Empirical Approaches to Language Typology

Editors
Georg Bossong
Bernard Comrie

Mouton de Gruyter
Berlin · New York
Toward a Typology of European Languages

edited by
Johannes Bechert
Giuliano Bernini
Claude Buridant

Mouton de Gruyter
Berlin · New York 1990
Toward a typology of European languages / edited by Johannes Bechert, Giuliano Bernini, Claude Buridant.

Includes bibliographical references (p. ) and index.


415—dc20 90-13307

All rights reserved, including those of translation into foreign languages. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.
## Contents

Foreword by Bernard Pottier ........................................ vii
Introduction ......................................................... ix

1. *General problems* .............................................. 1

Standard Average European as an exotic language
Östen Dahl ............................................................ 3

Typological contrasts between pidgin and creole languages in relation to their European language superstrates
Suzanne Romaine ...................................................... 9

Area influence versus typological drift in Western Europe: the case of negation
Paolo Ramat and Giuliano Bernini .................................. 25

2. *Deixis* ............................................................ 47

Deixis — a pragmatic universal?
Barbara Kryk .......................................................... 49

Possessive adnominal modifiers
Gianguido Manzelli .................................................. 63

3. *Morphology* ..................................................... 113

The structure of the noun in European languages
Johannes Bechert ..................................................... 115

L’infinitif dans les langues romanes et les langues germaniques: essai d’approche typologique
Claude Buridant ..................................................... 141

The infinitive in south-east European languages
Emanuele Banfi ....................................................... 165

Conjugation of the verb in modern Celtic and Basque: from inflection to periphrasis
Malachy McKenna ................................................... 185
# Contents

4. *Tense, aspect and modality* .................................................. 193

Types of tense and aspect systems
Wolfgang Raible ................................................................. 195

On the coding of sentential modality
Dietmar Zaefferer ............................................................... 215

5. *Actancy/voice* .................................................................. 239

Caractéristiques actancielles de l’“européen moyen type”
Gilbert Lazard ................................................................. 241

Processes and actions: internal agentless impersonals in some European languages
Juan Carlos Moreno ............................................................. 255

Questions of the investigation of the complements of adjectives in European languages
László Dezső ................................................................. 273

6. *Complementation and subordination* .................................. 305

The evolution of certain patterns in subordination in Romance and English
Martin Harris ................................................................. 307

Usages normatifs et non normatifs dans les relatives en français, en espagnol et en portugais
Claire Blanche-Benveniste .................................................. 317

Adverbial participles, gerunds and absolute constructions in the languages of Europe
Ekkehard König and Johan van der Auwera ............................... 337

Index of names ................................................................. 357

Index of languages ............................................................... 365

Index of subjects ................................................................. 373
Stahl Schmidt, Andrea

Vendler, Zeno

Wilmet, Marc
On the coding of sentential modality

Dietmar Zaefferer

Introduction

The categories of sentence mood and sentential modality are not very well investigated topics in current linguistic typology. What I am going to argue for in this paper is that these phenomena should receive more attention, since both a) typology itself and the related areas of general linguistics, and b) more philosophically oriented foundational attempts at reducing the meaning of linguistic expressions to the conventional use they are put to, would benefit a lot from progress in this area. I will illustrate this by outlining the consequences that might be derived from some of the scattered cross-linguistic data on the coding of sentential modality that have been accumulated so far (cf. Sadock—Zwicky 1985, or Palmer 1986) for the theory of illocution types argued for e.g. in Searle—Vanderveken (1985).

1. What is sentential modality, what is sentence mood?

In order to answer these questions we first have to answer the question: What is a sentence? And in order to answer this question, I claim, we have to go back one further step and answer the question: What is a proposition? Most semanticists agree that a proposition is something that can be true or false, and I would like to specify without further discussion that it is the holding of a given state of affairs, of a way things can be, in a given domain (this is what Barwise and Etchemendy 1987 call the Austinian view, after Austin 1961).

A proposition-level expression then is an expression that, under appropriate circumstances of use, is about a proposition, and a sentence is a proposition-level expression the use of which in a given discourse situation conventionally determines (a) the proposition it is about and (b) the role of this proposition in the discourse in which it occurs.

We will call the maximal proposition the use of a sentence is about1 its propositional content and the role of this proposition in the discourse, insofar
as it is primarily coded with linguistic means, its (sentential) modality or sentence mode. That part of the sentential modality that is structurally determined will be called sentence mood.\(^2\) It follows that sentence mood is part of the structural meaning of a sentence. It follows furthermore, since the inventories of structural meaning vary from language to language, that sentential modality is much less language-dependent than sentence mood; for instance the promissive sentential modality is expressible in all natural languages, but it constitutes a sentence mood, i.e. is coded in the structure of sentences only in Korean\(^3\) (and possibly in Gilyak), as far as I know.

This is a rather generous conception of sentential modality, one that e.g. Palmer would deem too wide (1986: 15), but he seems to be a little confused about what is propositional and what not. For instance, standard negation is certainly not a non-propositional element, since it takes you from one proposition to another one. Also I would not subscribe to Sadock and Zwicky’s claim that attitude marking modal particles should be excluded from defining the notion of sentence type and hence of sentence mood (Sadock—Zwicky 1985: 161), but I agree that they are secondary insofar as they only modify the primary sentence mood determined by other means.

The main reason I want to have such a fine-grained notion of sentence mood, besides simplicity (one doesn’t have to care about how exactly to draw the line between mood markers and attitude markers), is that the way modal particles modify the primary sentence mood is not always specification, creating a special case of the same sentence mood, but sometimes conversion, creating some other sentence mood.\(^4\) A case in question is the English -ever, which converts subordinate constituent interrogatives like / I don’t know / what you do into “unconditionals” like Whatever you do, / please do it carefully/ (cf. Zaefferer 1990). But in the following I will be mostly concerned with the most basic and elementary sentence moods.

2. A proposal of basing all illocutionary forces on five primitive ones: Searle and Vanderveken’s classification

In his joint book with Daniel Vanderveken, *Foundations of Illocutionary Logic* (Searle—Vanderveken 1985), John Searle gives an *a priori* justification of his earlier classification of illocutionary acts into five main categories (Searle 1975). “In spite of frequent philosophical protestations to the contrary,” he says, “there is a rather limited number of things one can do with language”
On the coding of sentential modality

(Searle—Vanderveken 1985: 51). Why should that be so? Because the illocutionary force of an illocution always relates its proposition to a world of utterance and there is only a limited number of ways a proposition can be related to a world of utterance. Borrowing from Austin and Anscombe, Searle calls these ways directions of fit, and he says that there are four and only four of them in language: word-to-world, world-to-word, double direction, and empty direction.

If one associates with each direction of fit one primitive illocutionary force except for the world-to-word one, where two forces are associated, one that is addressee-oriented and one that is speaker-oriented, then one comes up with Searle's five primitive illocutionary forces: 1. The assertive force with word-to-world direction of fit; 2. the commissive force with world-to-word direction of fit and speaker responsibility; 3. the directive force with the same direction of fit and addressee responsibility; 4. the declarative force with double direction of fit; and 5. the expressive force with empty direction of fit.

Examples are assertions and statements for the assertive force, promises and vows for the commissive force, orders and requests for the directive force, explicit performatives and other declarations for the declarative force, and finally congratulations and apologies for the expressive force.

Searle and Vanderveken do not fail to draw the important distinction between naming and expressing an illocutionary force: Where the former is exclusively done with verbs and nouns, i.e. lexical means, the latter is done mainly with structural means, and the two functions overlap only in the case of explicit performatives, where the force is expressed by mixed lexical-structural means, but although Searle and Vanderveken have a lot to say about the naming of illocutionary forces (in chapter 9, they analyze over a hundred of English illocutionary verbs), they are not very explicit about the ways the five primitive illocutionary forces are expressed.

"In English", they say, "the primitive assertive illocutionary force is ... expressed by the indicative mood" (1985: 60). This is surely not correct, if one takes indicative to be the verbal mood, since there are many sentences with the main verb in the indicative mood, that do not have an assertive illocutionary force, like interrogative, protasis, or relative clauses, but we can assume that by indicative mood, the declarative sentence mood is meant, which seems to be sometimes the usage in philosophy of language.

The primitive commissive illocutionary force, they go on to say, is indirectly expressed by the modal auxiliary will, since there is no illocutionary force indicating device for this force in English (1985: 60). This is only correct if one interprets "illocutionary force indicating device" as meaning only struc-
tural and excluding lexical devices, since their own example I hereby commit myself to fighting it out on this line even if it takes all summer shows that the explicit performative formula is exactly such a device, albeit not a purely structural one.

About the third primitive illocutionary force, the directive one, Searle and Vanderveken say that in English it is most naturally expressed with the imperative mood (1985: 61), which is probably correct.

The fourth primitive illocutionary force, the declarative one, is according to Searle and Vanderveken most naturally expressed with performative sentences (1985: 61), and again, I have no objection.

Finally, they say that in English there is no special syntactic device for expressing the primitive expressive illocutionary force as distinct from expressing particular, non-primitive expressive illocutionary forces (1985: 62). This sounds as if they assume that there are special syntactic devices for expressing at least one of the special forces that are named by verbs like apologize, thank, condole, congratulate, complain, lament, protest, deplore, boast, compliment, praise, welcome, and greet (listed by Searle and Vanderveken, 1985: 211), but I cannot think of any construction type that would do this.

On the other hand, there is a syntactic device in English, a construction (or better a family of constructions) that is related to, but distinct from the interrogative constructions, and that is used for expressing an illocutionary force which is most naturally called expressive, a construction not mentioned by Searle and Vanderveken at all, namely the exclamatory construction (or constructions), illustrated by sentences like Boy, am I ever hot today! or What a lovely T-shirt you are wearing! And exclamatory constructions are nothing that would occur only in English or a few languages, but they are a reasonably common phenomenon in the languages of the world (cf. Sadock—Zwicky 1985: 162; for the relation with interrogatives Elliott 1971: 102—104, Elliott 1974: 244—245).

Moreover, and even more prominently, there is a sentential modality that is probably a sentence mood in all languages in the world, which also does not figure among Searle and Vanderveken’s primitive illocutionary forces, and that is the erotetic mode with its corresponding interrogative moods. Of course, they do talk about questions, but only as a special case of directives, and they do not even discuss the possibility of having them as a primitive illocutionary force.

So if one looks at the four most prominent sentence moods, at least in English, on the one hand, and at Searle and Vanderveken’s five primitive illocution types, on the other, a certain mismatch can be seen:
Major sentence moods of English | Primitive illocution types
---|---
declarative | assertive
declaration | declaration
imperative | directive
interrogative | expressive
exclamative | 

Now there is no need to expect a perfect match here, but something has to be explained at least, and maybe even something has to be changed, if one takes into account that natural languages tend to code with structural, i.e. grammatical, means only the most central, general, and important notions and distinctions such as discourse participant role, number, gender, tense, definiteness, etc. It seems very plausible indeed that the hierarchy of coding reflects some hierarchy of basicness in the notional structure of natural languages.

(1) grammatical (unmarked) < grammatical (marked) < lexical (root) < lexical (stem) < lexical (compound) < phrasal

For instance in languages with both "pure" and adpositional case marking, it is the more basic, central and abstract grammatical roles that become marked with "pure" cases and the less basic, more peripheral and more concrete ones that receive adpositional marking. On the other hand, if there are no other means of coding than phrasal ones, the chances are that what is coded is not a very central notion, category or distinction. There is of course a tendency to lexicalize such notions once their relevance (and frequency of usage) increases, very often with the help of acronyms and other abbreviations, compare e.g. computer assisted design and CAD.

One caveat should be added which comes up immediately if one thinks about the origins of these ways of coding. Since many grammatical means became what they are through a process of grammaticalization and these processes tend to take more time than processes of lexicalization, and since the lifespan of grammatical means tends to be longer than that of lexical items, it may well be that the notions coded by grammatical means are not as central today as they were when they started to become expressible by grammatical items.

If this is correct, and if declarative, interrogative, imperative, exclamatory and optative are indeed the most widespread (in decreasing order) sentence
moods in natural languages, then it seems that the modes or forces of assertion, question, directive, exclamation and expression of wish are in some sense most basic for classifying the different roles the expression of a proposition may play in human linguistic usage.

The question arises whether this can be reconciled with the Searle-Vanderveken claim that assertive, directive, commissive, expressive, and declarative are the most basic roles played by propositions in natural language, and if so, what such a reconciliation would look like, if not, how the speech act theoretical assumptions about the basic categories should be revised.

3. Ways of coding sentential modality: A survey of some European languages (with some non-European background)

3.1. An inventory of structural means used for the coding of sentential modality

If one thinks about structural indicators for sentential modality, in other words for sentence mood, from a European perspective, probably the following three or four will come up first: interrogative words, which seem to mark constituent questions everywhere, verbal mood (think of the imperative mood in Greek, Latin, German), word order (or more precisely constituent order), whose role as a sentence mood indicator is especially conspicuous in German with its three basic sentence types, and intonation, which plays some role everywhere, but which, e.g. in spoken Russian, is usually the indicator of polarity questions.

This result is a good example of (western) eurocentric bias since it leaves out one mood-indicating device which is very prominent in the languages of the world, namely particles. In Ultan’s sample of seventy-nine languages, interrogative particles are the second most widespread device for marking polarity interrogatives (Ultan 1978: 226), and in European languages, although less prominent, they are not missing either, witness Welsh (interrogative particle a), Finnish (enclitic interrogative particle -ko/kö), Russian, where in some varieties of the written language li has the function of the standard polarity interrogative marker, Polish czy, Turkish mı, and French, which is developing a (still transparent) sentence initial polarity interrogative particle est-ce que.
Outside of Europe modal sentence particles are quite frequent, although a closer look at Ultan’s findings shows that he also subsumes verbal affixes under this heading, which of course are not easy to tell from clitic particles but should perhaps be better grouped under verbal mood. For example, his data about Konkow suggest that this language really has an interrogative verbal mood.

Having outlined the inventory of sentence mood markers it is interesting to recall what other functions are expressed by the same kind of devices.

Intonation, in its broadest sense, is also used for marking emphasis and junction (e.g. in the enumeration contours), interrogative words are often identical with indefinites and relatives (see below), modal verbs and verbal mood mostly mark primarily predicate mood and sometimes evidentiality, and only in a secondary way do they codetermine sentence mood; constituent order can also indicate subordination, and sentence particles also mark negation, complementation, attitudes, and evidentiality.

Almost all these additional functions of the same devices are somehow related to the sentence mood indicating function, which demonstrates once more the soundness of the maxim: Where there is relatedness of form, look for relatedness in function.

3.2. The assertive mode and the declarative moods

The declarative sentence mood as a structural coding means of the assertive modality is taken by many semanticists, especially those who are formally oriented, to be the default, basic, notionally unmarked, and central mood par excellence. Jon Barwise, for example, writes: “Possible world semantics and situation semantics share the view that understanding the assertive use of declarative sentences is basic to understanding their meaning” (Barwise 1987: 1). If this is correct, one would expect the languages of the world to treat their declarative sentences formally as the unmarked case, too. And, according to Sadock and Zwicky, most natural languages (at least most languages in their sample) do exactly this. In these unmarked-declarative languages, sentence types other than the declarative typically “have forms based on the declarative construction, in the sense that the other types involve the declarative construction plus some particle” or something else (Sadock—Zwicky 1985: 165). If one looks a little closer, however, the added particle is the only clear case, the other examples (change of word order and different inflection) could also be interpreted the other way around, unless one word
order or one inflection is established as basic by independent evidence. We will come back to this problem shortly.

There is a far bigger problem for assuming the declarative as the universally unmarked sentence mood, namely the fact, also noted by Sadock and Zwicky, that there is a fair number of languages where declarative constructions are not the basis on which the other sentence types are formed. What such a marked-declarative language looks like depends on the means it uses for the coding of sentential modality. If it uses e.g. mainly sentence particles or affixes for this purpose, then it will use one sentence particle or affix, say, for interrogatives, and just another one for declaratives (instead of no particle at all, as the unmarked-declarative languages do).

One example of such a language is Welsh (Bowen—Jones 1960), where the most common colloquial verbal constructions are with periphrastic verbs, and declarative sentences with periphrastic verbs have a sentence-initial affirmative particle y(r)r which is absent in embedded clauses and which is parallel to the negative particle ni(d) and to the interrogative particle a. (Note that there is no common declarative particle, and that therefore it would seem plausible to talk of two declarative moods: a positive or affirmative, and a negative one.) Sentences with non-periphrastic verbs however may lack the affirmative particle and therefore in Welsh declarative sentences are only partially marked.6

Hidatsa, a Northern Plains Siouan language, is another case in question, but here we have five obligatory and mutually exclusive sentence particles that present a proposition either a) as definite knowledge, emphatically described feeling, or promise (“Emphatic”), or b) as general knowledge (“Quotative”), or c) as learned from hearsay (“Report”), or d) as believed, desired or felt by the speaker (“Period”), or finally e) as something the speaker does not know, but thinks the listener doesn’t either (“Indefinite”) (Matthews 1965: 99 ff.). Therefore one could talk here of five declarative moods instead of one, but just as the Welsh system has unmarked declaratives with non-periphrastic verbs, the Hidatsa system has an unmarked declarative “under certain specific conditions” (Matthews 1965: 98).

Third, Korean has a marked declarative, marked by a special obligatory declarative affix from a set of mutually exclusive affixes, in four of its seven speech styles. The authoritative style, however, has the same ending for declaratives and interrogatives, and the intimate and the polite style have the same ending for all four major modes: Assertion, question, directive, and proposal (Martin 1954: 21 f.). So it seems that systems with marked declaratives tend to be partial.
But there is at least one language that is claimed to have marked declaratives throughout, and that is German. German is among the languages in which constituent order plays a prime role in the coding of sentential modality, and since constituent order, unlike particles or endings, cannot be present in the non-declarative moods and absent in the declarative, if one wants to maintain that the declarative mood is formally marked, one has to establish that the corresponding constituent order is marked or not basic. But that is exactly what most syntacticians nowadays accept as a correct assumption, namely that the unmarked or most basic constituent order in German clauses is the verb-final one, which is obligatory in all unmarked subordinate clauses and marked in non-subordinate clauses.

I do not need to repeat all the arguments that have been adduced to support this view; let me just mention two of them. The first is the observation that particle verbs have their most natural form, the one where the particle is not separated from the verb, only in verb-final clauses, whereas verb-second (and even more so, verb-first) clauses separate the particle from the verb:

(2) ... daß ich morgen heimfahre.
    ... that I tomorrow home-go.

(3) Ich fahre morgen heim.
    I go tomorrow home.

(4) Fahre ich morgen heim?
    Go I tomorrow home?

The second argument is derivable if one accepts the idea that markedness is positively correlated with restrictiveness. Then verb-second constructions are more marked than verb-last constructions, since the former admit only finite verb forms, and comprise only clauses, whereas the latter can have both finite and infinite forms, comprise both clauses and verb phrases, and are hence less restricted.

In the rather limited class of independent infinitive constructions in German there is the type of the clause-like pseudo-coordination as exemplified in (5), that evokes the idea of pure possibility of predication by joining a referring expression with a predicating one without asserting that the predicate holds of the referent (on the contrary what is implicated is that it would be absurd to even entertain such a possibility).

(5) Ich und morgen heimfahren!
    I and tomorrow home-go!
Thinking about the origin of this construction in the mere juxtaposition of a referring and a predicating unit without any mark of attitude towards the emerging Gedanke (in Frege's sense) makes one think about the option of introducing a new modality which would be even more basic than the assertive one, namely what could be called the presentative mode.

The function of the presentative would be simply to represent a proposition without any specification of the role it is to play in the discourse, especially without any commitment to its truth, falsity, pleasantness, or whatever, except that it is presented and therefore accessible as a possible topic for the ongoing discourse.

One way of going on would be to present another proposition as necessarily cooccurring with the first one, turning the whole sequence into a conditional construction. And this is exactly what I consider to be the correct part of Haiman's thesis of the semantic equivalence of protasis and topic (Haiman 1978): all protasis propositions are topical propositions, since apodoses are per definitionem about a virtual domain where the protasis proposition is true.\(^8\) The wrong part of Haiman's thesis is the other direction of the biconditional: not all topical propositions are protases. One can perfectly well present a proposition just in order to say that one does not want to even tentatively assume it as true or false (which would be the prerequisite for an if- or if not-protasis), i.e. topicalize it in order to delete it from the list of topics.

Palmer also thinks about what I call the presentative mode, but he suggests "that the declarative ... may, perhaps, be ... the neutral expression of a proposition with no direct indication of its epistemic status" (Palmer 1986: 28 f.). In order to evaluate this proposal it seems important to keep sentential modality apart from sentence mood. The mode of asserting \(p\) is of course distinct from the mode of neutrally presenting \(p\), and the notion of declarative mood is traditionally linked with the assertive mode. What Palmer's proposal amounts to is reinterpreting the formal markers that are usually interpreted as declarative mood markers as presentative markers, at least for languages like English, which uses the same clause structure in independent clauses and after that, whether, if, etc. So if one sticks to the traditional meaning of "declarative" one has to say that Palmer claims that languages like English have no declarative, and use the presentative instead plus some pragmatic principle like "the presentation of a proposition in its baldest form is usually to be regarded as a statement" (Palmer 1986: 87). I tend to disagree, following Austin (1961), who says that in English assertion is marked by the absence of an embedding context, and assuming that such an absence is also a structural marker.
The situation is much clearer in German, where verb-second clauses do definitely not express a presentative, but a declarative mood. The existence of verb-second complement clauses does not constitute counterevidence, since their use is obviously closely related to asserting (compare *Ich glaube, es wird regnen* with *Ich glaube nicht, es wird regnen* or *Ich bezweifle, es wird regnen*). I propose to think of German verb-final constructions like *es regnet* as expressing the neutral, presentative mood, although this modality is necessarily superseded by more specific modes, since such constructions are never independent. The nature of the presentative mode as something very basic and at the same time rarely occurring on its own makes this quite understandable.

Maybe the Hidatsa indefinite comes closest to being an independent presentative mood. Deliberative constructions like German *Ob es wohl regnen wird?* are obviously derived from interrogatives and should be located somewhere between the presentative and the interrogative.

Finally, the assumption of a (mostly hidden) presentative mode gives a plausible picture of the “curious situation in Huichol (an Uto-Aztecan language of Mexico; cf. Grimes 1964: 27) where the form used as a question is often the unmarked form, though Huichol also has a marker for the ‘assertive’ mood” (Palmer 1986: 33). Again I disagree with Palmer, since both options he offers — that in Huichol the interrogative is the unmarked form, and alternatively that this unmarked construction is some kind of weak declarative “merely presenting propositions” (Palmer 1986: 33) and the one with the assertive marker a strong declarative — seem to me less plausible than the interpretation of this construction not as a declarative at all, even a weak one, but as a straightforward presentative, which naturally under certain circumstances lends itself to interrogative use. One would expect to find protasis uses of it as well.

### 3.3. The erotetic mode and the interrogative moods

When Searle and Vanderveken treat questions as a subtype of directives among many others, they are supported in this view by the way English verbally names this kind of linguistic activity, namely frequently with the verb *to ask*, which is a verb of requesting that is not restricted to questions. But as we emphasized above, there is an important difference between naming and expressing a notion, and if we look at the means that are used in English and in other languages for the expression of the erotetic mode, i.e. the interrogative mood markers, and at the means that are used for the expression
of the directive mode, i.e. the imperative mood markers, it is by no means obvious that they indicate that one is a special case of the other, nor even that they are related at all. Let us look at the different types in turn, first at the interrogatives.

Leaving aside special constructions like interrogative tags or rhetorical interrogatives, interrogatives seem to fall universally into three main categories for which several traditions of labeling coexist. I will use the terms “constituent interrogative” for the category that marks one or more constituents of a sentence as something to be specified in an appropriate answer, “alternative interrogative” for the category that presents two or more different propositions with the understanding that exactly one of them can be specified as true, and “polarity interrogative” for the category that presents a proposition as something to be confirmed or denied.

Constituent interrogatives, whether they have additional marking (like changes in constituent order, intonation, or interrogative sentence particles) or not, seem to be definable as sentences with interrogative words that mark the relevant constituent or constituents as the focus or foci of both the question and any appropriate answer. Ultan (1978: 228) claims that “interrogative words are characteristic of all languages”. This has to be taken cum grano salis, however, since interrogative words are often formally identical with indefinite and relative proforms, as Ultan himself is well aware (1978: 230), and as, e.g., Christian Lehmann confirms. He gives English, Latin, Hittite, Hebrew, Elamite, Nahuatl, and Yucatec as examples of languages with identical interrogative and relative proforms (Lehmann 1985: 325).

German allows nice illustrations of the three functions of some \( \text{w} \)-forms like \( \text{wer} \) and \( \text{was} \):

(6)  \( \text{Da kommt wer.} \)  
There comes somebody.  
(Indefinite)

(7)  \( \text{Wer kommt da?} \)  
Who comes there?  
(Interrogative)

(8)  \( \text{Wer da kommt, ist der Briefträger.} \)  
Who there comes [is the postman.]  
(Relative)

Of course not all interrogative words serve this triple function in German, but presumably there are languages where all interrogative words are formally identical with indefinites. Korean seems to be one of these, turning an
On the coding of sentential modality

indefinite into an interrogative either by stressing or by fronting it, and Sadock and Zwicky even say that many languages do not formally distinguish between interrogatives and indefinites. Therefore the universal should be restated as “all languages have words that serve as interrogative words”. This would be true in some sense even if Whorf’s claim can be confirmed that in Hopi one has to say “Someone came” or “Did someone come?” in order to express “Who came?” (Sadock—Zwicky 1985: 184).

There are interesting differences with respect to what constituents can be asked for and the way this is reflected in the choice of the interrogative word. It would be theoretically possible, as Sadock and Zwicky note, for a language to get by with a single interrogative word, one that could be glossed ‘what’, and to do all the differentiation with periphrasis, but the smallest system they are aware of is the three-membered Yokuts system with its three stems glossed ‘who’, ‘who, what’, and ‘where’ (Sadock-Zwicky 1985: 184 f.). The extremely simple system conceived of by Sadock and Zwicky seems to exist in Tamasheq, which according to Hanoteau (1896) uses a single interrogative word for all kinds of constituent questions.

There appears to be a differentiation hierarchy in interrogative word inventories with related implicational universals corresponding to the following distribution: most languages have interrogative pro-nouns, many have interrogative pro-adverbs, fewer have interrogative pro-adjectives (Polish jaki, Yiddish roser), few have interrogative pro-numerals (Latin quoi, quous), and only a small number have interrogative pro-verbs (Sadock and Zwicky list Southern Paiute, Ulan cites Western Desert and Mandarin, Sapir [1921: 126] mentions Yana, and Johannes Bechert [personal communication] has pointed out to me that Avar should be added to this list). One could imagine the existence of interrogative pro-adpositions, but according to Katz and Postal (1964: 152, note 29) they cannot exist, whereas Weinreich (1963: 122) thinks this is an open question.

Exhaustive and precise data about alternative questions are not readily available, but a look across the European fence indicates that this category possibly has to be split into at least two subcategories, according to the intrinsic relation between the member propositions: polar opposition with negation as a special case, and non-polar opposition. Not all languages seem to treat these subcases alike, although probably most of them do. English, for example, does:

(9) \textit{Are you coming or aren’t you?}
(10) \textit{Is this good or bad?}
(11) \textit{Is this green or blue?}
According to Saha (1984: 137), (9) and (10) can be expressed in Bengali with the negative conjunction na where English has or, a conjunction that requires the conjuncts to be semantically polar opposites. If this is correct, (11) cannot be expressed in the same way. Even if this turns out to be wrong for Bengali, it is by no means evident that there is no language that does make such a distinction.

Coming to the polarity interrogatives, I think it would be interesting to trace back all the etymologies of the interrogative particles. It is probably not too risky to conjecture that most of them go back to or are grammaticalizations of older items meaning negation (this is a possible origin of the Chinese main clause interrogative particle ma), doubt, hesitation, conditions (these are possible origins of the German subordinate clause interrogative marker ob), and the like.

Even more frequent than interrogative particles is interrogative intonation and here the terminal rise contour is the most frequent, contrasting thus polarity interrogatives with parallel declaratives which mostly have a terminal fall. This is in concord with the iconic meaning of these contours: down is closing, up is opening. A well-formed discourse normally doesn’t close with a question. Note that even one of the famous exceptions, Chitimacha (an extinct Penutian Gulf language) with its falling interrogative intonation preserves the contrast by just inverting it: in Chitimacha, declaratives have a rising terminal contour (Ultan 1978: 220).

Finally, special constituent order, probably the most prominent device for marking polarity interrogatives when seen from a European vantage point, appears to be rather uncommon elsewhere in the world. In Ultan’s sample of seventy-nine languages Khalkha (Mongolian) was the only non-European language to use this device. What happens almost invariably in polarity interrogative constituent order changes is that the verb or auxiliary is fronted from a verb-second position in declaratives. (A possible exception to this would be Hungarian, since there it is not obvious whether the unmarked order for declaratives is SVO or SOV.) If one assumes that in these languages the non-initial position contributes to the coding of the assertive force in non-embedded declaratives, it is plausible to assume that removing the verb from this position and fronting it is associated with stripping it of its assertive force.

Although this is still rather speculative, if one compares the basic meanings of these three kinds of polarity interrogative markers, there is some evidence for the assumption that the common functional denominator of these devices is to suspend the assertive force of the sentence that without these devices would be present.
If this assumption is correct, then polarity interrogatives would have a functional common denominator with protasis clauses and one would expect this connection to be reflected in at least some formal correspondences. And these are not difficult to find. Traugott (1985: 291) lists two protasis markers as derived from interrogatives: Russian *esli* (from ‘to be’ and the interrogative particle *l* mentioned above) and Hua *ve*, but one could add German verb-initial protasis clauses like (13) below, which is exactly like its interrogative counterpart (12), and one should also mention Biblical Hebrew which uses the opposite strategy, deriving the polarity interrogative particle *ha* from an interrogative indicator *ha* and the protasis marker *im* (Sadock—Zwicky 1985: 183).

(12) *Hast du was?*  
Have you something?

(13) *Hast du was, dann bist du was.*  
Have you something, [then are you something.]

Additional evidence for the interrogative—protasis relationship comes from the fact that in a variety of languages some modified constituent interrogatives can play the role of a special kind of protasis, which I have come to call “unconditional”, since its effect is one of removing restrictions from, rather than imposing restrictions on, the validity of the apodosis.¹³

To sum up, the examination of the ways natural languages code the different forms of the erotetic modality as interrogative sentence moods has collected some evidence in favour of the assumption that interrogative sentences are about their propositional content in a way that contrasts with parallel declarative sentences in that they indicate a) the suspension of assertion (this is what they have in common with protases), and b) the kind of information that is missing in order to make up a true assertion: polarity, choice from a set of propositions, and correct instantiation for what is left deliberately indeterminate in the proposition.

### 3.4. The directive mode and the imperative moods

Let us look now at the ways the directive mode is structurally coded in European and other languages, and at the relations these ways may bear to the coding means used for the interrogative.

The first and probably most salient difference between the erotetic and the directive modality is that the latter is much more restricted with respect to
its propositional content than the former, which shares with the assertive mode the property of admitting any (absolute or parametric) proposition, whereas directives always have some controllable future course of events as their critical property and either the addressee (or one of them, if there is a plurality of addressees) as agent (which is coded mostly as subject), or a group including speaker and addressee (this is the so-called exhortative), or a third person. This semantic markedness is very often iconically coded by formally marked structures, namely structures with subject ellipsis even in languages that normally require an overt subject in active constructions. For example in German, (14) is a marked declarative, whereas (15) is an unmarked imperative.

(14) Bist ein lieber Kerl.
Are a nice guy.

(15) Sei ein lieber Kerl!
Be a nice guy!

There are exceptions, however, to the obligatory subject ellipsis in German imperative sentences. First, remember that in German the imperative sentence mood has the verb in sentence-initial position, and its mood is the imperative, if the addressee is proximal and singular, otherwise it is the subjunctive mood. What do I mean by proximal? German has two paradigms of notionally second-person or addressee pronouns, namely the unmarked, “familiar” or proximal (in a sociological, not a local sense) paradigm du, deiner, dir, dich, ihr, euer, euch, and the marked, “polite” or distal paradigm Sie, Ihrer, Ihnen. The second paradigm is formally, with respect to agreement, third person plural and therefore notionally transnumeral. The distal way of addressing does not allow for subject ellipsis at all:

(16) Seien Sie ein lieber Kerl!
Be you-DISTAL a nice guy!

(17) *Seien ein lieber Kerl!
Be a nice guy!

The obligatory subject ellipsis with the proximal way of addressing has two kinds of exceptions, namely a) when a particular addressee is contrasted with some other possible addressee as in (18), b) when the addressee, though notionally of course second person, is formally third person, which happens in German not only with the distal form of address, but also when an indefinite member of a plurality of intended hearers is the addressee, as in
(19), and c) when all members of a plurality of intended hearers are addressess, as in (20):

(18) Bring **du mir eine Kreide und du einen Lappen**!
    Get **you** me a chalk and **you** a rag!

(19) **Hilf mir doch bitte einer die Tafel abwischen**!
    Help me yet please **someone** the blackboard wipe-off!

(20) **Iß keiner mehr als ihm zusteht**!
    Eat nobody more than him is-due!

The situation with the imperative sentence mood is less complicated in English and other languages, but it seems safe to assume that the heavily restricted and therefore semantically marked character of directives is formally marked in most languages of the world, be it by a defective paradigm in verbal inflexion, by a special sentence particle (Korean) or a special morpheme (Lahu).

I should not forget to mention a phenomenon that could be called the imperative marking paradox. It arises from the seeming discrepancy between the functionally marked character of the imperative, and the formal marking of the verb, which is often zero. Over half of the languages in Sadock and Zwicky’s sample (with the rather modest size of thirty-three) “employ an entirely affixless verbal base to indicate requests” (Sadock—Zwicky 1985: 172). I do not think that the paradox is a real one, if one conceives markedness as deviation from a (formal or notional) standard, since it seems plausible to assume also negative formal marking (subject ellipsis in a language with otherwise obligatory surface subjects would be another instance of this phenomenon).

Coming back to our search for structural evidence for the Searle—Vanderveken claim that questions are but a special case of directives it is probably correct to say that in the ways typologically diverse languages indicate their sentence moods there is no indication that they treat interrogatives as a special kind of imperative nor that the interrogative moods are related at all to the imperatives except through the declaratives. Why is this?

I think there is a mistake involved in Searle and Vanderveken’s subsuming the erotetic mode under the directive: surely, when considered in an absolute manner, to ask somebody a question is a special case of requesting something from that person, but in connection with sentential modality the perspective is somewhat different, it is not absolute, but relative to a given propositional content. And it has to be relative to a given propositional content **p** that we ask questions like: What is the role of **p** in the discourse? In what way does
p relate to the discourse situation? And looked at from this perspective, it is of course not the case that the way the content of an interrogative sentence relates to the discourse situation is a special case of the way the content of an imperative sentence relates to the discourse situation.

For the purposes of a linguistically interesting classification of illocutions, one that could be easily correlated with a classification of sentential modalities in general and with sentence moods in the different languages in particular, Searle and Vanderveken simply asked the wrong question. Instead of asking “Are questions special directives?”, the answer to which is affirmative, but uninteresting, they should have asked “Are questions with a certain content special directives with the same content?”, which has to be answered in the negative. That is why they are so differently marked. The whole special-case issue comes up only if one includes some activity of the addressee in the propositional content of the question, which of course is possible (e.g. in Tell me if it is raining!), but which simply is not the standard way natural languages code questions.

So what we come up with is not a special case of the addressee-oriented illocution type directive with its typical world-to-word direction of fit, but another type which, like the assertion, has the word-to-world direction of fit, but one where it is up to the addressee to assume responsibility for the fitting of the words to the world.

Instead of analysing questions as a special case of directives, we have followed the lead of structural means in natural languages for coding questions, and have come up with an analysis of questions not as a subcase of directives, but as a sister case of assertives, with the common denominator being the presentation of a proposition under the perspective of raising the question of its being true or false, and with the specific difference that the speaker does not commit himself to its truth (or the truth of its dual, or of some of its instantiations, if it is a parametric one) but rather asks the addressee, if there is any, to do so. So what is correct in Searle and Vanderveken’s intuition is preserved, but put in its adequate, less central place.

4. The most prominent sentence moods and the most basic illocution types

After my critique of Searle and Vanderveken’s treatment of questions and interrogatives and their relation to directives and imperatives it can be expected that I also have some qualms about the role they assign to decla-
It supposes the presentative mode to be the weakest, most basic one, because it is at the core of every illocutionary act with a propositional content. It is pictured in Figure 1 at the root of the tree, which is to represent the entailment relation (going upward) between the illocations standardly expressed by sentences in the corresponding mood (indicated in brackets), since the presentative is entailed by every illocution with a propositional content.

The picture then shows the assertive, the assumptive (hypothetical), and the goal-presenting mode as three specifications of the neutral mode. Next follow the different kinds of questions as further specifications of the assumptive mode, pictured in a block, since no entailment relation holds...
between them. The first two kinds of questions are paralleled by the two kinds of exclamation (about the polarity of a proposition and about the scalar value of one of its constituents) as specifications of the assertive mode that are influenced by the corresponding kinds of questions (this influence is indicated by the broken lines). Finally, the picture classifies (this is very tentative, but at least English and German show some evidence in favour of such an assumption) the optative mood as a specification of the hypothetical one, claiming that every expression of a wish entails a hypothetical presentation of its content.

I consider it supporting evidence for this picture that all these content relations between the modes and, where they exist, the corresponding moods are reflected by formal relations between the markers of these moods at least in some of the languages that have these moods. If this paper stimulates the search for further evidence or counterevidence, it has achieved at least one of its aims.

Notes

1. The specification “maximal proposition” assures uniqueness for most cases, like I think it is raining, which under normal circumstances is about two propositions, namely that it is raining and that the speaker thinks so, or It's sunny but it's cold outside, which is about three propositions, the maximal being the conjunction of the two minor ones; there are however cases like This picture is beautiful but can we afford it? that have multiple propositional content and therefore multiple modality. I will neglect these complications in what follows wherever possible, i.e. except in connection with alternative questions.

2. For a survey of different theories of sentence mood see Grewendorf—Zaefferer (in press).

3. Cf. Lee—Maxwell (1970). Non-structural ways of coding the promissive modality include continuations like ... and that's a promise.

4. I owe this distinction to Simon Dik (1987).

5. This distinction has been emphasized in Zaefferer (1983), where I argue for taking the ways forces are expressed (indicated) rather than the ways they are named (labeled) as a starting point for linguistic analysis (the latter is the Austin—Searle—Vanderveken strategy). I still think that this argument is a sound one, in fact the present paper is meant to adduce additional evidence in its favour.

6. The view that colloquial Welsh should be regarded nevertheless as being a marked-declarative language to a quite high degree is confirmed by an anonymous referee, who notes that “in colloquial Welsh even nonperiphrastic verbs take affirmative particles; moreover, the interrogative particle is usually dropped, resulting in declaratives that are more marked than interrogatives.” This property of colloquial Welsh seems to be less conspicuous however in its spoken form, where the affirmative particle is often not pronounced before consonants, on the one hand, and where interrogative sentences without the corresponding particle can still be recognized because they show lenition (“soft mutation”) of the verbal form (Johannes Bechert, p. c.).
7. This is what Wittgenstein (1967: 23) calls Satzradikal (sentence radical).
8. It should be mentioned that this normal situation can be inverted by special contexts like the ones created by questions, cf. When is a number prime? — A number is prime if ...
9. Probably this is what Palmer with his second alternative had in mind.
11. For a synopsis and preliminary analysis of the different functions of w-constructions in German see Zaefferer (1990).
12. Kisun Hong, Stanford, personal communication.
14. English: If only somebody had told us! In German two prominent means of protasis formation, the conjunction wenn and the verb-first constituent order, can be further specified to yield optative constructions, if the verb is in the subjunctive. (i) and (ii) are examples, the a-variant of a protasis, the b-variant of the corresponding optative:

(i) a. Wenn es geregnet hätte, wäre der Rasen naß.
   If it rained had, would-be the lawn wet.
   b. Wenn es nur geregnet hätte!
   If it only rained had!

(ii) a. Hätte es geregnet, so wäre der Rasen naß.
   Had it rained, then would-be the lawn wet.
   b. Hätte es nur geregnet!
   Had it only rained!

References

Austin, John L.

Barwise, Jon
1987 Two Replies. Stanford: Center for the Study of Language and Information.

Barwise, Jon — John Etchemendy

Bowen, John T. — T. J. Rhys Jones

Bremen, Klaus von

Chisholm, William S., Jr. — Louis T. Milic — John A. C. Greppin (eds.)

Comrie, Bernard
1984 “Russian”, in: Chisholm et al. (eds.), 7—46.
Dik, Simon  

Elliott, Dale  

Grewendorf, Günther — Dietmar Zaefferer  

Grimes, Joseph F.  

Haiman, John  

Hanoteau, Adolphe  

Katz, Jerrold J. — Paul M. Postal  

Lee, Hong Bae — Edward R. Maxwell  

Lehmann, Christian  

Martin, Samuel E.  

Matthews, G. H.  

Palmer, Frank Robert  

Sadock, Jerrold M. — Arnold M. Zwicky  

Saha, P. K.  
1984  “Bengali”, in: Chisholm et al. (eds.), 113—143.

Sapir, Edward  
Searle, John R.

Searle, John R. — Daniel Vanderveken

Traugott, Elizabeth Closs

Ultan, Russell

Weinreich, Uriel

Wittgenstein, Ludwig

Zaefferer, Dietmar

