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LANGUAGE TYPOLOGY IN THE
UNITYP MODEL

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"Perhaps the psychologists of the future will be able to give us the ultimate reasons for the formation of linguistic types."

(E. Sapir, Language 122)

"More justifiable would be a classification according to the formal processes most typically developed in language."

(E. Sapir, *ibid.* 126)

1. I N T R O D U C T I O N

The aim of this contribution is to embed the question of an antinomy between "integral" vs. "partial typology", inscribed as the topic of this plenary session, into the comprehensive framework of the dimensional model of the research group on language universals and typology (UNITYP). In this introductory section I shall evoke some cardinal points in the theory of linguistic typology, as viewed "from outside", viz. on the basis of striking parallelisms with psychological typology. Section 2 will permit a brief look on the dimensional model of UNITYP. In section 3 I shall present an illustration of a typological treatment on the basis of one particular dimension. In section 4 I shall draw some conclusions with special reference to the "integral vs. partial" antinomy.

Language typology (henceforth abbreviated as LTYP) is a field with an important history, it enjoys increased interest in recent times, it exhibits important contributions both to theory and to empirical investigation.¹ Nevertheless it seems fair to say that LTYP continues to be a hotly debated and highly controversial enterprise where success is uncertain. It is by no means trivial to say that LTYP in a fully explicit sense is only possible within the framework of a comprehensive theory of language.²

¹ A bibliography of linguistic typology is currently being prepared by N. Érdi of the UNITYP group, Cologne

² The perhaps most elaborated and comprehensive theory is contained in the work of E. Coseriu. For an exemplary presentation of his views on linguistic typology see Coseriu 1980:199-206. Compare also the appraisal of Coseriu's typological work by Ch. Lehmann (forthcoming) with an extensive bibliography.

Much on-going work is done in the absence of such a theory, whereby the notion of LTYP is simply taken for granted - and yet such work may come up with interesting results. However, to resolve such questions as that of the relation between "integral" and "partial typology", or that no less debated one between language universals research (henceforth abbreviated as LUR) and LTYP requires a basis broad enough to encompass both theory and empirical research.

It is not, of course, the place here to even attempt at developing such a base. Naturally, since I have been instrumental in developing the UNITYP model of LUR and LTYP, I am going to suggest that this model might be suited for solving some of our problems. Before doing that, however, I should briefly point out what these problems are. Where things are so controversial, it is sometimes helpful to adopt a detached viewpoint "from outside", using analogies and similia from other sciences. In our case psychological typology seems to be an obvious choice.

It is not by accident that I shall base the following survey on a presentation by Albert Wellek (Wellek 1955/1969:36ff.) who, together with his brother, the literary critic René Wellek, formed part of the Prague Circle: There is a nearly total correspondence between his view on psychological typology and ours on linguistic typology.

Wellek seeks typicality in human behavior that follows certain patterns. The implicit idea is that this might enable us to predict human behavior; in a similar vain typicality in language would enable us to predict human linguistic behavior. Instead of a mere listing of psychological types Wellek aims at an ordering into types and anti-types, i.e. types in mutual complementation, comparable to the complementary relationship between man and woman, child and grown up, etc. Thus, the choleric is inconceivable without the phlegmatic, the sanguinic unthinkable without the melancholic. It is important to note that the anti-type is not simply the negation of the type. What this amounts to, then, is a polarity, and the tension ("Spannung") between the two poles he calls a dimension. According to Wellek, most psychological types are one-dimensional, although more-dimensional ones are

conceivable. C.G. Jung's Extravert-Introvert is such a one-dimensional polarity, where it is essential that we find continuous transitions between the poles. Thus, extraversion never occurs in reality without an admixture of the opposite mechanism of introversion. There are intermediate stages partaking in both principles. There is also a middle between the poles represented by a neutral group that is "untypical in a typical way". Gradience represents for Wellek - and for us - the fundamental difference between typology and (biological) classification, the latter being strictly disjunctive. In typology one can distinguish between "ideal" and "real type", and the real type is always an approximation ("Annäherungsbegriff").

The presence of a single property would never constitute a type. Type is viewed as a holistic, schematized structure. This idea is not developed any further in Wellek's survey, but it has been vigorously promoted by another Praguian scholar of fame, the linguist V. Skalička, under the term of preferred connections ("bevorzugte Zusammenhänge") (see in particular Skalička 1966). It has met the approval of E. Coseriu (Coseriu 1980:167), and it appears under the term of "cluster of properties" as an essential ingredient of J. Greenberg's typology (Greenberg 1974:32).

Finally, the typological view, according to Wellek, would encompass psychological structure in a medial realm of schematization. It should not be confounded with characterology. It occupies an intermediate level between general psychology on the one side, and individual psychology on the other. To this we would add: just as LTYP is intermediate between LUR and grammatical description of a single language.

One notion, not mentioned in Wellek's treatment is that of hierarchical levels. As we shall see, it is of prime importance for LTYP. We may safely assume that it is vital for psychological typology as well: The "mathematical type" and the "extravert type" - both occurring as examples in Wellek's survey - certainly aren't of the same scope.

2. O V E R V I E W O F T H E U N I T Y P M O D E L

I take it to be of primary importance that one states one's

goals: Why should we engage in language universals research and typology? What do we want to explain? It is a fact that, although languages differ significantly and considerably indeed, no one would deny that they have something in common: How else could they be labelled 'language'? There is obviously unity among them, no matter how vaguely felt. Neither diversity nor unity is what we want to explain. We consider both as given. What we do want to explain are such facts as the comparability of languages, the translatability from one language into another, the learnability of any language, language change - all of which presuppose that speakers intuitively find their way from diversity to unity, and back again to diversity - and this is a highly salient process that deserves to be brought into our consciousness. Generally then, our basic goal is to explain the way in which language-specific facts are connected with a unitarian concept of language - "die Sprache", "le langage". The foremost notion here is that of a process.

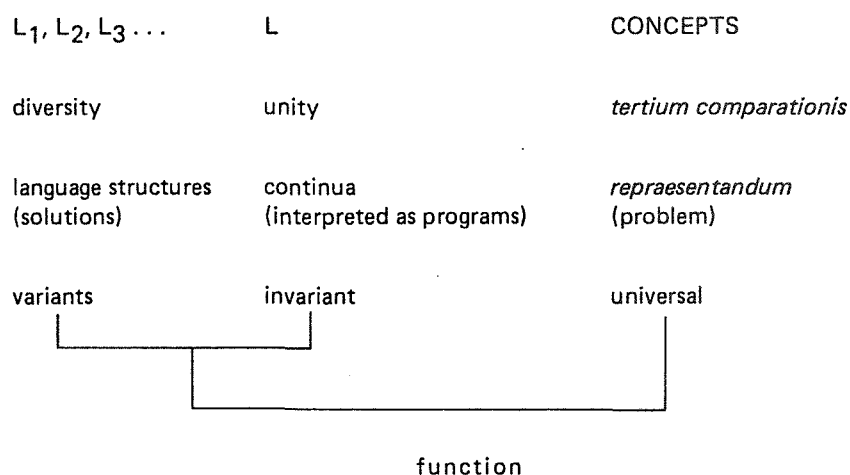


Fig. 1

The chart in Fig. 1 (repeated here from Seiler 1986:14) visualizes a goal-directed process by symbolizing the ways in which language-specific facts are related to the invariant and to the universal. L₁, L₂, L₃ ... symbolize the data of different individual languages, whereas L stands for the unitarian concept of language. The reconstruction of this relationship is carried out under two different aspects, one deductive, the other induc-

tive. Under the deductive aspect we posit cognitive-conceptual entities as tertia comparationis. Every grammarian does that. For example, when he assembles and interprets data pertaining to determination, i.e. a relation between a determinans and a determinatum, he must have some idea of what this relationship is about - cognitively and conceptually. This means that he presupposes a concept of determination. Inasmuch as he applies it to the study of any language, it is precisely the concept that may be said to have a truly universal status. The concepts should not be confused with the meanings of particular linguistic structures. The latter, as we know, differ from one language to another no matter how much they may have in common in particular instances. But difference and sameness must be judged on the basis of one common ground - the tertium comparationis.³

The inductive aspect of our research concerns the ordering of data under a common concept. Here, we make generalizations regarding their form and their meaning, and we try to bring them into an order according to sameness and difference. The construct of a continuum is our most important tool in this task. Once the continua are established, we can then extract a common functional denominator representing the invariant, while the positions on the continuum are the corresponding variants. Thus, the invariant has an epistemological status which is different from that of the universal: The latter belongs to deduction and apriorism, the former to induction. But the invariant is the authority that avails itself to be directly compared with the universal.

According to what has just been said, the chart in Fig. 1 can be read in both directions: right-left and left-right. The CONCEPTS are not only the tertium comparationis but also the repraesentandum, i.e. that which is to be represented by means of language. This representation is not a matter of course but a constant problem to be solved by the speaker and listener.

³ This notion is due to the theoretical work of K. Heger. On the interaction between his theory of "noemes" and the UNITYP model, see Heger 1985:97ff. with further references. - I am under the impression, but hope to be corrected if mistaken, that the notion of "content-oriented typology", fundamental to much recent work of our Soviet fellow typologists, ultimately involves cognitive conceptualizations.

The initial stage of the problem solving process are the repraesentanda, the final stage, the output, the result, are the various linguistic structures in the different languages - in the case of our example above: the structures pertaining to determination. Our major task then consists in showing how these variants relate to an invariant, and how such an invariant matches the presupposed conceptualization. As the schema indicates, the key notion of the entire model is that of function, which encompasses two aspects: In the deductive view the repraesentandum (= the problem to be solved), in the inductive view the relation between variants and invariance.

Our work will mainly concentrate on establishing the continua and subcontinua (more on these in section 3.1.). Here the main problem consists in delimiting the continuum and in justifying both the gradience and the discreteness of its positions. Under the universalist view this can be done on independent grounds such as the common functional denominator and criteria of sameness and differences, partial substitutability and contrast of adjacent positions. But it is the typological view that furnishes decisive justification in pointing out that the positions of the variational spectrum of a continuum as options chosen by a particular language are not chosen at random but that the choices cluster in certain definite ways, and that these clusters recur in language after language of a particular typological group.

A different problem concerns the number and the kind of cognitive conceptualizations to be posited for our universalist and typological work. Here, the major work still remains to be done. Thus far, we have proceeded in a more or less additive way, concentrating on those conceptualizations where the linguistic data most readily lend themselves to ordering in continua. Beyond that, I have only guesses. It is clear, however, that some day we will have to come up with definite answers. Perhaps they will consist in a classification somewhat like the following:

- I. Basic: APPREHENSION ('thing'), NOMINATION ('name')
- II. Relational: DETERMINATION, POSSESSION, LOCATION, PARTICIPATION (valence, verbal gender, case marking, etc.), PREDICATION
- III. Operators: REFERENCING, QUANTIFICATION, ORDINATION, (tense, aspect, mood), QUESTION, NEGATION

Fig. 2

Here 'Basic' could mean "non-relational concepts", and 'Operators' could be thought of as "operating on 'basic' and/or 'relational' concepts".

It goes without saying that this is speculative for the most part. The only thing I would insist upon is conveyed by the intended uniformity in the nomenclature in -ION action nouns: What we are looking for corresponds to mental operations rather than to things.

3. ILLUSTRATION: A UNIVERSAL DIMENSION AND ITS SUBDIMENSIONS (TECHNIQUES) AS A BASIS FOR TYPOLOGICAL COMPARISON

3.1. PRESENTING THE DIMENSION

The universal dimension of APPREHENSION has been described in full in Seiler 1986. This can, of course, not be repeated here; a brief summary must suffice. APPREHENSION describes how language grasps and represents conceptualizations that correspond to objects or things. Immediately the following question arises: What are these conceptualizations of objects? Is there an established knowledge about them? There isn't any. For the time being we must content ourselves with intuitions. We know that there are different kinds of objects - because we interact differently with them: individual objects, masses, collections, persons. A number of noteworthy intuitions has come to us, such as Aristotle's (Anal. Post., A. 31.87 b 25 [Bekker] and other passages) who, speaking about the perception of things, says "that it is both a 'such' and a 'this', for although perception is with reference to a 'such' and not to a 'this', to be per-

ceived necessarily relates to a 'this' and a 'where' and a 'now'." The following chart may summarize the correlations mentioned in the various Aristotelian passages:

SUCH	THIS
To perceive	To be perceived
Quality	Quantity
General	Individual
[Predicativity]	[Indicativity]

Fig. 3

The last line is our addition. In sum, it seems that Aristotle constructs the notion of 'object' on the basis of these two complementary principles.

Passing on to linguistic representation we present the following geometricization of the dimension of APPREHENSION (cf. Seiler 1986:23):

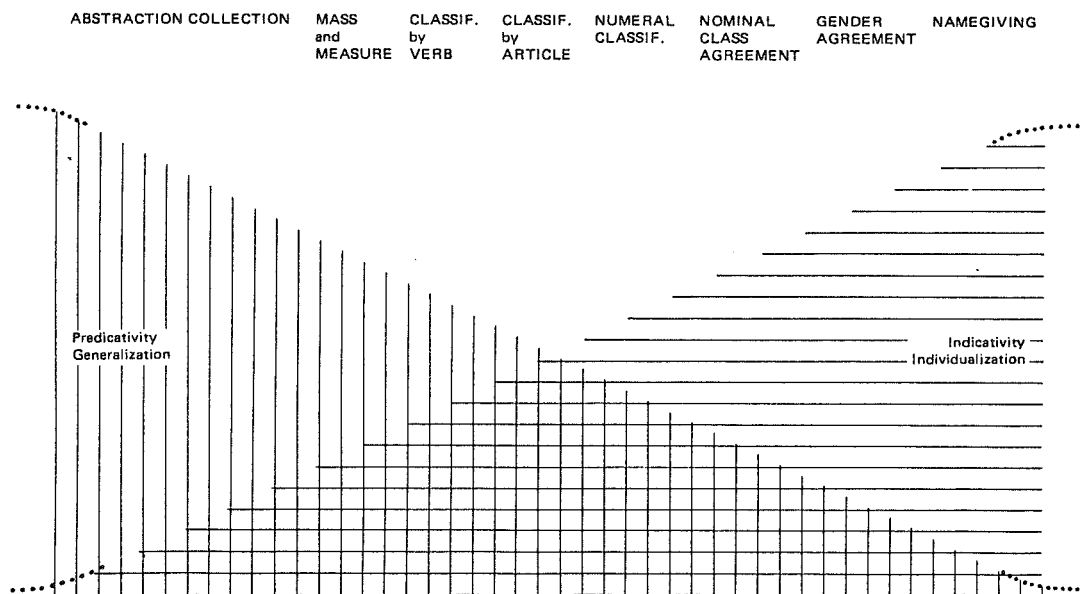


Fig. 4

This represents a parameter with a linear ordering of positions appearing on the top horizontal line. The capitalized terms are related to, but not identical with, categorial notions. Thus, abstract nouns have a role in ABSTRACTION, collective nouns in COLLECTION, etc. In contradistinction to the categorial

terms, the capitalized terms do not stand for categories but for techniques that may be interpreted as programs. If the dimension, i.e. the entire parameter, represents the overall program, the techniques aligned in the order given represent sub-programs. The corresponding categories, such as abstract nouns, etc., may be thought of as representing the most grammaticalized instance on the sub-programs. All in all, the schema represents principled ways (programs) for something "that is being done", and it stands for both the 'what it is' and the 'how it is' that is being done. The ordering of the positions is determined by two gradients that are negatively correlated with each other such that an increase in the one entails a decrease in the other. The two gradients correspond to two converse properties technically termed two converse functional principles, which are, respectively, indicativity/individualization vs. predicativity/generalization. The first term in each pair corresponds to a general formulation of the principle holding for all dimensions studied thus far; the second term is the manifestation of the principle in the dimension under study here. Indicativity/individualization means: The object is apprehended by pointing it out, by an indexical, deictic procedure. The pointed out object is an individualized object. Predicativity/generalization means: The object is apprehended by predicating about it. Predicativity is syntactically manifested as relationality. A relation is basically a general, not an individual. The predicated object is a generalized object.

The schema says that as we move along from one technique to the next and further on, either from left to right or the other way, we get a gradual increase of one functional principle, and a correlated gradual decrease of the other. This is represented by means of the cross-hatching, where the gradients assume the shape of a curve with asymptotic trends. This, in turn, conveys the idea that there should be no zero values. Rather, each position (technique) partakes in both functional principles, but in negatively correlated degrees of dominance. In a medial zone the participation of the two principles is about equal, none dominating over the other. The point where the dominance relationship becomes inverted is called the turning point. It is to

be expected that the techniques adjacent to each other are the most similar, and that they possibly might be substituted for or collapsed with one another. And it may be predicted that the structures pertaining to two adjacent techniques are also the most similar, both in form and in meaning. The properties as outlined in the foregoing are encompassed by the construct of continuum. The dimension with its techniques and the sub-continua clustered within a technique encompass the variation - on different hierarchical levels - on the general theme of APPREHENSION. Variation is necessarily correlated with an invariant, and both are understood here in two ways: (a) within one and the same language, as when different options are available to represent one and the same basic function; (b) cross-linguistically, as when each language represents a particular choice of techniques out of the total range of possible techniques corresponding to such an overall function as that of APPREHENSION. The dimension with its subdimensions is also the locus of - and furnishes the explanation for - language change, in the sense of transitions from one option to an adjacent one. In sum, this model will enable us to show how diversity is linked to unity.

The sequence of techniques in the dimension can be further subdivided into three or four groups: There are the three relational techniques, each involving a relational noun: abstract noun (based on a predicate), collective noun, mass noun; then the four classifier techniques, each involving a classifying element; then NOMINAL CLASS AGREEMENT and GENDER AGREEMENT with affinities both with the classifier techniques and - on the ground of their indexical character - with the following technique, NAMEGIVING, where indicativity maximally dominates predicativity.

3.2. TYPICALITY IN THE CHOICE OF OPTIONS ON THE LEVELS OF DIMENSIONS AND SUBDIMENSIONS

It seems safe to assume that all languages exhibit a dimension of APPREHENSION - which would thus be a universal dimension - and that all languages show some of the techniques but

that no language has all of them.

As a further hypothesis we assume that the choice among the dimensional and subdimensional options for a given language is not random, but is functionally determined by the following factors: 1. The band-width of the cognitive repraesentandum - in our case the conceptualization of objects or things. 2. The hierarchy of levels - dimension vs. techniques with their sub-dimensions. 3. The complementarity of "pulls" between predicativity and indicativity. 4. The pragmatic aspect of context, discourse, shared knowledge, etc.

It is now the task of language typology to show that within the aforementioned constraints similar choices are being made in more than one language, i.e. within groups of languages. These choices would then be typical for those language groups.

In assessing the typicality of choices we shall base ourselves on the following criteria: 1. implicational statements, 2. statements of complementarity, 3. statements of analogy, 4. statistics. All four criteria pertain to our aforementioned typological notion of clustering. Statistics, rather than being a criterion in its own right, seems to come with each of the first three criteria, thereby reflecting the intuition alluded to in section 1, that typicality is of a gradient rather than of a yes/no nature (cf. Skalička 1974:17ff., and Sgall 1986: 22ff.). It should be noted that the implicational statements figuring in the sections to follow, although bearing some resemblance to the well-known "universals" of the Greenberg type, are different in their status: They are derived from the model of the dimension instead of being arrived at by inductive generalization, i.e. from a sample of languages. Furthermore, they are not meant to be "universals" but to pertain to typology. But they can certainly be matched against the facts of the individual languages.

3.2.1. Choices on dimensional level

One of the most salient complementarities on the dimensional level obtains between the extreme range vs. the medial range. It concerns the contrast between variation within one

and the same language (intra-language) vs. variation between languages (inter-language).

ABSTRACTION, located at the outer left of the dimension, is a technique which allows for considerable variation within one and the same language. Thus, the argument places of the relational abstract noun may successively be filled, or, on the contrary, left unsaturated. The arguments may appear in the plural or in the singular. The abstract noun may take an article or appear without, etc. (see Seiler 1986:26ff.).

NAMEGIVING, located at the extreme right of the dimension, exhibits considerable intra-language variation due to its dominant indicativity. This includes the transparency and relative meaningfulness of the name as well as a host of pragmatic concomitants (rituals, taboos, and other customs).

Now, the "outer-layer" techniques may be combined with one another in one and the same language. Thus, abstract nouns may occur as names; abstract, collective, and mass nouns may or even must appear in a certain gender. On the other hand, "inner-layer" techniques, specifically the classificatory ones, seem to occur in mutual exclusion. The following negative implications seem to hold:

$$(1) \quad [+ \text{ NUM.CLF. }] \quad \longrightarrow \quad [- \text{ CLASSIF. by VERBS }]$$

(with few specific exceptional overlaps representing diachronic transition, see Seiler 1986:84).

$$(2) \quad [+ \text{ CLASSIF. by VERBS }] \quad \longrightarrow \quad [- \text{ CLASSIF. by ARTICLE }]$$

(with few specific exceptional overlaps in diachronic transition, see Seiler 1986:89).

$$(3) \quad [+ \text{ CLASSIF. by ARTICLE }] \quad \longrightarrow \quad [- \text{ NUM.CLF. }]$$

The common functional denominator of all the classificatory techniques is classification. In this respect one may consider them as variants of one invariant, and one may say that the variation is between languages rather than within one and the same language.

Such a distribution of intra-language vs. inter-language continua is of import in two respects. On the one hand it under-

lines the structuring of the overall continuum of the dimension into central and marginal zones, which was first established on independent grounds of markedness relations, similarity, partial substitutability, and diachronic transitions. On the other hand it represents a typological fact. To properly appreciate it, we should note that the three relational techniques on the left side plus the techniques on the outer right side serve to apprehend special kinds of objects: abstract objects, collections, masses, individual objects, persons. The classificatory techniques in the center basically cover the entire range of possible objects to be apprehended, with the exception, we should add, of objects apprehended by NAMEGIVING - which is probably found in every language. Now, if a language exhibits one of the classificatory techniques - and if this technique covers the near-entire range of objects to be apprehended - it becomes understandable why there is no room in that same language for any of the other classificatory techniques and why they should exclude each other (except for diachronic overlaps).

This in turn is apt to throw light on many facts pertaining to adjacent, non-classificatory techniques as well. To mention just one: MASS and MEASURE is constituted by an appropriate construction with a mass noun: much milk. But any object can be represented as a mass by means of such a construction: much automobile, much Rembrandt. Moreover, MASS and MEASURE shows a classificatory aspect: pint, liter is used for liquids, pound, kilo for solids, etc. These facts seem to tie in with the other fact that - to mention only Indo-European languages - it is difficult to think of any special morphological (affixal) marking of mass nouns, while abstract and collective nouns display a host of special suffixes, and a tendency toward constant renewal of these elements.

3.2.2. Choices on the level of techniques

It is on this level that we encounter the phenomena pertaining to morpho-syntactic typology. The criteria for typicality are the same as above. Clustering shows up in implicational statements that can be bundled in complementary pairs where

techniques ordered on opposite sides of the turning point are involved:

- | | | | | |
|---------|--------|---------------|---|-------------------------------|
| (4) (i) | ABSTR. | [+ saturated] | → | [- saturated] |
| | (ii) | NUM.CLF. | | [- saturated] → [+ saturated] |

The technique of ABSTRACTION is based on constructions with relational nouns which open argument places. The technique of NUMERAL CLASSIFICATION is based on a weaker relation, viz. solidarity (between classifier and classified), and it opens a place for a quantifier (or some other determiner) in the so-called "classifier phrase". (4) (i) means that in a language with the technique of ABSTRACTION the unmarked state is that the argument places are left unsaturated. (4) (ii) means that in a classifier construction the unmarked state is that the place for Q (or a determiner) is saturated. In some languages such as Bengali, Vietnamese, Jacaltec we find constructions without a Q. But these have a special function (definite reference), and these languages also exhibit the normal construction of Q + CLF + N (see Seiler 1986:107 with further literature). The functional correlates of (4) (i) are more freedom in the construction and thus greater semanticity - in short: greater predicativity; those of (4) (ii) are correspondingly more grammaticalization, more obligatoriness, and thus lesser semanticity - in short: greater indicativity.

- | | | | | |
|---------|--------------|--------------------------|---|--|
| (5) (i) | CLF. by VERB | [+ fixed classification] | → | [+ mobile classification] |
| | (ii) | NUM.CLF. | | [+ mobile classification] → [+ fixed classification] |

(5) (i) means that in languages exhibiting the technique of CLF. by VERB, there is always the possibility of a reclassification (mobile classification): "Few, if any combinations of noun plus classificatory verbs are impossible" (Hoijer 1971:232). (5) (ii) means that if a language with NUM.CLF. offers the possibility of reclassification (so-called "temporary classification"), it also shows fixed or "inherent" classification, while the reverse is not true (see Serzisko 1982:155ff.). A similar statement would hold for the adjacent technique of GENDER AGREEMENT, subordinating classification to indexing, where mobile gender pre-

supposes fixed gender, and not vice versa. The functional correlates of mobile classification are greater semanticity/predicativity, those of fixed classification lesser semanticity and greater indicativity.

3.2.3. Choices within a particular technique

We now move to the level of one particular technique. CLASSIFICATION by VERBS in Amerindian languages may serve as an example. Here we find variation between languages in the domain of morphological typology.

There are two components within a classificatory verb, viz. one of 'handling' (hence the term of "handling verbs", sometimes used in the literature), and one of classification, where the verb classifies the noun. The former represents the individualizing, indicative principle - only individuals can be 'handled' - the latter represents the generalizing, predicative principle. R. Barron (1982:142ff.) has pointed out a continuum reflecting the degree of agglutination vs. fusion of the two components of the verb representing, respectively, classification and handling. The continuum ranges from complete amalgamation (Navajo) to complete isolatability (Diegueño) with several intermediate degrees (Cherokee, Acoma, Atsugewi, Tarascan), where for a particular predication the two components are merged, whereas for the remaining predications they are realized in two different morphemes. Barron explicitly notes that a certain degree of agglutination vs. fusion on this level for a given language does not imply that the language shows that same degree in its overall structure, i.e. across levels.

The continuum is functionally correlated in two ways. One concerns the possibility of a reclassification of nouns. R. Barron (loc. cit.) has advanced the hypothesis that reclassification would be facilitated by an agglutinative, isolatable representation of the two components on the grounds that it would be easier to recombine the classifying part of the verb with new predications. And conversely, the more fusional and symbolic the representation of the two components, the

more obligatory the occurrence of one particular verb with a noun of a particular class.

The other functional correlate of R. Barron's continuum consists in the semanticity of the predicating (the 'handling') component: If the two are morphologically fused, the predicating component has a meaning of its own and acts as a classifier vis-a-vis the noun. If the two are morphologically combined in an agglutinative manner, the predicating element is more or less devoid of any specific meaning beyond that of 'handling' in general; it needs to be supplemented by the classifying affix plus other affixes that further specify the predication.

As this example shows, the time-honored "morphological typology" with its degrees of agglutination vs. fusion does have its validity on a certain definite rank - the technique - of the overall model; but it would be a mistake to hypostasize it into an "integral typology".

We have now reached the "bottom level" and would at this point certainly not go into phonology. However, it might be of interest to at least raise the question of whether our approach might be extended onto other domains of language structure - which in our framework would mean onto other functional dimensions, as far as they have been established by UNITYP.

3.2.4. Appendix: Choices on the level between dimensions

The further dimensions which we have examined are: DETERMINATION (Seiler 1978:301ff., 1985:435ff.) POSSESSION (Seiler 1983), and PARTICIPATION (Seiler 1984a and 1984b). They are all based on a common functional denominator and they are all constituted by the complementarity of the two principles of predicativity vs. indicativity. They are all represented by continua with a sequence of techniques with, grossly, two extreme ranges and a medial range.

Let us briefly compare APPREHENSION with POSSESSION and limit ourselves to observing intra-language vs. inter-language variability. POSSESSION is the ordered dimension encompassing

the various techniques for representing the relation of appurtenance. On the extremes of the continuum we find inherent POSSESSION (usually called "inalienable") with predominant indicativity and established POSSESSION (usually called "alienable") with predominant predicativity. In the latter range the so-called VERBS of POSSESSION are a particularly marked technique. In the medial range we find, among others, the technique of POSSESSIVE CLASSIFICATION. It occurs in Oceanic languages on the one hand, and in Amerindian on the other. While possessive classifier constructions within one and the same language mainly follow one and the same pattern, there is considerable diversity in the relevant constructions across languages. Amerindian languages such as Cahuilla differ widely in this respect from such Polynesian languages as Renellese (Seiler 1983:35ff.). Nevertheless there is sufficient evidence for subsuming both under the technique of POSSESSIVE CLASSIFICATION. The emphasis, then, is on inter-language variation.

The technique of POSSESSIVE VERBS, on the other hand, may exhibit a considerable range of constructional variation within a particular language where this technique occurs: thus, in English, we find, among others, the copula (the house is mine), the verb 'to have' (I have a house), the full verbs 'to possess' (I possess a house), 'to own' (I own a house), the very different construction of 'to belong' (the house belongs to me), etc. The emphasis is here on intra-language variation. In cross-language comparison we encounter more or less the same pattern of increasing verbalness - which is a manifestation of increasing predicativity - from auxiliary to increasingly actional verbs, such as 'to hold', 'to seize', 'to grasp', etc.

In both dimensions compared the medial range includes a classificatory technique, and in both cases the variation is inter-language as opposed to intra-language variation in the peripheral techniques. In both dimensions medial techniques are complementary, i.e. exclude each other, whereas peripheral techniques may cooccur within one and the same language. Furthermore, it may be the case that languages with a concentration on medial techniques tend to avoid or underdevelop techniques of dominant predicativity. Thus, among Melanesian

languages the following implication seems to hold:

$$(6) \quad [+ \text{ POSS.CLF. }] \longrightarrow [- \text{ POSS.VERBS }]$$

i.e. a language with possessive classifiers does not show possessive verbs; and in one specific language, Nguna, the emergence of a possessive verb seems precisely to correspond to the disappearance of possessive classifiers (Mosel 1983:17). It remains to be seen whether the analogous statement for APPREHENSION bears any statistical significance.

$$(7) \quad [+ \text{ NUM.CLF. }] \longrightarrow [- \text{ ABSTR. }]$$

i.e. a language with numeral classifiers shows little or no manifestation of the technique of ABSTRACTION. Japanese would certainly be an exception. If there are languages with NUM.CLF. and little or no ABSTR., this would not mean that they cannot represent immaterial concepts at all. It can be done, e.g. by a general and semantically empty classifier, or a so-called repeater construction, as in Thai, or by leaving the noun unclassified, as in Vietnamese (see Seiler 1986:103 with further literature).

These few remarks are simply to point out a case of analogy, and to indicate the direction our search will take in the quest for broadening the scope of our typological perspective. Needless to say that this will not amount to claiming to have detected the workings of an "integral typology".

4. C O N C L U S I O N

We can now formulate our views on the "integral vs. partial" antinomy, and we propose the following slogan: "'integral typology' as a program, not as a claim". Doubtlessly, it corresponds to good scientific method to aim at the maximum scope for the validity of our generalizations. I do not think that this will necessarily take the form of a "grandiose typology", "where the whole structure of a language would be characterized by a single statement" - as B. Comrie satirically characterizes such attempts (Comrie 1985:237). Such claims, if they were earnestly proposed, would seriously neglect the hierarchical levels of language. What we intended to convey all along our section 3

was the idea that typological work has to take hierarchical structuring into account - a structuring which must be made fully explicit in the first place. Typological statements ought to be set up first for a circumscribed level of the languages compared. Only in a further step of our procedure can we try and see whether the statement would also hold across levels.

A form of the above-mentioned program I could subscribe to is "total accountability". This would mean that any typological statement must be assigned its hierarchical level, its domain, and its significance within the total structure of the language or languages it applies to. Why pick word order for a typology? Why relative clauses? Why tenses? Why case marking? Why subject - object? The reasons for such selective treatments must be made transparent.

A precondition for such a program to become realistic consists in establishing a maximally comprehensive model of the functioning of language. In the foregoing we have tried - in a brief survey and by means of an illustration - to give an idea of what such a model might look like. Function is here the central concept in its Janus-like character of cognitive content⁴ to be represented (repraesentandum), and variants/invariant relationship.

The decisive corroboration for such a model will have to come from an understanding of the complementary nature of the two activities of LTYP and LUR, where complementarity means that one is unthinkable without the other. I am unable to see what B. Comrie means when he claims "that there is no clearcut distinction between language universals and language typology" (Comrie 1985:237) - for either there is a distinction, or there isn't any, and then we wouldn't even need two terms. Distinction is one matter, and separation another; and for the relation between LTYP and LUR we would maintain: distinction - yes, separation - no. On the other hand I fully agree with Comrie when he goes on to argue "that the only way in which typology

⁴ Once more I should point out that there are resemblances with "content-oriented typology", see e.g. Klimov 1976:122ff.

can be pursued as a significant and insightful study is in close relation to research in language universals" (loc. cit.)

LUR must furnish the basis of comparison among languages. We have tried to show that the functionally based continua of the dimensions and techniques with their subdimensions are apt to represent such a basis. But it is precisely the typological view with its methodology of implicational statements and of clusters of such statements so successfully developed by J. Greenberg that adds necessary justification to the set-up of continua and, in turn, receives its full significance within these continua.*

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R E F E R E N C E S

- Barron, Roger. 1982. "Das Phänomen klassifikatorischer Verben."
In: Seiler, H. & Lehmann, Ch. (eds.) 1982:133-146.
- Comrie, Bernard. 1985. "On language typology." In: Seiler, H. &
Brettschneider, G. (eds.) 1985:228-237.
- Coseriu, Eugenio. 1980. "Der Sinn der Sprachtypologie."
TCLC 20:157-170.
- Greenberg, Joseph H. 1974. Language typology: a historical and
analytic overview. Janua Linguarum, Series minor, 184.
The Hague & Paris: Mouton.
- Heger, Klaus. 1985. "'Concepts' and 'Noemes'". In: Seiler, H. &
Brettschneider, G. (eds.) 1985:97-101.
- Hoijer, Harry. 1971. "Patterns of meaning in Navaho."
In: Zamora, M.D. & Mahar, J.M. & Orenstein, H. (eds.).
Themes in Culture. Quezon City: Kayumanggi Publishers.
227-237.
- Klimov, Georgij A. 1976. "Voprosy kontensivno-tipologičeskogo
opisanija jazykov (Questions of contentive typological
description of languages)." In: Jarceva, V.N. &
Serebrennikov, B.A. (eds.). Principy opisanija jazykov
mira. Moscow: Nauka. 122-146
- Lehmann, Christian. forthcoming. "Zu Eugenio Coserius Sprach-
typologie." To appear in: Festschrift für Eugenio Coseriu.
- Mosel, Ulrike. 1983. "Adnominal and predicative possessive con-
structions in Melanesian languages." akup 50.
Köln: Institut für Sprachwissenschaft.
- Seiler, Hansjakob. 1978. "Determination. A functional dimension
for interlanguage comparison." In: Seiler, H. (ed.).
Language Universals. (= Tübinger Beiträge zur Linguistik,
111). Tübingen: Gunter Narr. 301-328.
- Seiler, Hansjakob & Lehmann, Christian (eds.) 1982. Apprehension.
Das sprachliche Erfassen von Gegenständen. Teil I:
Bereich und Ordnung der Phänomene. (= Language Universals
Series, 1/I). Tübingen: Gunter Narr.
- Seiler, Hansjakob. 1983. POSSESSION as an Operational Dimension
of Language. (= Language Universals Series, 2).
Tübingen: Gunter Narr.
- Seiler, Hansjakob. 1984a. "Vorbemerkungen zur sprachlichen Dimen-
sion der PARTIZIPATION." akup 57. Köln: Institut für
Sprachwissenschaft. I-IV.
- Seiler, Hansjakob. 1984b. Die Dimension der Partizipation.
(Valenz, Transitivität, Kasusmarkierung, usw.). Vorlesung
im Wintersemester 1983/84. Manuskript. Köln: Institut für
Sprachwissenschaft.
- Seiler, Hansjakob. 1985. "Kategorien als fokale Instanzen von
Kontinua: gezeigt am Beispiel der nominalen Determination."
In: Schlerath, B. & Rittner, V. (eds.). Grammatische Kate-
gorien. Funktion und Geschichte. Wiesbaden: Dr. L. Reichert.

- Seiler, Hansjakob & Brettschneider, Gunter (eds.) 1985. Language Invariants and Mental Operations. (= Language Universals Series, 5). Tübingen: Gunter Narr.
- Seiler, Hansjakob. 1986. Apprehension. Language, Object, and Order. Part III. The Universal Dimension of Apprehension. LUS 1/III. Tübingen: Gunter Narr.
- Serzisko, Fritz. 1982. "Temporäre Klassifikation. Ihre Variationsbreite in Sprachen mit Zahlklassifikatoren." In: Seiler, H. & Lehmann, Ch. (eds.) 1982:147-159.
- Sgall, Petr. 1986. "Classical typology and modern linguistics." FoL XX. 1/2:14-28.
- Skalička, Vladimír. 1966. "Ein typologisches Konstrukt." TLP 2:157-163
- Skalička, Vladimír. 1974. "Konstrukt-orientierte Typologie." In: Linguistica Generalia 1. Studies in Linguistic Typology. Prague. 17-23.
- Wellek, Albert. 1955/1969. "Typus und Struktur." In: Ganzheitspsychologie und Strukturtheorie. Zwölf Abhandlungen zur Psychologie und philosophischen Anthropologie. München & Bern: Franke. 35-47.

In der Reihe akup erscheinen die Arbeiten des Kölners Universalienprojekts (DFG-Projekt, Leitung Prof. Dr. Hansjakob Seiler). Die Nummern 1-15 sind schienen als Linguistic Workshop (LW I, LW II, LW III), München: Fink 1973-75.

The asterisked numbers are unfortunately already out of print!
Die mit einem Stern versehenen Nummer sind leider schon vergriffen!

1. SEILER, H. 1973. "Das Universalienkonzept." LW I, 6-19.
2. LEHMANN, Chr. 1973. "Wortstellung in Fragesätzen." LW I, 20-53.
3. IBÁÑEZ, R. "Programmatische Skizze: Intonation und Frage." LW, 54-61.
4. BRETTSCHEIDER, G. 1973. "'Sexus' im Baskischen: Die sprachliche Umsetzung einer kognitiven Kategorie." LW I, 62-72.
5. STEPHANY, U. 1973. "Zur Rolle der Wiederholung in der sprachlichen Kommunikation zwischen Kind und Erwachsenen." LW-I, 73-98.
6. SEILER, H. 1974. "The Principle of Concomitance: Instrumental, Comitative and Collective (with special reference to German)." LW II, 2-55.
7. SEILER, H. 1974. "The Principle of Concomitance in Uto-Aztec." LW II, 56-68.
8. LEHMANN, Chr. 1974. "Prinzipien für 'Universal 14'." LW II, 69-97.
9. LEHMANN, Chr. 1974. "Isomorphismus im sprachlichen Zeichen." LW II, 98-123.
10. SEILER, H. 1975. "Die Prinzipien der deskriptiven und der etikettierenden Benennung." LW III, 2-57.
11. VAN DEN BOOM, H. 1975. "Zum Verhältnis von Logik und Grammatik am Beispiel des neuinterpretierten λ -Operators." LW III 58-92.
12. UNTERMANN, J. 1975. "Etymologie und Wortgeschichte." LW III, 93-116.
13. LEHMANN, Chr. 1975. "Strategien für Relativsätze." LW III, 117-156.
14. ULTAN, R. 1975. "Infixes and their origins." LW III, 157-205.
15. STEPHANY, U. 1975. "Linguistic and extralinguistic factors in the interpretation of children's early utterances." LW III, 206-233.
- * 16. ULTAN, R. 1975. "Descriptivity grading of body-part terms."
- * 17. LEHMANN, Chr. 1975. "Determination, Bezugsnomen und Pronomen im Relativsatz."
- * 18. SEILER, H. 1975. "Language Universals and Interlinguistic Variation."
- * 19. HOLENSTEIN, E. 1975. "Semiotische Philosophie?"
20. SEILER, H. 1976. "Introductory Notes to a Grammar of Cahuilla." (To appear in Linguistic Series, offered to Joseph Greenberg on the occasion of his 60th birthday).
21. ULTAN, R. 1976. "Descriptivity in the Domain of Body-Part Terms."
22. VAN DEN BOOM, H. 1976. "Bedeutungsexplikation und materiale Implikation."
23. SEILER, H. 1977a. "The Cologne Project on Language Universals: Questions, Objectives, and Prospects."
SEILER, H. 1977b. "Determination: A Functional Dimension for Interlanguage Comparison." (Final Version of SEILER, H. 1976. "Determination ...", published as akup 23, 1976)
To appear in: Papers from the Gummersbach Conference on Language Universals.
The Hague: Mouton)
24. MOSHINSKY, J. 1976. "Measuring Nominal Descriptivity."
- * 25. SEILER, H. (ed.) 1976. "Materials for the DFG International Research Conference on Language Universals."
26. WALTER, H. 1976. "Das Problem der Deskriptivität am Beispiel deutscher Verbalderivation".

27. SEILER, H. 1977. "Two Systems of Cahuilla Kinship Expressions: Labelling and Descriptive." (To appear in the Festschrift for Madison S. Beeler)
28. HOLENSTEIN, E. 1977. "Motive der Universalienforschung."
29. VIRKKUNEN, P. 1977. "Zum Ausdruck der notivischen Bestimmtheit im Finnischen. Mit einer Schlußbemerkung zum typologischen Vergleich des Französischen und des Finnischen von Wolfgang Raible."
30. KÖLVER, U. 1977. "Nominalization and Lexicalization in Modern Newari."
31. VAN DEN BOOM, H. 1978. "Paradigmenwechsel als Notationswechsel: Saussure - Chomsky."
- *32. HOLENSTEIN, E. 1978. "Von der Hintergebarkeit der Sprache (und der Erlanger Schule)."
33. RAMAT, P. 1978. "Y a-t-il une typologie profonde? (Quelques considérations théoriques (et pratiques))."
34. KÖLVER, U. 1978. "Syntaktische Untersuchung von Numeralklassifikatoren im Zentralthai."
35. HOLENSTEIN, E. 1979. "Zur Begrifflichkeit der Universalienforschung in Linguistik und Anthropologie."
- *36. LEHMANN, Chr. 1979. "Der Relativsatz. Typologie seiner Strukturen. Theorie seiner Funktionen. Kompendium seiner Grammatik." Erhältlich als: Vol. 3 der Language Universals Series, ed. by H. Seiler. Tübingen: Gunter Narr Verlag (1984).
37. SERZISKO, F. 1980. "Sprachen mit Zahlklassifikatoren: Analyse und Vergleich."
38. BARRON, R. 1980. "Das Phänomen klassifikatorischer Verben in nordamerikanischer Indianersprachen: Ein typologischer Versuch."
39. SEILER, H. 1980. "Two Types of Cahuilla Kinship Expressions: Inherent and Establishing."
- *40. STACHOWIAK, F.-J. 1981. "Zum funktional-operationalen Ansatz in der sprachlichen Universalienforschung aus psycholinguistischer Sicht."
LEHMANN, Chr. 1981. "On some current views of the language universal."
SERZISKO, F. 1981. "Gender, noun class and numeral classification: a scale of classificatory techniques."
41. CLASEN, B. 1981. "Inhärenz und Etablierung."
- *42. SEILER, H. 1981. "POSSESSION as an Operational Dimension of Language." Erhältlich als: Vol. 2. der Language Universals Series ed. by H. Seiler Tübingen: Gunter Narr Verlag (1983)
- *43. SEILER, H. 1982. "Possessivity, Subject and Object."
- *44. MOSEL, U. 1982. "Possessive constructions in Tolai."
- *45. LEHMANN, Chr. 1982. "Rektion und syntaktische Relationen."
- *46. LEHMANN, Chr. 1982. "Twenty-four questions on linguistic typology and a collection of answers."
- *47. HEINE, B./REH, M. 1982. "Patterns of grammaticalization in African languages."
- *48. LEHMANN, Chr. 1982. "Thoughts on Grammaticalization. A programmatic sketch. Vol. I."
- *49. KÖLVER, U. 1983. "Indonesische Verbalpräfixe. Ein Beitrag zur Dimension INHÄRENZ und ETABLIERUNG."
- *50. MOSEL, U. 1983. "Adnominal and Predicative Possessive Constructions in Melanesian Languages."
- *51. OSTROWSKI, M. 1983. "Zur Nomen:Verb-Relationierung im Wogulischen, Jurakischen und Jukagirischen."
52. VAN DEN BOOM, H. 1983. "Zum Verhältnis von Logik und Linguistik im Bezug auf UNITYP-Grundsätze."

53. UNITYP-FORSCHERGRUPPE. 1983. "Beiträge zum Problembereich Skalen und Kontinua."
54. HEGER, K. 1983. "Akkusativische, ergativische und aktivische Bezeichnung von Aktantenfunktionen."
55. OSTROWSKI, M. 1984. "Zur Lokalisation im Wogulischen, Jurakischen und Jukagirischen."
56. KÖLVER, U. 1984. "Local Prepositions and serial verb constructions in Thai."
57. SERZISKO, F. 1984. "ORIENTIERUNG" (Ein Beitrag zur sprachlichen Dimension der PARTIZIPATION).
58. MOSEL, U. 1984. "Towards a typology of valency."
DROSSARD, W. 1984. "Abstufungen der Transitivität im Tagalog. Ein Beitrag zu den Techniken Valenz und Orientierung."
MOSEL, U. 1984. "Abstufungen der Transitivität im Palauischen."
(Beiträge zur sprachlichen Dimension der PARTIZIPATION).
59. BRETTSCHEIDER, G. 1984. "PARTIZIPATION verknüpft mit NEKTION."
HEINE, B. & REH, M. 1984. "On the Use of the Nominal Strategy for Coding Complex Complements in Some African Languages."
(Beiträge zur sprachlichen Dimension der PARTIZIPATION)
60. DROSSARD, W. 1984. "KAUSATIVIERUNG und TRANSATIVIERUNG im Tagalog."
MATSUBARA, T. 1984. "Das Problem der KAUSATIVIERUNG am Beispiel japanischer Kausationsausdrücke."
SAMUELSORFF, P.-O. 1984. "Das Kausativmorphem im Suaheli."
(Beiträge zur sprachlichen Dimension der PARTIZIPATION)
61. MOSEL, U. 1985. Ergativity in Samoan."
62. HIMMELMANN, N., Jr. 1986. MORPHOSYNTACTIC PREDICATION. A functional-operational approach."
63. DROSSARD, W. 1986. "KASUSMARKIERUNG und die Zentralität von Partizipanten."
KÖLVER, U. 1986. "Transitive Konstruktionen und Verbdiathese im Indonesischen."
(Beiträge zur sprachlichen Dimension der PARTIZIPATION)
64. DROSSARD, W. 1986. "VERBKLASSEN."
LEHMANN, Ch. 1986. "Relationality and the grammatical operation."
(Beiträge zur sprachlichen Dimension der PARTIZIPATION)