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ON THE STRUCTURE AND CONTENTS OF A GENERAL THEORY OF LEXICOGRAPHY

Introduction

My paper deals with a subject on which I have already published several works (cf., inter alia, Wiegand 1976, 1977a, 1979, 1981, 1982, 1983a, 1983b, 1983c, 1983g). Unfortunately, however, I have had to observe that the use of the German language in linguistic publications frequently creates a barrier to communication with French and English speaking colleagues in particular. Thus I should like to take advantage of this conference, which is being held in English, to offer in the first part of my paper a brief sketch of a draft for a general theory of lexicography. Further details can be found in my publications. In the second part of my paper I shall expound my concept of the so-called lexicographical definition or the so-called dictionary definition, so that you will become acquainted with a small extract from a general theory of lexicography.

Lexicography as scientific practice and as the subject of a general theory of lexicography

The following categorical statements are the result of a critical examination in published form of the relevant literature (cf. Wiegand 1983c):

(1) Lexicography was never a science, it is not a science, and it will probably not become a science. Scientific activities as a whole are aimed at producing theories, and precisely this is not true of lexicographical activities. We must bear in mind that writing on lexicography is part of meta-lexicography and that the theory of lexicography is not part of lexicography.

(2) Lexicography is not a branch of so-called applied linguistics. Quite apart from the fact that it is not at all clear what exactly is to be understood by applied linguistics, lexicography is, at all events, more than the application of linguistic theories and methods or the utilization of linguistic and philological findings. In a frequency dictionary, for example, the methods of statistics play the major role, and just imagine if linguistic knowledge alone were taken into account in a technical medical dictionary!

(3) Lexicography is not a branch of lexicology, and lexicography is by no means theoretically determined by lexicology alone. Lexicology hardly features, for example, in the production of dictionaries of pronunciation or gestures, and in valency dictionaries grammar is at least as important as lexicology. General lexicology and the lexicology of a particular language are especially important for certain dictionary types only, such as the monolingual defining dictionary.

(4) Lexicographical activities result in reference works which can be classified according to different types. All types of works made with the aim of providing not only, but above all, information
on linguistic expressions should be classified as linguistic lexicography. They would include at least the following types: dictionaries of language, glossaries, concordances and word indexes (cf. Hausmann forthcoming). In what follows I shall consider dictionaries of languages only.

To sum up: We can characterize the subject area linguistic lexicography, as given in numerous historical, concrete dictionary projects, as follows: Linguistic lexicography is scientific practice aimed at producing reference works on language, in particular dictionaries of language. Lexicographical activity has recourse to the results, methods and theories of various academic disciplines according to the type of reference work being produced.

From linguistic lexicography in this sense (and I shall refer henceforth simply to lexicography, as misunderstandings have been excluded), a general theory of lexicography derives its specific subject matter by leaving out of account historically individual factors. By a process of abstraction and typification, only recurrent features with their typical properties become the proper subject of academic study. Taken together, the following separable components make up the proper subject of a general theory of lexicography:

(1) The lexicographical activities. These can be classified into three fields of activity:
   (a) The first field includes all the activities leading to the drawing up of a dictionary plan.
   (b) The second field of activity includes all the activities involved in establishing a dictionary base and in processing this base in a lexicographical file.
   (c) The third field of activity includes all the activities concerned directly with the writing of dictionary texts and thus with the writing of the dictionary.

(2) The results of the lexicographical activities in the three fields, namely: the dictionary plan, the lexicographical file, and the dictionary (cf. Wiegand 1983b, 1983c).

Let me explain the terms used here. By dictionary plan I understand a written plan of the dictionary in all its aspects. By a dictionary base I understand the complete linguistic material forming the empirical basis for the production of a language dictionary. A dictionary base includes at least the lexicographical corpus as the set of all the primary sources: primary sources may be defined as all sources not themselves language dictionaries, the secondary sources as the set of all language dictionaries consulted, and other linguistic material (cf. Wiegand and Kučera 1981:100ff.).

By a lexicographical file I understand a collection of quotations for potential lemma-signs compiled from the dictionary base. The quotations are ordered in some way, for example alphabetically (the term lemma-sign is explained in Wiegand 1983a).

Sketch of the structure and contents of a general theory of lexicography

A general theory of lexicography must systematically process and
explain the reasons for the knowledge required to enable lexicographers to carry out their work appropriately and as well as possible. In accordance with the proposed structuring of the subject area lexicography, a general theory of lexicography can consist of four constituent theories as shown in the following diagram. Both the individual constituent theories A to D and some of the components may be developed relatively independently.

Let me now characterize briefly the individual constituent theories and their components. I shall not deal further with constituent theory B, the theory of organization.

In constituent theory A relationships are established between the general theory of lexicography and the following: (1) society, (2) other theories, (3) the history of lexicography. Thus constituent theory A consists of three components in which meta-theoretical considerations bearing on the general theory of lexicography are also permitted.

In the first component, general purposes for mono-, bi-, and multilingual language dictionaries are derived from the communic-
ative and cognitive needs of the society or societies; or possibly goals are set that can stimulate needs (cf. Wiegand 1977b, 1978, 1983e, 1983f, 1983h). The purposes are given in general terms and classified in groups in such a way that specific and concrete lexicographical purposes may be derived for each dictionary type differentiated by the theory in constituent D. Such purposes are set out in the general section of the dictionary plan.

In the second component, the connections with other theories or constituent theories are listed. This includes, for example, a description of which concepts have been borrowed, which sections of conceptual systems, and which tenets of a theory of language and communication. In particular, it must be established which premises are taken over from a general lexical theory, from a special lexicology (i.e., one related to an individual language) or from several such lexicologies.

In the third component, connections are made with the history of lexicography by establishing the principles that have been followed in lexicography up to now. Thus it is stated, for example, which principles have been valid for which dictionary types in the past and why, and which principles could apply in future, for example, for new types of dictionaries as well.

Now some comments on constituent theory C, the theory of lexicographical research on language. The subject area of a theory of lexicographical research on language is the class of all scientific methods that can be applied in lexicography.

The first component is a theory of lexicographical data collection. This is a theory about how to compile a dictionary base; that is, it concerns, firstly, the collection, composition, representativity, function and typology of lexicographical corpora relative to dictionary types. Thus it concerns lexicographical fieldwork as well, e.g. for designing a direct or indirect opinion poll to gather lexical data. Secondly, the role played by secondary sources in the work on the dictionary has to be clarified (cf. Wiegand and Kučera 1981, Wiegand and Kučera 1982). Research on the use of dictionaries does not belong here. It is a special part of meta-lexicography (see Figure 1 above and Hausmann forthcoming).

The second component of constituent theory C is a theory about ways of processing the linguistic data collected so that a dictionary file suitable for a particular dictionary type or a group of dictionary types is established. The role of the computer must either be considered in both components, or a third component, a theory about computer assistance in lexicography, may be added. If computational lexicography makes good progress, every constituent theory should be supplemented by a component about computer assistance.

Let me now make a few comments on constituent theory D, the theory of the lexicographical description of language. The subject area of a theory of the lexicographical description of language is the class of all the presentations of the results of linguistic lexicography as texts about language. These include first and foremost language dictionaries, but also word indexes, concordances and glossaries. The theory of the lexicographical description of language has two components.
The first component consists of a dictionary typology and its rationale. This is a major component of a general theory of lexicography, since many of the statements in this theory have to be formulated relative to the typology.

The second component concerns the structure of lexicographical texts (cf. Dubois and Dubois 1971; Rey-Debove 1971; Wiegand 1983b, 1983c). Thus it is not concerned with the propositional contents of lexicographical statements, with the content of the texts. Since the so-called lexicographical definition is a textual element to be treated in the second component of constituent theory D, I shall deal with this component in the next section of my paper.

On the so-called lexicographical definition: an extract from a theory of the lexicographical description of language

The following description differs from the conceptions of the so-called lexicographical definition that I am familiar with, particularly in the following four respects:

1. it is based on a view of language that does not draw a sharp dividing line between language and the extralinguistic world;
2. it is based on the theory of meaning-as-use;
3. the so-called lexicographical definition is not viewed in isolation but as a textual component forming an integral part of the dictionary article;
4. each respective form of the so-called lexicographical definition is considered to be determined by the respective type of lemma-sign, and these types are determined by the semantic form of the lemma-sign.

I hope that these four points will become quite clear in what follows.

When lexicographers explain the meaning of a lemma-sign in a monolingual dictionary to a potential user of the dictionary, they must on principle proceed exactly the same way as speakers of the same language do in everyday dialogues about the meanings of parts of utterances that have been questioned (cf. Wiegand 1977a, 1977b). At all events, the activities of the lexicographer when explaining the meaning of a lemma-sign, and in particular the results of these activities, show a greater similarity to the explanations of meaning given by speakers in everyday dialogues than to the procedures and definitions of natural and social scientists defining expressions belonging to academic and scientific usage and thereby creating technical terms. For this reason, I have been collecting and analyzing everyday dialogues about the meanings of linguistic expressions since 1975. The following dialogue is an example (cf. Wiegand 1977a:86ff.):

A: (1) Warum ist denn Herr S so sauer?
B: (2) An seiner Stelle wäre ich das auch; vor drei Tagen hat er einen teuren Wallach gekauft und erst heute festgestellt, daß er webt.
A: (3) Was ist denn Weben?
B: (4) Eine lästige Angewohnheit vom Pferd; die nicken dann dauernd mit dem Kopf und treten dabei mit den Füßen vorne ständig auf und ab.

Translation:
A: (1) Why is Mr. S so cheesed off?
B: (2) I would be too if I were him; three days ago he bought an expensive gelding and he only found out today that it weaves.
A: (3) What's weaving?
B: (4) A tiresome habit horses have; they keep nodding their heads the whole time while constantly shifting from one foreleg to another.

I shall give a brief interpretation of this example solely in respect of the relationship between language and the extralinguistic world. As he listens to what speaker B is saying in (2), A notices that he has an individual 'word meaning gap'. This gap is frequently a knowledge gap as well. A clearly does not know a technical meaning of the verb weave. But it is worth noting that A does not ask in (3) about the meaning of the verb, in other words, he does not ask a question about language, but about a thing, in this case about the topic of conversation referred to with weave in (2). Formally this can be recognized by the fact that in (3) weave is not mentioned, but used. As (3) shows, A assumes - even though communication has been disturbed by the fact that a word meaning was not known - that he can ask about the extralinguistic object that B was talking about in (2). B now explains in an answer designed to resolve the communication conflict (4) what weaving is, that is, he talks about the thing or object. But by correctly describing weaving in terms of a few characteristic properties, he also explains to A the meaning of the verb weave used in (2) at the same time. In other words, the assumption is that an explanation of a thing can function as an explanation of meaning.

I shall experiment with this example and change the authentic stretches of conversation (3) and (4) to

A: (3a) Was heißt (oder: bedeutet) denn weben?
B: (4a) Weben heißt (oder: bedeutet), daß Pferde die lästige Angewohnheit haben, dauernd mit dem Kopf zu nicken und dabei mit den Füßen vorne ständig auf und ab zu treten.

Translation:
A: (3a) What does weave mean?
B: (4a) Weaving means that horses have the tiresome habit of nodding their heads the whole time while constantly shifting from one foreleg to another.
The result is that speaker A asks a question about language in (3a). B could have answered this question, too, perfectly correctly with a variation of (4) that referred to an object, for example, with "Weaving is a tiresome habit horses have... etc.". By explaining to A in (4a) what weave means, he is also describing at the same time what weaving is.

The example shows, inter alia, that when speakers talk about the meanings of expressions, they do not make a strict division between language and the extralinguistic world. This does not mean that they cannot distinguish clearly between the two. It does, of course, mean that speakers do not differentiate strictly between purely semantic knowledge and encyclopaedic knowledge. To put it differently: This means that even if a theoretically clear-cut distinction were made between semantically analytic and synthetic sentences, a dichotomous classification of all the sentences of a natural language into two classes, the semantically analytic and the synthetic, would have no empirical foundation. This has far-reaching consequences for the working out of a notion of the so-called lexicographical definition that has some practical relevance, because there is no decision-making machine independent of the lexico-semantic competence of speakers, including lexicographers of course, that functions automatically and provides for each lemma-sign as definitiendum precisely that set of predicates that belong in the definiens. I shall return to this important point later.

But first I should like to look more closely at certain similarities between everyday dialogues about meaning and situations in which the use of a dictionary is determined by semantics, in particular at similarities between contextual paraphrases of meaning in everyday dialogues and so-called dictionary definitions. To do this, I shall use the following entry $E_1$ from Wahrig's DEUTSCHES WÖRTERBUCH (1980):

$E_1$: Ka'ser.ne ... Gebäude(komplex) zum dauernden Unterbringen von Truppen ...
Translation: barracks ... (set of) building(s) used for the permanent housing of troops ...

Up to now I have always talked explicitly about the 'so-called lexicographical definition' or the 'so-called dictionary definition'. I have used the distancing 'so-called' for the following reason, among others: in the meta-lexicographical literature the two terms and their equivalents in other languages are used very differently. For many authors only the expression on the right of the three dots in $E_1$, i.e. "a set of buildings for the permanent housing of troops", is the lexicographical definition. Compared with the usage in Western theories of the definition and with that of the modern theory of science, this is a very unfortunate use of the term definition, in so far as precisely what is called the 'definiens' in the theory of science is called here the definition. For other authors the whole entry $E_1$ is the lexicographical definition. This usage, too, is unfortunate, in my opinion, because the definiitor is missing in $E_1$ (cf. Hiorth 1957:9ff.; Harras 1977:158ff.; Püschel 1980; Wiegand 1981:157ff.). Further, talking about lexicographical definitions can all too easily obscure the fact that an entry like $E_1$, for example, is a linguistically abbreviated, empirical hypothesis about linguistic matters, while a definition of an expression
In academic or scientific usage is anything but an empirical hypothesis. It is a stipulation intended to ensure precise understanding. For these and other reasons I do not use the expressions lexicographical definition and dictionary definition as technical terms in my works. I shall not use them again in the course of my exposition, and I shall introduce my own terminology as I go.

In conformity with the usual linguistic terminology I call the syntagma "a set of buildings for the permanent housing of troops" in E₁ a 'lexical paraphrase'. One lemma-sign can have several lexical paraphrases, for example, when it is polysemous. Synonyms for lemma-signs such a Tierarzt for Veterinär in E₂ from Wahrig's DEUTSCHES WÖRTERBUCH

E₂: Vet.e.ri'när ... Tierarzt

are not lexical paraphrases (cf. Wiegand 1976, 1983d). The set of all lexical paraphrases for a lemma-sign and/or the set of all the synonyms for the lemma-sign, in so far as these word synonyms are set in the same type as lexical paraphrases and are not explicitly listed as synonyms, I call a 'lexicographical explanation of meaning'. In entry E₃ from Wahrig's DEUTSCHES WÖRTERBUCH

E₃: In.ter'es.e.se ... Aufmerksamkeit, Beachtung, Anteilnahme, Wißbegierde, Neigung ... Translation: interest ... attention, heed, concern, curiosity, inclination ...

the lexicographical explanation of meaning consists of five synonyms, a problematic procedure (cf. Wiegand 1983d). In E₄ from the same dictionary it consists of a lexical paraphrase, because the synonym Adresse is explicitly listed as a synonym and thus does not belong to the lexicographical explanation of meaning. The following entries E₅ and E₆ are from the DUDEN. DAS GROSSE WÖRTERBUCH.

E₄: An.schri.f't ... Orts-, Straßen- und Hausbezeichnung der Wohnung; Sy Adresse ... Translation: address ... the place where a person lives; Sy residence ...
(Note that the English pair residence/address is not as close in meaning as Adresse/Anschrift)

E₅: Zitrone ... gelbe, länglichrunde, sich an beiden Enden verjüngende Zitrusfrucht mit saftigem und sauer schmeckendem Fruchtfleisch u. dicker Schale, die reich an Vitamin C ist; Frucht des Zitronenbaums ... Translation: lemon ... yellow, oval citrus fruit tapering at both ends, with juicy, sour tasting pulp and a thick rind, rich in vitamin C; fruit of the lemon tree ...

E₆: Bar ... (1a) intimes (Nacht-)Lokal, für das der erhöhte Schanktisch mit den dazugehörenden hohen Hockern charakteristisch ist ... (1b) barähnliche Räumlichkeit in einem Hotel o.A. (2) hoher Schanktisch mit Barhocker ...
Translation: bar ... (la) intimate (night-)club characterized by high stools ... (lb) bar-like room in a hotel etc. (2) high serving counter with bar-stools

In $E_2$ the lexicographical explanation of meaning consists of two lexical paraphrases; the second one is: Frucht des Zitronenbaums. In $E_1$ it consists of three lexical paraphrases. If there is only one lexical paraphrase for a lemma, as in $E_1$, then the technical terms 'lexical paraphrase' and 'lexicographical explanation of meaning' can be used synonymously.

A lexical paraphrase together with the lemma can fulfil the same function as a contextual paraphrase together with the expression being questioned in everyday dialogues about meanings (cf. Scholfield 1979). Of course, the lexical paraphrase is intended by the lexicographer as an explanation of the meaning of the relevant lemma-sign. However, a dictionary user can interpret this as an explanation of a thing nonetheless, namely in those cases where he consults the dictionary, for example Wahrig's DEUTSCHES WÖRTERBUCH, with the question "What are barracks?". In this case he will introduce as he reads the missing relator linking the lemma and the lexical paraphrase, for example, with the copula is, so that $E_1$ is interpreted either as (1) "Barracks are a set of buildings for the permanent housing of troops" or (2) "Barracks? That's a set of buildings for the permanent housing of troops".

This interpretation provides the dictionary user with information on characteristic properties of barracks, and he thus also has at his disposal a meaning of the word barracks. Of course, the dictionary user can interpret the lexical paraphrase in the same way as the lexicographer, as an explanation of the meaning. Then he asks, for example: "What does barracks mean?"

In this case, he can introduce as he reads numerous different expressions for the missing relator, such as means, has the meaning, is synonymous with, has the same sense as, and so on (cf. inter alia Hiorth 1957). But in grasping the meaning via the lexical paraphrase, the dictionary user has also become acquainted with characteristic properties of the object barracks, the very ones, indeed, that are names in the lexical paraphrase. This surely makes it clear that lexical paraphrases of lemma-signs that can be used exophorically, such as nouns, adjectives and verbs, can always be interpreted just like contextual paraphrases in everyday dialogues about meanings - either as an explanation of the meaning or as a description of an object. If they are taken as an explanation of meaning, they still characterize the thing at the same time; if they are taken as a description of a thing, they still explain the meaning at the same time (cf. Wiegand 1976: 121ff.; 1977a:86ff.; 1977b:65ff.). This correlation supports, as I see it, the view that the semantic knowledge conveyed in a lexical paraphrase of expressions that can be used exophorically should be interpreted as an especially marked, but not strictly delimited part of encyclopaedic knowledge (I cannot enter here into the controversy about the different kinds of knowledge; cf. inter alia Haiman 1980 and Frawley 1981). The following diagram will show my view clearly.
Obviously there are also differences between the paraphrases in dialogues and in dictionaries. I shall come back to this after I have outlined how a lexical paraphrase is to be interpreted in the light of a theory of meaning-as-use.

The theory of meaning-as-use interprets the meaning of an expression as correct or rule-governed use or as the rule for the use of the expression. The rules of use are rules for doing things with language. To know the meaning of an expression is to know how to do things with it, how to act linguistically with it, and in analyses of meaning the rules for these acts are given (cf. Heringer 1974; Heringer et al. 1977; Keller 1974; Wimmer 1979). Thus in the light of the theory of meaning-as-use, a dictionary entry with the form *lemma ... lexical paraphrase* must be interpreted as a statement of the rule for the use of the lemma-sign, i.e., as an abbreviated formulation of the semantic rules. As the rules are rules for linguistic acts, it is not an expression for the properties of linguistic signs that will be introduced for the missing relator linking the lemma with the lexical paraphrase, but a predicate for a linguistic act (cf. Püschel 1981). Thus dictionary entries with the form *lemma ... lexical paraphrase*, for example $E_1$, will not be reconstructed as follows:

- **barracks**
  - means a *set of buildings*
  - denotes a *used for the permanent*
  - designates a *housing of troops* etc.

- **barracks**
  - is synonymous with *set of buildings*
  - has the same sense as *used for the permanent housing of troops*
  - is similar in meaning to *of troops*
  - is defined by etc.

Rather, in accordance with the theory of meaning-as-use, it must be reconstructed as follows:

- **barracks** is used to refer either referentially or predicatively to a set of buildings used for the permanent housing of troops.

Using this type of instruction for reading the entry $E_1$, I now want to develop a general form of a rule formulation that applies to all nouns. To do this, I refer to the following dictionary entry $E_7$ which is provided with some terminological notes.
I start with the sentence form:

(1) The lemma-sign Z is used to do H.

Z is a variable for nouns and to do H is a variable for expressions denoting linguistic acts. If we insert for Z Rappe and for to do H the generic predicate to refer to something, which stands for the two linguistic acts of referring and predicing, then we get the expression

(2) The lemma-sign Rappe is used to refer to something.

The word something in (2) is a natural language variable for the lexical paraphrase schwarzes Pferd (black horse) for Rappe. The lexical paraphrase is inserted for this variable, so that we get:

(3) Rappe is used to refer to a black horse.

The lexical paraphrase black horse inserted in (3) gives the conditions that must be met if we want to perform the act of referring or predicating with Rappe in conformity with the semantic rules. These conditions are that the expressions black and horse are not only true predicates of the object we want to refer to with Rappe, but that they also determine the class of 'Rappen' or black horses. Hence, if we interpret the dictionary entry E₇ as an abbreviated rule formulation, we can also state the full formulation of the semantic rules as follows (cf. Wiegand 1981:160ff.): If, and only if, an object G has the property of being black, i.e., if most speakers accept as true that the predicate black applies to G, and if, and only if, the same object G has at the same time the property of being a horse, i.e., if most speakers accept as true that the predicate horse applies to G, then, dictionary user, you can correctly and in conformity with the rules, refer to G with Rappe, because most speakers accept as true the predicate Rappe applies to G, and this means that it is accepted as true that G is a 'Rappe'. This formulation shows that language determines being, in this case being a 'Rappe' or black horse, but not, of course, the existence of 'Rappen' or black horses.

The instructions given in (3) for reading the dictionary entry E₇ have to be enlarged upon, however, if we want to take the following simple example into account (cf. Wiegand 1977a:93ff.). A black-haired boy has harnessed himself to a small cart and calls out to his father: "Look, I'm a horse!". Whereupon his father answers: "Then trot past me, you Rappe!". Rappe is used perfectly correctly and meaningfully here, but obviously not in accordance with the rule formulated in rule formulation (3), because the predicates horse and
black are not true predicates of the boy and do not identify the class of boys. The reason is that the father has produced a 'non-usual' text for Rappe. 'Non-usual' texts for lemma-signs cannot be accounted for in lexicographical rule formulation. Every single lexical paraphrase in a monolingual dictionary is stated, rather, in terms of 'usual' texts. I can only explain very briefly here what I understand by a 'usual' text (cf. Wiegand 1981:157ff.). 'Usual' texts for a particular lexicalized item A of a language L are all the oral and written utterances which belong to a particular stage of the language L and in which A is used referentially and predicatively in such a way that full semantic congruence is given with correct answer-utterances in 'usual' denomination contexts for A. By 'usual' denomination contexts for A I understand dialogue contexts in which someone formulates in the language L a question-utterance of the type: What is X? What is an X? What does A mean? What is A called? and the like. The person asked formulates in the language L correct answer-utterances in which either
(a) an object X is identified for the questioner as being such and such and no other, and characterized as having such and such properties, whereby the meaning of A is explained to him in the same answer-utterance, or
(b) the meaning of A is explained and thereby, in the same answer-utterance, an object X is identified as being such and such and no other, and characterized as having such and such properties.

I think that the concepts of 'usual' texts and of 'usual contexts' are important for a proper understanding of lexicographical practice.

We must now expand instruction (3) to

(4) Rappe is used in 'usual' texts to refer to a black horse.

so that the general form for nouns (n) that are not marked pragmatically reads:

(5) The lemma-sign Zₙ is used in 'usual' texts to refer to G.

G is a variable for lexical paraphrases for Zₙ.

The formulation

(6) Zₙ is used in 'usual' texts to do H under the circumstances C₁, C₂, ...

would be the form valid for pragmatically marked nouns as well. Such schemata for rule formulations can be given for all types of lemma-signs. The introduction of the restriction in 'usual' texts marks the most important difference between the lexical paraphrases in a dictionary and paraphrases in everyday dialogues about meanings. The latter are not subject to such a restriction, but are co- and contextually specific.

Up to now I have interpreted lexicographical practice in the light of theoretical concepts in the hope of contributing to a better understanding of that practice. In what follows I should like to conclude by indicating what suggestions a theory of the
lexicographical description of language can make for a practicable solution to a major problem of lexicographical practice. You will recall that I said that semantic knowledge - at least with expressions that can be used exophorically - cannot be strictly delimited from encyclopaedic knowledge and that it is possibly a specially marked part of encyclopaedic knowledge (see Figure 2 above). At all events, there are no objective criteria or methods which would enable us to ascertain for sure how from a given set of predicates that apply to the particular object referred to in 'usual' texts with the lemma-sign precisely those that belong in the lexical paraphrase can be selected. In practice, this leads to the difficulty that the same question has to be put over and over again: Does a given predicate belong in the lexical paraphrase or not?

To be able to decide this - we may now infer - we have to be able to state the properties which predicates belonging in the lexical paraphrase must have. For nouns as lemma-signs these predicates must have the following properties: they must have as high a degree of usability as possible in order to identify that class of objects in 'usual' denomination contexts referred to in whole or in part by the lemma-sign in 'usual' texts. Let the lemma-sign be Zitrone or lemon. In this case, the lexical paraphrase must contain those predicates showing the highest degree of usability in identifying the class of objects lemons in an answer to the question: "What is a lemon?" Which predicates are these, and how can they be ascertained?

Below you will find a list of predicates that can be used in 'usual' texts to refer to a lemon with the word lemon. The predicates are taken from lexical paraphrases of the lemma Zitrone in dictionaries of present-day German (cf. E above) and from the description in MEYERS ENZYKLOPÄDISCHES LEXIKON. The predicates in A are found only in the dictionaries, those in B in the dictionaries and in MEYER, and those in C only in MEYER.

**Table 1**

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<thead>
<tr>
<th>Prädikate</th>
<th>Brauchbarkeits-skala</th>
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<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>1 ist gelb</td>
<td>weniger gut</td>
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<tr>
<td>2 ist länglich rund</td>
<td>gut</td>
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<tr>
<td>3 verjüngt sich an beiden Enden</td>
<td>weniger gut</td>
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<td>4 hat eine dicke Schale</td>
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<tr>
<td>B</td>
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<tr>
<td>5 ist die Frucht des Zitronenbaumes</td>
<td>gut</td>
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<tr>
<td>6 ist eine Zitrusfrucht</td>
<td>weniger gut</td>
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<tr>
<td>7 hat saftiges Frucht fleisch</td>
<td>gut</td>
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<tr>
<td>8 hat saures Frucht fleisch</td>
<td></td>
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<tr>
<td>9 hat Frucht fleisch, das reichlich Vitamin C enthält</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>10</td>
<td>ist lânglich</td>
</tr>
<tr>
<td>11</td>
<td>hat eine unterschiedlich stark vorspringende Fruchtspitze</td>
</tr>
<tr>
<td>12</td>
<td>hat eine gelbe Schale</td>
</tr>
<tr>
<td>13</td>
<td>hat eine grüne Schale</td>
</tr>
<tr>
<td>14</td>
<td>hat eine dünne Schale</td>
</tr>
<tr>
<td>15</td>
<td>hat Fruchtfleisch, das rund 3,5-8% Zitronensäure enthält</td>
</tr>
<tr>
<td>16</td>
<td>hat Fruchtfleisch, das reichlich Vitamine enthält</td>
</tr>
<tr>
<td>17</td>
<td>findet vielseitige Verwendung in der Küche</td>
</tr>
<tr>
<td>18</td>
<td>dient zur Herstellung von Getränken</td>
</tr>
<tr>
<td>19</td>
<td>dient zur Gewinnung von Zitronensäure</td>
</tr>
<tr>
<td>20</td>
<td>dient zur Gewinnung von ätherischem Öl</td>
</tr>
<tr>
<td>21</td>
<td>dient zur Gewinnung von Pektin</td>
</tr>
</tbody>
</table>

Translation:

<table>
<thead>
<tr>
<th></th>
<th>Predicates</th>
<th>Scale of Usability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1. is yellow</td>
<td>not so good</td>
</tr>
<tr>
<td></td>
<td>2. is oval</td>
<td>good</td>
</tr>
<tr>
<td></td>
<td>3. tapers at both ends</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>4. has a thick rind</td>
<td>not so good</td>
</tr>
</tbody>
</table>

| B | 5. is the fruit of the lemon tree | good |
|   | 6. is a citrus fruit | not so good |
|   | 7. has juicy pulp | good |
|   | 8. has sour pulp | good |
|   | 9. has pulp rich in vitamin C | - |

| C | 10. is oblong | - |
|   | 11. has a variably protuberant tip | - |
|   | 12. has a yellow rind | good |
|   | 13. has a green rind | not so good |
|   | 14. has a thin rind | - |
|   | 15. has pulp containing approx. 3,5-8% citric acid | - |
|   | 16. has pulp rich in vitamins | - |
|   | 17. has many uses in cooking | - |
|   | 18. is used to make drinks | - |
|   | 19. is used to make citric acid | - |
|   | 20. is used to make essential/ethereal oil | - |
|   | 21. is used to make pectin | - |
The question now is: Which of these predicates belongs in the lexical paraphrase for lemon?

To answer this question, I submitted the list of predicates to 100 students with the following instructions: Below you will find a list of 21 expressions. Please read the list through carefully first. Then put a tick against the expressions that you think should be present in a correct answer to the question: "What is a lemon?" In analyzing the students' responses, I have evaluated the three judgements about their usability for a lexical paraphrase as follows:

- ticked 75 times and more: good
- ticked 50 times and more: not so good
- ticked less than 50 times: not good.

The result is that the following five predicates were judged as 'good': "is oval", "is the fruit of the lemon tree", "has juicy pulp", "has sour pulp", "has yellow rind". In line with this result the lexical paraphrase for lemon can read as follows: "oval fruit of the lemon tree with juicy, sour pulp and yellow rind".

The test conducted here, which I have also carried out in various modified forms with other lemma-signs as well, is a test to ascertain a scale of usability for expressions taken to be candidates for identifying a class of objects. I am not suggesting that lexicographers carry out such tests to optimize their lexical paraphrases. That is much too much trouble. What I want to show by the test is rather how to take the sting, as it were, out of the question: Which predicates belong in a lexical paraphrase? First we must give up considering the lexicographical explanation of meaning in isolation and regard it as an integral part of the dictionary article.

The dictionary article is a text of linguistic instruction with which the lexicographer instructs the dictionary user on the use of a lemma-sign. Several lexicographical textual elements help explain the meaning of the lemma-sign to the dictionary user, not just the lexical paraphrases alone (cf. Wiegand 1982). Since it is by no means certain that the meaning of expressions is best learned by reference to the expressions labelled 'good for use', and since the knowledge of the potential dictionary users must always be reckoned to be very heterogeneous, those predicates in the middle of the usability scale should also be taken into consideration in the dictionary. In this case, these are the ones judged as 'not so good'. My proposal is that these predicates be incorporated in a specially marked group of special examples. This special group of examples is not just there to document the use of the lemma-sign, but it is designed - like the lexical paraphrase - to contribute towards the identification of the class of objects referred to in whole or in part with the lemma-sign in 'usual' texts for that lemma-sign. Thus, for our example, we get the following dictionary entry:

E.g: lemon ... oval fruit of the lemon tree with juicy, sour pulp and yellow rind

lexical paraphrase with the predicates labelled 'good'
The lemon, which is a type of citrus fruit, has a thick rind and is green when unripe.

special lexicographical example with the predicates labelled 'not so good'

The requirement for the special lexicographical example is that all predicates judged as 'not so good' occur in the example; but there is no requirement that only these predicates may occur in the example (cf. unripe).

This discussion of the question "Which predicates belong in a lexical paraphrase?" should have made it clear that my remarks on the term definition were not only, as it were, criticism of colleagues' usage, but that with this last proposal, and in particular with the introduction of the scale of usability, the concept of a definition based on academic and scientific usage has been abandoned (cf. Hölker 1977). It is not usable in the lexicography of general usage (cf. Wiegand 1983g).

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