

## ON THE BOUNDARY BETWEEN SYNTAX AND LOGIC

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THE subject of the present article is the assertion that the main categories of internal syntax which appear within a simple sentence, such as subject, predicate, object and other modifiers, are not grammatical but logical means. The ground for such an opinion may be the fact that the above-mentioned categories of syntax are not expressed by grammatical means in most languages best known and investigated. They are, then, not expressed grammatically in the Indo-European, Semitic and Ural-Altai languages. The opposite pole of our conception, however, is the assertion that the mentioned syntactical categories may be denoted with grammatical means and that there are languages in the world in which they are just in such way uttered.

The mechanism of language communication in a great degree is founded upon formal distinctiveness called relevance. The word as a language sign of an out-of-language context becomes a form only when it stands in opposition to other adjacent words and when it differentiates from them becoming relevant. Opposition and relevance are then the grounds for language communication and condition of understanding, to begin with phonemes which owing to their oppositional character differ from positional variants, up towards the uppermost units – the syntagmata which must also be in opposition to deserve the name of forms. But we are aware of a strange phenomenon that in most languages there are arranged in oppositions even sentences and clauses in the parataxis and hypotaxis, for they have their language indicators; on the other hand, however, such categories as subject, predicate etc. are not set in opposition, thus they are not language forms.

Without doubt the exigency of relevance by using forms contrasted and opposite is different in various languages. We deal thus with diverse types of language formalism. If we recognize namely as a language form a lexical element widened by a morpheme, e.g. by a flexional termination, then treating matters only morphologically we should recognize as the most distinctive in a formal sense the Tabasaranian language in the north-east Caucasus which according to L. Hjelmslev's<sup>1</sup> opinion pos-

<sup>1</sup>Louis Hjelmslev, *La catégorie des cas*, Acta Jutlandica VII, 1, pp. 137-8, Aarhus (Denmark), 1935 (tome I).

sesses 52 cases with endings, further perhaps the Hungarian language with its 18 cases, the Finnish with its 15 formal cases, the Sanskrit with 8; on the other hand the least distinctive would be Romance languages without formal declension or the idioms of the Malayo-Polynesian branch, where there is no trace of case terminations. But thus we would straiten overmuch the notion of language form. It is namely a matter of fact that the same part as endings grown together tightly with their themes do play in a lot of languages also loose elements attached before the words. Already Bernhardi in 1805<sup>2</sup> came out with the thesis that prepositions perform the same functions as case endings. There is not a shadow of doubt that if we treat matters functionally there is the same semantic value in the Latin construction *eo loco* 'in this place' as in the later *in eo loco*. Thus the elements which the Latin grammar had called onesidedly 'praepositiones' and which may stand before or after nouns, perform the identical function as case endings. The notion of language form should, then, be widened in order to avoid its being unpractically narrow, and, in the investigation of many language types, already useless. Why, then, if we reiterate the old error of Latin grammarians that 'casus est declinatio nominis quae fit maxime in fine,' should we consider language form simply as the ending attached to its theme, and not a pre- or postposition connected with a stem? Both constructions do perform anyway the same function in the given language systems. The more so since in the diachronic scale the old exclusively morphological standpoint seems to be wrong, for in the development of languages there is seen an eternal fluctuation between the ending (an auxiliary word adjoined) and the preposition (an auxiliary word loose). The cardinal difference between the so-called flexion and agglutination is, perhaps, only a difference of degree, not of quality, that is to say agglutination is an annexation looser, flexion on the other hand is a way of annexation more compact that produces changes not only in the morphological tying (Sanskrit *pat* 'foot', acc. *pad-am*, Greek Σφιγγξ (= *sphink-s*), gen. Σφιγγός (*Sphing-os*), Polish *matk-a* 'mother', dat. *matk-e*, Finnish *kaupunk-i* 'town', inessive *kaupung-issa* 'in town'), but even modifications within the theme which affect the vowels (Ukrainian *dim* 'house', gen. *dom-u*, German *Land* 'country', plur. *Länd-er*; well-known English mutations; *woman, women; mouse, mice; goose, geese*) or occurring in the form of very deep changes in the stem vowels termed 'internal flexion' in the Semitic languages (Arabic *ḥarf* 'letter; character', plur. *ḥu-*

<sup>2</sup>A. F. Bernhardi, *Anfangsgründe der Sprachwissenschaft*, Berlin 1805.

*rūf*, *timsāh* 'crocodile', plur. *tamāsīh*). The phenomenon of internal flexion is followed in the Arabic language by similar changes in word-formation, e.g.  $\sqrt{h}r\bar{m}$  - *ḥarrama* 'to proclaim someone as saint', *iḥram* 'vestment worn by Mohammedan pilgrims', *ḥarām* 'shut; forbidden; sacred', *ḥurma* 'shut or sacred thing; wife', *ḥarīm* 'wife or wives; the women's part of a house; harem.' Thus, if we treat this problem only within the limits of the declension, we must agree with the fact that in a lot of languages the theme with the ending has the same function as the word with the preposition and alike within the conjugation we become aware of a distinct tendency that in the Indo-European languages endings convey the task of form-generation to personal pronouns. Thus in the Latin language in the conjugation of the present tense the main burden of formal relevance rested on endings, e.g. *am-o*, *am-as*, *am-at*, *am-amus*, *am-atis*, *am-ant*, but in present-day Swedish this distinctiveness has been shifted to personal pronouns: *jag älsk-ar*, *du älsk-ar*, *han älsk-ar*, *vi älsk-ar*, *ni älsk-ar*, *de älsk-ar*, because the ending *-ar*, identical in the whole paradigm, ceased to be a relevant element. But to be fully correct we ought to recognize as a language form both the Latin *am-o* (in which the pronoun *ego* 'I' may be omitted) and the Swedish *jag älsk-ar*, in which the pronoun *jag* 'I' may not be omitted.

The notion of language form so extended will be of use to us, because we shall endeavour to advance to the utmost our investigations and inquiries as to whether such notions as subject, predicate and so on, are language forms or not. If it proves that they are not forms, it will be advisable to exclude them from grammar and transfer them to logic. We shall thus call a form a language element that possesses the property of distinctiveness. I think that there are three ways of such a distinguishing: 1. the phonetic 2. the morphological and 3. the syntactical one. Distinction by means of phonemes is a rarer way of form construction. It occurred in processes of apophony whose primitive semantics is now mainly obliterated as in this Slavonic series: *mīr-q* 'I die', *\*mer-ti* 'to die', *sŭ-mŕ-tŭ* 'death', *mor-ŭ* 'pestilence, murrain', *u-mir-ati* 'to die', *mar-a* 'nightmare'. With respect to the consonants that perform a role of productive of cases let us adduce the Arabic reduplications like:  $\sqrt{h}w\bar{f}$  'to be afraid', *ḥawf* 'fear', but *ḥawwafa* 'to frighten', *ḥawwāf* 'timid, shy', *jamāl* 'camel', but *jammāl* 'cameleer';  $\sqrt{k}f\bar{l}$ : *ḥafala* 'to shut', *ḥufl* 'padlock', but *ḥaffāl* 'locksmith'. Nevertheless, forms are mostly generated by morphological means, or if we extend the notion of the form according to the above-mentioned opinion, then we shall recognize as productive of forms also auxiliary words, chiefly prepositions. Within the limits

of the so-called word-formation forms are constructed of words either by adjoining prefixes or suffixes or even infixes. These methods have but a geometrical character, since they denote the place within a morphological continuum of the word that is chosen by the given language to attach there a morphological indicator. It is obvious that several types of languages display their character which consists in the preference and predisposition to one of the three above-mentioned ways of word-formation. In the Indo-European languages the procedure of infixion is rather moderate (Latin *pinxi*, *pictus*, Greek λαμβάνω, ἔλαβον (*lambanō*, *élabon*) 'I take; I took', Sanskrit *yuñjmaḥ* 'we join', *yugam* 'yoke'). In the Semitic languages prefixion is scarce (e.g. the prefixes *t-*, *m-*:  $\sqrt{h}rm$  'to shut' – *tahrīm* 'interdiction', *maḥram* 'one who has access to the harem') and the whole burden of morphological and semantic means is laid upon the internal flexion. Here also the notion of the grammatical form must be extended from the flexional case (e.g. the Arabic three cases from the word *shams* 'sun' – nominative *ash-shams-u*, genitive *ash-shams-i*, accusative *ash-shams-a*) to a word with a preposition (e.g. *fī* 'in, within', *bi* 'with', *min* 'from' : *al-walad-u* 'boy', *fī 'l-walad-i* 'in the boy', *bi 'l-walad-i* 'with the boy', *min 'l-walad-i* 'from the boy'). In the idioms of the great Malayo-Polynesian language family immense stress in word-formation and flexion is laid upon prefixion. E.g. in the Malayan (Indonesian) language from the word base *angin* 'wind' we get the following formations: *angin-angin* 'gossip', *berangin* 'to blow', *berangin-angin* 'to take the air', *menangini* 'to air; to ventilate; to fan', *menganginkan*, *mempengaruhi* 'to air'.

Finally, let us not forget a manner of form creation also, the syntactical one. It is a fact that in some languages certain forms are uttered by the position of words relative to each other in the sentence. We shall see, however, that position has a very limited use, because of the fact that man's memory grows tired by reckoning and differentiating positions. Nevertheless the syntactical position in several languages, even Indo-European ones, is the means which is very near the ideal we are in search of, though it is a means inconsequent and liable to deformation and limitation in the further development of languages. In fact, however, the syntactical position (word order) e.g. the order of the dative before the accusative (German: *Ludwig stellte Johann Marie vor* 'Louis introduced Mary to John') is a means generative of forms, because it distinguishes formally dative from accusative.

Let us ask now whether the above-mentioned elements which are fundamental to syntax and since for centuries have been recognized as its

very corner-stones, above all subject and predicate, are discerned, viz. grammatically marked, and in consequence whether they are language phenomena or only logical categories without any reflection in the language system. We must agree with the second assertion – in most known languages they are not language elements. Let us start with the subject. In none of the better known languages is the subject marked grammatically. Such marking might be performed, as we have stated formerly, by a specific factor – phonetic, morphological or syntactical (ending, preposition or word order). It might be marked in another way still – by involving the subject entirely within the scope of another grammatical category, e.g. within a part of speech. We know namely that parts of speech are grammatically marked (see further on), so that the subject entering in totally and filling up the given part of speech would be also marked by its language indicators. Let us adduce an example from natural science. The symptom of the birds is the fact that they feed by aid of beaks, the mammalia, however, do it with the dentation. Likewise presents itself the problem of birds' motion by aid of wings and of their breeding by hatching eggs. Exceptions from this rule are very rare, e.g. the *Omithorrhynchus anatinus* or *Echidna aculeata*. We may thus assert that the feature of possessing a beak, flying with wings and breeding by means of eggs is a class of phenomena that wholly corresponds to the notion 'bird' understood as a class. Let us ask what is the matter with the subject? Does the subject as a class of phenomena coincide totally with the class of the noun? No. Does it coincide wholly with the pronouns? By no means. Further investigations on this way will prove fruitless. Almost all may be the subject. The subject may be a noun (*PARIS is the capital of France*), a pronoun (*HE is a good fellow*), an adjective (*THE POOR and THE RICH, THE WEAK and THE STRONG, THE YOUNG and THE OLD have one common father*), forms of a verb (*TO BE or NOT TO BE, that is the question*); an auxiliary word (*In all this was a small BUT*), even a whole sentence (*'GOD SAVE THE KING' is a hymn*). I have adduced here English examples, very common and legible, but the material of a number of world languages would afford us many other proofs. Hence, the category of the subject and the category of parts of speech are incomparable with each other; they are two different classes of phenomena.

But the question arises what profit would we obtain for our problem, if the subject be involved wholly in a given class of parts of speech, e.g. in the class of the noun? It would be important to us, because parts of speech are mostly marked in language systems. It is known that in

many languages, particularly in those of the Indo-European group, there is a distinct inflection of nouns (by case endings) and another inflection of verbs (by personal endings). Although in many languages of the Indo-European branch nouns and adjectives are inflected alike (e.g. in Greek and Sanskrit there are themes in *-o-*, *-ŭ-*, *-ū-*, *-a-*, *-ī-*, *-ī-* and various consonant themes), there are distinct noun suffixes opposed to those suffixes which are also elements that distinguish a given class, e.g. in Sanskrit the suffix *-ti* ( $\sqrt{stu}$  'to praise' : *stu-ti* 'the praise',  $\sqrt{vṛdh}$  'to grow': *vṛddhi vṛdh-ti* 'growth') is substantival, the suffixes *-mant* and *-vant* are, however, adjectival (*vasu* 'wealth' : *vasu-mant* 'wealthy', *vidyut* 'lightning' : *vidyut-vant* 'abundant in lightnings'). Similarly, adducing the Greek forms from the theme εἰρήνη (*eirēnē*) 'peace' we are aware that the themes εἰρήνικο-, εἰρηναίο- (*eirēniko-*, *eirēnaio-*) are adjectival, εἰρήνευ- (*eirēneu-*) verbal, without the need to adduce the proper endings. In English, as is known, the accent often distinguishes the noun from the verb: *cóntact*, to *contáct*; *cóntrast*, to *contrást*; *éxport*, to *expórt*; *ímpress*, to *impréss*; *óbject*, to *objéct*; *présent*, to *presént*, *récord*, to *recórd* etc. Even adverbs are often marked morphologically: English *other-wise*, Latin *iunc-tim*, *cordiali-ter*, Romance *final-mente*. We must state, thus, that the subject is not distinguished by any mark and because it does not come wholly into a category of parts of speech, since it may be each of them, so it is not marked by means of the morphological indicators of those parts of speech. The subject belongs, then, to a quite other sphere of phenomena than language facts.

But is the subject perhaps used to being expressed exclusively by a certain case? Commonly it is expressed by the nominative, but not necessarily. It may be expressed correctly by an infinitive; it may be a part of speech uninflected (*This your ONLY irritates me*; *A loud HURRAH rent the air*), it may be a sentence or clause or even a part of a word (*The Romance -MENTE in cordial-mente is derived from mens, mentis 'mind'*) and in such uses it is not possible to apply cases. In a number of languages the subject must not stand in the nominative, it may appear also in the genitive. It is due to partitive functions, e.g. in Lithuanian there are very frequent sentences as *ŽMONIŲ būvo miške* 'people were in the wood', *PAUKŠČIŲ lakstė ore* 'The birds were flying in the air', where in the forms *žmonių*, *paukščių* we deal formally with plural genitives. This phenomenon exists in French (*Il y a DE LA VIANDE dans la boutique*) and in the Finnish language *LEIPÄÄ on pöydällä* 'there is bread on the table' (verbatim: "of bread" there is on the table'). One may imagine subjects being used in other cases than in the usual nominative and in

the partitival genitive. In exotic languages such applications are frequent (e.g. in the so-called ergative construction) and even in English we might imagine a subject in the semantic dative or instrumental case, as follows: *Would it be possible to give this task to parachutists? To PARACHUTISTS will do. He hesitated if he might write the petition by means of type-writer or with the pen, but he decided: WITH THE PEN will suffice.*

Matters stand likewise with other parts of the sentence. They also do not have their own language indicators. For example, does some special even least morpheme distinguish the predicate, object or other modifiers? They are not discerned nevertheless by being totally included in a given language class, e.g. in a class of parts of speech. The predicate is mostly a verb, but there are, however, numerous constructions like the Polish *ojcie'* CHORY 'father (is) ill', Russian *on* ANGLICHANIN 'he (is) an Englishman', with the elision of the linking verb. Besides, even in constructions like *brother IS A DOCTOR* the stress in the predicative form does not rest upon the linking word (copula), but on the main 'praedictum' which by its turn may be arbitrarily either a noun (*brother is A DOCTOR*), or an adjective (*brother is GOOD*), or a participle (*brother is LOVED*). There are even languages in which the function of the predicate is performed by uninflected parts of speech as in this Polish slang construction: *Jasiek jest HO-HO!* 'Johnny is good (clever, brave...)', where the function of the completing word is performed by the interjection *ho-ho!*

The modifier of the subject in its wide sense, which was called by the Latin grammar 'appositio', is nevertheless not denoted by any language mark. We can distinguish four species of this syntactical element: 1. an appositive (explanatory modifier) *sensu stricto*, e.g. *Napoleon, EMPEROR OF FRANCE*, 2. a modifier of the subject, put mostly before it, that may be an adjective, pronoun, numeral or participle, e.g. *the GOOD boy, ONE boy, a SINGING boy*. 3. a modifier of the subject which occurs in the genitive: *the waves OF THE SEA*, 4. a modifier with a preposition: *the girl WITH BLUE EYES*. We see thus that this syntactical means is in no relation to parts of speech, nor to cases, since it possesses a quite other dimension and nature than those language categories. Even the so-called adverb modifier is a logical category without evident language markings. This part of sentence is usually expressed by adverbs (*I shall come EARLY; The books are HERE; You are ALWAYS right...*), but there are in many languages constructions with prepositions, often very intricate, as in this long adverbial place modifier in Lafcadio Hearn's 'Japanese letters' (July 22, 1893): *I went up steps BETWEEN HEIGHTS OF CLIPPED SHRUB-*

BERY AND RANKS OF FLOWER POTS FILLED WITH ORNAMENTAL PLANTS INTO A PIAZZA, FULL OF ROCKING-CHAIRS AND LAMPS AND SILENCE.

And now we shall revise the question of the object. This syntactical category also is a logical invention, for it is not uttered with language means. The object is usually a noun, but may also be a pronoun, numeral or participle which may stand in all cases except the nominative. Owing to this it is obvious that the object is found in no necessary relation to parts of speech, the more so since, in addition to declinable parts of speech, a verb (an infinitive) may also be an object (*She began TO WEEP*). We do not see nevertheless that the object must stand in some indispensable case. Ordinarily the object is placed in the accusative (direct object): *I am eating THE FRUIT*, afterwards the object may stand also in the dative or instrumental case (indirect object): *John gave money TO JAMES*. It is clear that the object has no language indicator which would distinguish it, thus it is not a grammatical but logical category. However let us examine whether the position (word order) is a factor which could distinguish and bring into relief the object? There are languages called by certain linguists positional, in which the case function is performed by word order. Illustrating this phenomenon we mention above there is the Chinese language. Already W. Wundt<sup>3</sup> signalized the role word order plays in the case system of certain languages, as he asserted that the four cases called by him 'cases of internal determination' (innere Determination), that is to say nominative, genitive, dative and accusative, may be expressed by word order and this idea was subsequently taken up by L. Hjelmslev<sup>4</sup> in his outstanding study on the category of cases, where he wrote: 'Ce serait chose vaine que de vouloir prétendre que les mêmes cas qui en allemand ou en latin s'expriment par des désinences s'expriment en chinois classique par l'ordre des mots. Les cas du chinois classique ne sont pas identiques aux cas de l'allemand ou du latin. Mais ce sont des cas.' Word order as a factor productive of cases appears not only in Chinese, but in a series of languages, even European ones, though in a moderate degree, but only when the morphological system seems to be insufficient for purposes of communication. In present-day German this phenomenon is evident and finds its application in proper nouns owing to the fact that this category has not inflective articles, the system of endings being in them also deficient. As an example may serve the German above-mentioned construction: *Ludwig stellte JOHANN MARIE*

<sup>3</sup>Wilhelm Wundt, *Völkerpsychologie*, Leipzig 1900, II, p. 60.

<sup>4</sup>Opus citatum, II, pp. 68-69.



vor, where the object in the dative precedes the object in the accusative. We shall ascertain that such a construction is a constant phenomenon in a number of languages, namely that the first place is taken by the dative, the second by the accusative. This is visible not only in proper nouns in the Swedish language in which there is a very limited formal case system, for here there exists only a genitive with the *-s*-ending (*faders* 'father's') and the so-called basic form (*grundform*) which with definite nouns have the postpositive article *-(e)n*. Thus from the words *lära* 'she-teacher', *flicka* 'girl' and *blomma* 'flower' we can construct the sentence: *Lära gav flickan blomman* 'She-teacher gave the girl the flower', in which the morpheme *-(e)n* is deprived of the ability of semantic distinction owing to its identity in all three applications, so that this function is taken over by the word order: 1. nominative (*lära*), 2. dative (*flickan*), 3. accusative (*blomman*). A similar word appears in a number of Indo-European languages when there are used pronominal forms, especially if those forms must precede verbs. Such is the case in French, Italian, Spanish, even in Bulgarian. This construction occurs in French phrases, e.g. *Il ME LE dit*; *Nous VOUS LEUR donnons* etc. In Italian also the dative must precede the accusative: *dateGLIELA* 'give him her' (= *gli + la*), *perdonAMELO* 'forgive me this' (= *mi + lo*), *La prego di restituirmi il libro che Le diedi ieri, in cambio GLIENE darò un altro* 'I beg you to give me back the book I had given you yesterday, and in exchange I shall give you another one'. A similar construction occurs in Spanish: *He comprado las flores y SE LOS he dado* 'I have bought flowers and given them to her', *Puedes llevARTELO* 'You may take this to you'. In Bulgarian: *Az TI GO davam* 'I give this to you'. It is evident, however, that the said construction does not possess the function of distinguishing cases, because in it the pronominal forms in the dative are different from those in the accusative, notwithstanding the fact that dative precedes accusative. In the Pekinese (literary) dialect from the words *t'a* 'he, him etc.' and *shu* 'book' we construct the phrase with the meaning 'to give him the book' as in European languages: *kei T'A i-pen SHU* (*kei* 'to give', *i-pen* class- and quality indicator for books). Thus here the dative precedes the accusative. But the word order as a factor productive of cases is here strongly restricted. First, because it expresses as in European languages only two objects (dative- and accusative-object). It does not reach further, since by means of word order there are not expressed other cases. They are expressed by auxiliary words, e.g. for the instrumental case one uses the element *yung*: *Ni YUNG SHEN-MA pi se tse?* 'With what do you write? The cause of the limited efficacy of word order

in languages called positional is, as has been mentioned, the fact that the memory of the users of those languages grows quickly tired in the process of 'reckoning' positions. This memory does not reach deep enough, because in Chinese it does not reach deeper than the relevance of melody, since in the Pekinese dialect there are 4 accents and 4 word order positions – the subject, the predicate and two objects. But here we should make a correction, because in constructions like: *Ludwig stellte JOHANN MARIE vor* and others the word order does not by any means differentiate the object, but it distinguishes the cases. Here therefore has been brought into relief the dative opposed to the accusative. It does not mean, however, that the object has been distinguished, because the two forms, that with the dative and that with the accusative, are both objects.

Nevertheless one might pretend that particularly within the scope of word order we might find in human languages evidence the parts of a sentence are grammatically distinguished and thus they should be considered forms. In many languages the scheme is adopted that the first place in the sentence continuum is taken by the subject and others successively by the predicate or the object. On this point, however, the practice is not consistent and does not afford indications that would be of use to general linguistics. The word order in this sense is rather a habit, a consuetude of a given language, but not a necessity that would be a rigour whose trespass might threaten misunderstanding. In Latin the predicate stands at the end of the sentence, but in many languages it takes the second place after the subject. With regard to the place of the subject modifier the customary word order does not afford a consequent picture, for in the Slavonic languages the adjectival modifier of the subject is placed before the subject (\*DOBROJI čilověkŭ 'the good man') and in Latin this word order is inverted (*populus ROMANUS, toga PRAETEXTA*).<sup>5</sup> Vice versa, the genitival modifier of the subject stands in Latin before the subject as in Lithuanian: *PATRIS domus; LIETUVIU kalbos žodynas* (verbatim: 'Lithuanians' tongue's dictionary'). We are aware, then, of a great inconsequence and of the fact that two diverse kinds of modifiers possess diverse word order, and thus word order is not a factor that

<sup>5</sup>The situation is the same if the adjective in question performs a usual determinative function, expressing the objectively existing properties of the thing. If, however, it expresses the subjectively seen features of the object, the word order is inverted: *MAGNO DOLORE adficiabantur* (Caes. Gall. 1, 2, 4), *INSIGNEM CALAMITATEM populo Romano intulerat* (ibidem 1, 12, 6).

marks and differentiates this modifier. In all the languages in question the usage of the customary word order is not a rigour, as we have stated, and it may undergo alterations. The subject in many languages as 'prima imposito' stands in the first place, but it may occupy other places. Let us adduce a Latin example: *Obstipuit primo aspectu Sidonia* DIDO (Verg. Aen. I, 613) or the German ones: *Ziehn DIE SEGEL, ziehn DIE hohen WOLKEN, jauchzen an dem Ufer alle FREUNDE Hoffnungslieder nach* (Goethe 'Seefart'), *Doch wandelt unten an dem Bach DAS treuste WEIB der Erde und, seufzet leise manches Ach* (Goethe 'Das Blümlein Wunderschön').

Inasmuch as the subject, predicate and other modifiers are not marked by any indicators in the systems of languages, we see, however, an interesting and almost stupendous fact that sentences and clauses do possess their language signs, thus they are constructions which we had formerly called forms. The formalizing function in sentences and clauses is performed above all by conjunctions. By this marking system there are brought into relief several components of a compound sentence. This occurs both in the parataxis as in the hypotaxis. For instance the conjunction *and* signalizes an independent relation of two clauses and therefore the additive (cumulative) one, the conjunction *but* appears in an adversative (contrasting) clause. In the same way the indicators *when, while, after, before* signalize a hypotactic adverb clause of time, the markings *though, albeit* express the function of concessiveness.

As has been said formerly, the subject, predicate and modifiers in a great number of languages are not a grammatical but a logical phenomenon, nevertheless I have succeeded in finding a language in which the subject and the predicate do have their special language indicators and other parts of the sentence are also marked but by one common indicator. This phenomenon appears in the group of Malayo-Polynesian languages, where there are languages which possess many phenomena, curious and interesting for general linguistics. I have not observed this fact in the most investigated languages of this group, above all in Malayan, in Malagash (Madagascar), nor in the most south and eastward advanced Maori language of New Zealand. The phenomenon in question appears, however, in the Tagalog languages (wikang tagalog), one of the main languages of the Philippines.<sup>6</sup> Here the subject receives the formal

<sup>6</sup>Studying this problem one may use the following compendiums on the Tagalog language: (a) grammars: R. Alejandro, *A Handbook of Tagalog Grammar*, Manila 1963; F.R. Blake, *A Grammar of the Tagalog Language*, New Haven 1925; (b) vocabularies: S. Laktaw, *Diccionario tagalog-hispano*, Manila 1914; J. Pangani-ban, *English-Tagalog Vocabulary*, Manila 1958, For the analysis of texts there is of great use the work: L. Bloomfield, *Tagalog Texts with Grammatical Analysis*, Illinois 1917.

element *ang*, and proper nouns are marked by the indicator *si*. Exceptionally pronouns are not marked by any indicator. Let us quote examples.

1. The subject is a noun: ANG PARUPARÓ *ay may-kulay* 'The butterfly is many-coloured' (*paruparo* 'butterfly', *may-kulay* 'many-coloured, variegated'), SI PEDRO *ay gumawâ sa pagauaán* 'Peter works in the factory' (*gumawâ* 'to work' *sa* locatival indicator, *pagauaán* 'factory, works').

2. The subject is a pronoun: SIYÁ *ay makatá* 'He is a poet' (*siyá* 'he, she', *makatá* 'poet'). Here we do not see any subject indicator.

3. The subject is an adjective: ANG MASIPAG *ay laging nagtatagumpáy* 'The laborious will always succeed' (*masipag* 'laborious').

4. The subject is a numeral: ANG ISA *ay naparito* 'One is here' (*isa* 'one').

5. The subject is a verb: a, in an infinitive: ANG MAG-ARAL *ay mahirap* 'To learn is difficult' (*mag-aral* 'to learn', *mahirap* 'difficult'), (b) in a participial function: ANG UNAAWIT *ay ibon* 'The singing (that which is singing) is a bird' (*umaawit* 'singing', *ibon* 'bird').

6. The subject may be a whole differentiated phrase: ANG PARA SA MGA SUGATÁN *ay agád mong ipadalá* 'That, which is for the wounded should be sent away by you without delay', where the phrase *ang para sa mga sugatán* (*para sa* 'for', *mga* plural indicator, *sugatan* 'wounded') plays the role of the subject.

The predicate possesses the marking *ay*. It is, strictly speaking, a linking element which joins the subject with the predicate, because it appears between them: *Si Huwan AY BUMABASA ng aklat* 'John is reading the book' (*bumabasa* 'reads', *aklat* 'book'). It is worth noting here that the element *ay* should by no means be translated as a European linking verb (*to be*), because in the above sentence there appears a full finite verb *bumabasa* which needs no copulative verb. Besides a simple predicate we have in Tagalog also compound predicates corresponding to the English constructions: *John IS A DISCIPLE*; *John IS GLAD*. Such a predicate is also denoted with the indicator *ay*: *Si Marya AY BABAÍNG nag-aaral* 'Mary is a student' (*babae* 'woman', *NAG-AARAL* 'she-student'), *Si Marya AY MAGANDÁ* 'Mary is beautiful' (*maganda* 'beautiful'). *Ang sumulat ng aklat na ito AY SI JOSÉ RIZÁL* 'This who has written this book is José Rizal.'<sup>7</sup> The predicate may also be a possessive pronoun corresponding to the European absolute possessive form (French: *il est LE MIEN*, Span-

<sup>7</sup>José Rizal, an outstanding Philippine scholar, artist and writer (1861-1896).

ish: *él es mío*, English: *he is MINE*): *Ang babay na itó na may hálamanán* AY AMIN 'This house with the orchard is ours' (*babay* 'house', (*na*) *itó* 'this', *na may* here a sociative construction, *hálamanán* 'orchard', *amin* 1. plur. from the exclusive pronoun *kami* 'we').

Finally, the other modifiers are attached to their syntagmata by means of the indicator *ng*, with proper nouns by aid of the element *ni*. When the word order is inverse, the element *ng* takes on the form *na*.

Note examples of Tagalog constructions which correspond to English appositions or adjective complements: MALAKÍNG *salid* 'a large room' (*malaki* 'great, large', *salid* 'room'), HAMÓG *ng umaga* 'morning dew' (*hamog* 'dew' *umaga* 'morning'). *tulay* NG DAAMBAKAL 'railway bridge' (*tulay* 'bridge', *bakal* 'iron', *daam* 'way'), *ang damit* NI HUWÁN 'John's clothes' (*damit* 'clother').

Let us adduce further examples of direct and indirect objects, with the usual element *ng*, *Si Huwán ay gumauâ* NG BAHAY 'John has built the house' (*gumauâ* 'to make'). We may state the identity of the indicators of the object and the adjective complement: *Si Huwan ay gumauâ* NG MALAKING BAHAY 'John has built a large house' (*malaki* 'large'). *Ang tubó ay inaani* NG GULOK 'sugar-cane is being cut down with the gulok = a sort of knife', (*tubó* 'sugar-cane', *inaani* 'to cut' with the instrumental prefix *i-*), *takpán ang mukhâ* NG MGA KAMÁY 'to bury one's face in one's hands' (*takpán* 'to hide, conceal', *mukhâ* 'face', *kamáy* 'hand').

If in the Tagalog language we have incontestable evidence that the language system may possess means for marking the subject, predicate and modifiers, it would be groundless to pretend that the Indo-European languages do the same. The formalism of the subject, predicate and modifiers of our European languages is but our own illusion. In language they do not exist, but only in our thought. But let us ask what may be the cause of such an illusion? This error may be traced back to the grammatical schools of Greek and Roman antiquity, whence it is expanded, having subdued the grammatical thinking of Europe and governed it during many centuries. This illusion consists in the fact of non-differentiating logical categories from grammatical ones. For we must not forget that the first grammarians of Hellas and Rome were philosophers and logicians and the groundwork for grammar was laid by Aristotle in his 'Categories' and in the treaty *περὶ ἑρμηνείας*. The Hellenic era has brought forth Plato, the highest efflorescence of idealism, who to ideas abiding outside things imputed an independent existence. I think the lesson the Tagalog language gives us is very valuable. We cross here the dangerous threshold between logic and grammar. We should always

be able to wade through threatening Scylla and Charybdis of logic and to bring in into our investigations only the pure gold of language facts. The logical thought of man creates diverse categories, but only part of them language owns to its system. A splendid example within the scope of the case category is Hjelmslev's coherence and incoherence.<sup>8</sup> Examining the four fundamental human space orientations: *before* – *behind* – *over* – *under*, Hjelmslev justly says that only *over* shows a differentiation between coherence ('on, upon') and incoherence ('over'), while the other three orientations do not display such bipartition. There is not in human languages a coherent and an incoherent *under*, there is only one common *under* not liable to such a bipartition. Hjelmslev does not answer the question, why matters so stand, but it is to me quite evident. The construction of our world, the Newtonian gravitation, owing to which bodies fall, brings about this phenomenon. Although logical thought suggests to language that a coherent *under* might be created, language refutes it. A coherent *under* is needless, inasmuch as objects mostly fall away from the lower surface and on the contrary they are recumbent on the upper one. We Europeans have made everyone believe that there is a subject or a predicate as a language category, just as we could have made believe that there are coherent *under*, *before* and *behind*, though they really do not exist in human languages. Matters may also stand quite contrariwise, namely language may create superfluous categories, needless to logic. How many such categories there are in language! For instance the Pythagorean ἀριθμός, acknowledged by this philosopher as the main bond of the universe, is in Indo-European and Semitic languages expressed unpractically, because binarily. It is not compatible with reasonable economy that the number is expressed once precisely in the system of numerals and for the second time less strictly and needlessly in the grammatical number: singular, dual, plural. The Ural-Altaic idioms do not have such inaccuracy. I think that we should strive to investigate language only in a language mirror and to eliminate every side-reflex, since it might impose on us a false picture, far from the objective truth, being but a mirage of fata Morgana.

<sup>8</sup>Opus citatum, II, pp. 129-130.