A FUNCTIONAL VIEW OF 'ORDO NATURALIS'*

Jan Firbas

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V. Mathesius, the founder of the Prague Linguistic School, has summed up his life-long research into word order in two important papers. One of them is devoted to Czech word order (Mathesius 1941), the other draws a comparison between Czech word order and English word order (Mathesius 1942). Mathesius' major contribution to word order studies consists in viewing word order phenomena as constituting a system which is determined by the mutual relations of word order principles. These principles are basically valid for all Indo-European languages, and possibly for language in general, but may differ as to their mutual relations from language to language. Differing as to the extent to, and the manner in, which they operate in various languages, they may constitute different hierarchies. A fuller understanding of the word order system of a language is achieved if it is compared with that of another language, preferably one of different structure.

Mathesius' conception of word order as an outcome of an interplay of principles is in harmony with his endeavour to fully appreciate the tendencies that are at work in language (Mathesius 1911). These principles may differ in intensity and manner from language to language, or even from one stage to another in the historical development of a language. Language is therefore not viewed as a closed and perfectly balanced system.

Developing Mathesius' ideas, I will attempt to throw some light on the time-honoured problem of 'ordo naturalis', the natural order. I trust it will be possible to show that it is worth while tackling it from the structuralist and functionalist point of view. I should add that I shall concentrate on the linguistic merits of the problem.
A detailed survey of the application of the concept ‘ordo naturalis’ throughout the centuries has been offered by H. M. Jellinek (1913—4. §563—78). It can be gathered from this survey that the medieval grammarians were in agreement that the natural order consisted in the sequence SUBJECT, PREDICATIVE VERB, ITEMS OF VERBAL COMPLEMENTATION (§565). Basically the same order was prescribed by the ancient grammarian Dionysius of Halicarnassus. He maintained that it reflected the natural order of the phenomena in Nature itself. In his view, word order was a ‘physei’ phenomenon (ibid. §568).

Le Labourer (1669) held that in order to fulfil its purpose satisfactorily, communication should follow the natural order of thought (Jellinek 1913—4. §571). A pioneer work in word order study is H. Weil’s book (1844).¹ Weil finds that the sentence contains a point of departure (an initial notion) and a goal of discourse. The latter presents the very information that is to be imparted to the hearer. Weil claims that the movement from the initial motion to the goal of discourse reveals the movement of the mind itself. The reverse order, which puts the goal of discourse first and the initial motion last, is termed by him “pathetic” and looked upon as a vehicle of emotion.

Turning to modern linguistics, let me mention the approaches of V. Mathesius and D. L. Bolinger (1952).

Developing H. Weil’s ideas Mathesius speaks of known and unknown information. Putting elements in the known-unknown sequence creates objective word order, putting them in the reverse sequence creates subjective word order.

Bolinger has developed the concept of linear modification. In accordance with this concept, ‘elements as they are added one by one to form a sentence progressively limit the semantic range of all that has preceded. This causes beginning elements to have a wider semantic range than the elements toward the end’ (1952.280). The ‘gradation of position creates gradation of meaning when there are no interfering factors’ (1952.288). (He slowly backed away, He backed away slowly; They left out both pages, They left both pages out; The only navigable river is to the north, The only river navigable is to the north.)

It is evident that in determining the order of sentence elements a number of factors are in play. Sentence elements can be ordered in regard to old and new information, linear modification, the requirements of grammatical structure; moreover, the rhythmic factor is in play, as well as the factor that renders word order emotive (marked). Another aspect, however, must be added to the picture.

Let me approach the problem from the point of view of communicative importance (communicative weight), or rather — to take the dynamic character of communication duly into account — communicative dynamism (= CD) (Cf. Firbas 1971). The concept of CD is based on the fact that communication is not a static, but a dynamic phenomenon. By CD I understand a quality displayed by communication in its development (unfolding) of the information to be conveyed and consisting in advancing this development.

¹ Weil’s work is mentioned by Jellinek, but not discussed by him, the purpose of his survey being to cover the development of German grammatical thought only up to the times of J. Ch. Adelung (1732—1806).
By the degree of CD carried by a sentence element, I understand the extent to which the sentence element contributes to the further development of the communication.

The concept of CD can be established empirically and inductively. Adopting this approach, we find that elements conveying known information (context dependent elements) contribute less to the further development of communication than elements conveying unknown information (context independent elements). Context dependent elements carry a lower degree of CD than context independent elements.

Bolinger has shown that semantic contents increase their communicative importance — in my terms, their degrees of CD — if the elements conveying them are shifted toward the end of the sentence. This establishes the capability of sentence linearity to raise the degrees of CD. Bolinger is, of course, fully aware of interfering phenomena.

Context is the most powerful of these interfering phenomena. Irrespective of sentence position, a context dependent element (an element “dedynamized” by context) will always carry the lowest degree of CD within the sentence and in this way work counter to sentence linearity. Thus in the structures I saw him, I met him in the street, the pronouns will most naturally be context dependent. They have this status, no matter whether occurring initially, medially or finally.

At this point let me insert a note on context and further clarify the concepts of context dependence and independence.

From the functional point of view, a semantic and grammatical sentence structure cannot be discussed without regard to context (cf., e. g., Reichling and Uhlenbeck 1962). It is only in context that such a structure can function and become a sentence in the true sense of the word. Outside context, a semantic and grammatical sentence structure can be looked upon merely as a spurious sentence, not performing any genuine communicative function.

Context is an extremely complex phenomenon. Speaking in most general terms, there is the context of experience. It is provided by the common knowledge (experience) shared by the speaker and listener. Focusing our attention on the moment of utterance, we find a sphere within the context of experience that is constituted by the ad-hoc context of immediate experience, a considerable narrowing down of the context of experience taken in the general sense. The ad-hoc context of immediate experience is contributed by the situation at the moment of utterance. A further narrowing down within this sphere is the ad-hoc verbal context preceding the sentence.

The preceding verbal context is thus embedded within the ad-hoc context of immediate experience, which in its turn is embedded within the context of experience taken in the general sense. It is essential to bear this constantly in mind; yet it is convenient to speak, apart from the preceding verbal context, simply of the ‘situational context’ and ‘context of experience’, respectively meaning the ad-hoc context of immediate experience to the exclusion of the preceding verbal context, and the context of experience to the exclusion of the ad-hoc context of immediate experience. Unless otherwise stated, it is in this sense that the two terms are used.

2 An expression I owe to A. Svoboda (personal communication).
But the contextual conditioning at the very moment of communication cannot be determined without due regard to the immediate communicative concern\(^3\) (purpose) of the speaker. It is this communicative concern of the speaker that sets what can be termed the narrow scene.\(^4\) By the narrow scene I consequently mean the contextual conditioning obtaining at the very moment of utterance. It is the narrow scene that ultimately determines context dependence or independence. The following four examples will illustrate.

1. An element may express a notion that is derivable from the preceding verbal context but appears as new in view of the speaker's immediate concern. In regard to the narrow scene, such an element will not be context dependent, but independent. Thus the following contextual conditioning may apply to *Bob went to the window*: *window* conveys a notion derivable from the preceding verbal context and perhaps even from the situational context; the speaker's immediate communicative concern is the indication of the goal of Bob's motion. This indication is the immediate communicative purpose imposed by the speaker upon the semantic and grammatical structure *Bob went to the window*. As conveyer of the indication, *window* is underivable from the preceding verbal and situational context; in regard to the narrow scene, it is context independent.

2. It follows from 1 that an element conveying a notion derivable from the preceding verbal context can be looked upon as context dependent provided this is in harmony with the speaker's immediate concern (immediate communicative purpose). Thus in reply to *What did Bob do?*, *Bob* in *Bob went to the window* is to be interpreted as context dependent.

3. The situational context co-operates in rendering elements context dependent, but in doing so is hierarchically inferior to the preceding verbal context. Situational context can come fully into play only in the absence of preceding verbal context. Thus in *'Have you seen that?*, occurring for instance as an immediate reaction, with no preceding verbal context, to some conspicuous transient extra-linguistic phenomenon, *you* and *that* will unmistakably appear as context dependent. But even here, the speaker's immediate concern may decide otherwise. If used cataphorically, selecting out a phenomenon for the hearer's special attention and pointing to it, *that* will be context independent, entailing a change in its prosodic feature; cf., *'Have you seen that?*

4. As will be shown later, context of experience certainly participates in determining degrees of CD, but in regard to the narrow scene, its non-ad-hoc character does not render sentence elements context dependent. Thus in *The word 'fisherman' came to his head*, word *'fisherman'* conveys a notion that forms part of the common experience shared by the speaker and listener. (It could be regarded as a dictionary entry.) Yet, it is neither derivable from the preceding verbal context nor from the situational context as a phenomenon that came to somebody's mind (that 'appeared' in somebody's head). In regard to the narrow scene it is context independent.

Another important factor working counter to sentence linearity may be some types of semantic content. Let me adduce here at least some examples

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\(^3\) A term suggested to me by K. A. Müller (private communication).

\(^4\) Cf. the discussion of the narrow scene in Firbas 1966, 246–7.
and summarize the main arguments. References will indicate where the phenomena are discussed in detail.

It has been found that a context independent element expressing a phenomenon (animate or inanimate, concrete or abstract) existing or appearing on the scene is communicatively more important and consequently carries a higher degree of CD than an element merely expressing the existence or appearance and an element merely expressing the scene. (A boy came into the room — Firbas 1966.242ff). The limitation stipulating context independence is extremely important. It must be borne in mind that a context dependent element can never exceed a context independent element in CD.

In English, perhaps the most common means of expressing a phenomenon existing or appearing on the scene are the existential /there-sentences (There was a book on the table), mostly employing the verb to be, and the sentence containing a verb or verbal phrase explicitly expressing existence or appearance on the scene (such as exist, be present, occur, come, come into view, come on the scene, come in, come up, to present oneself, to take place, to arise). But other means exist. There are sentences containing verbs that, strictly speaking, express appearance or existence on the scene only implicitly (cf., e.g., A haze hovered over the prospect, A fly settled on his hair). Special mention must be made of sentences in which — provided the subject is context independent — the object of a transitive verb evidently expresses the scene on which a phenomenon appears. (A dumb and grumbling anger swelled his bosom, A dusky orange dyed his cheeks). The verb and its object then respectively express 'appearance' and 'scene of appearance'. Passive constructions in which the adverbial element of agency, means or instrumentality is unexpressed or has become context dependent also deserve special mention. Provided the subject is context independent, the verb comes to function as one of appearance/existence on the scene. It may not express appearance/existence on the scene explicitly, but it does so implicitly and with sufficient clearness. It newly introduces the notion expressed by the context independent subject into discourse (cf. A blind and dumb man was brought to him, A terrible cry was to be heard [when the doctor was pulling out the teeth of some little boy], New Zealand apples were being sold, Many new houses have been built, A serious mistake has been made by them). The phenomenon of verbs that express appearance or existence on the scene and, communicatively speaking, recede into the background in the presence of nouns expressing notions newly introduced into discourse (i.e., made to appear on the narrow scene) is naturally not limited to English.\(^5\) (This will be borne out by the following discussion.)

It is worth noticing that under the described semantic and contextual conditions, i.e. in regard to the further development of discourse (in regard to the dynamics of communication) it is not the noun that introduces the verb, but the verb that introduces the noun, into the discourse. The verb will cease to perform this introductory function if the noun — the subject in the structure under consideration — becomes context dependent. In that case attention will naturally shift to the quality (in the widest sense of the word) ascribed

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\(^5\) Highly relevant to a comparison of English and German ways of distinguishing degrees of CD are H.W. Kirkwood’s papers, e.g. 1969, 1970a, 1970b.
by the verb to the subject. Even a verb (or verb phrase for that matter) that explicitly expresses appearance/existence on the scene will no longer function as an introductory device. In *He came, the accident occurred, George (N. B., thought of as context dependent here) was present,* existence/appearance on the scene is in fact presented as a transient quality. Under the circumstances, *come* may even come to be regarded as a verb of action.

The concept of existence/appearance on the scene is applicable even to context independent objects expressing phenomena that emerge as the outcome of some action. A case in point are objects of verbs of production (such as *make, effect, build, construct, form, manufacture, produce*). A context independent object expressing such an effected goal of an action can once again be looked upon as having been newly introduced into discourse, having been made to appear on the narrow scene, by the verb (*They have effected important changes, They have built dikes, roads and bridges, Der bekannte Schriftsteller hat ein neues Buch geschrieben*).

But even if an action does not effect a phenomenon, it may at least affect one. Provided the object expressing the affected phenomenon is context independent, the verb expressing the process of affecting will once again function as a device newly introducing the object into discourse. In regard to the dynamics of the communication, both the context independent effected goal and the context independent affected goal behave in the same way; it therefore appears to be of minor importance if it is not always possible to make a clear distinction between the two.

Semantically speaking, an object expresses an absolutely essential amplification of the semantic content of a transitive verb. If this amplification is constituted by a context independent notion, the necessity of amplification points in the direction of the further development of communication and makes the verb serve as an introductory element. To sum up, a context independent goal of action is communicatively more important than the action itself. A context independent object expressing a goal of action carries a higher degree of CD than the verb (cf. Firbas 1959).

The preceding sketch has outlined the conditions under which the semantic contents of ‘existence/appearance on the scene’, ‘the phenomenon existing/appearing on the scene’, ‘the scene itself’, ‘action’, ‘affected or effected goal of action’ signal degrees of CD. It is essential that they can do so irrespective of sentence position, i.e. sentence linearity. It follows that the semantic content can actively participate in the development of the discourse, i.e. in constituting its dynamics.

The question may be raised whether there are any overt features in language that are in harmony with and bear out the outlined interpretation. Let me therefore adduce the testimony of articles, personal pronouns, word order and intonation.

Articles co-operate in signalling degrees of CD more effectively if accompanying count nouns and functioning in non-generic co-text. Two provisos must be added. The following notes do not apply to what has been termed second instance sentences and to certain types of class-room repetition sentences. By a second instance sentence I understand a semantic and grammatical sentence structure that has appeared in heavy *ad-hoc* contrast because of one single semantic item6 (*Father HAS written a letter*). It is this item (in the
adduced example it could be the temporal indication, for instance) that remains context independent (and so does in consequence the element — *has* in the adduced example — that expresses it), the other semantic content of the structure (including the non-contrasted verb of the semantic content of the foregrounded element) being context dependent. A typical class-room repetition sentence would be *Peter killed a fly*, used in reply to *Who killed a fly?* and in fact merely practising the structure *Peter killed a fly*.

Bearing the above conditions and provisos in mind, we find that the indefinite article (*a* or its zero plural variant) signals novelty of information and hence context independence and a rise in CD (cf. the examples adduced here on p. 33).7 On the other hand, the definite article never signals a rise in CD. True enough, it may occur with a noun that conveys a notion that is part of the interlocutors' common experience but in regard to the narrow scene conveys new information and is in consequence context independent (cf. the example *The word 'fisherman' came to his head*, adduced above). But context independence and the resultant rise is then signalled by other devices. The definite article, however, will effectively co-operate in preventing a rise in CD if performing a genuinely anaphoric function. This is the case when it accompanies a noun which, together with another linguistic element occurring in the preceding context, co-refers to a notion regarded as known in relation to the narrow scene. (Cf., e. g., *[He could not decide whether to buy the book or not. — What did he do?] — *He bought the book.*8) The noun is context dependent.

Now, the occurrence of an indefinite article with a count noun expressing a context independent effected or affected goal of the action or a context independent phenomenon appearing on the scene is in harmony with the higher degree of CD that the noun carries in comparison with the respective verb. Likewise, the occurrence of the definite article with a context dependent noun is in harmony with the low degree of CD (in fact, the lowest within the sentence) carried by that noun. As has already been pointed out, occurrence of the definite article with a context independent noun is facilitated by and compensated for by other means.

The personal pronouns equally bear out the described distribution of CD. Under one contextual conditioning, it is not possible to choose between a personal pronoun and a context independent count noun accompanied with a non-generic indefinite article. The two mutually exclude each other.

Provided there is no danger of ambiguous reference, and rhythmical and stylistic considerations permit it, it is possible to choose between a personal pronoun and context independent count noun accompanied with a non-generic definite article; the pronoun, however, appears in its stressed (strong) form.

Finally, it is as a rule possible to choose between a context dependent noun accompanied with the definite article and a personal pronoun. It is the pronoun

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6 For a detailed discussion of second instance sentences, see Firbas 1968.15–8.
7 A very efficient device of signalling a context independent subject in Japanese is the marker *ga*. This has been shown by Susumo Kuno (1972).
8 For a discussion of the function of the articles in signalling degrees of CD, see Firbas 1966.
that is mostly selected in such a case. It usually appears in its unstressed (weak) form.

In tabular form, the participation of articles and personal pronouns in signalling degrees of CD, respectively accompanying and replacing count nouns, can be presented as follows. The two provisos mentioned above (cf. here p. 34—5) naturally apply.

**Table 1**

<table>
<thead>
<tr>
<th>COUNT NOUN</th>
<th>Its CONTEXTUAL CONDITIONING</th>
<th>Its non-genetic ARTICLE</th>
<th>Its REPLACEABILITY BY PERSONAL PRONOUNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>independent</td>
<td>indefinite</td>
<td>irreplaceable</td>
</tr>
<tr>
<td>2.</td>
<td>independent</td>
<td>definite</td>
<td>replaceable by a stressed strong form</td>
</tr>
<tr>
<td>3.</td>
<td>dependent</td>
<td>definite</td>
<td>replaceable by an unstressed weak form</td>
</tr>
</tbody>
</table>

1 most naturally

**Examples**

1. A boy came
   A girl broke a vase
   *He came
   *She broke it

2. The boy came to see us
   He chose the books
   *He [unstressed] came to see us
   He [stressed] came to see us
   *He chose them [unstressed]
   He chose them [stressed]

3. The boy came
   The girl broke the vase
   He came
   She broke it

In consequence, if S and O in The girl broke the vase is respectively context dependent and independent, *She broke it* is possible, but *The girl broke it* impossible. Under reverse contextual conditions (S being context independent, but O context dependent), *The girl broke it* is possible, but *She broke the vase/ She broke it* impossible.

Let me now turn to the evidence offered by the prosodic features. It is most natural that within a sentence conveying the semantic contents of 'scene' (possibly absent), 'appearance/existence', 'appearing/existing phenomenon', the element expressing the phenomenon should bear the most conspicuous prosodic feature (= intonation centre), provided of course it is context independent: Then a*light appeared on the horizon, *A fly settled on his hair. ... a*thaw was expected.

The prosodic features equally bear out the findings on the degrees of CD.

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9 A term introduced by Fr. Danes (1957.27, 153).
10 Quoted after M. Schubiger (1964.265).
11 For a discussion of the relation between prosodic weight and CD, see Firbas 1959.
by a verb expressing action and those carried by an object expressing the
effect or affected goal of the action. I have devoted a special study to the
prosodic features of the Modern English finite verb-object combination (Firbas
1969). The results of this study\(^\text{12}\) fully corroborate the finding that a context
independent object expressing the goal of an action will carry a more con-
spicuous prosodic feature than the finite verb.

Of particular interest in this connection are M. Bierwisch's observations
(1968), who approached the problem of German accentuation from the
generativist's point of view. Relevant to the present discussion are his findings
on the contextual conditioning of the verb and the object as well as his findings
on the prosodic features of these elements. These findings are in harmony with
my observations offered above and in earlier writings (Kirkwood 1969, 1970a,
1970b; Firbas 1959). I find it useful for the present purpose to adduce here
Bierwisch's relevant examples. I underline in them the syllable to which
Bierwisch assigns the most conspicuous prosodic feature, i.e. the intonation
centre (=IC).

1. Peter betrachtet ein Buch.
   Peter schaut ein Buch an
   Peter hat ein Buch betrachtet
   Peter hat ein Buch angeschaut
2. Peter betrachtet das Buch.
   Peter schaut das Buch an
   Peter hat das Buch betrachtet
   Peter hat das Buch angeschaut
3. Peter betrachtet das Buch.
   Peter schaut das Buch an
   Peter hat das Buch betrachtet
   Peter hat das Buch angeschaut
4. Peter betrachtet ein Buch.
5. Peter betrachtet es.

One cannot but agree with Bierwisch that 4 (in his paper given under 9)\(^\text{13}\)
is highly unusual. He in fact goes the length of saying that possibly it "must
be ruled out altogether". As I see it, ein Buch of the sentence structure exem-
plified by 4 can become context dependent only under special circumstances,
particularly within second instance, in class-room communication (cf. here
34 — 5) and perhaps on some other highly unusual occasion. Bierwisch's examples
and his notes on the influence of context (i.e., to use his apt term, on contextual
conditioning)\(^\text{14}\) corroborate that apart from second instance sentences and
some highly peripheral cases (see above), a context independent O expressing
the goal of an action will bear a weightier prosodic feature than V; it will in
fact bear the IC. It is highly important that under the specified circumstances

\(^{12}\) As already stated in the study (1969.49), its results are in keeping with M. Schubiger's
observation (1935. 14) that the object is usually relatively more important than the verb. The
same conclusion has been drawn by F. Trojan (1961. 17). It can also be unmistakably gathered
from P. Adamec's study of Russian word order (1966).

\(^{13}\) I have renumbered Bierwisch's examples. His numbers are respectively 14, 15, 16, 9, 11.

\(^{14}\) I have adopted this term and use it in reference to the contextual determining of context
dependence or independence (cf. here p. 31).
O will bear this feature irrespective of sentence position. O takes the IC along with it, as it were.

For clarity’s sake let me state the relation between the distribution of prosodic weight and that of CD over the V—O combination in tabular form. The statement is based on my inquiry into the prosodic features of the Modern English finite verb-object combination (Firbas 1969). Strictly speaking, it applies to a V—O combination expressing an action and the effected or affected goal of the action. These are the most usual semantic contents of V and O.

**Table 2**

<table>
<thead>
<tr>
<th>RELATION between the distribution of prosodic weight and the distribution of CD over the V—O combination in Modern English</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semantic conditioning:</strong> V expressing action, O expressing goal of action</td>
</tr>
<tr>
<td><strong>Contextual conditioning:</strong> (i) as indicated below, and (ii) assuming the absence of elements carrying a higher degree of CD than the V—O combination</td>
</tr>
<tr>
<td>Possible combinations of V and O in regard to context dependence/independence (IND. = context independent, DEP. = context dependent).</td>
</tr>
<tr>
<td>IND. V + IND. O</td>
</tr>
<tr>
<td>DEP. V + IND. O</td>
</tr>
<tr>
<td>IND. V + DEP. O</td>
</tr>
<tr>
<td>DEP. V + DEP. O</td>
</tr>
</tbody>
</table>

Bearing in mind the semantic and contextual conditioning stated above, we can summarize the interpretation offered by Table 2 as follows. If context dependent, neither V nor O can bear the IC; V can become IC bearer only provided O has been rendered context dependent; a context independent O, on the other hand, will come to bear the IC. In other words, as long as O is context independent, i.e. as long as the phenomenon expressed by it has not yet been made to appear on the narrow scene, O will not yield the IC to the verb. This bears out the interpretation that intrinsically O, or to be quite exact, the semantic content of goal of action, is more dynamic than V, or to be quite exact, the semantic content of action.

At this point, the following note should be inserted. It is well known that inexperienced or inattentive readers may tend indiscriminately to place the
IC on a final stressed sentence element, and perhaps even other language users may occasionally slide into this ‘automatizing’ practice. It seems not to be impossible for the structure *A girl came into the room* to be intoned with a gradually falling intonation and with the IC on *room*, even in case of a *girl* being context independent and *into the room* merely expressing the scene. But this should not be surprising. Within the intricate interplay of factors, the tendency to shift the IC as far backwards within the clause as possible — a tendency that can perhaps be brought into relation with the impact exercised by sentence linearity — can evidently assert itself from time to time. The ‘automatizing’ tendency is, however, kept within limits. (In any case, in the presence of ‘neutral’ intonation, the highest degree of CD within the sentence quoted appears to be sufficiently signalled by context and semantic structure, so that lack of congruence between the carrier of the highest degree of CD and the IC bearer does not seriously impair the signalling of degrees of CD). These limits are imposed by the tendency to unequivocally signal the carrier of the highest degree of CD, a tendency promoting the efficiency of language in functioning as a reliable tool of communication. Thus in regard to German it can certainly be assumed that the weaker the semantic content of a final V, the lower the probability of such a V claiming the IC in the presence of a context independent O. (Thus it will be highly unusual for the IC to fall on *gemacht* and *gegeben* in *Er hat viele Fehler gemacht, Er hat uns einen guten Rat gegeben, if viele Fehler and einen guten Rat stay context independent*).

Another important piece of evidence for the offered interpretation of the degrees of CD as signalled by the semantic items of ‘existence/appearance on the scene’, ‘phenomenon existing/appearing on the scene’, ‘action’, ‘effected or affected goal of action’ is offered by word order. Extensive enquiries into Czech and Slovak word order have established that in Standard Czech and Standard Slovak the unmarked arrangement of sentence elements puts the element expressing the most important piece of information in end position. Thus in unmarked use, the elements *chlapec* (‘boy’), *přišel* (‘he came’), *vázu* (‘vase’ accusative case), *rozbila* (‘she broke’) in *Přišel chlapec* (‘He-came boy’, A boy came), *Chlapec přišel* (‘Boy he-came’, The boy came), *Divka rozbila vázu* (‘Girl she-broke vase’, A/The girl broke a/the vase), *Divka vázu rozbila* (‘Girl vase she-broke’, The girl broke the vase) will be context independent and carry the highest degree of CD. Deviations from this arrangement are marked. This would happen if the element *chlapec*, *přišel*, *vázu*, *rozbila* in *Přišel chlapec, Chlapec přišel, Divka rozbila vázu, Divka vázu rozbila* were context dependent and hence incapable of carrying the highest degree of CD. In spoken language,

15 The operation of this tendency has been discussed in greater detail in Firbas 1976.
16 See Mathesius 1941. Among the most recent contributions are Benešová 1968 and 1971, Mistrik 1966, Uhlířová 1972. See also Bauer—Grepl 1972, where further references can be found (179—81).
17 These are perhaps the most likely uses of the articles. This means that not all the possibilities are indicated. It has to be borne in mind that the definite article is not invariably linked with context dependence.
18 Needless to say, still other contextual conditions can be thought of. Both the notions of ‘breaking’ and ‘vase’ could be context dependent, whereas the notion of ‘girl’ could be context independent. The most conspicuous prosodic feature would then appear on *Divka: Divka rozbila vázu, Divka vázu rozbila.*
the two sets would show the following placements of the most conspicuous prosodic feature (the IC): Přišel chlapec, Chlapec přišel, Divka rozbila vázu, Divka vázu rozbila; Přišel chlapec, Chlapec přišel, Divka rozbila vázu, Divka vázu rozbila. All these observations are in harmony with the conclusion that a context independent noun expressing a phenomenon appearing or existing on the scene will carry a higher degree of CD than a verb, context dependent or independent, expressing appearance or existence on the scene, and that a context independent noun expressing the effected or affected goal of the action will carry a higher degree of CD than the verb, context dependent or independent, expressing the action itself.

As the discussed types of semantic content are capable of signalling degrees of CD irrespective of sentence position, the question arises whether word order could not be called upon to perform other duties. To a varying extent and in a different manner this possibility has indeed been embraced by some languages. Let us, for instance, recall the fixed position of the verb in English, German and Japanese. In all these languages the position of the verb is determined by the grammatical principle, sentence position having taken on grammatical duties. Occurring between S and O, the English verb participates in signalling the grammatical S—O relation; having different fixed positions in principal and subordinate clauses, the German verb respectively signals syntactical independence and dependence; invariably occurring in end-position, the Japanese verb signals the end of a clause. It is not without interest to note that, for instance, a rise in CD that is signalled by the word order in Czech or Slovak is frequently signalled by articles in English and German and by a special particle in Japanese. Diachronistically speaking, the discusses semantic contents facilitate changes in word order effected by various tendencies operating in the course of the historical development of language.

It is not possible to give an equally extensive, though necessarily sketchy, account of other types of semantic content that can—provided they remain context independent—signal degrees of CD irrespective of sentence position. Let me just briefly comment on some more instances.

A. Svoboda (1968) has inquired into the distribution of degrees of CD within an attributive construction (head word plus attribute). He has found that provided the attribute is context independent, it will carry a higher degree of CD than the head word. Communicatively speaking, it is most natural to assume that an attribute expressing a context independent (newly introduced) quality provides additional information about the phenomenon expressed by the head element. Thus within the attributive construction an excellent teacher, occurring e.g. in We have found him an excellent teacher, the attribute excellent will—provided it is context independent—carry a higher degree of CD than the head noun teacher. From what has been said follows that a context independent attribute will provide the additional information, and develop the communication further irrespective of sentence position. It will carry a higher degree of CD no matter whether it occurs before or after the head element. As is well known, for instance, French and Polish tend to put the attribute (no matter whether it is an adjective, and adjectival phrase or an adjectival clause) after, English and Czech before or after (the second alternative applying to prepositional noun phrases and clauses), Japanese invariably before, the head element.
Strictly speaking, an analysis of the degrees of CD within an attributive construction becomes relevant only after its degree of CD has been established in regard to the clause within which it occurs. Svoboda has demonstrated that in relation to the clause, the attributive construction constitutes just one communicative unit. It constitutes, however, a unit that itself provides a distributional field — a subfield — with its own communicative units. The establishment of this hierarchical relation helps to account for the prosodic features borne, for instance, by an English attributive construction. If both the attributive and the head element are context independent, the element coming last bears the more conspicuous prosodic feature within the construction (We have found him an excellent teacher. He is a teacher of life-long experience.) This feature is to be interpreted as belonging to the entire unit and does not necessarily coincide with the carrier of the highest degree of CD within the unit viewed as a distributional subfield. If necessary, however, intonation is capable of co-signalling the distribution of CD within the attributive construction; cf., e.g., the prosodic features in He is an excellent teacher, He is an excellent* teacher, He* is an excellent teacher, respectively signalling teacher, excellent, and both teacher and excellent, as context dependent.

Svoboda's observation on the context independent attribute exceeding its head word in CD is relevant also to the assessment of the degrees of CD carried by a Subject and an Object Complement (Cs, Co). Semantically speaking, both Cs and Co express qualities. It once again applies that a context independent element expressing a quality, provides additional information about a phenomenon and in this way further develops the communication. This becomes all the more evident in the case of Cs and Co, for they both constitute separate communicative units. The distribution of prosodic features is in agreement with the distribution of degrees of CD; cf., e.g., His friend was a good Greek scholar, They elected him Chairman of the Selection Committee, Brilliant was the lecture he gave, 'Brav und tapfer war der kleine Junge. Once again the offered observation about the context independent Cs and Co holds good irrespective of sentence position.

At this point a note should be inserted on the notion of quality, touched upon earlier in the discussion (see here p. 33–4). Taken in a wide sense, quality can be understood to cover not only a permanent, but also a transient aspect of a phenomenon (Mathesius 1961.62–3). A permanent aspect is mostly expressed by an adjective; a transient phenomenon is mostly expressed by a verb. This overlap, however, does not affect the present argument.

In the light of what has been said in the preceding paragraphs, the subject of a sentence (clause) expressing the bearer of a quality can be expected to carry a lower degree of CD than the element expressing the quality. The latter must of course be context independent. And there is another important proviso to be added. In regard to the development of the discourse (the dynam-

19 For a more detailed treatment of the concepts of distributional field and communicative unit and their application, as well as of the relation between the gamut of CD and that of prosodic weight, see Firbas 1972. 81–2, 84–6.

20 The economic crisis was very long in making itself felt in that district, He is sure to come are examples adduced by Mathesius (1961.62–3) in illustration of a transient aspect expressed by adjectives (long, sure).
ics of the discourse), the semantic content of a subject cannot fully function as a quality bearer unless it can be regarded as already introduced into discourse, i.e. as having already appeared on the narrow scene. Nor can the element that is to convey the quality fulfill its function to the full extent unless this condition is fulfilled. This is in harmony with what has been said about the verb introducing into discourse a context independent notion conveyed by the noun, i.e. making it appear on the narrow scene. This probably explains why within a context independent item of information of the type The church is on fire, Die Kirche brennt, Kostel hoří, it is the grammatical subject that bears the most conspicuous prosodic feature. The predicative verb or phrase certainly expresses a transient aspect of the phenomenon ‘church’, but this phenomenon is evidently not regarded as having already been introduced onto the narrow scene. Under the circumstances the predicative verb/the predicative phrase takes over the role of a verb of appearance/existence on the scene. It could not perform this function if it bore the most conspicuous prosodic feature. The subject would then be regarded as context dependent (owing to situational context, in the absence of preceding verbal context); it would be regarded as already having been introduced onto the narrow scene and could fully perform the function of quality bearer. We shall be able to return to this problem again later. Let me now resume the thread of thought initiated by the discussion of the function of the attributive construction.

It is not without interest to note that the relation between the one-word adverb of manner (= manner adverb) and the verb bears some resemblance to the relation between the attributive adjective and the noun. F. Kopečný speaks of the manner adverb as of the ‘verbal attribute’ (1962. §4, 50). In comparison with the element expressing the action, a context independent element expressing a qualification of the action takes the development of the communication a step further. This applies provided the qualification is context independent and it holds good not only for the one-word adverb of manner (= manner adverb), but for the adverbial element of manner (= manner adverbial) in general. A context independent manner adverbial exceeds the verb in CD. This applies irrespective of sentence position.

An inquiry into the distribution of prosodic features over the manner adverb-verbo combination in regard to the relation between prosodic weight and CD remains pending. A context independent adverbial occurring after the verb will, however, carry a more conspicuous prosodic feature. This is certainly in agreement with the offered interpretation (He viewed the new proposal dejectedly, He played Beethoven’s Moonlight Sonata with greatest delicacy).

Let me now add a note on the adverbial elements of time/place. As has been shown by E. Dvoráková (= E. Golková) (1964) and myself (1961, 1977), the adverbial elements of time/place can function in the act of communication.
either as situational settings or as temporal/local specifications. The following examples will illustrate: *Ich schrieb gestern ein paar wichtige Briefe.* There are world-famous museums in Amsterdam/In Amsterdam gibt es weltberühmte Museen. It happened yesterday/Es geschah gestern/Stalo se to včera. I met him in Amsterdam/ICH begegnete ihm in Amsterdam/Ich bin ihm in Amsterdam begegnet/Potkal jsem ho v Amsterodamu. Provided it is only the personal pronouns (I, it, him) that are context dependent, yesterday/gestern/včera and in Amsterdam/in Amsterdam/v Amsterodamu will function as settings in the first pair of examples, but as specifications in the second. In the first example, the context independent action and context independent effected goal are communicatively more important than the temporal indication, which is in consequence relegated to the background as a setting. In the second example, the phenomena existing on the scene are communicatively more important than the local indication; the latter is relegated to the background and merely sets the scene. In the other pair of examples, on the other hand, the communicative purpose of the speaker is to convey a temporal and a local specification. In consequence, the specifications have been foregrounded. It is worth noticing that, in the first example of the other pair, the phenomenon spoken about has already been introduced onto the narrow scene and is context dependent, and so is the affected goal of the action in the second example of the pair.

It can be gathered from the above comments that the types of semantic relation into which the temporal and local indications can enter co-determine whether the indications are to function as settings or specifications. Further research will have to give a more detailed account of the relevant conditions. Also the types of possible multifunctionality (ambivalence), i. e. types admitting of double interpretation due to the absence of unequivocal conditioning, will have to be established. The unequivocal cases (in which the adverbial elements of place/time clearly function as settings or specifications) necessitate such further inquiries.

In regard to Modern English, E. Horova (1976) has found that in comparison with the adverbial of time, the adverbial of place has a higher frequency as a specification. This is in harmony with L. Uhlířová’s findings (1974), based on Modern Czech data, that in comparison with the adverbial of time the adverbial of place has a higher frequency as a rhematic element. V. Černá’s inquiries (not yet published) show that the same holds good for the historical development of English word order. Both synchronistically and diachronically speaking, as respectively shown by E. Horová and V. Černá, the adverbial of time displays greater mobility, i. e. aptness to change its position within the sentence, than the adverbial of place.

It is essential to bear in mind that specification and setting are viewed here as phenomena that are to be ultimately accounted for in terms of function in the act of communication, in other words, in terms of CD. They are not to be regarded as purely static semantic concepts. This explains why an adverbial

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22 The following are literal translations of the Czech examples: *Yesterday I-am wrote several important letters*, *In Amsterdam are world-famous museums*, *It happened refl. pron. it yesterday*, *Met I-am him in Amsterdam*. 

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of time/place can serve as a specification only if context independent. If context dependent, on the other hand, it can only serve as a setting. This wording admits of the possibility of a setting being either context dependent or independent. In actual fact, a setting can indeed function either within the context dependent or context independent section of a sentence. The roles the adverbial of place/time can play in the development of the communication can be tabulated as follows.

<table>
<thead>
<tr>
<th>Roles</th>
<th>Contextual Conditioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>SETTING</td>
<td>CONTEXT DEPENDENT CONTEXT INDEPENDENT</td>
</tr>
<tr>
<td>SPECIFICATION</td>
<td>CONTEXT DEPENDENT CONTEXT INDEPENDENT</td>
</tr>
</tbody>
</table>

As has already been stated, further inquiry is desirable to exhaustively establish the conditions under which an adverbial of place/time functions as a setting or a specification. But what has been established so far testifies to the capability of the adverbial of place/time to signal degrees of CD irrespective of sentence position.

In discussing the means signalling degrees of CD I have intentionally devoted considerable time and space to the illustration of the role played by the semantic contents and the semantic relations into which they can enter (in other words, the operation of semantic structure). I believe that an inquiry into the operation of semantic structure in the very act of communication (i.e. into the dynamic aspect of this structure) is a very important step taken towards a better understanding of the function of language.

The type of semantic content conveyed by an element is by far not irrelevant to the extent to which the element can contribute to the further development of discourse. This applies both to the type capable of signalling degrees of CD irrespective of sentence position and to the type incapable of doing so. L. Uhlířová (1974) has more recently demonstrated the close relationship between semantic content and the role played in the development of discourse.

Of particular interest are such elements whose semantic contents make them carry a more or less constant degree of CD outside second instance. *Even the noisiest boys kept quiet* is one of the most striking examples. The function of the interrogative pronouns and *not* as carriers of constant degrees of CD have been discussed elsewhere (see, e.g., Firbas 1976). A similar function of the temporal and modal exponents of the finite verb will be touched upon further below (cf. here p. 54).

The intricate interplay of means of signalling CD may not always be unequivocal, perhaps allowing of more than one interpretation. This phenomenon has been referred to as multifunctionality and discussed in greater detail elsewhere; more often than not multifunctionality in written language is
removed by prosodic means in spoken language. Further research, however, may throw some new light on cases that have so far been interpreted as multifunctional (equivocal). Nevertheless, regarding language as an open and not perfectly balanced system, we cannot but assume that cases of genuine multifunctionality truly exist.

In some cases uncertainty may arise as to whether an element is context dependent or independent. Such uncertainty, however, does not necessarily impair a reliable assessment of the CD relations of such an element to another element provided the latter is unmistakably context independent and the former cannot — no matter whether context dependent or independent — exceed it in CD. In such cases the latter will always implement a rise. True enough, this rise will be more evident if the former element is context dependent, but this does not affect the establishment of the rise in CD, i.e. that of the higher degree of CD.

It has been shown that semantic structure is one of the means of signalling degrees of CD. I have proceeded far enough to summarize the findings on their interplay.

I refer to the devices signalling the degrees of CD as means of functional sentence perspective (= FSP). This is because by distributing degrees of CD over the elements of a sentence they put the sentence in a definite kind of perspective: they make the sentence function in a definite kind of perspective.

Within the interplay of means, the leading role is played by context. It is context, strictly speaking the *ad-hoc* situational and the preceding verbal context (see here p. 31), that determines the extent to, and the manner in, which semantic structure and linearity are allowed to come into play. This is in agreement with the observation that a semantic and grammatical sentence structure becomes a genuine sentence only when serving a definite communicative purpose, i.e. within a definite context.\(^{23}\)

Contextual conditioning giving linearity and semantic structure full play characterizes what has been termed basic instance sentences (Firbas 1959.52). They show a maximum degree of context independence. Contextual conditioning partly limiting the operation of linearity and/or semantic structure characterizes what has been termed ordinary instance sentences. Contextual conditioning maximally limiting the operation of linearity and semantic structure characterizes second instance sentences (cf. here p. 34; Firbas 1968.14-8). Needless to say, borderline cases occur, but the outlined instance level system facilitates not only the description of a particular case of context dependence of a semantic and grammatical sentence structure, but also its contextual applicability, i.e. all the possible cases of contextual conditioning under which the structure may function (cf. Firbas 1962.141).

The instance levels are presented in Table Four; the scope of active operation of the three devices is presented in Table Five. The examples adduced in Table Four do not of course exhaustively cover all the possibilities.

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\(^{23}\) Following Fr. DANEš (1964), I maintain that the function of the sentence in the act of communication can be successfully interpreted if three levels are kept separate: those of the semantic and grammatical structure of the sentence and that of FSP.
Let me add one further note on the operation of the three devices. When discussing the basic instance use of *A lion killed a hunter* and focussing attention solely on the relation between the elements *a lion* and *a hunter*, we reach the following conclusion. In determining the degrees of CD of the two elements, the only device that is in play is linearity. Neither context nor semantic structure nor grammatical endings for that matter provide a clue to their degrees of CD. Table Six takes this kind of sole operation of linearity into account.

The above outline covers only the interplay of means of FSP within written...
language. In spoken language also the prosodic features (intonation) enter into the interplay (cf. Danes 1957 and 1967, Firbas 1968 and 1969). This has been demonstrated earlier in the discussion, but to illustrate the interplay of all means of FSP in a longer stretch of contextually interlinked sentences, let me comment on the following two pieces of dialogue. They are quoted after R. Gunter (1966),24 who regards the first piece as ‘pathological’ and ‘unintelligible’, the second as ‘entirely intelligible’, ‘even ordinary’. It is certainly not without interest to attempt to account for the respectively pathological and ordinary character of the two pieces from the point of view of the interplay of means of FSP.

6.1 Smith: Bob has acquired a motor-cycle.
6.2 Jones: John has bought a sports car.
6.3 Smith: Where did he get it?
6.4 Jones: He bought it in the city.
6.5 Smith: Did he drive it home?
6.6 Jones: Paul drove it home.
6.7 Smith: I hope the traffic wasn’t bad.

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Jones: John has bought a sports car.
Smith: Where did he get it?
Jones: He bought it in the city.
Smith: Did he drive it home?
Jones: Paul drove it home.
Smith: I hope the traffic wasn’t bad.

6.1 *Has* cannot bear the most conspicuous prosodic feature, i.e. the intonation centre (=IC). It could do so only if the notions expressed by the verb and object (action and goal) were recoverable from the preceding context. As this is not the case, it is the element expressing the goal that carries the highest degree of CD. In the ‘non-pathological’ version of the dialogue, it is indeed this element that bears the IC.

6.2 *Bought*, expressing action, cannot bear the IC, for the goal of the action is context independent. Moreover, *bought* might be regarded as conveying the same information as *acquire* of 6.1 and therefore as context dependent. But irrespective of whether it is interpreted as conveying old or new information, it cannot exceed in CD a context independent element expressing the goal of the action. *John* is context independent and evidently in contrast with *Bob*. But expressing an agent, the element cannot exceed in CD *sports car*, expressing a context independent goal of action.

6.3 *Did* cannot bear the IC, for it is not the focus of the question. (By ‘focus’ I understand the element that indicates the angle from which the question is to be approached by the prospective informant. This angle is communicated as a piece of new information to the informant and indicates the very perspective in which the question is to function. The focus is the carrier of the highest degree of CD. English displays a practically perfect congruence between the focus conveyer and the IC bearer. This means that one and the same element conveys the focus and bears the IC.) As has been shown in great detail elsewhere, an auxiliary verbal element can carry the highest degree of CD only provided all the other elements are context dependent. This does not apply,

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24 In a number of points Gunter's independent approach arrives at an interpretation that is in harmony with that offered by the Prague School. Further research would certainly benefit from a comparison of the two approaches and interpretations.
for in any case the interrogative attitude expressed by *where* is irrecoverable from the preceding context.

But which element will perform the function of focus? The uncontrasted context dependent notions expressed by the personal pronouns *he* and *it* are incapable of doing so. The entire interrogative structure being preserved, *where* could become focus only if the structure were used in repetition; in that case the focus would have been previously expressed by an element of the non-*where* part of the structure. Under the circumstances, it is a semantically weak *get* that qualifies for the functions of focus conveyer and IC bearer. (In any case, the indication of the angle from which the question is to be approached is a piece of context independent information.)

6.4 *Bought* cannot become an IC bearer, for it is context dependent. But even if it were context independent it could not exceed the adverbial in the *city* in CD, because the latter serves as a local specification. This is clearly indicated by *where* of 6.3.

6.5 *Did* cannot become IC bearer for the same reason as *did* in 6.3. *Drive* and *home* are context independent. As *home* expresses the goal of motion and hence a local specification, it exceeds *drive* in CD. Together with in the *city* of 6.4, it illustrates the impossibility of the verb to exceed the adverbial of place in CD, as long as the latter expresses a context independent specification.

6.6 *Drove* cannot become the IC bearer, for together with *it* and *home*, it is context dependent. As under the circumstances the element expressing action and that expressing the goal are context dependent, it is the element expressing the context independent agent that becomes the IC bearer.

6.7 *Hope* cannot normally become the IC bearer, for the affected goal (the entertained expectation) is new information. Under the circumstances *hope* could perhaps retain the IC, but then the entertained expectation would be presented as context dependent; this device would render the sentence emotive making it express excessive concern. It may be surprising that it is not the unknown quality (*bad*), but the quality bearer (*traffic*) that gets the IC. Yet there is the strong tendency to introduce a previously unmentioned quality bearer (used in the widest sense of the word) into discourse with sufficient prominence, i. e. to give its 'appearance on the scene' sufficient foregrounding. This foregrounding necessarily involves a backgrounding of the quality, the element expressing it primarily serving as an introductory device.

The interplay of means of FSP can accommodate the operation of various word order principles. It can accommodate different word order systems determined by different interrelations between these principles.

Inquiries have shown that English, German, French, Spanish, Czech, Russian and probably Indo-European languages in general display an unmistakable tendency towards what has been termed as the basic distribution of CD. Such distribution is revealed by elements that show a consistent gradual rise in CD (*The boy has made a serious mistake*). The degree to which this tendency is observed may of course vary. In Czech, for instance, it is so strong that it determines unmarked and marked word order. Word orders showing no or little deviation from the basic distribution of CD are unmarked; those showing significant deviation from the basic distribution of CD are marked. In Czech, the tendency towards the basic distribution of CD asserts itself as the leading word order principle. In English, this tendency can assert
itself to a lesser degree. It is not the deviation from the basic distribution of CD, but that from the order required by the grammatical principle that renders the word order marked. Thus the structures

A boy came into the room — Chlapec přišel do pokoje
‘Boy he-came into room’

Into the room came a boy — Do pokoje přišel chlapec
‘Into room he-came boy’

agree in the order of the grammatical sentence elements and in the order of the semantic items conveyed by these elements; they will also agree in the distribution of CD over these elements if we assume that the subject expressing the appearing phenomenon is context independent and the adverbial of place expressing the scene context dependent. They will, however, differ in markedness and unmarkedness. Whereas the first English sentence is unmarked, the first Czech sentence is marked; and whereas the second English sentence is marked, the second Czech sentence is unmarked. Before adducing and commenting upon examples, I have to recall an observation made further above.

It has been noted that certain types of semantic content (A) cannot exceed other types (B) in CD unless the latter (B) become context independent. This is in harmony with another observation, namely that if both A and B are context independent, it is (B) that carries a higher degree of CD. Using the letters A and B in the sense assigned to them above, we can tabulate the relations revealed by the operation of some types of semantic content within the context independent section of a sentence as follows. (Needless to say, what applies to context independent sections of ordinary instance level sentences applies also to entire basic instance level sentences, the latter having no context dependent section.)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>appearance/existence</td>
<td>phenomenon appearing/existing on the scene</td>
</tr>
<tr>
<td>bearer of quality</td>
<td>quality (transient/permanent)</td>
</tr>
<tr>
<td>quality</td>
<td>specification</td>
</tr>
<tr>
<td>specification</td>
<td>further specification</td>
</tr>
</tbody>
</table>

It should be added that an element merely expressing a setting (the scene or part of the scene) will carry a lower degree of CD in relation to any item of the mentioned types of semantic content provided the latter is context independent. In regard to the further development of the communication any element carrying a higher degree of CD than one expressing a quality
may be regarded as a specification. In its turn, this may be exceeded in CD by further specification (further specifications).

As tabulated and commented on above, the discussed relations suggest the two following context independent semantic scales reflecting a gradual rise in CD:

1. SCENE (settings) — APPEARANCE/EXISTENCE — PHENOMENON APPEARING/EXISTING (possible prospective quality bearer).
2. SCENE (settings) — QUALITY BEARER — QUALITY (permanent/transient) — SPECIFICATION — FURTHER SPECIFICATION(S).

In regard to the further development of discourse, the two scales could be fused into one, representing a context independent semantic scale of gradual rise in CD: SCENE — APPEARANCE/EXISTENCE — PHENOMENON APPEARING/EXISTING // QUALITY BEARER — QUALITY — SPECIFICATION — FURTHER SPECIFICATION(S).

Let us now briefly compare some English, German and Czech ways of expressing the semantic contents and the semantic relations presented by the scales. The examined structures are regarded as basic instance level sentences.

In each of the three languages, the most common grammatical realizations of the items of Scale One and Scale Two respectively are:

adverbial, verb, subject;
adverbial, subject, verb, object, adverbial.

As to the arrangement (sequence) of the items, the three languages show some differences. The following are the unmarked realizations.

**SCALE ONE:**

An accident occurred yesterday — S V Ad

Gestern geschah ein Unglück — Adt V S

Gestern ist ein Unglück geschehen — Adt v S V

Es geschah gestern ein Unglück — s V Adt S

Es ist gestern ein Unglück geschehen — s v Adt S V

Včera se stalo neštěstí — Adt V S

(['Yesterday refl. pr. it-happened accident'])

**SCALE TWO:**

A boy made a mistake through inattentiveness yesterday — S V O Adt O Adc

Ein Knabe machte gestern einen Fehler aus Unaufmerksamkeit — S V Adt O Adc

Ein Knabe hat gestern einen Fehler aus Unaufmerksamkeit gemacht — S v Adt O Adc V

Gestern machte ein Knabe einen Fehler aus Unaufmerksamkeit — Adt V S Adc

Gestern hat ein Knabe einen Fehler

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The formulations ‘realization (implementation) of the scale’, ‘expressing the semantic contents and the semantic relations’, or for short ‘expressing the semantic content’, do not necessarily imply that the sequence presented by the scale has been preserved.

Adc — adverbial of cause, Adt — adverbial of time, O — object, S — subject, s — anticipatory subject, V — verb, v — auxiliary component of the verb.
A few comments before an evaluation. Let us first note the great range of mobility of the Adt, *yesterday*/*gestern*/vcera. It occurs initially, medially and finally. In the adduced examples it functions as a mere temporal setting. Yet there are limits to this mobility imposed by the word order system. In Czech, a context independent *vcera occurring in end-position would most naturally be interpreted as a specification, in fact carrying the highest degree of CD.27 The leading Czech word order principle, aiming at an implementation of the basic distribution of CD, does not readily allow an unmarked word order to close with a context independent temporal setting. The word order principle aiming at an implementation of the basic distribution of CD is somewhat less powerful in German, its operation being restricted by the fixed positions of the verbal forms. Yet as in Czech, it does not readily allow a context independent temporal setting to occur in end position or before a final verb form. Far from being powerless in English, it nevertheless yields the leading position to the grammatical principle. The context independent *yesterday* can appear in end position as a setting. This is in fact its most usual position. In contrast with German and Czech, it becomes a somewhat foregrounded setting if occurring in front position.

The context independent adverbial of cause, *through inattentiveness*/*aus Unaufmerksamkeit*/z nepozornosti behaves differently. Its degree of CD is affected by sentence linearity. It will lose the status of specification if shifted towards the front; i. e. — in regard to the examples discussed — if occurring before the object. Such a shift would bring about a considerable change in CD relations: it would turn the adverbial into a setting (stating the cause as a concomitant circumstance).

No change in CD relations occurs if the context independent *accident*/Unlück/*něštěsti, expressing a phenomenon appearing/existing on the scene, exchanges places with the verbal form *occurred*/geschah/*stalo se, expressing appearance/existence on the scene. Similarly, no change in CD relations takes place if the context independent *mistake*/Fehler/*chybu, expressing the goal of an action, exchanges places with *made*/machte/*udělal, expressing the action.

It is now possible to attempt the following evaluation. It will be remembered that the examined structures are all regarded as sentences functioning on the basic instance level. This means that under the circumstances only linearity and semantic structure operate in signalling degrees of CD. In regard to the basic distribution of CD, it is Czech that comes closest to its implementation. In expressing the semantic content of Scale One, English, on the other hand deviates so much from the basic distribution of CD as to produce its mirror-

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27 In Standard Czech, the occurrence of context independent *vcera in end position goes hand in hand with a ‘dedynamization’ of the other semantic contents of the scale. The latter are context dependent. Under corresponding contextual conditioning, even the English and German counterparts, *yesterday*/*gestern*, would become a specification.
image (producing a sequence of elements showing a gradual fall in CD). In expressing the semantic content of Scale Two, however, English shows a very high degree of conformity with the basic distribution of CD, the final temporal setting being the only deviation. German shows some deviations, but the tendency towards conformity with the basic distribution of CD is unmistakable. Except the English way of expressing the semantic content of Scale One, all the others, including the English way of expressing the semantic content of Scale Two, put the elements carrying the highest degree of CD either in end position or at least in penultimate position. In expressing the semantic content of Scale Two, all three languages preserve the order 'quality bearer (agent) — specification (effected goal of action) — further specification (cause as specification)'. And there is another item the placement of which is preserved in the examined examples: the temporal and modal indications related to the so-called notional component of the verbal semantic content (and through it to the entire semantic content of the sentence or clause). No matter whether expressed by an auxiliary or an ending, they will occur between the 'quality bearer (agent)' and 'specification (effected goal of action)'.

In expressing the semantic content of Scale Two, all three languages then preserve the order 'quality bearer (agent) — temporal and modal indications — specification (effected goal of action) — further specification (cause as specification)'.

Concentrating on the grammatical realization, the above sequence can be presented as S — TMEs — O — M (TMEs standing for the temporal and modal exponents of the finite verb).28 In regard to Czech and English, and with a certain limitation even to German, the sequence could be presented as S — V — O — M. In relation to semantic structure and CD relations (FSP), the offered interpretation could be tabulated as follows.

<table>
<thead>
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<td>V₁</td>
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<td>S</td>
<td>V₁</td>
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<td>Adₑ</td>
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F S P
Gradual rise in CD: a display of the basic distribution of CD (with the exception of the alternative German version).

Note¹: Containing the TME(s).
Note²: Together with the termination of V, constituting the TMEs.

On the other instance levels the relations between the semantic structure, the grammatical structure and the distribution of degrees of CD (FSP) will change. It will, however, remain practically the same in the most frequent

28 A term used after Trnka 1964.38.
case of context dependence of the semantic and grammatical structure under consideration: that of a context dependent subject.

The described similarity between English, German and Czech is a striking one. It cannot pass unnoticed that the order established is in harmony with that defended by the ancient grammarians.

Another point of particular interest concerns English word order. It is well known that in the course of historical development English word order has become considerably rigid. Yet as an inquiry into basic instance sentences reveals, its considerable rigidity is not at variance with the requirements of FSP. Even without the aid of context, i.e. on the basic instance level, English word order certainly does not prevent an efficient signalling of degrees of CD. It is surely remarkable that in the course of historical development English word order has become stabilized in such a way as to display a high degree of conformity with the basic distribution of CD on the basic instance level.

True enough, this does not apply to the English realization of what has been referred here as the semantic content of Scale One. But its realizations are less frequent than those of Scale Two. Besides, as far as the semantic contents of Scale One are concerned, the distribution of degrees of CD is efficiently signalled by other means. Moreover, for conveying the existence of a phenomenon on a scene English has developed the efficient existential there-construction.

A further point can be made in connection with the present discussion. In the above argument reference has been made to the well-known predisposition of the subject to become the carrier of the lowest degree of CD.29 This raises the question of congruence between grammatical structure and/or semantic structure and degrees of CD. Highly relevant to such questions are L. Uhlířová’s statistical inquiries in regard to Czech. I regret that considerations of space prevent me from demonstrating that her results bear out the findings on the role played by the various types of semantic content in signalling degrees of CD.30 But at least one further striking case of congruence should be mentioned here.

Uhlířová has established for Czech that the syntactic unit describable as verbal predicate/copula/modal verb almost exclusively performs one function (only exceptionally other functions) in FSP. This also holds good for English and undoubtedly for all Indo-European languages. As has been shown, there are elements that exceed the verb in CD. The verb can become carrier of the highest degree of CD only provided these elements are either absent or context dependent. As statistics show, the number of such instances is comparatively low.31 This predisposes the verb to a transitional role — to function as a transition between elements carrying the lowest and those carrying the highest degrees of CD.

29 This observation is in full harmony with H. Weill’s discovery that modern languages tend to make the grammatical subject express the ‘point of departure’. Cf., the English version of his book, p. 37. It is also in harmony with the findings of V. Mathesius (1924). Cf. also M. A. K. Halliday (1967).
30 L. Uhlířová (1972). I regret that I have not been in a position to pay due regard to the most recent and certainly remarkable contribution to the theory of FSP, namely P. Sgall, E. Hajíčková and E. Benešová (1973).
31 For Czech see Uhlířová 1972; for English Firbas 1968.
Now within first instance, if the verb does become carrier of the highest degree of CD, it does so on account of its notional component. It does not do so on account of the temporal, modal and possibly other indications which are equally conveyed by the finite verb form and expressed by its TMEs. Within first instance, both on basic and ordinary levels, it is in fact the TMEs that invariably perform the transitional function. In regard to the CD relations (irrespective of position within the linear arrangement), they function — within first instance — as a borderline between what can be termed the thematic and the non-thematic section (theme and non-theme) of the sentence or clause.

It has been shown that the interplay of means of FSP also accommodates word orders that can be regarded as a mirror-image of the basic distribution of CD (cf., e.g., the unmarked *A boy came into the room* type showing a gradual fall in CD). This suggests the possibility of the existence of ‘mirror’ languages in which the unmarked word order would be reversing — ‘mirroring’ — the basic distribution of CD.

It seems, however, impossible for the entire discourse pattern to be mirrored. It seems impossible to reverse the entire natural flow of the discourse. In developing it, the speaker/writer will most naturally ‘begin at the beginning’ and gradually proceed towards the fulfilment of the communicative purpose of the discourse. Special effects can occasionally be achieved by anticipating and expressing a piece of information that would normally come later in the discourse. I believe to be right in assuming that all this is a natural consequence of the linearity of the discourse and of the character of human apprehension and experience. It follows that even within fields of higher order (paragraph, chapter, book), linearity — on a higher level — aims at a basic distribution of CD. On the other hand, it seems to be equally in accordance

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32 The transitional role of the TMEs can be instanced by the following structures. (The abbreviations, th, n-th, tr pr, stand for ‘theme’, ‘non-theme’, ‘transition proper.’) The role of transition proper, performed by the TMEs, is taken over in these structures by the verb ‘to be’. Its semantic content is so weak that it comes very near that of the TMEs.

His father (th) is (tr pr) the famous actor (n-th).
The famous actor (th) is (tr pr) his father (n-th).

His father (th) was (tr pr) play (n-th)ing (tr pr) the most difficult role (n-th).
The most difficult role (th) was being (tr pr) play (n-th)-ed (tr pr) by his father (n-th).

His father (th) play (n-th)-ed (tr pr) the most difficult part (n-th).
The most difficult part (th) was (tr pr) play (n-th)-ed (tr pr) by his father (n-th).

I have discussed the problem of theme, transition and theme elsewhere (for references, see end of note). The present discussion shows that an inquiry into the CD relations and into congruence between the CD level (FSP) and the semantic and the grammatical levels leads to an establishment of a section within a sentence or clause that owing to the interplay of means of FSP carries the lowest degrees of CD within the sentence or clause. Serving as a link, the TMEs, on the one hand, start building up the very information to be conveyed. On the other hand, they separate this information from the foundation upon which it is being built up. In this way the TMEs set off the element(s) that carries (carry) the lowest degree(s) of CD and constitutes (constitute) the theme. ‘Separating’ is not to be understood in terms of sentence position, but in terms of CD relations. The TMEs are by no means linked up with mid-position. But they do occur in mid-position if the basic distribution of CD is implemented. The realization of a link between the foundation (the theme) and the very information to be conveyed is an act *sui generis* and is in itself new information. In this respect, the TMEs are definitely context independent. For a discussion of the problem of theme, transition and rheme, see, e.g., Firbas 1964, 1965, 1968.

33 I owe the term ‘mirror’ language to B. J. Hoff.
with the character of human apprehension that in a discourse (field) made up of a longer string of verbal sentences, a basic distribution of CD in the fullest sense of the word (i.e., one throughout which, gradually, every element becomes a carrier of a higher degree of CD than its predecessor) can practically never be accomplished. Within such a distribution every element would convey new information. But this is not the way the discourse is structured. In order not to jeopardize comprehension the discourse is continually interspersed with elements conveying information known from the previous context, or from the ad-hoc situational context for that matter. Such information is conveyed by the context dependent elements within the fields of complex-sentence and lower orders. It is through these elements — duly signalled by the interplay of means referred to above — that relief is constantly provided from the flow of new information. Not reversing the entire discourse pattern, ‘mirror’ languages would then tend to provide such relief not at the beginning, but at the end of their sentences.

We have now proceeded far enough to be in a position to draw the following conclusion. From the point of view of specific languages, an order that is natural in one language may not appear to be so in another. In fact, it is possible to speak of language specific natural unmarked orders and language specific natural marked orders.

Before offering the closing remarks, let me come to the operation of such semantic contents as are capable of signalling degrees of CD irrespective of sentence position if context independent. They deserve some more comment. The content independent semantic scale they constitute shows a high degree of conformity with the language user’s experience of the extra-linguistic reality. This experience will tell him which of the two phenomena, the scene or the phenomenon appearing on it, ‘naturally’ precedes the other. According to his experience, their ‘natural’ order is: scene — phenomenon appearing on the scene. A similar sequence borne out by experience is that of process of appearance and the appearing phenomenon: the former ‘naturally’ precedes the latter. Similarly, a language user knows from his experience that an action is a transitional phenomenon proceeding from the agent towards the goal to be effected or affected. This is in harmony with the view that an action can be considered a transient quality: the ascription of a quality assumes the existence of a quality bearer. This holds good both for transient and permanent qualities. Specifications in general require as a necessary antecedent the phenomenon to be specified. The established rises in CD as revealed by the semantic contents that are capable of signalling degrees of CD irrespective of sentence position if context independent display a high degree of conformity with the language user’s experience of the extra-linguistic reality. It follows that such a high degree of conformity is displayed by the entire context independent semantic scale.

Through this high degree of conformity language displays a remarkable — shall we say — ‘physei’ relation to the extra-linguistic reality as reflected in the language user’s experience. This experience provides an indispensable link between language users in general. Both speakers/writers and listeners/writers basically share the same general experience, which ensures a smooth

34 The flow of new information is continually punctuated with old information.
and efficient functioning of language as a tool of communication. It must be remembered, however, that language is not a slave to the extralinguistic reality. Owing to the interplay of means, controlled by the immediate communicative concern and purpose of the speaker, extra-linguistic reality can be approached from different angles and viewed in different perspectives. With reservations discussed above, the model order advocated by the ancient and medieval grammarians — Subject, Predicative Verb, Items of Verbal Complementation — tallies with the order of basic instance level sentences in English, German and Czech and very likely in most, if not all, Indo-European languages. Those sentence types are concerned that constitute brief messages complete in themselves or open a discourse. Although the ancient and medieval grammarians were definitely not paying sufficient attention to context, it may be asked whether when considering sentence structures ‘out of context’ they were not in actual fact subconsciously choosing basic instance level sentences. In any case, insufficient attention to context prevented them from appreciating the functional aspect of word order.

That the suggestion of naturalness or unnaturalness of word order cannot be decided without paying due attention to context was fully appreciated by H. Weil. His work is a pioneer inquiry into the relations between structure and function. V. Mathesius has understood the significance of H. Weil’s contribution to word order study, and inspired by his ideas, has laid the foundations of the FSP theory.

The existence of a relation between linguistic phenomena and extra-linguistic reality can hardly be doubted. The language user’s experience of the natural order of extralinguistic phenomena cannot stay unreflected in language. Only the language user is free to view the extra-linguistic phenomena in different perspective and language is a pliant enough tool to function accordingly. Viewing word order as a ‘physei’ phenomenon in the ancient sense of the word ends in a failure to duly appreciate the flexibility of language and word order.

The structuralist and functionalist linguist cannot avoid the challenge of the ancient and the medieval grammarian’s problem of natural order. His awareness of the necessity to relate structure to function, however, enables him to study the problem in a far more appropriate setting. Appreciating the grains of truth in the observations of the ancients and the medievals, he can reiterate the question of natural order in view of the complex interplay of factors determining naturalness in language.

REFERENCES


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**FUNKČNÍ POHLEDA NA TZV. „PRIROZENÝ SLED“ („ORDO NATURALIS“)**

Autor se zabývá otázkou tzv. „prirozeného sledu“ větých složek („ordo naturalis“), která gramatiky zajímá už od velmi dávných dob. K problému přistupuje z hlediska výpovědní dynamiky.

Stupněm výpovědní dynamiky (VD) rozumí autor relativní míru, s níž jazyková složka obohacuje sdělení (a tak je rozvíjí) a je signalizována souhrnem sémantické stavby, větné lineární modifikace a kontextem, a to vzhledem k bezprostřednímu komunikativnímu záměru mluvčího a v mezích daných gramatické struktury. K pojmu VD lze dospět empiricky a induktivně. Autor demonstruje, jak sémantická stavba, větová linearita a kontext fungují při signalizaci VD.

V souladu uvedených faktorů je hierarchicky nejzávažnější kontext. Sémantická stavba a větová linearita mohou v plném smyslu signalizovat stupně VD jen v kontextově nezávazné části věty. (Kontextově zapojená část vždy jeví nejmenší stupeň VD.)

O kontextově zapojené nebo nezávazné větých složek rozhoduje aktuální kontext (tzv. úzká scéna). Ten je vytvářen kontextem slovním a bezprostředně relevantním kontextem situačním a je vposedu determinován bezprostředním komunikativním záměrem mluvčího. Aktuální kontext je zakotven v širším kontextu situačním a spolu s ním v celkovém kontextu zkušenostním. Vzhledem k tomu, že jeden typ kontextu je zakotven v druhý, nelze vždy hledat ostro hranici mezi kontextem zkušenostním, situačním a aktuálním.

Analýza toho, jak fungují kontextově nezapojující sémantické nápisy, dovoluje pokusně vytvářet stupně VD, jak ji vytvářejí různé typy kontextově nezapojujících sémantických obsahů. Aby stupnice odpovídala vysoké abstraktnosti pojmu gramatické větové stavby, je formulována
na pokud možno odpovídajícím vysokém stupni abstrakce. Má tuto podobu: SCÉNA ("KULI-
SY"") – EXISTENCE/OBJEVENÍ na scéně – JEV existující/objevující se na scéně – NOSITEL
vlastnosti – VLASTNOST – SPECIFIKACE – DALŠÍ specifikace. V konkrétních případech
stupnice připouští různá zpětnosti, např.: nositel vlastnosti (činitel) – vlastnost (činitel)
– specifikace (cíl činitelí [např. vytvořený nebo zasažený jev]).

V souhlas se souhrnu faktorů je i řada povrchových rysů (signálů). Autor probírá z tohoto
hlediska použití členů, zájmen, slovního podátku a intonace.

Ukazuje se, že např. angličtina, němčina, francouzština, španělština, čeština, ruština a pravdé-
podobně indoevropské jazyky vůbec jeví nepopíravou tendenci stavět větné složky do sledu,
ktéří jeví stoupačející VD. (Takové rozložení VD na větě složky, které jeví nepřetržitě stoupačející
VD, nazývá autor základním rozložením výpovědní dynamičnosti.) Stupeň, v kterém se toto
tendence realizuje, není ve všech jazycech stejný. Je v češtině dochází k tomu, že se v ní
tendence k základnímu rozložení VD uplatňuje jako hlavní slovosledný činitel. V angličtině
naproti tomu se tendence k základnímu rozložení VD uplatňuje rovněž, nepřejímá v ní však
úkon hlavního slovosledného činitele.

Je pozoruhodné, že na tzv. základní instancní rovině (tj. při maximální kontextové nezapoje-
nosti, kterou mohou jeví větě stojící na začátku sdělení nebo jednovětě sdělení) spisovná
angličtina i spisovná čeština řadí složky S (subjekt), V (predikativní sloveso), O (objekt), M
(adverbialní určení způsobu – v daném případě jde o M vyjadřené slovním spojením) do sledu
S—V—O—M. V němčině se vedle uvedeného sledu setkáváme jeně se sledy S—V—O—M a S—O—M—V—v. (Malé, v' znáčí auxiliární slovesnou složku.) Toto pozorování lze s jistými
modifikacemi, týkajícími se především postavení V, aplikovat na indoevropské jazyky
obecně.

Je neméně pozoruhodné, že sled S—V—O—M lze z hlediska fungování sémantické stavby
v aktu sdělení interpretovat jako reprezentující sled „nositel vlastnosti – vlastnost – specifikace –
další specifikace“ a že tedy jeví základní rozložení VD. Pozoruhodné je i to, že toto platí
i pro nejfrekventovanější případ na tzv. obyčejně instancní rovině (tj. při částečné, nikoli však
maximálně možné kontextové zapojenosti dané sémanticko-gramatické větě struktuře). Jde o
případ, kdy je kontextově zapojoen S. Není ani bez zajímavosti, že sled „nositel vlastnosti –
vlastnost – specifikace – další specifikace“ není v rozporu s našimi znalostmi o mimojazykové
skutečnosti, získanými jejím poznáváním a z naší zkušenosti s ní. Daný sled není tedy ani v roz-
poru s přirozeným pořádkem, jak jej známe z mimojazykové zkušenosti. V tomto bode se ukazuje,
že v přístupu starověkých a středověkých gramatik, které považovali sled S—V—O za při-
rozený („ordo naturalis“), je možno hledat racionální jádro.

Jazyky ovšem nejsou otocky vazány na základní rozložení výpovědní dynamičnosti. Mohou
se od něho odchylit a tyto odchylky signalizovat, a to souhrně zmíněných faktorů uplatňující
se v mezičně dané gramatické struktury. To vede k tomu, že pro jednotlivé jazyky je bezpříma-
kovost a příznakovost slovních pořádeků (tj. jejich „přirozenost“ nebo „nepřirozenost“) nutno
určovat právě s ohledem na to, jak se tato souhra realizuje v dané struktuře. Přitom je třeba
přihlédet k tomu, jak sémanticko-gramatické větě struktuury fungují ve všech možných in-
stančních rovinách (tj. ve všech možných typy kontextové zapojenosti), „přirozený sled“ –
ktéří se nemusí z tohoto hlediska jeví ve všech jazycech stejný – se tak stanoví na základě
fungování jazykové struktury v aktu sdělení, což vyžaduje, aby se důsledně přihlíželo ke komu-
nikativnímu záměru, neoddělitelnému od mimojazykové skutečnosti.