

Problem 1. The above terms obviously denote different things, but the phenomena are nonetheless interconnected. What is missing is a guiding hypothesis. We need a common denominator from which the differences might be illuminated.

Problem 2. The above terms are related to different levels of analysis, as case marking should make clear. Beside obvious morphosyntactic aspects, the very concept of "case roles" (Agens, Patiens, etc.) involves semantic and pragmatic aspects. How do the different levels share in any given phenomenon?

It is convenient to speak of "perspectives" instead of "levels" here. The same linguistic phenomenon can be studied from a morphologico-syntactic, a semantic and a pragmatic viewpoint. But the difference among these viewpoints should not distract us from looking at the interconnected whole. To use a musical analogy, it is like having one piece with many different voices. In fact, we find ourselves before what is called a dimension, the dimension of PARTICIPATION, where the above terms are its subdimensions or "techniques". To speak of participation I propose the following terminological convention: the nucleus (of an event), i.e. the verb, shall be called the PARTICIPEE; and the PARTICIPANTS shall be the NPs that take part in that event.

Part I

AN OVERVIEW OF THE TECHNIQUES

1. Valency

The concept of valency (or valence) was originated in chemistry and made its way into linguistics via formal logic (n -place predicates) thanks to Tesnière (1959).

The linguistic concept of valency may be defined, to begin with, as the number of complements (actants) that a verb governs—or may govern, since it is not the number of factual complements that is decisive but rather the number of possible ones.

Definition. Valency is the number of empty places for actants which a verb requires. (Unsaturated valencies are empty places for possible complements which are not occupied.)

Thus, according to Vater (1979:2), the German verb *malen* ('paint') is four-place; it opens places for a Subject, an Instrument, a Direct Object and a Directive. Consider the following:

- (1) a. Paul malt mit Kreide Gesichter an die Tafel
SUBJ INSTR DO DIR
'Paul paints faces on the blackboard with
chalk'

- b. Paul malt
SUBJ

'Paul paints (is a painter)'

Although *malen* was declared to be a four-place verb, (1b) is a grammatical sentence. This shows that in order to answer the question of valency we have to test the use of participants and whether they are obligatory or optional. But a difference already appears at the semantic level: (1b) can be interpreted habitually whereas (1a) cannot. The same is true of the following:

- (2) a. Paul sitzt dort hinten

'Paul is sitting back there'

- b. Paul sitzt

'Paul is in jail (lit. is sitting)'

Compare also the semantically different interpretations of these sentences:

- (3) a. Ich gebe ihm 50. DM 'I give him 50 marks'

b. Ich gebe 50 DM 'I give 50 marks'

c. Ich gebe 'I give'

As opposed to (1) and (2), the sentence (3c) is elliptical and may be considered well-formed only in certain environments (contexts).

The previous examples throw light on the opposition between norm and deviation. For

example, the participle *geben* occurs with a certain number and a certain kind of participants; but it may also be used in a deviant manner. Thus, SUBJ and IO of *geben* must have the feature [+animated] whereas DO has to be specified as [-animated]. But if, against the norm, an item does not appear, then certain constraints result, which also belong to the norm. The obligatoriness of occurrence which the verb imposes upon its participants is known as its binding power (potency).

To the binding power of a verb corresponds the bondedness or cohesion of any participant with respect to that verb. I propose the following hypothesis.

Hypothesis. Bondedness is a matter of degree. (Valency as bondedness is not just the numerical question of having one, two or three places.)

The following sentences illustrate my point:

- (1) a. Paul malt mit Kreide Gesichter an die Tafel.
'Paul paints faces on the blackboard with chalk'
d. Paul malt Gesichter/Portraits/...
'Paul paints faces/portraits/...'
e. Paul malt mit Kreide/Ölfarben/...
'Paul paints with chalk/oil paint/...'
f. Paul malt an die Tafel/auf Leinwand/...
'Paul paints on the blackboard/on canvas/...'

- g. * Malt mit Kreide.
'Paints with chalk'

The first complement (the Subject) is obligatory and therefore has the greatest bondedness with respect to the verb *malen*. All other participants, i.e. DO/PAT, INSTR and DIR, are optional and thus nearly equally bound to *malt*. In (3a-c) the IO appears not to be as strongly bound to the verb as the DO, since (3b) is more marked than (3a) and again (3c) more marked than (3b).

Valency concerns the minimal and most economic expression of PARTICIPATION, i.e. it embraces all phenomena that one can observe if an expected item does not occur.

2. Orientation

2.1 Voice

By 'voice' (*genus verbi*, Diathese) we understand the difference between active, medial, medio-passive, reflexive, reciprocal and passive. A study of voice must take into account the separation of the levels of morphology, syntax, semantics (including the lexico-semantic representation of the participant) and pragmatics. That means, for instance, that the claim that a language does not have a passive must be examined at all levels and, if need be, restricted and made more precise.

As a matter of method, not of principle, the following argument is limited to participes

with one or two participants, in other words to one-place or two-place predicates. We shall adopt the symbols proposed by Comrie (1981a):

- S = the only argument of a one-place predicate
A,P = the two arguments of a two-place predicate

We shall sometimes follow Hopper/Thompson (1980) and use O instead of P, the former being more neutral with respect to case roles. The item denoted by S is not identical with SUBJ, although identity is not to be excluded. The division of participants into A and P correspond in most, but not all cases, to the classification of the semantic roles AG and PAT. Compare:

- (4) a. Hans sah Maria 'Jack saw Mary'
b. Hans tötete Maria 'Jack killed Mary'

Hans/Jack is certainly the AG in (4b) but not so in (4a), nevertheless it is A in both sentences.

In a first approximation the basic feature of a SUBJ is that it is the NP which has a preferred position or which is preferentially handled. This preference shows up at different levels through certain regularities, e.gr. first position in the sentence and agreement of the verb with the SUBJ. Verbal agreement with the SUBJ occurs with significantly greater frequency than verbal agreement with objects. If the DO agrees with the verb, though, then so does the