HOW UNIVERSAL ARE LINGUISTIC CATEGORIES?
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ABSTRACT

From the arbitrary (though sensible) definition of language as "a (phonic) system used to say something about someone or something" it follows that to say (i.e. to predicate) something about someone or something (i.e. about entities or states of affairs conceived in our mind) belongs to the basic activities of our brain. In Edward Sapir's words «There must be something to talk about and something must be said about this subject once it is selected» (Sapir 1921; repr. 1949: p 119).

If we understand the Aristotelian terms hypokeimenon and kategoreimenon (Lat. subjectum and, respectively, pradicatum) not in the grammatical meaning they acquired in the Western grammatical tradition, but—in a functional sentence perspective—as 'topic' and 'comment', or 'theme' and 'rheme', we may affirm that they constitute the basic sentence structure, the essential part for the semantic interpretation of the sentence. Consequently, many linguists see NOUN and VERB as universal categories that all languages must have. But the discussion concerning whether the distinction NOUN/VERB is valid everywhere, for instance among the Iroquoian languages, is far from being settled. At the other hand of the extant typological structures the same could be said for the so-called precategorial languages of South East Asia, where the functional value of a word (and hence its categorial status) is often determined only by its syntactic context (see Walter Bisang's many contributions on the subject).

We need multiple criteria in order to assign a category to a lexeme—or, better, a given lexeme to a category. Accordingly, the present paper tries to make a distinction between semantic function and morphosyntactic functioning of words and shows that both viewpoints are necessary and complementary in order to define the linguistic status of a word. The concept of 'tertium comparationis' will help to clarify the point.

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Thus an account of the organism’s ability to categorize transcends linguistic theory. It is central to all cognitive psychology’, Ray Jackendoff, *Semantics and Cognition*, 1985:77.

In order to give a historical dimension to the question included in the title of the present paper it may be useful to start by a quote from the Latin grammarian Priscian (5th-6th cent.; cp. Vineis 1998): *Partes igitur orationis* [i.e. of the sentence] *sunt, secundum dialecticos duae, nomen et verbum: quia hae solae, etiam per se contunctae, plenam faciunt orationem: alias autem partes, syncategoriemata, hoc est consignificantia, appellabant* (Prisciani Institutio de arte grammatica, lib. II, 2). ‘*Plena oratio*’ means meaningful sentence, self-sufficient utterance. The classical tradition often did not distinguish between form and function: see for instance the double meaning of *rhêma* as “verb” and as “predicate”, or *ônoma* as “noun” and “subject” (cp. Ramat 2005: 87f.; see also below). This classical tradition went through the centuries as testified, for instance, by the following dialogue fragment from Horne Tooke’s famous *Diversions of Purley* (1786, quoted by Aarts 2006: 367f.):

Beadon: Well. *For the present confine yourself to the necessary Parts: and exemplify in the English.*

Tooke: *In English, and in all Languages* [my emphasis], *there are only two sorts of words which are necessary for the communication of thoughts.*

Beadon: *And they are?*

Tooke: 1. *Noun and 2. Verb*

It can be seen that in Tooke’s view, ‘noun’ and ‘verb’ are basically considered from a functional more than a syntactic viewpoint, in other words, more as topic and comment, theme and rHEME, rather than as grammatical categories.

That NOUN and VERB (hereafter N and VB) are universal is maintained even in nowadays discussions. I will limit myself to quoting Chomsky’s paper on nominalization (Chomsky 1970) where N and VB are implicitly considered as the essential syntactic features, on the basis of which even the other major categories can be defined: ADJ is [+N,+VB], PREP is [-N, -VB] and, of course, N is [+N,-VB], while VB is [-N,+VB].

Conversely, we find the relativistic position expressed among others by Benjamin Lee Whorf in a well-known passage, which deals precisely with substantives and verbs:

“The Indo-European languages and many others give great prominence to a type of sentence having two parts, each part build around a class of word --substantives and verbs-- which those languages treat differently in grammar [...] this distinction is not drawn
from nature; it is just a result of the fact that every tongue must have some kind of structure, and those tongues have made a go of exploiting this kind. The Greeks, and especially Aristotle, built up this contrast and made it a law of reason [...] Our Indian languages [Hopi, etc.] show that with a suitable grammar we may have intelligent sentences that cannot be broken into subjects and predicates. Any attempted breakup is a breakup of some English translation or paraphrase of the sentence, not of the Indian sentence itself”, Whorf 1956:241.

The discussion between universal formalism and relativistic functionalism has been taken up again in very recent times, in the frame of cognitive linguistics on the one hand, and linguistic typology on the other. Cognitive linguistics is concerned with how grammatical strategies are tied to more general cognitive capacities and more general cognitive processes (of categorization), thus making the generativists’ hypothesis of a Universal Grammar ‘ad hoc’ and redundant (see, among others, Tomlin 1997:164; Tomasello 2003 and 2004, and the thorough discussion by Newmeyer on possible and probable languages: Newmeyer 2005).

However, this is not the place to open up again the long-lasting debate between relativism and universalism in the language theories. As I shall conclude at the end of the present paper, I believe that the two positions are not irreconcilable: it is possible to find a common ground for agreement if we accept a prototypical approach to linguistic problems. In fact, Greenberg’s famous probabilistic phrasing which is also the general title of this Conference, “with more than chance frequency”, hints at the possibility of inductively drawing universal conclusions from the observation of real language facts (“faits de langue”).

Thus, let us go back to the linguistic discussion ‘stricto sensu’ alluded to at the beginning of the present paper: typology has shown that the functions of subjects (in the sense of AGENTS) and PREDICATEs may be expressed by very different strategies in different languages, while to say (i.e. predicate) something about someone or something (i.e. about entities or states of affairs conceived in our mind) does in fact belong to the basic activities of our brain. One of the possible definitions of language is indeed: “language is a (phonic) system used to say something about someone or something”, or, in Edward Sapir’s words «There must be something to talk about and something must be said about this subject once it is selected» (Sapir 1921; repr. 1949: 119; see Gaeta 2002:20). If we understand the Aristotelian terms hypokeimenon and katēgoroûmenon (Lat. subjectum and, respectively, praedicatum) not in the grammatical meaning they acquired in the Western grammatical tradition, but—in a functional sentence perspective—as ‘topic’ and ‘comment’, or ‘theme’ and ‘rheme’, we may affirm that they do constitute the universal basic sentence structure, the essential part for the semantic interpretation of the sentence.

Having distinguished between semantic functions and morphological forms, we may accept that the same semantic function be
implemented by different morphs. Thus, we should not inquire whether theme and rheme, topic and comment are universal notions but rather discuss whether grammatical categories such as NOUN, VERB, ADJECTIVE etc. may be considered as language universals.

At the phonological level we know that in a vowel system with three vowels the most generally diffused opposition is /a/ ~ /i/ ~ /u/, whilst in cases where there are just two vowels the generally diffused opposition is between a low central vowel and a high one (as in Yimas, Papua New Guinea: see WALS : Maddieson 2005:14). Exceptions to such generalisations are always possible. But at the phonological level we are dealing with physical objects (sounds) which can be accurately described in acoustic and articulatory terms. In Italian the [i] of ionio, iodo is phonologically and phonetically different from the [i] of piccolo, bambino etc., though nowadays they are written with the same grapheme ⟨⟩ (even if until the 19th century it was usual to write noja, bujo and even studj, the plural of studio). However, an [i] is an [i], i.e. a highly fronted palatal vowel, in all languages of the world where it exists, whereas a [i] is a [i], i.e. a fronted semivowel in all languages of the world where it exists (were this not true, the IPA would be useless!). Accordingly, we may conclude that [i] and [i] are sounds which can be realized in every human language, even if an implicational relation of the type [i] ⇒ [i] could be affirmed.

This seems not to be the case when dealing with notions such as NOUN, VERB, ADJECTIVE etc. (which belong to the theory of grammar and its implementations). One cannot have the physical perception of a noun in the same way one physically perceives an [i]. Concepts such as Ns, VBs, ADJs are not physical objects, although they are physically realised by sounds: they belong to a different level. We can tentatively define an ADJ as a lexeme which (among other properties) assigns a quality to a referent and therefore modifies a head noun: the noun’s white house; Ramat 2005:77). But this property is also shared by participles, which belong to the verbal paradigm:

1. La notte passata non sono andato a letto “Last night I did not go to bed”
2. Le notti passate non ho chiuso occhio “During the last nights I did not sleep a wink”

Notoriously, Japanese ADJs ending with -i have been considered as VBs:

3. ano tatemono wa takai
   this building TPC high i.e. “this building is high”

According to Bhat (1994:199) “Japanese […] does not belong to the group of languages in which adjectives form a distinct category” This point has been discussed and refused by Lombardi Vallaum (2000) who assigns both types of ADJs − the -i-ADJs as well as the -na-ADJs—to a class to be distinguished both from VBs and Ns, according to a series of parametric features which include also the syntactic order.
The -i-ADJs (partially overlap with VBs, the -na-ADJs with Ns and both, -i-ADJs and -na-ADJs, share some morphological, syntactic and semantic properties, which allow us to speak of a class on its own. Both express properties, whilst VBs designate processes, activities or states and Ns designate things, mental or physical entities (Lombardi Vallauri 2000:333).

All in all the Japanese situation is not qualitatively different from what can be observed for participles: participles behave like ADJs on the one hand (ex.s (1) and (2), above), but, on the other, they may have a clearly verbal function as in

(4) *La notte è passata (*passato !) "the night is over",
(5) *Ha passato(?-a) tutta la notte senza dormire "(s)he has not slept all night long"

Even without an AUX the participle may keep its verbal value:

(6) Passata la notte, smise di piovere "When the night was over it stopped raining".

Notice the difference between (6) and (1), i.e. between the adjectival and the verbal value of the very same form.

Consider now compounds such as (a/the) fireplace or (a/the) fireman. The heads of the compounds are place and man, respectively—exactly as is house in the NP (a/the) white house and in those forms which became proper names, written as a single word, such as Whitehall, Whitehorse etc. It follows that in order not to consider fire as an ADJ (on the basis of its constructional parallelism with Whitehorse)—which would sound rather counterintuitive—we have to take account of formal as well as semantic-functional criteria. Even limiting ourselves to English, where ADJs do not show agreement with their head nouns, from a morphological point of view fire cannot have a comparative nor a superlative degree, which is a property of prototypical ADJs (cp. whiter, whitest: see below). Moreover, we can have fires (Plur.), but not *whites. On its turn, from a syntactic point of view, white cannot be the head of an NP, unless it is substantivized via a syntactic device as the insertion of a DET:

(7) The brilliant white of the flowers.

It is well-known that from the content point of view we may have nominal constructs which have a verbal function and vice versa. Giuliana Fiorentino (2004) has correctly spoken of Action Noun Constructions as ‘substitutive strategies’ for verbal predicates, as in

(8a) The destruction of the city by the enemy was terrific

versus

(8b) The enemy destroyed the city in a terrific way.
On the other hand, it is well-known that also Infinitives may be substituted by Action Nouns (nomina actionis), especially in agglutinative languages, whereas fusive languages seem to prefer infinitive forms which belong more strictly to the verbal paradigm (cp. Sgall 2006: 410-417).

Cross-linguistic data, as well as (neuro)psychological tests concerning linguistic production and comprehension, lead to the conclusion that the distinction between nouns and verbs is not neatly dichotomic but may be thought of as a continuum between two poles (cp. for a psychological-cognitivist approach Laudanna / Voghera 2006:xiiif., with references. For a more linguistically oriented approach see, e.g., Simone 2003 and 2004 who has studied the Arabic ‘al-\textit{maṣdar} construction.). Remember Benveniste’s (1950–1966) statement that the difference between Ns and VBs has to be sought not in an opposition between ‘things’ and ‘processes’ but between two ‘viewpoints’ of the same state of affairs, in their variable form and their invariant referential function, as in (8a) and (8b).

By speaking of infinitives and action nouns we are on the verge between two different categories, as in the case of ADJs and participles, and one might wonder why in the Latin grammars the forms in \textit{bilis} such as \textit{solubilis “that can be solved, untied” or laudabilis “praiseworthy”} are not included in the verbal paradigms of \textit{solvere} and \textit{laudare} whereas in the Greek grammars the so-called ‘verbal ADJs’ (like \textit{lytόs “untied, solutus”} and “that can be untied, soluble”, \textit{lytόs “that has to be untied, solvendus”}) are quoted among the verbal forms: where is the difference?

The discussion about what is a paradigm would lead us astray and too far from the main topic of this paper. What can be said from a general point of view is that the concept of prototype can be applied also to the notion of paradigm: on the basis of the examples quoted above we see that there are forms which belong to the core of the verbal paradigm (say the 1st person of the active indicative present) and more peripheral forms which may share some features with members of different categories (e.g. the Latin gerundives and participles that show an adjectival agreement with their head noun in gender, number and case). This is not detrimental to the fact that VB and ADJ build up two different categories, each of them being prototypically characterized by a certain set of features.

As we shall see below, the categorial properties of a category (say ADJ) belong to different levels of the linguistic organization (semantic-functional, morphosyntactic, pragmatic etc.; see Laudanna / Voghera 2006:xiiii).

In a previous article on the universality of grammatical categories (Ramat 1999, expanded in Ramat 2005: 68-73) I noted that a given category may be lacking in a language, and quoted from Schachter (1985: 15) the case of Hausa where there exist very few ADJs: in order to say “a kind person” this language says

(9a) \textit{mutum mai alheri}
person having kindness;

or in the predicative function:

\[(9b) \text{yana da alheri}\]
\[\text{he.is with kindness: "he is kind"}\]

The syntactic as well as semantic function of a lexeme is defined by its position within a construction.

In spite of these considerations which seem to lead to an absolute relativity of categorial concepts such as VB, N, ADJ etc., I believe that VB, N, ADJ etc. are universal categories and good tools of analysis for all languages. Björn Wiemer and Walter Bisang write as follows in their introduction to a volume on grammaticalization:

The requirement of linking semantic properties as they are represented in semantic maps with clear-cut formal criteria as manifested in constructions is not recognized (nor accepted) in category-based approaches, Wiemer / Bisang 2004: 7.

The (almost total) absence of the category ADJ in Hausa does not impinge on the existence of the category at the theoretical level. A quote from what Coseriu said on the occasion of the 11th International Congress of Linguists in Bologna may clarify what is meant here:

...si l’on définit universellement un adjectif, ceci ne signifie aucunement que l’on attribue l’adjectif à toutes les langues, puisqu’une définition n’est pas un jugement d’existence, Coseriu 1974:49.

Furthermore, the implementation of the category ADJ may be different in different languages: there may even exist languages which do not have the category at all (and this is indeed the case), or languages whose adjectives lack some of the prototypical features. Even inside one and the same language there may be more or less adjectival lexemes (as is the case with participles).

But categorization is a cognitive process of systematisation of what we experience and know (see the quote from Jackendoff at the beginning of this paper). When we come across something new in our worlds, we want to assign it to some already known set of material entities or abstract concepts (cp. Aarts 2006:361). Therefore, it makes sense even for linguists to try and assign a linguistic element to a class of already known elements on the basis of shared properties or similarities.

Several kinds of criteria have been and are considered for the identification of lexical categories. Judgements are often made on the basis of meaning first. Words designating (material or mental) objects are labelled as Ns whereas words referring to states of affairs (including actions, events) are labelled as VBs. But we have already seen that also the morphological structure has to be taken into account, though markers such as gender, number, cases may be shared by VBs, Ns,
ADJs and even PROs. Finally, one has to consider also the syntactic slots a lexeme may fill in in a sentence. The three criteria may lead to different results even inside the same language: what might be identified as a verb on formal morphological grounds might have on the basis of its syntactic behaviour the semantic function of a noun to designate objects (that can be [+ abstract]):

\[(10a) [\{il_{DET} \text{ fumare}_{INF}\}_{NP} \equiv il_{fumo}_{NP} \text{ danneggia gravemente la salute}\}_{VP},\]

whereas in

\[(10b) [\text{fumare} \text{ danneggia gravemente la salute}\}_{VP}\]

\text{fumare} is a bare verbal form with the same SUBJ function as \text{il fumare}, but syntactically cannot be labelled as NP.

Tahitian \text{ao} may mean both “day” and “it’s getting light”, but in the sentence

\[(11) \text{‘ua ao}\]

the aspectual morpheme ‘\text{ua} marks beyond any doubt \text{ao} as having a verbal function (cf. Lazard / Peltzer 2000:63f.).

Among the isolating languages, it is well-known that the languages of (South)East Asia have lexical items which can be considered precategorial in the sense that they do not belong to any particular morphosyntactic category and show strong distributional versatility: it is the pragmatic context with its argument structure that disambiguates their function in discourse (see Bisang, forthcom.). This is not the norm in (old) Indo-European languages which show a strong morphological array: difference of form entails in these languages category difference (e.g. \text{fun} vs. \text{funny}), though identity of form does not entail categorial identity (e.g. \text{clean} \text{VB} and \text{ADJ}). Bisang writes that “there are no obligatory grammatical categories in East and mainland Southeast Asian languages” and quotes the following Late Archaic Chinese example (Bisang 2006: 589)

\[(11) \text{wō}_{1} \text{bù jiàn tā}_{2} \text{yǐ} \text{shì sān shí wǔ nián;} \text{jiǎn tā}_{1} \text{jiàn tā}_{2} \text{le}\]

\text{I NEG see he already be 30 more year; today see PF}

“I haven’t seen him for more than 30 years. Today [I saw [him]]”

where the two arguments “I” (\text{wō}) and “he” (\text{tā}) are dropped in the second clause. Obviously, this is not meant as a counterargument to the existence of the PRO category in Chinese. Needless to say that lexeme precategoriality or ‘categorial flexibility’, as Stéphane Robert (2004: 138) calls it, does not impinge on the existence of categories in general. In conclusion, we have to distinguish between categories as theoretical concepts which represent abstractions used by the linguist in his/her analysis and practical, real implementations of these concepts. The former are universal and valid for the analysis of all languages (and
indeed we speak of 'verbiness' or 'nouniness' also for those languages which do not show a clear-cut distinction between VBs and Ns; cp. Ramat 2005:87). The latter may be idiolinguistic or shared only by a certain number of languages.

In sum, between the absolute relativism of the Sapir-Whorf Hypothesis and the assumption of a Universal Grammar there is – I think – a third way of approaching the problem.

The gradient character of the linguistic categories with core representatives and more peripheral items is more and more recognized by many linguists. What Croft (1991) considers 'transitory categories' such as the auxiliary verbs are just intermediate stages in the process of transcategorization (think for instance of ADJs used as ADVs such as Germ. schnell, It. veloce etc.: Ježek / Ramat, forthcom.). Some forms may reach the endpoint of the transcategorization process as is the case with participles becoming nouns (e.g. Hung. költő “poet”, elárusító “shop-assistant” from the verbs költ “to create” and elárusít “to sell”, It. cantante “singer”, calmanente “painkiller”) others do not, as is the case for schnell and veloce; others may even stop the transcategorization process (see for instance Old It. uomo “man” used as indefinite pronoun just as French on, Germ. man. Nowadays, however, the indefinite use of uomo does not exist any longer: it has been substituted by the si-construct as in si parla italiano (vs. Fr. on parle italien, Germ. man spricht Italienisch) and (u)omo has kept just its nominal meaning (see Giacalone Ramat / Sansò, forthcom.). If we consider the diachronic dimension there is no need of introducing new categories, which would lie between N and PRO: we have simply to observe that recessivity is always possible. Along with developments N > N/PRO > PRO we may have also N/PRO > N.

Like Ockham (1258-1349) I deem that ‘entia non sunt multiplicanda (praeter necessitatem)’: the old, traditional categories, if considered both formally and functionally, are good enough to cross-linguistically account for parts-of-speech and their transformations.

I began this paper by quoting the Latin grammarian Priscian. Now I would like to conclude by referring to Thomas of Erfurt, the modista of the 14th century, who considered pre-linguistic concepts to be an amorphous substance which acquires linguistic form only when it acquires a 'modus significandi', i.e. when it is assigned to a grammatical category.
Abbreviations

ADJ Adjective
AN Action Noun
AUX Auxiliary
DET Determiner
INF Infinitive
N Noun

NP Noun Phrase
PF Perfect
PREP Preposition
PRO Pronoun
TPC Topic
VB Verb
VP Verb Phrase

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1 This holds also for the semantic level where there have been attempts to find ‘semantic primes’, i.e. universal notions which cannot be defined in terms of higher primitive concepts and are expressed in every language: suffice to remember Anna Wierzbicka’s studies on ‘Natural Semantic Metalanguage’ (e.g. Wierzbicka 1996; see also Goddard 2001). But this is not the place to afford the discussion on the validity of semantic universals. It must be noted, however, that recent studies of body parts’ nouns, which one would be inclined to consider as best candidates to universality, have shown that they are in fact subject to different linguistic categorisations and language-specific principles: see Language Sciences 28 /2006, special issue “Parts of the body: cross-linguistic categorisation”, ed. by N.J. Enfield, A. Majid and M. van Staden. (with Wierzbicka’s reply: 2007).

2 E.g. bakana hito “stupid person”

3 Indeed, the name the ancient grammarians gave to this particular form of the verbal paradigm, namely metochē “participation, sharing”, calqued in Latin as parti-cipium, refers to its double function (on the mixed, non-prototypical character of the participles see Pompei 2006). Already this name contradicts the Aristotelian ‘all-or-none’ definition of kategoría according to which ‘tertium non datur’, as maintained by Frege [“The law of excluded middle is really just another form of the requirement that the concept should have a sharp boundary”, Frege 1903 > 1997: 259, quoted in Aarts 2006:364]: in other words, an element (also a word) must
belong to category A or to category B (cp. Ramat 2005: 87.). On the difference between categorial concepts and their implementation see below.

iv Note, however, that (8a) is not a complete sentence without was terrific, whereas (8b) is a complete sentence also without the specifying modal in a terrific way. This means that there are constraints in the use of different constructions and that, consequently, constructions have their own meaning.

v Contrast Turk. gimem lazum, lit. my go is necessary, with its Engl. translation "I must go, I have to go".