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LANGUAGE UNIVERSALS AND INTERLINGUISTIC
VARIATION

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1. Introduction

Actually, the title should include intralinguistic variation along with the interlinguistic one. For variation within one and the same language is the thing which directly presents itself to the observation while it still remains to be demonstrated that phenomena in different languages can be regarded as variants to be assigned to one and the same invariant principle.

There are two senses in which the terms of variant, variation are used in the following remarks: one, which has just been mentioned, concerns the assignment of variants to some definite invariant. The other implies the possibility of gradient transitions and opposes the notions of discreteness and of yes-or-no. I shall not try here to reconcile these two senses and I trust that what I intend to show will become intelligible nevertheless.

Henri Delacroix (1924:126f) has reformulated an old hypothesis which seems worth exploring in connection with the search for language universals: "Une langue est une variation historique sur le grand thème humain du langage." It remains to be seen what "le grand thème" or rather "les grands thèmes" are about and what particular language-specific properties could be shown to be variants of one and the same theme.

One such major theme which we shall now investigate is the interrelation between, on one side, a word or a sequence of words, and, on the other, a sentence. As this for us is not only a syntactic but also a semantic problem, we might rephrase the antithesis as that between a term or sequence of terms and a proposition. Two alternative views on the nature of this interrelation seem conceivable: A. The interrelation is yes-or-no, i. e. an

element or a string of elements either constitutes a
term (sequence of terms) or a proposition. B. The inter-
relation is of gradient nature, i. e. we find interme-
diary stages. Both alternatives are appropriate, but
under different circumstances.

2. An abstract Model for the Interrelation between Term and Proposition

It can be represented as follows:

(1) (i) Px
     (ii) $(\lambda x)\ (Px)$
     (iii) $Q((\lambda x)\ (Px))$
     (iv) $(\lambda x)\ (Qy)$

In (i) we have a predicate P with a variable x as its
only argument. In (ii) this variable is bound by the
Carnapian λ operator;[1] the whole is an absolute ex-
pression which may function as an argument of a new
predicate Q shown in (iii). (iv) represents the cyclic
re-application of λ and the transfer of (iii) into an
argument or absolute expression. Expressions (ii) and
(iv) are called absolute because they are substitutable
in argument positions but nothing is said here about a
predicate. The term argument presupposes the presence
of a predicate. Conversely, we speak of relational ex-
pressions in the case of predicates with places not
filled by arguments. It seems legitimate to correlate
the notions of predicate and relational expression of
this model with our previous notion of proposition;
and likewise the notions of argument and absolute ex-

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[1]See Carnap 1960:130f; van den Boom 1975:66ff

pression with our previous notion of term. In this model, then, the interrelation between term and proposition is certainly of the either-or type.

It is revealing to compare the situations in natural languages with the model just presented. Some languages - an example will be shown presently - come strikingly close to the model, but even these deviate from it in very significant ways. For one thing, the functional aspect, not present in the model, implies that predicates assert and arguments or terms serve as names for objects or processes. As for the naming function, it can be achieved in two ways: either by labeling or by describing, i. e. by predicating.[2] A name which is a label is unanalyzable. A name which is descriptive - which describes the object by its properties, activities, etc. - is always composite; and it shows affinities of variable degrees with a predication. This is where our gradient aspect comes in.

3. Cahuilla

Cahuilla is a Southern Californian Uto-Aztecan language with which I have been familiar for some time.[3] In the following set of forms

(2) (i) verb stem -húya- 'to straighten, stretch'
     (ii) ne-húy-ʔa   'my straightening, what I have str.'
     (iii) húya-l   'the arrow'
     (iv) ne-húyʔa   'my arrow'

we find a verb stem meaning 'to straighten' and thus forming the basis of a relational expression: 'my

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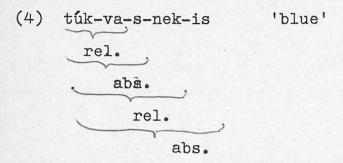[2]For a detailed discussion of these two techniques see H. Seiler (Seiler, ed. 1975:2-55

[3]A fuller display of the materials relevant to the problem under discussion may be found in H. Seiler (1975:18-34)

straightening', 'what I have straightened'. (ii) repre-
sents the corresponding verbal abstract noun. In (iii)
we find the absolute suffix, here represented as -$\underline{l}$,
transforming the relational expression into an absolute
one (or, in other words: a predicate into an argument),
thus acting like the λ operator. Form (iv) is the pos-
sessive corresponding to (iii). Importantly, the mean-
ing of the absolute expression is specialized; it is
narrower in comparison with the first two relational ex-
pressions: While it is understandable that the designa-
tion of the 'arrow' should derive from the activity of
straightening - which in the fabrication of arrows is
the decisive activity, indeed - it is by no means the
case that every straightening results in an arrow. If
we view absolutivisation as a process, a diachronic pro-
cess, I should add, which out of a proposition develops
a term (a name for an object), we see that, in contra-
distinction to the abstract model, the propositional
nucleus does not remain unchanged, or, in other words,
that the connection between term and proposition becomes
loose. In our particular set of forms - which represents
a very frequent pattern in the language - the coexistence
of a verbal abstract form 'my straightening' homophonous
with the possessive form 'my arrow' makes for a relative-
ly close connection between term and proposition. In
other cases where a verbal abstract form and meaning is
missing, the connection is less close - or: the coales-
cence of propositional elements going into a term is
stronger. Still one step further as in

(3) (i) verb stem -qáw-   'to become hard, solid'
    (ii) qáw-iš   'the rock'

we find just a verb stem 'to become hard, solid' and an
absolute form 'rock'. Here the connection between predi-
cation and naming definitely belongs into the realm of
etymology.

Our next example

(4) túk-va-s-nek-is   'blue'
     ╰──────╯
       rel.
     ╰────────────╯
          abs.
     ╰──────────────╯
            rel.
                abs.

shows a cyclic application of the absolute suffix com-
parable to the cyclicity in our abstract model. All the
morphemes occur elsewhere; all the bracketed stretches
occur as free forms. túkvas is the word for 'sky'. It
contains the verb stem -túk- 'to fasten something curv-
ed', a local suffix -va- indicating 'the place, where...'
and the absolute suffix, here in its variant -s, thus:
'that (the thing) where something curved is fastened'.
(= sky). túkvasnek adds the verb stem -nek- 'to come
close to, become', thus forming a new relational ex-
pression 'becoming like sky'. Finally, a new applica-
tion of the absolutivisation process (-is 'one who has
accomplished a process') results in túkvasnekis 'having
accomplished the process of becoming like the thing where
something curved is fastened' = 'blue'. Of course, this
morpheme-by-morpheme translation is valid for diachrony
rather than for synchrony. In fact, it is precisely the
reiterated application of absolutivisation and conse-
quently of specialisation that the meaning of 'blue'
has finally come about.

4. German

    A western language like German produces descriptive
terms by means of composition and derivation; it lacks
a constant operator comparable to the absolute suffix.
Intuitively there exists a relationship between a term

like <u>Haustür</u>, and its explications like <u>Tür des Hauses</u>
or, still more explicitly, <u>Eingangstür des Hauses</u>. The
nature of this relationship is by no means clear. It
will form the subject matter of a study which is in pre-
paration. It does seem, however, that the faculty of ex-
plicating a term is grounded in an essential property of
the linguistic sign itself which, in Peirce's terms, is
capable of being translated into ever more explicit signs.
Two important traits of this interrelation, found earli-
er in Cahuilla, are present here too: (1) the term shows
specialisation in meaning with regard to its explicating
proposition. Compare the term <u>Lehrer</u> 'teacher' and its
explicating proposition <u>einer, der lehrt</u> 'someone who
is teaching'. <u>Lehrer</u> is specialized in meaning, because
it adds the component of 'professional activity': Not
everyone who happens to teach somebody at some given mo-
ment is necessarily a teacher. (2) Compounded or derived
terms show gradience in their closeness to an explicat-
ing sentence: A term like <u>Brotschneidemaschine</u> contains
instrument, verb, and object of the explication <u>mit der</u>
<u>Maschine schneidet man Brot</u>; while the term <u>Brotmesser</u>
contains object and instrument only, and lacks the verb;
<u>Messer</u>, an unanalyzable term and thus at the extreme
end of non-descriptivity, could still in some sense be
said to imply the verb <u>schneiden</u>. Another way of describ-
ing this sliding scale or squish from proposition to
term would be to say that the more we move from greater
to lesser descriptivity, the stronger the coalescence
of the constituent elements, until, with labels, analysis
becomes impossible altogether.

There is an important functional aspect of this
which has to do with the task for every speech community
to create, with finite means, new terms for an infinity
of new thins. Descriptive technique is a solution to the
problem, and increased descriptivity or explicitness in-
creases the possibilities of taxonomic distinctions:

<u>Waschmaschine</u>, a term of medium descriptivity, is used
for a machine that washes laundry only. When dishwashers
were put on the market, the more descriptive <u>Geschirr-
spülmaschine</u> had to be coined. Compound types such as the
one just mentioned show an incorporation of a verb stem
into the nominal. There exists a language type which pre-
fers incorporation of the noun into the verb.

5. Incorporation of Nouns

If in English we could replace <u>I write songs</u> by
<u>I song-write</u>, i. e. by compounding a noun stem in object
(or other syntactic) functions with a finite verb form,
we would be presented with the phenomenon of noun incor-
poration, which is rare in IE, but frequent among Amer-
indian languages. It is hypothesized here that noun in-
corporation, which is usually considered to constitute
a salient typological feature, is but a complementary
technique, serving the same purposes of taxonomy encoun-
tered in other language groups. The evidence in support
of this can only be hinted at.

Intralinguistically, we find again specialization
in the meaning where sentences with incorporated object
and sentences with non-incorporated object noun co-exist,
the expression with incorporation being more specialized.
A recent systematic account of Onandoga, an Iroquoian
language (Woodbury 1975:10-20), shows that in all cases
the sense of the incorporated noun is narrower than that
of its unincorporated counterpart. This is not contra-
dicted by the fact that incorporated nouns usually are
of rather general reference; for it is precisely in con-
nection with reference that they are used for designa-
ting "a special kind of", i. e. for subcategorisation.
Thus an expression like 'he is tobacco-getting' refers
to a special brand of it.

In interlinguistic comparison, we find coalescence
of the elements in varying degrees. In Iroquois the coa-
lescence seems to be carried farthest in that incorpora-
tion here resembles a derivative process, the incorpo-
rated noun behaving like a derivative affix. In Yana, a
Hokan language, noun incorporation according to Sapir
(Sapir 1911:271f.) seems to occupy a point in the scale
between composition and derivation. In Takelma, a Penu-
tian language, the process of coalescence seems less far
advanced. Incorporation, again according to Sapir (l. c.
272), seems here to be something more than mere juxta-
position and yet something less than composition or deri-
vation; it may be best described as proclisis of stems.
In Aztec, incorporation is clearly compositional (cf.
Sapir, l. c. 260). At the extreme end of the scale we
find such important languages as the Athapascan, and Es-
kimo, which allegedly lack incorporation. This is all
the more surprising as these languages might be consider-
ed as types of 'polysynthetic' languages.[4] Alfred Kroe-
ber (Kroeber 1911:580f.) set up the tentative typology
which I shall tabulate as follows:

(5)

	compound nouns	compound verbs
Indo-European	+	−
Iroquois	−	+
Uto-Aztecan	+	+
Eskimo	−	−

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[4]Thalbitzer (Thalbitzer 1911:1057) states: "As regards
the descriptive term POLYSYNTHETIC, it would seem that
it very appropriately expresses the conglomeration or
clustering of ideas which occurs in Eskimo word-sen-
tences." He cites, however, a different opinion (l. c.
1056f.):"Lucien Adam, who, at the Americanist Congress
of 1883, spoke on the relation of the Greenlandic
language to other languages, arrived at the conclusion
that the Eskimo language is not polysynthetic..., but
is only a derivative language. In a survey compiled
for the Project of Language Universals at the Univer-
sity of Cologne, Heribert Walter has assembled evi-
dence which seems to confirm Adam's appraisal.

The typology probably needs further refinement. The strict yes-or-no presentation will not suffice. The aspects of gradience will have to be considered as well. Noun composition vs. verb composition seem to be complementary in Indo-European and in Iroquois. The interesting question arises as to what happens if both are present as in Aztec, or both are absent, as, allegedly, in Eskimo.

7. Conclusion

What all this ultimately amounts to is the recognition of the two aspects in the relationship between the word and the sentence, between the term and the proposition: one, the yes/no contrast; the other, a scale of gradient transition. Moving from the pole of the label towards increased descriptivity and towards the proposition means moving in the direction of increased explicitness. This is a synchronic process, and it is irreversible, as we have seen in all instances. Moving in the opposite direction, from the proposition towards the term is a diachronic process, and it is also irreversible. It is the path which leads to amplification of taxonomy and subcategorization.

In the various language groups briefly discussed there were different morpho-syntactic means involved in these synchronic and diachronic processes: Incorporation of verbs into nouns (noun composition) and incorporation of nouns into verbs (noun incorporation) were the two major techniques. But structurally, both behave in a parallel way; and functionally, they serve one and the same purpose of naming by predicating. They might therefore well be considered alternative manifestations - and thus variants - of one and the same principle.

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