ramat: Introductory paper
9.30 — 9.45 Henning Andersen (København): From Auxiliary to Desinence
9.45 — 10.00 Simon Dik (Amsterdam): Copula and auxiliary: synchronic and diachronic aspects
10.00 — 10.15 Eloise Jelinek (Arizona): Auxiliaries and ergative splits: a typological parameter
10.30 — 11.15 General discussion

(b) *'Exotic' Languages:* Discussant Annarita Puglielli (Roma)

11.30−11.45 Ronald Emmerick (Hamburg): Auxiliaries in Khotanese
11.45−12.00 Thomas Stolz (Bochum): The development of the AUX-category in pidgins and creoles: the case of the resultative-perfective aspect and its relation to anteriority in creoles
12.00−12.15 Annarita Puglielli: Discussion paper
12.15−12.45 General discussion

(c) *Germanic Languages:* Discussant Martin Harris (Salford)

15.30−15.45 Louis Goossens (Antwerpen): The auxiliarization of the English modals: a Functional Grammar view
15.45−16.00 Merja Kytö (Helsinki): On the use of modal auxiliaries indicating possibility in Early American English
16.00−16.20 Martin Harris: Discussion paper
16.20−16.45 General discussion

(d) *Romance Languages:* Discussant John Green (Bradford)

17.15−17.30 Harm Pinkster (Amsterdam): The use of motion verbs as auxiliaries in Latin
17.30−17.45 Giampaolo Salvi (Budapest): The Romance auxiliaries: a case of syntactic reconstruction
17.45−18.00 Ed Tuttle (UCLA): The spread of ESSE as a universal auxiliary in Italo-Romance
18.00−18.15 Nigel Vincent (Cambridge): 'Venire' and 'andare' as auxiliaries in Italian
18.30−18.45 John Green: Discussion paper
18.45−19.15 General discussion

Two new papers have been added to the original program: C. J. Conradie's paper, transferred from the main Conference, and that by Esméralda Manandise, who was unable to attend the workshop as originally planned.

Despite the regrettable absences, we believe that the present collection of papers represents a valuable contribution to the ongoing discussion on a topic that in recent years has proved to be of great interest within many different theoretical approaches. The diachronic approach of this volume may help to elucidate some of the central issues in the debate about the problematic category of AUXILIARY, and what may reasonably count as an exponent thereof.

Finally we would like here to thank all those who helped to make the workshop a success, above all of course the contributors and other participants but also our hard-working secretarial colleagues Marco Mazzoleni, Caterina Pagani, Claire Robinson and Stella Walker.

M. H. and P. R.

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Section (a):

General Problems

Introductory Paper

Paolo Ramat

In this discussion paper it is my intention to sketch some of the general problems and issues raised by the reading of the contributions offered to the workshop.

I will examine first some proposals for a definition of AUX(iliary) as a category, drawing from the evidence adduced in the papers. Then I shall examine whether all the adduced examples can really be considered as being auxiliaries, according to the criteria usually employed in different approaches to the question of the definition of AUX, and conclude with a negative answer.

The category AUX seems to be a gradient notion, in effect 'fuzzy' though with prototypical instances. This is of course a situation that, in the historical dimension, applies to many aspects of language.

Finally, from the historical point of view, I will tentatively sketch four stages in the auxiliarization process — that is in the grammaticalization process of lexical items — relying on four empirical properties to arrive at an operative definition of AUX.

The first impression one gets from reading the whole set of papers presented for this workshop — and not only those appearing under the heading 'General Problems' — is that the definition of what is meant by 'Auxiliary' is by no means uniform and consistent in spite of several recent attempts to give a comprehensive definition (see also the discussion by John Green in this volume: 257 ff.).

Take for instance the notional definition proposed by Akmajian et al. (1979: 2) according to which 'AUX is a category — i.e. distinct in its syntactic behavior from the behavior of other syntactic categories — labeling a constituent that includes elements expressing the notional categories of Tense and/or Modality'. In addition to this it must be noticed that the category AUX is said to contain a specified, fixed and small number of elements, usually occurring in a fixed order within the AUX constituent. These elements may mark subject, object, subject and object agreement, question, evidential,

emphasis, aspect, and negation (see Manandise, this volume: 319 f., drawing on Steele 1981: 21 – 22).

Does such a definition really include all the verbs which are usually considered as instances of AUX and only those? If a parameter for the auxiliarity of a verb is its peculiar syntactic behavior, how have we to consider the serial constructions of the type quoted by Simon Dik (his example (61))

(1)   'he finish he eat' or 'he eat he finish' for 'he has eaten'

where 'verbs sharing a common core argument are merely juxtaposed with no complementizers or intervening constructions' (Foley – Van Valin 1984: 186).

This is the case of Mandarin Chinese

(2)   *Tā   lā-kāi   le   mén*
         3 sg. pull-open PERF door
         'he pulled the door open'

or of Yoruba

(3)   *ó   mú   iwé   wá*
         3 sg. took book   went
         'he brought the book' (Foley – Van Valin 1984: 189),

where we find two full verbs, none of which shows a peculiar syntactic behavior. I am by no means a specialist for Australian languages, but it seems to me that Warlpiri, too, may be said to show a similar feature since the verb root *ka* functioning as auxiliary may present different forms according to different tenses. Thus alongside

(4)   (= Jelinek 5 d.) *Ngarrka-ngku ka   wawirri*
                          man-ERG   AUX   kangaroo
         panti-rni
         spear-NON PAST
         'The man is spearing the kangaroo'

with *ka* = PRES 3 sg NOM 3 sg ACC, we find also

(5)   *Wawirri-∅   kapi-rna-∅*
         kangaroo-ABS   FUT-1 sgNOM-3 sgACC
         panti-rni   yalumpu-∅
         spear-NON PAST that-ABS
         'I will spear that kangaroo'

with *kapi-*. (On the ∅-form of the arguments see Jelinek, this volume: 90.)

We have here clitic auxiliaries bound to a fixed position and carrying no individual semantic content but only a syntactic load — as usual in Australian prefixing languages with a fairly transparent agglutinative structure (Capell apud Dixon (ed.) 1976: 618) and therefore it seems that these examples can be compared to the Yoruba ones only to a certain extent: however we see that AUX-forms give morphological information on a par with the 'main verb'; in other words there are two inflected verbal forms — which is not of course the case in English or French.

The same remarks as for Mandarin Chinese and Yoruba seem to hold true also for Khotanese:

(6)   *käḍägane   yäḍe*
        evil deeds 3 sgPERF TRANS MASC
        īyä
        3 sgOPT (< Root *ah-* 'to be')
        'he may have done evil deeds' (see Ronald Emmerick, this volume: 272).

or Basque (examples from Dik, Nr. 48, 49; for further discussion of the Basque case see the final part of this paper):

(7)   *Liburu   hori   ni-k   irakurri-a*
        book   that(-ABS) I-ERG   read(PERF)-DEF sg
        d-a
        3 sgABS-*izan* (= be)
        'That book is such that I have read it'

(8)   *Ni-k   liburu   hori   irakurri*
        I-ERG   book   that(-ABS) read(PERF)
        d-u-t
        3 sgABS-ukan (= have)-1 sgERG

and this certainly holds true for many other languages, where the so-called 'AUX' shows no particular syntactic behavior.

If we follow the traditions of Indo-European linguistics and insert among the definitional properties of AUX that in a verbal complex the AUX must be the only inflected form, all the cases discussed so far would necessarily be excluded from the set of examples of AUX. From the semantic and functional point of view this definition entails

that the combination of the verb considered to be an AUX and the form of the other verbal lexeme must have just the same argument structure as the simple forms of that verbal lexeme (see Pinkster on *habēre,* this volume: 201). This means, in other words, that the finite verb form (= the AUX) imposes no restrictions on the non-finite forms.

In her stimulating contribution to *Auxiliaries and Related Puzzles* (Frank and Richards (eds.) 1983: 21 – 46) Eloise Jelinek has argued for the existence of an AUX invariant node and AUX as a universal category, rejecting Pullum's assumption that auxiliaries would represent but a special subset of verbs generated in a way similar to that of the other verbs. If AUX is a universal category it must be represented by a Phrase Structure Node in all grammars and the large crosslinguistic variations we may actually observe must be explained by the (semantic) features of the words inserted under the AUX-node. This is an up-to-date reformulation of the fundamental rule of the classic Transformational Grammar:

(9)   S → NP (AUX) VP

where AUX → T M A (Tense, Mode, Aspect).
Within Chomsky's Government Binding Theory

(10)   S → NP INFL VP

so that in this respect AUX and INFL would practically be identical.

There is, in fact, a widespread agreement that AUX should be considered a category dominating Tense, Mode, and Aspect. However, Eric Reuland has argued in his contribution to Frank – Richards (1983) for the superiority of the INFL category and the non-universality of the AUX category, since the first one exhibits all the fundamental properties of the 'head' S which are relevant for GB theory. Consequently AUX would be just a special case of INFL, and moreover it would be incapable of accounting for non-temporalized clauses as Dutch bare infinitival constructions:

(11)   *dat Annamaria Patrick de ratten zag vangen* (Reuland
         1983: 139)
         'that A. saw P. catch the rats'

or English

(12)   *I understand John behaving foolishly* (Reuland 1983: 115).

I have dwelt upon the discussion within the Generative Theory just in order to show that also among generativists there is by far no agreement as to what AUX actually means. Actually I have argued elsewhere that the Universals of Generative Transformational Grammar, are often not 'Universals of Language' but 'Universals of the Linguist', i. e. methodological devices of the analysis the linguist applies to all languages (cf. Ramat 1984: 56 – 57).

But leaving now aside this larger epistemological and methodological problem, let us recall from the foregoing discussion that AUX must have the property of being capable of expressing Tense, Mode, Aspect. The problem is whether AUX must be the only representative of Tense, Mode, Aspect. If the answer is 'yes', then examples (2) – (8) should be excluded from the realm of auxiliaries. This is, I think, the reason why Simon Dik (this volume: 71) doubts whether serial constructions consisting of two fully inflected verbs have to be considered on a par with the other cases of auxiliarization he has examined (namely the 'Localist channel' and the 'Property channel').

According to A. Capell, Tense, Mode, and Aspect are represented, in Warlpiri and other Australian languages, discontinuously in the clause, not by elements in an auxiliary word, but by suffixes in the verb stem, and free aspectual and modal auxiliary roots (Capell apud Dixon (ed.) 1976: 623).

Now, some 'auxiliary' roots (with quotation marks added by Dixon 1980: 426) are still reducible to semantically autonomous full verbs: 'Consideration of verbs that take -*wa*- "to fall" as AUX is suggestive of metaphorical connections' (Dixon 1980: 127 — comparing Engl. *fall in love*). If this is true, we are not far from the state of affairs exemplified by the outcomes of Port. *acabar* 'to finish' in creoles and pidgins, so nicely studied by Thomas Stolz:

(13)　(Ilha do Principe) *E　kabá　falá* (= Stolz, example (5))
　　　　　　　　　　　　PRO PERF V
　　　'He finished talking'

or, still more evidently:

(14)　(Sri Lanka) *E:li　ja:-fəla　e:w　ja:-ka:- fəla:*
　　　　　　　　PRO PAST-V PRO PAST-PERF-V
　　　　　　　　fəla:-tu
　　　　　　　　QUOT-PERF
　　　'He said he (had) told (you)' (Stolz, example (8))

with *-ka:* (< *acabar*) as a tense/aspect modifier of the main verb (Stolz, this volume: 296).

The large palette of examples from Portuguese-based creoles enables Stolz to sketch a stratification which may be considered representative of the diachronic evolution of *acabar* from full verb with its own lexical meaning as perhaps in

(15)   (Papia Kristang) *Yo   ja   kabá*
                         PRO PAST PERF
                         kumí (= Stolz, example (7))
                         V
        'I have finished eating'

to a real auxiliary as in (13), and then finally a temporal conjunction:

(16)   (Cabo Verde) *El   cendê candêr, el*
                      PRO   V   N   PRO
        senta pêl d'cara, cabá   el   bá abri
        V   N   PERF   PRO   V   V
        'She lit a candle, caressed her face and went then to open the door' (= Stolz, example (6))

thus joining other temporal conjunctions derived not from verbs but from nouns, as *lo* 'then' (< *logo*), used also as future marker. As Schuchardt rightly pointed out, 'das Verbum sinkt vielfach zu der Rolle eines Adverbiums, einer Präposition, einer Konjunktion herab' (quoted after Stolz, this volume: 311). In other words, we are faced with the weakening of restrictions, a development which is typical of the diachronic evolution towards the category AUX, so accurately illustrated by Harm Pinkster referring to the emergence of temporal auxiliaries in Latin (see Pinkster, this volume: 210 ff.).

From the examples presented in several papers (and especially in those of Andersen and Stolz) we may tentatively sketch the process of auxiliarization — i.e. of grammaticalization of lexical items — as follows:

I. Full verbs

acabar, habēre, shall, werden (-wa- ?), etc. have their full semantic meaning as in

(17)   *multa   bona   bene   parta   habemus* (Plautus, *Trin.* 347)
QUANT N   ADV ADJ V
"we have many properties (which are) well acquired"

whose constituent analysis is

(17) a. $_{VP}$[$_{NP}$[$_{QUANT}$[multa] $_N$[bona] $_{ADJ}$[bene parta]] $_V$[habemus]]

(see Ramat 1984: 145).

This construction may still be found as late as the 5th century: cf. Cassianus, *Inst.* 4,7 [A. D. 426]: *qui habet curam peregrinorum deputatam* '(a monk) who has received [from others! The Subj. of *habēre* is not the same as the Subj. of *deputāre*!] the task of taking care of foreign visitors"; see Pinkster, this volume, example (14).

In these cases the non-finite verbal form, whose subject may also be different from that of the finite verb (see Salvi, this volume: 228), may also be absent and the sentence will not lack its meaning: *multa bona habemus* and *qui habet curam peregrinorum* are meaningful sentences.

This is no longer the case when the non-finite verbal form becomes the necessary complementation of the finite verb (Phase II).

II. Predicative construction

Yo ja kabá kumí (example (15)) without *kumí* would mean simply 'I have finished'. Compare also

(18)   *Nam hominem servom / suos domitos habere oportet oculos et manus* (Plautus, *Mil.* 563 – 564)
In fact a man servant / his tamed to have needs eyes and hands.
'A servant must indeed keep his eyes and hands submissive'.

Without *domitos* (18) would have no meaning at all (see Ramat 1984: 144). Pinkster is right to note that in most cases as

(19)   (= Pinkster, example (8)) [*Flamines*] *caput cinctum habebant filo* (Varro, *L. L.* 5,84)
'the *flamines* had their hair girt with a woollen *filum*'

or

(20)   (= Pinkster, example (15a)) *nam et capillos nostros ipse utique creavit et numeratos habet* (Augustinus, *Serm.* 62.10,15)

'for he has certainly created our hairs and has them counted'

the predicative past participle cannot really be omitted: ?*the flamines* had their head', ?*he has our hairs'.

It is perhaps precisely in such cases of inalienable possession that periphrastic verbal forms made the first step towards auxiliarization of finite verbs. Note that the process may be repeated with new lexical material. Salvi quotes the Italian example

(21)   *Tengo gli occhi aperti* 'I keep my eyes open'

with *tenere* like Port. *ter* < Lat. *tenēre*, already used as an AUX in cases as *persuasum, traditum tenere* (Pinkster, this volume: 214 f.): ? *tengo gli occhi* 'I keep my eyes' would sound very strange! This applies also to the new category of 'semi-auxiliaries' quoted by John Green (this volume) as Ital. *venire, andare* which show also modal nuances (e. g. *la cosa andava fatta* 'the thing had to be done'); on modality see below.

III. Periphrastic forms

Examples as the well-known Late Latin

(22)   *episcopum invitatum habes* (Gregory of Tours) 'you have invited the bishop',

discussed by Pinkster, belong here, as well as the already quoted *E kabá falá* (example (13)) "he finished talking".

We are dealing here with real (new) periphrastic perfect forms. But the same applies also to the forerunners of the Romance futures and conditionals: *possidēre habet, dare habes* > *pussideravit, daras* where the finite verb (to be considered in terms of a Categorial Grammar as the 'Operand': Ramat 1984: 155–156) is really the marker for Tense, Mode, and Aspect, with no autonomous semantic meaning.

We arrive finally to stage IV.

IV. Agglutination

This stage may be exemplified by the already quoted Late Latin

(23)   *PVSSIDERAVIT, daras*

and, of course, by the Romance future and conditional. Or also by *ja:-ka:-fala:* '(had) told' of the Sri Lanka creole (example (14)) – and, I would add, by the Warlpiri examples (4) and (5). See also the 'not-easy-to-analyse' fusional forms of the Basque examples (27), (28) as the final stage of an agglutination process.

The evolution sketched here is strongly reminiscent of the scale of grammaticalization suggested by Louis Goossens for the process of desemanticization of the English modals:

(24)   full predicates > predicate formation > predicate operators
        (Goossens, this volume: 118).

Now, it is certainly noteworthy that in English, too, the instances of AUX, when reduced to tense or mood markers, may have an extremely reduced phonetic form: *I'll see; I'd like; I've been,* etc. The AUX is here reduced to a simple morphological sign, a prefix agglutinated to the main verb ('erosion' of the form). As was rightly observed by Ernst Pulgram in the workshop discussion, *'ll, 've* and also *gonna* (in substandard forms as *I/you/he gonna do this*) are on the way towards becoming prefixed inflectional morphemes, whether or not they are spelled out as separate lexemes. The same evolution can be observed in ModGk. *θà πῶ* 'I'll say' < *θέλει ἵνα εἴπω,* lit. 'will (3sg!) so that I speak', where the cliticized form no longer distinguishes verbal person. (Pulgram quoted also French dialectal forms of the type *je/tu/il va chanter.*) The same evolution can be observed – as is well-known – in the Slavic languages that cliticize the verb 'to be', in this case postposed to the main verb: Henning Andersen in his paper presents evidence for the enclitic agglutination of the verb 'to be' to the finite verb forms in Old Polish, where, however, the eventual outcome was person and number markers, unlike the extreme trend noted in the above English and French examples. Finally, a further parallel may be underlined in this drift towards cliticization, namely that beside the reduced clitic forms many languages do continue to have full orthotonic forms of the same verb when they possess an autonomous meaning: Old Pol. *jeśm*

'I am' vs. *-(e)šm/-(e)m*; Rum. *noi avem* 'we have' vs. *noi am vezut* 'we've seen': the final stage of this reduction or phonetic erosion is precisely Ital. *-emo* in *vedr-emo* 'we'll see' vs. (dial.) *avemo* or French *-ons* in *nous verr-ons* vs. *nous avons* (see Ramat 1984:159).

On the one hand, Frans Plank, critically reviewing the 'Modals story' as told by David Lightfoot, affirms that the rise of the English Modals 'must be seen in the larger context of an overall diachronic tendency towards the reduction of inflectionally expressed mood oppositions [e. g. indicative ~ subjunctive], or at least of the inflectional apparatus to express such oppositions' (Plank 1984:345, for further critical discussions of Lightfoot's interpretation of the evolution of modals in English see Conradie and Harris, this volume 113 ff. and 182 f.). The analytic, periphrastic forms produced by using Modals or pre-Modals follow the general principle if 'iconicity' or transparency (Gabelentz 1901:256 called it 'Deutlichkeitstrieb').

On the other hand, cliticization of AUX — the last phase of the desemanticization and erosion process that auxiliaries undergo in their grammaticalization (see Dik, this volume, referring to Meillet) — represents the final result of the second general principle operating in language (and language change), the principle of least effort (Gabelentz called it 'Bequemlichkeitstrieb') moving towards synthetic, symbolic and no longer analyzable forms.

Stages I—IV represent focal instances of the process between the two poles — a process which is continuously going on without breaks (and Goossens, too, has placed some modal items like *can* or *shall* on the intersection lines between the three domains of his scale). The first steps of this gradual drift occur first in unmarked environments where the original meaning of the verb on the way to becoming AUX may easily become redundant (e. g., *habēre* in the case of inalienable possession: recall ?*Flamines caput habebant*).

Things being so, no wonder that there exist different opinions among linguists as to what must actually be considered an AUX: where should we draw the line between full verbs and AUX?

Following the line proposed in Talmy Givón's article of 1971 it has recently been suggested that also the serial constructions (= type (1)) should be considered as the first, most primitive stage of the AUX development (Moreno, forthcoming). From the evidence gathered from the papers of our workshop it is not possible to support this hypothesis — and in fact, as was stated at the beginning, there are substantial differences between serial constructions and what is

traditionally considered an auxiliary verb, although such an evolution cannot theoretically be excluded (see below).

We thus come back to the problem of a consistent definition of AUX, the problem with which we began. After having quoted the definition proposed by Akmajian, Steele, and Wasow, let us also consider a recent analysis within the framework of Montague Grammar: Greg Carlson ranges the AUX-verbs among the functional morphemes that do not contribute to the meaning of the sentence but are syncategorematic to the lexical morphemes to which they apply (in this case the main verbs), preserving their category (Carlson 1983). Evidently this applies well to the traditional set of auxiliaries in the (Indo-)European languages.

Many years ago, discussing the status of the semi-Modals like Engl. *need* or Germ. *brauchen*, I tried (Ramat 1971 and 1972) to outline the set of Germanic Modals as a morphosemantic field starting from a morphosyntactic definition of Modal Verb, intuitively adequate to the set of *mögen, dürfen, müssen, wollen, sollen* and related forms in the other Germanic languages. I tentatively defined a (Germanic) Modal as a verb that

a) selects another non-finite verbal form (its own infinitive included: *Ich will wollen* 'I want to want' vs. **Ich gehe gehen* '*I go to go' (cf. Manandise's example (11 a. und b.) where Basque *izan* and *ukan* can be used in combination with the same auxiliary forms!);

b) is not able to select a NP of its own, and

c) shows a particular paradigm, different from the 'normal' one and has also a particular syntactic pattern, different from that of the other verbs (e. g., *he need not know how many books are there* and not **He needs not to know* or **he does not need; need he come?* and not **does he need to come?*).

I concluded that formal criteria alone are inadequate to delimit the set of Modals: *Er lernte lernen* 'He learned to learn', though having a weak paradigm behaves as *Ich will wollen*, but for semantic reasons evidently cannot be considered to be a Modal. On the 'fuzziness' of the modal verbs see also Conradie (this volume: 171).

A kindred characterization of the present-day English Modals is now proposed by L. Goossens who includes also a semantic criterion beside the formal and syntactic ones: 'Semantically we find that the

items that share these syntactic and formal properties cover a broad range of modal meaning (going from facultative to deontic and epistemic modality) plus a number of other meanings' (this volume: 112 f.). This situation is confirmed also by Conradie from a diachronic point of view in his study of the meaning shifts of the Afrikaans Modals, passing from Knowledge to the expression of bare Futurity (= AUX!). (On the semantic changes Germanic Modals underwent in their evolution see the careful analysis of the uses of *can/could* by M. Kytö in this volume and compare also, more generally, Ramat 1972, where it is shown that the changes are not random but on the contrary may be encompassed in a relatively limited set of possibilities, since shifts of meaning imply the existence of semantic categories common to different meanings.)

Every definition is of course conventional and arbitrary, and can be called neither true nor false, but simply adequate or non-adequate. But I think that Goossens is right in considering in the formulation of his definition the three levels of linguistic structure at the same time. There is otherwise the risk of widening too much the notion of Modals (or AUX): if we do not consider the morphological aspect as relevant for the definition (property (c) above) it is impossible to exclude Germ. *brauchen* already alluded to:

(25)   *Er brauchte nicht kommen* (popular)

has precisely the same syntactic frame as

(25) a.   *Er wollte / sollte / konnte* (etc.) *nicht kommen.*

Or why not include *to take, tomar, prendere, vzjat'* among the auxiliaries, since we have the well-known type studied by Coseriu (1966)

(26) a.   *she took and died*
     b.   *tomó y murióse*
     c.   *prese (su) e morì*
     d.   *voz'mi da i pomri* (etc.; cf. Coseriu 1966:39)

We find here a paratactic and analytic construction building a morphological unity where 'to take' has no lexical meaning at all but gives, on the contrary, expression to the unitarian character of the action (Coseriu speaks of 'Entschlossenheit, schneller Vollzug, Überraschung, Erregung, Einheit und Unteilbarkeit der Handlung', 1966:48), i.e., of notions that are typical of the aspectual dimension).

Noting a certain similarity with the serial constructions, we could surely imagine that verbs like 'take' or 'up' (in *she up(ped) and married him*), 'go' (in ἔρχουμι κὶ κάσουμι, 'je viens et je m'assieds', 'I come and sit down' could eventually develop into instances of AUX, but this would again concern the historical dimension of the evolution of the category, not its definition. (In the Sinto dialect of the Gypsy language in the USSR, the periphrastic future is built with the verb *lav* 'to take': *lav te ǧáva* 'I shall go' lit. '(I) take that (I) go', *les te ǧása* 'You shall go', etc. On the other hand, in standard Romanis of the Danubian area (Vlax), we find a prefix *kam-* (< *kamán* 'I will'): *kam-keráv* 'I'll do', *kam-kerés* 'You'll do', etc. (see Soravia 1977: 36.)

To sum up:
— A historical view of the category AUX helps to elucidate the gradual coming-into-being of auxiliaries and their evolution but cannot lead to a categorial definition. It also makes understandable why there are so different views as to what may be considered an example of AUX. The decision, however, depends on the theory the linguist has chosen, not on the historical development of particular examples.

Finally, the historical perspective, with its 'pre-Modals' and 'semi-Modals' is in keeping with the notion of prototype which is now becoming popular in many definitional procedures (cf., e. g., Comrie 1981: 100 — 104; Lehmann 1984: 37). Grammatical categories have a range of characteristics, some of which will be more central than others to the definition of the category under scrutiny. Consequently, there will be focal and marginal instances of the category.

In a very interesting article, Karin Aijmer (1985) has outlined the evolution of OE *willan* to ModE *will*. *Willan* shows the prototypical properties of a volition verb: *a*) active desire; *b*) human subject; *c*) the main verb denotes an activity. Almost the only function of ModE *will* is to mark future. This drift points to a progressive moving of the verb out from its prototypical place and progressive weakening of the original meaning. But also the reverse movement is possible and *will* may in present-day English express modality, too (probability, inference, likelihood, etc.). We have thus a to and fro movement between full verbs (e. g. OE *willan*), auxiliaries marking Tense, Mode, Aspect (e. g., *I will write a letter tomorrow*), and Modals (e. g., *This will be the book you were looking for, I suppose*). Each one of these categories will be represented by prototypical, focal instances.

From the literature I have quoted and from the papers presented for our workshop I think we may retain four criteria for an operationally useful definition of what may be labelled as prototypical instance of the AUX-category:

a) An AUX must have the same Subject as the uninflected dependent verb. In other words, although AUX in terms of the Categorial Grammar is to be considered as 'Operand' (main verb), it no longer selects its own ARG(ument) but — as rightly stated by Nigel Vincent in his brilliant study of *habēre* and *esse* (1982) — fills that position in its structure taking over the ARG of the non-finite verbal form.

b) More generally, V_{fin} and V_{inf} must have the same PRED(icate)-frame.

c) No semantic restrictions are imposed by the AUX ($= V_{fin}$) on the V_{inf} (Pinkster, this volume). In his very accurate contribution to the workshop Edward Tuttle proceeded, in fact, to show that *habēre* and *esse* may be blended and confused in many Italian dialects: e. g. *Ntonio è* [vs. standard Ital. *ha*] *rotta la brocca* "Antonio has broken the pitcher", and, conversely, the rather widespread type *ha stato* [vs. standard Ital. *è stato*] '(he/she/it has been'; see Tuttle 1986). (Interestingly enough we find such a blend in other linguistic traditions too: in ModFris. one can say both *Ik ha siik west* 'I have been sick' and *Ik bin siik west*, lit. 'I am sick been', without any significant difference (cf. Popkema 1985).

d) The function of AUX is to express syncategorematically tense, mood or aspect relations (so that Modals may fulfill the role of AUX) — though, of course, Tense, Mode, and Aspect may also be represented by other means.

If we accept these criteria (or others of the same kind), making use of concepts of the general theory of language like PRED or Subj., but not deriving the notion of AUX from the theory itself (as is the case in Transformational Grammar), the question whether AUX must be seen as a language universal will receive an empirical answer by checking whether the language under scrutiny will show, or not show, the features established as definitional criteria.

A further general point must finally be emphasized. Relativizing the notion of AUX and restricting it to the languages where the chosen prototypical definition does really apply is by no means equivalent to denying the real existence of a category 'AUX', both in the general theory of language and in those languages. In other words, as was rightly remarked in the workshop discussion, AUX is

not an arbitrary construction of the linguist; it may also not be a language universal, but for the languages where the definitional criteria apply it is doubtlessly real in the sense that it belongs to the morphosyntactic structure of these languages. (And the definition proposed by the linguist has to take care of the language reality if it seeks to be operative!)

Take for instance the case of Basque, extensively discussed by E. Manandise. We may also agree with Manandise's view that, from a synchronic standpoint, *ukan* 'to have' and *izan* 'to be' are not full verbs with auxiliary function but simply markers for tense, person, mood, etc. in

(27)   *Nik   etxe   bat   dut*
        I: ERG house one: ABS it: non past: 2 arguments
                                  (ABS/ERG): indicative
        'I have one/a house' (= Manandise, example (38))

(28)   *Ni   gizona   naiz*
        I: ABS man: the/a: Sg: ABS I: non past: 1 argument
                                     (ABS): indicative
        'I am a/the man' (= Manandise, example (37))

In many languages possessive and existential statements do not have in fact any form corresponding to 'to have' and 'to be'. But in this case we will simply have to conclude that the category AUX does not function in Basque sentences such as (27) and (28) and that the diachronic evolution of the two verbs has reached its final stage reducing the verbs to phonetically not recognizable formatives, much in the sense previously alluded to (under IV. Agglutination). The category AUX is no longer found in (27) and (28) and only a diachronic approach helps us in understanding where *dut* and *naiz* come from. A theory-oriented categorial definition of AUX will on the other hand not permit considering *dut* and *naiz* as auxiliaries any more.

The historical perspective will thus give a sensible answer to the much debated question whether the development of AUX must be thought of in terms of Thom's catastrophic approach or as a result of a steady, gradual evolution (see also Harris, this volume). The linguistic change leading to auxiliaries is gradual but the recategorization of the items according to the definitional criteria chosen by the linguist will follow a yes/no-strategy, i. e. a catastrophic point of view.

References

AIJMER, KARIN. 1985. The semantic development of *will*, in: Historical semantics: Historical word-formation, ed. by Jacek Fisiak, 11–21. Berlin: Mouton.

AKMAJIAN, ADRIAN; SUSAN M. STEELE; and THOMAS WASOW. 1979. The category 'AUX' in Universal Grammar. LIn 10.1–64.

CAPELL, A. apud DIXON 1976.

CARSON, GREG N. 1983. Marking constituents, in: Frank & Richards 1983. Vol. I: 69–98.

COMRIE, BERNARD. 1981. Language universals and linguistic typology. Oxford: Blackwell.

COSERIU, EUGENIO. 1966. Tomo y me voy. Ein Problem vergleichender europäischer Syntax. VR 25/1.13–55.

DIXON, R. M. W. (ed.). 1976. Grammatical categories in Australian languages. New Jersey: Humanities Press.

DIXON, R. M. W. 1980. The languages of Australia. Cambridge: University Press.

FOLEY, W. A.; R. D. VAN VALIN. 1983. Functional syntax and Universal Grammar. Cambridge: University Press.

FRANK, H., AND B. R. RICHARDS (eds.). 1983. Linguistic categories: auxiliaries and related puzzles. 2 vols. Dordrecht: Reidel.

GABELENTZ, GEORG VON DER. 1901. Die Sprachwissenschaft. Ihre Aufgaben, Methoden und bisherigen Ergebnisse. (2. Aufl. 1972. Tübingen: Narr).

GIVÓN, TALMY. 1971. Historical syntax and synchronic morphology. Papers from the 7th Regional Meeting. Chicago Linguistic Society: 394–415.

JELINEK, ELOISE. 1983. Person-Subject marking in AUX in Egyptian Arabic, in: Frank & Richards 1983. Vol. I: 21–46.

LEHMANN, CHRISTIAN. 1984. Der Relativsatz. Tübingen: Narr.

MORENO, JUAN CARLOS. Forthcoming. Diacronía y tipología: hacia una superación del punto de vista sincrónico.

PLANK, FRANS. 1984. The modal story retold. Studies in Language 8.305–364.

POPKEMA, J. 1984. Hy hat/is heechlearaar west, in: Miscellanea Frisica (Festschrift H. T. J. Miedema), ed. by N. R. ÅRHAMMER et al., 193–203. Assen: Van Corcum.

RAMAT, PAOLO. 1971. Die Analyse eines morphosemantischen Feldes: die germanischen Modalverben. IF 76.174–202.

RAMAT, PAOLO. 1972. Analisi etimologica del campo morfosemantico dei verbi modali germanici. Studi Germanici 10.43–79.

RAMAT, PAOLO. 1984. Linguistica tipologica. Bologna: Il Mulino.

REULAND, E. J. 1983. Government and the search for AUX.s: a case study in crosslinguistic category identification, in: Frank & Richards 1983. Vol. I: 99–168.

SORAVIA, GIULIO. 1977. I dialetti degli Zingari. Pisa: Pacini.

STEELE, SUSAN M. et al. 1981. An encyclopedia of AUX: a study of cross-linguistic equivalence. Cambridge, Mass.: MIT Press.

TUTTLE, EDWARD F. 1986. The spread of EsSE as universal auxiliary in Central Italo-Romance. Medioevo Romanzo 11.229–287.

VINCENT, NIGEL. 1982. The development of the auxiliaries HABERE and ESSE in Romance, in: Studies in the Romance verb, ed. by Nigel Vincent & Martin Harris, 71−96. London: Croom Helm.

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From Auxiliary to Desinence

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0. Introduction

It is an old insight that today's morphology is yesterday's syntax.

The idea that affixes originate as full words which are grammaticized, become phonologically reduced, and are then agglutinated as bound elements to original free forms goes back, in its rudiments at least, to the 1500's (Robins 1967:101, 157). It was a commonplace at the beginning of the 1800's, when it came to play a central role in the reconstruction of Indo-European morphology (cf. Robins 1967:173). The complementary idea that grammatical means are renewed through the creation of novel syntactic constructions is neatly adumbrated by Whitney (1867:283).

Over the years a great number of such developments from word to affix have been noted in a wide range of languages, involving the development of derivational affixes from compounding, case markers from adpositions, nominal possession and definite markers from pronouns, subject and object markers on verbs from pronouns, tense and mood markers from auxiliary verbs, and so on (cf. Tauli 1958:82−112, Serebrennikov 1973).

But the details of such developments are still relatively unknown. It is characteristic that neither the major works of synthesis in linguistics (Whitney 1867, Gabelentz 1891, Bloomfield 1935, Serebrennikov 1975), nor the more or less specialized textbooks (e. g., Anttila 1972, Bynon 1977, Boretzky 1977) attempt more than the most superficial account of what has become known as the linguistic cycle (Hodge 1970), if they even mention it. It is characteristic, too, that the speculative 'theory of agglutination', current since the 1800's (cf. Gabelentz 1891:250 ff.), according to which the position of affixes directly reflects the word order of an earlier language state has had to wait until recently to be put into proper perspective (cf. Comrie 1980).

In this paper I will review one of the best documented developments of an auxiliary verb from word to desinence, the history of the Modern Polish inflection of the preterite indicative, of the subjunctive, and of the present indicative of the verb 'to be'. The data to which I will refer are well-known to Polonists. They are briefly mentioned in all historical grammars of Polish and have been the subject of a fair amount of scholarly literature, including two monographs (Decaux 1955, Rittel 1975). My aim in reviewing this development is twofold.

I want to draw attention to this development as a topic for future research. Although it is richly documented, some of the known details of this development have not been satisfactorily interpreted. I will mention a few of these below and offer my own thoughts on them. But apart from this, the data which are available in Polish texts from the 1400's to the present can yield a great amount of new information if they are approached with the right questions. These will arise as our theoretical understanding develops and they should be addressed to the Polish data in the future.

The second aim with this presentation is to show how the observed gradualness of this development can be reconciled with a conception of language structure that recognizes categorical distinctions. Faced with data documenting a gradual development of an autonomous word to a fixed desinence, some linguists might be happy to take this as evidence that there is not a clear-cut distinction between free forms and bound forms, but rather an infinitely graded cline with 'free' and 'bound' as extreme values. I view the current preoccupation with gradience as a very natural manifestation of the 'post-binary bliss' the field of linguistics is experiencing in connection with the shift of interest from language structures to discourse. But in the longer run the problem remains of reconciling the categorical distinctions (oppositions) encoded by grammars with their gradient application in discourse and — in diachronic terms — bridging the gap between categorical shifts in the chronological transmission of a grammar and their gradual attestation in texts. To tackle this problem one needs a suitably articulate conception of language structure, as I will suggest in sec. 2 below.

1.0. The historical development

In this chapter I will present a summary of the development of the set of desinences that in Modern Polish characterizes the preterite indicative and the subjunctive of all verbs, and the present tense indicative of the verb 'to be' (hereafter: BE).

The presentation will concentrate on the later stages in this development, which are documented in the historical period. But the account must start with some facts about the Common Slavic tense system, in which BE functioned as an auxiliary (sec. 1.0.1), and must describe the variant present tense forms of BE in the pre-Polish version of this system (sec. 1.0.2). We can then sketch the radical restructuring of the pre-Polish tense system on the eve of the historical period (sec. 1.0.3), which is the point of departure for the centuries-long process through which original forms of BE have metamorphosed into desinences of the preterite (sec. 1.1), the conditional (sec. 1.2) and the present tense of BE (sec. 1.3.1).

A number of issues of general relevance to this development are most conveniently discussed along the way, such as morphological univerbation (sec. 1.1.3), prosodic univerbation (sec. 1.1.4), and segmental univerbation (sec. 1.3.2). A number of other general questions will be touched on in sec. 2.

1.0.1. The pre-Polish tense system

In the Common Slavic period, constructions of BE with the so-called resultative participle in -*l*- (showing subject agreement in gender and number), formed from any verb, are idiomaticized and then grammaticized as compound retrospective tenses (e. g. 'has spoken', 'had spoken') opposed to the simple, non-retrospective tenses (e. g., 'speaks', 'spoke') as in (1), which lists the respective 3rd person singular, masculine forms of the Old Church Slavonic verb 'speak'. Tense systems of this structure are amply attested in Old Church Slavonic (Vaillant 1974: 81 ff.) and Old Russian (van Schooneveld 1959), and a similar system can confidently be posited for prehistoric Polish. Besides the grammaticized compound tenses listed in (1) there are also constructions of BE + passive participle (past or present), probably grammaticized as expressions for the passive voice, and more or less occasional constructions of BE + active participle (past or present). These will not be discussed here at all.

(1)   retrospective   non-retrospective

      perfect   *mlŭvilŭ jestŭ*   present   *mlŭvitŭ*
      plu-I   *mlŭvilŭ bě*   aorist   *mlŭvi*
      perf. II *mlŭvilŭ běaše*   imperfect *mlŭvljaaše*

There also appears in Old Russian and in Old Polish, perhaps only in connection with the development sketched in sec. 1.0.3, a 'double perfect' (as van Schooneveld calls it), a sort of 'passé surcomposé', composed of *l*-participle plus perfect of BE (e. g. ORuss. *mŭlvilŭ bylŭ jesti*), which will be relevant below.

Since the development of this tense system is entirely prehistorical, I will not discuss its particulars (see Vaillant 1974: 81 ff.).

1.0.2. Pre-Polish BE

In prehistoric Polish, the present tense of BE develops, beside the original orthotonic forms, which are maintained for rhematic and emphatic use, a set of phonologically reduced, atonic forms for unmarked use; cf. (2) (the parenthesized *e* occurs after forms ending in a consonant). While the orthotonic forms can occur anywhere in a clause, including initial position, and are serialized in accordance with the information structure of the utterance, the atonic forms become subject to Wackernagel's rule, that is, they are treated on a par with the other enclitics of the language and placed — in grammatically fixed sequential relation to these — in the position following the first orthotonic word of the clause (cf. Decaux 1955: 16 ff.).

(2)

	Old Polish	orthotonic	enclitic	Modern Polish
1st sg.		*jeśm*	*-(e)śm/-(e)m*	*-(e)m*
2nd sg.		*jeś*	*-(e)ś*	*-(e)ś*
3rd sg.		*jest/*	*-∅*	*-∅*
		jeść/je		
1st pl.		*jesm(y)*	*-(e)smy*	*-(e)śmy*
2nd pl.		*jeśće*	*-(e)śće*	*-(e)śće*
3rd pl.		*są*	*-∅*	*-∅*
1st du.		*jeswa*	*-(e)swa*	
2nd du.		*jesta*	*-(e)sta*	
3rd du.		*jesta*	*-(e)sta/-∅*	

The outcome of the development of enclitic BE-forms is well attested in the earliest Polish texts we have, some of which are written in a clearly archaic form of the language — they are copies of much older texts, which have been lost. It is interesting to note that some of these texts show influence from the Latin texts from which their originals were translated; for instance, the Old Polish 3rd person perfects regularly have a zero auxiliary (cf. (2) and the examples in (4)), but where the perfects render Latin deponent verbs or passives in these texts, the full auxiliary (*jest* or *są*) is consistently used (cf. Decaux 1955: 127). But despite their somewhat artificial character, these texts show clearly enough that both the phonological reductions of the present tense forms and their syntactic change to sentence enclitics were completed before the date of the oldest preserved texts. They show, too, that zero 3rd person forms of BE are usual from the 1300's on.

As orthotonic forms, *jest, jesta,* and *są* continue to be used — but with diminishing frequency, and only for emphatic predication — through the 1500's (Decaux 1955: 116, 127 — 128). Little by little their function passes to other means of expression, as we shall see in sec. 1.1.1.

1.0.3. The old Polish tense system

Still in prehistoric Polish, the system of preterite tenses is sharply reduced. The compound tense forms take over the functions of the imperfect and aorist. As these fall into disuse, also the subsystem of compound tenses (in which both imperfect and aorist of BE figured as auxiliary) is reduced. Only two compound tenses survive (cf. (3)), the earlier perfect (henceforth referred to as the preterite), and the earlier double perfect (henceforth, the pluperfect; this tense will not be discussed here apart from a brief mention in sec. 1.0.4).

This reduction of the finite preterite system is completed shortly before the period of continuous attestation. The most archaic Old Polish texts — which, as mentioned, are copies of much older ones — have preserved for posterity two dozen imperfect and aorist forms comparable to the ones known from early East and South Slavic (Klemensiewicz et al. 1974: 367 ff.). Note that the future of lexical verbs is composed of the infinitive of the main verb and the inceptive

aspect (traditionally called 'future tense') of BE. The other compound tenses are based on the original *l*-participle.

(3)   Old Polish tense system, 3rd sg. masc. forms of the verbs 'speak' and BE

present	*mówi*	*jest*/∅
preterite	*mówił (jest)*	*był (jest)*
pluperfect	*mówił był (jest)*	*był był (jest)*
future	*będzie mówić*	*będzie*

The recasting of the tense system has important consequences, which have traditionally been overlooked, but which are essential to the entire following development. In the Old Polish tense system, the original present tense forms of BE are no longer opposed to any past tense forms with person marking. Furthermore they occur as parts of compound past tense forms. Herewith the background is given for two reinterpretations. The original present tense forms of BE can be reinterpreted as simple person and number markers. And the original *l*-participles can be reinterpreted as finite non-present forms, the *-l-* in particular as the preterite ('distal tense') marker.

Both of these reinterpretations are covert and hence difficult to pinpoint in time. It is not certain that they occurred immediately when the conditions for them arose, but it is certain that they did occur. Polish historical grammars have traditionally spoken of the person and number markers as 'auxiliaries' with reference to all periods of the history of the language (thus also Decaux 1955 and Rittel 1975), just as they have called the original *l*-participles 'participles'. I will refer to the latter as '*l*-forms' where their status is uncertain, and otherwise simply as preterites.

1.0.4. Excursus on the future and the pluperfect

Although the development of the Polish future tense is not relevant to the central topic of this paper — the history of the person and number markers — it may be relevant to the question of when the *l*-forms were reinterpreted as finite preterite forms.

In prehistoric Polish the future is grammaticized as a construction of inceptive aspect of BE plus infinitive, as in (3). The earliest Old Polish texts show this to be the canonical expression for the future. A variant construction of *będzie* + *l*-form (i.e. *będzie mówił* 'he:will

speak') occurs, but has the earmarks of a recent innovation. It is attested first in verbs with infinitival complements (e. g. 'be able'; thus *będą czynić* 'they:will make', but *będą mogli stać* 'they:will be:able to:stand' in the St. Florian Psalter, ca. 1400). Later it gradually spreads to other environments. In the language of Mikołaj Rej (1505 — 1569), the *l*-form future is regular in the singular (*będę miał* 'I:shall have'), but not yet in the plural (e. g. *będziemy mieć* 'we:shall have'), except with verbs that take infinitival complements (e. g. *dobrze czynić będziemy chcieli* 'well to:do we:shall want', *będziecie mieli mówić* 'you:will have to:speak') (cf. Kuraszkiewicz 1970: 158). The change from infinitival to *l*-form future was never completed. Distributions similar to that attested in Rej's writings are current also in modern varieties of Polish.

A simple interpretation of these facts might be that the *l*-form future arose as a participial construction parallel to the participial preterite, possibly motivated by a change in the status of the auxiliary from tropic to phrastic function (cf. Lyons 1977: 749 ff.). The gradual generalization of this innovation would then very naturally have lost its impetus when the *l*-form preterite was reinterpreted predominantly as a finite preterite, perhaps in the 1500's.

One might wonder whether also the history of the pluperfect can be linked to this change. Note that at the time when Old Polish *mówił* could be interpreted simply as a finite preterite (accompanied by person and number markers), it was opposed to the pluperfect *mówił był*; this could be interpreted either (a) as a participle plus finite preterite of BE or (b) as a combination of two finites (a serial verb construction). The (a) alternative would make it an exception to the status of the *l*-form as finite preterite; the (b) alternative would make this the only serial verb construction in the language.

Polish grammarians note the decline of this tense from the 1700's on. It has been defunct in the standard language for a hundred years, but survives in some dialects.

1.1.1. The person and number markers

The 3rd person markers. In Old Polish the difference full vs. zero form expresses the distinction emphatic vs. unmarked predication; see (4). This distinction gradually passes to other means of expression (word order, sentence stress), and the full forms go out of use in the

1400 – 1600's, first *jest* 'sg.', then *sq* 'pl.', last *jesta* 'dual' (Decaux 1955: 127 ff.), each of them regularly being omitted earlier with the *l*-forms *byt* 'was', *miat* 'had(to)', *mógt* 'could', *chciat* 'wanted (to)', *kazat* 'said' than with other verbs (Rittel 1975: 55). Henceforth there are no 3rd person markers in any number in the preterite or pluperfect. Number (and gender) continues to be expressed by the desinences of the *l*-forms.

The 1st and 2nd person markers. The full, originally orthotonic forms (cf. (2)) go out of use in the 1500's (Decaux 1955: 133). The distinction emphatic vs. unmarked predication is at first taken over by the presence vs. absence of the original 3rd person markers, *jest* 'emphatic predicator' and *sq* 'emphatic predicator, pl.'. This is illustrated in (4), which shows a full form in (a); a combination of 'emphatic predicator' *jest* and enclitic person and number markers in (b), (c); and the more common use of enclitic markers in (d), (e).

(4)   Old Polish preterite

   a.   Wiem ze stworzyciela wszego luda porodziła *jeś*
        I:know that creator of:all mankind bore   2sg
        'I know you bore the creator of all mankind'

   b.   To-*m*   *jest* oglądała
        that-1sg emph saw
        'That I did see'

   c.   *Jest* ja ciebie zepchnął albo uczynił-*em* tobie co   złego?
        emph I thee   repulsed or did-1sg   thee any harm
        'Did I repulse thee or do thee any harm?'

   d.   Ani-*ś*   mię zepchnął, ani rzucił, ani-*ś*   niektóre złości
        not-2sg me repulsed   nor deserted nor-2sg any   harm
        uczynił
        did
        'Thou neither repulsedst, nor desertedst me, nor didst me any harm'

   e.   Bo-cie-*m*   się cała   darowała
        for-thee-1sg refl entire gave
        'For I gave myself wholly to thee'

The examples incidentally illustrate the common omission of person and number markers in the presence of a nominative personal pronoun (c) and when two or more verbs are conjoined (d) (cf. Decaux 1955: 30 ff.).

The demise of the full forms is attested earlier in texts that reflect spoken language than in bookish texts, and in these, earlier in secular than in religious texts (Rittel 1975: 68 ff.).

1.1.2. The process of agglutination

During the period from the 1500's to the present there are gradual changes in the placement of the person and number markers. First of all, deviations from Wackernagel's rule increase in frequency (cf. (5)). The presence of an intonational caesura after a heavy initial thematic element favors the occurrence of the person and number markers after the word or phrase following the caesura. Also, sentence stress on any word in the rhematic part of a clause apparently makes this word attract the person and number marker. It looks as if the enclitics change status from clause enclitics to phrase or word enclitics (see the examples in (5)). Throughout the development, clause-second placement is more frequent in subordinate clauses than in main clauses, more frequent when the clause initial word is a conjunction than any other word, more frequent when it is a pronoun than when it is a noun.

(5)		Total no. of examples	Deviations from Wackernagel's rule		Agglutination to preterite form	
	1500's	580	12	2%	130	23%
	1600's	1303	64	4%	649	49%
	1700's	1439	62	4%	994	68%
	1800's	1988	308	15%	1395	80%
	1900's	3325	503	15%	2817	84%
	exp. prose	569	usual		525	92%

Secondly, the person and number markers are with increasing frequency attached to the *l*-forms, as the figures in (5) show. Unfortunately these statistics from Rittel (1975:91) do not separate the examples of agglutination to clause-initial *l*-forms (which must account for most of the cases counted in the early centuries, when deviations from Wackernagel's rule are few) from those where the *l*-form occurs further to the right in the clause. This is why the percentages in the 'Agglutination' column present the picture of a

much longer gradual development than those in the 'Deviations' column. This is a weakness in these statistics which limits their usefulness; but the figures are at least suggestive. Agglutination becomes common earlier in main clauses than in subordinate ones (Rittel 1975: 88), and the singular person and number markers are agglutinated earlier than the plural ones, and in the singular, the 1st person marker earlier than the 2nd person one (Decaux 1955: 28, Topolińska 1961: 47).

Both deviations from Wackernagel's rule and agglutination of the person and number markers to *l*-forms are century by century reflected less widely in poetry than in prose, and in the modern period less in artistic prose than in expository prose (the last row in (5); Rittel 1975: 92). In modern Polish, tmesis (the separation of person and number markers from the *l*-form) is more common in written than in spoken language, in speech more common in formal than in casual styles, and more usual in the speech of older than in that of younger people. The markers have ceased to be mobile in the northern parts of the language area, but not yet in the south (Topolińska 1961: 55). This difference seems sometimes to be reflected in the attitudes of grammarians to the problems of synchronic description, linguists from the north (e. g., Warsaw) apparently being much more prone to view the person and number markers as bound morphemes, and tmesis as an archaism, than their colleagues from the south (e. g., Cracow).

1.1.3. Morphological univerbation

Rittel's use of the term 'agglutination' calls for comment. This term is evidently good enough for the purpose of registering data, but it lumps together a number of different phenomena that must be distinguished even in a summary treatment of this historical development.

In the first place her use of this word prejudges the issue of when the person and number markers changed from enclitics to desinences by speaking of agglutination even with reference to the early centuries when the person and number markers are practically never attached to *l*-forms unless these are in clause-initial position. Secondly, she glosses over the question of the nature of the observed change. Polish grammarians have traditionally been content to remain on the level