Productivity and Creativity

Some remarks on the dynamic aspects of language

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I

The conception of language as one single closed system shared by all members of a monolingual society and consequently completely present in and completely mastered by each adult individually is now generally recognized as being inadequate. Such a conception is too static, too monolithic and too simple. Too static, because it is unable to explain why a language has the flexibility to adapt itself to and to cope with the ever-changing communicative and cognitive needs of society and its members. Too monolithic, because it does not take into account that a language is a delicate mechanism in which systematic and obligatory features of phonology and grammar interact with essentially non-obligatory semantic and grammatical devices which permit the user of language to engage in a productive and creative activity without jeopardizing successful communication. Finally, this conception is too simple, in at least two respects. First of all it presents a simplified account of the way language actually functions by suggesting that it can function independently of extra-lingual knowledge, that is knowledge which speaker and hearer have of the speech situation, of each other, and more generally of the world and the society in which they live.

Secondly, this conception operates with the simple view that in society the position of each individual member towards his language is basically the same, whereas in fact it displays a variety determined by social factors and by individual differences in linguistic skills.

It is the aim of this short paper to take a closer look at the dynamic nature of language by examining the productive and creative devices available to a native speaker, as I have the impression that they are still insufficiently appreciated in many quarters. I believe that such an examination may form a fitting tribute to my friend and colleague Professor Eugenio Coseriu who has shown himself fully aware of the importance of those devices. This was proven already many years ago, for instance by his article on metaphorical creation in language, first published in Spanish (1956), later translated into German (1971), but still in need of an English translation, in view of the fact that numerous linguists take cognizance only of what is written in English.

II

Since KARCEVSKY'S Système du verbe russe (1927) and, even earlier since the Neo-grammarians (BYNON 1978: 114), the concept of productivity has been recognized as being indispensable in the study of morphology. In all morphological research, diachronically or synchronically motivated, it is considered to be of prime importance to determine what is productive and what is not. Productive categories are characterized by natural expansion: new words can be and are being made by the speaker largely without any awareness that a new, previously nonexistent item is being produced, while the hearer for his part unhesitatingly accepts and understands it, again without any feeling of strangeness or newness. Although morphologically productive processes may be of a quite different nature (transpositional processes: dark (adj.) — darkness (noun), non-transpositional processes: Dutch ui, onion — uitje, small onion(both nouns), compounding and various mixed processes) one may say that the main function of these processes is to give the user of language the means to expand the lexicon without unduly burdening his memory. This is not to say that all speech communities and all individual users of language will show the same readiness to apply these processes in actual speech; some communities and some individuals are more conservative than others and prefer to cling to those items which already have a well-established position within language, only rarely daring to make use of the morphological potential of their native language.

One might consider people who are able to exploit the morphological potential of their language to be creative speakers, but the term «creativity» can better be reserved for those cases in which a speaker makes new words on the basis of improductive formations. This is known to happen occasionally. It is true that not all such new words are made on purpose. Sometimes they are made out of ignorance and are simply errors. However, in most cases, new words of this type are consciously made with the intention to create some sort of special effect. Poets, writers and in general all people who have a strongly developed linguistic awareness, and who might be called players of language games (not in the Wittgensteinian sense, of course), such as journalists, writers of commercials or advertisements, entertainers, cabaret artists and even sometimes linguists, are especially creative in this respect.

A good example recently produced by a linguist is the word *iffyness*, (BINNICK 1976: 217), the result of a double process of transposition: first of a noun formed on the basis of the adjective *iffy*, itself based on the conjunction *if* which, like all other conjunctions, but unlike nouns, normally does not allow such a transpositional formation of the type *leaf*: *leafy*; *silk*: *silky*; *room*: *roomy*; *bush*: *bushy*; *nut*: *nutty*.

In contrast to words which are the result of the application of productive processes, words such as *iffyness* pose an interpretive problem to the hearer or to the reader. The speaker or writer presents some sort of challenge to his speech-partner. The special effects he aims at may be quite diverse. He may want to be facetious, or it may be that the newly coined word has an archaic flavor which is felt to be especially apt under certain circumstances or in a certain line in a poem. In the Binnick-case the author was clearly in need of a noun for a property of certain English verbs for which no term had yet been proposed. It seems reasonable to assume that both types of word-formation occur in speech everywhere. The normal expansion follows a number of easily identifiable and in principle exhaustively describable patterns, but the other type, which is the result of conscious reflection by the native speaker on his language, is erratic, creative and therefore essentially unpredictable.

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If one goes from morphology to syntax and from syntax to semantics, one notices that obligatoriness decreases while the possibilities of creative linguistic action for the native speaker increase. As to syntax, there is first of all combinatorial freedom on the level of word-grouping. There is, in English for instance, within a word-group with the structure: /article + adjective + noun/ freedom of combining any member of the class of adjectives (definable by morphological criteria) with any member of the class of nouns (again definable by morphological criteria).

This is not generally realized. On the contrary, there are still many linguists who believe that the quest for selection restrictions is not an idle one, in spite of the lack of agreement among native speakers about the restrictions proposed so far. Others even take the existence of selection restrictions for granted, relying on their so-called intuition as native speakers and on their actually limited ability to survey the whole gamut of possible combinations. In view of what he wrote some years ago, it seems that Langendoen belongs, or at one time belonged to this last category of linguists. Arguing against Halliday he stated that the English adjectives strong and powerful «may be collocated with the noun argument, but only strong may be acceptably collocated with *tea*, while only powerful

goes naturally with car. Expressions such as a strong car and powerful tea are relatively unacceptable vis-à-vis a powerful car and strong tea» (LAN-GENDOEN 1969: 400). Langendoen is careful not to rule out completely the possibility of groups like powerful tea and a strong car. They are only said to be less acceptable and less natural. The observational weakness of this conclusion lies in the use of these words. What criteria are there for deciding whether a certain combination is natural or acceptable? For one who has witnessed and experienced, as in fact I have, that even very weak tea may have a disconcerting influence, comparable to alcohol, on prisoners of war with an empty stomach, it is perfectly natural and acceptable under these circumstances to exclaim: this tea is really powerful! or I don't like this powerful tea! Instances like this one prove that it is on principle impossible for a native speaker to decide a priori what a natural combination is and what not, because the naturalness changes with the circumstances, and the circumstances cannot be surveyed in their endless variety. But even if they could be surveyed, tempora mutantur, nos et mutamur in illis. Human society is far from static. Therefore the world around us and in us can only determine in an arbitrary way what linguistic combinations are allowed and what are not. A vardstick based on considerations about the world today, will have lost whatever validity it may seem to have, by to-morrow (see for comparable views: COSERIU 1970, GECKELER 1977), Langendoen's view contains a denial of one of the creative possibilities of language. And this is not a minor point. As Willy Haas has said: «It is the root problem of linguistic analysis to explain the obvious ability we have of saying what has never been said before and understanding what we have never heard before» (HAAS 1969: 116-117). Part of the answer to that question, but only a part, is this universal principle of freedom of combination within the syntactic structures of a language.

It is of course not our intention to deny that certain combinations have become very common and are more frequently used than others. But common is to be equated neither with natural, nor with acceptable. Nor does it indicate a limit. In an interesting article Lipka observed that «a criminal court is certainly not criminal, but deals with crime, (while) a criminal lawyer may be either» (LIPKA 1971: 217). I believe that the word certainly in this sentence should be replaced by usually, because the possibility remains open for an English speaker to use a criminal court for a court that is criminal and not merely a court which tries criminal cases.

It is also not our intention to deny the universal fact that certain combinations may have become fixed collocations with a meaning, no longer synchronically derivable from the meaning of its components: *a queer fish, a strange customer.* However, it should be borne in mind that the components of all idiomatic expressions which are still individual words in the language, may still form combinations made up *ad hoc* by a native speaker. Idioms do not basically affect the freedom of combination; for instance a speaker may still say: John kicked the bucket, when a real bucket has been inadvertently turned over by a living human being.

Combining words into groups in accordance with the syntactic patterns of the language has a double rationale. First of all grouping makes it possible by creating numerous ad hoc units to have a lexicon of a manageable size, that is a lexicon which the individual speaker may acquire or at least a sufficient portion of it, well within the limitations of his memory. Secondly, grouping puts certain limits on the inherent flexibility of the individual word meanings. In general one may say that the function of combining words into groups is a semantic one. Syntax is ancillary to semantics. By coining the group green wine from the words green and wine the speaker brings the two meanings into contact. He sets in motion a process of semantic interaction. What the result of this interaction will be is not completely determined by their being grouped together. In this group green still retains some of its flexibility, as it still allows not only the «colour»-interpretation but also the interpretation «young, unripe». Other information derivable either from other meaning bearing elements in the sentence (this green wine is quite different from the pale Sancerre we had last week) or from extra-lingual sources, or of course from both at the same time, is needed for arriving at the interpretation intended by the speaker. The linguist is here confronted with a complicated and still largely unknown process, which does not seem to be amenable to rule.

There is yet another area within syntax which permits the speaker a certain amount of freedom. I am referring to a phenomenon found to be common in many and perhaps in all languages: the occurrence of segmented sentences. Nearly half a century ago Bally discussed phrases segmentées in French (BALLY 1944²: 79-109), and since then various authors have paid attention to such sentences (for Dutch: OVERDIEP (1937) and DE GROOT (1962), for Javanese, Malay and other Indonesian languages: UHLENBECK (1941), FOKKER (1950), UHLENBECK (1975)). Segmented sentences are sentences in which certain sections each consisting (like the sentence as a whole) of an intonational and a phatic component, separated by a potential pause, are in syntagmatic contrast with each other. An English example would be John, the poor boy, his parents always neglected him; a French example the well known slogan: Au volant, la vue, c'est la vie. While word-groups have a fixed, rigid structure with few possibilities for alternative orderings, and are describable by strict and explicit rules, these sentence segments are characterized by freedom of position vis-àvis each other. In French one could have (with different intonation) c'est la vie, la vue, au volant; la vue, au volant, c'est la vie; au volant, c'est la vie, la vue. In fact, all segmental orderings are possible. The principle of segmental mobility serves a variety of purposes. One might say that segmental mobility is a kind of supplementary device which enables the

speaker to present the semantic information he wants to convey in different ways: with or without strong emotional colouring, with or without emphasis or foregrounding of certain pieces of information at the expense of other pieces. The speaker may feel the need to add, at the last moment, as a kind of afterthought or as a safeguard against possible misunderstanding by the hearer, a final segment, being uncertain whether his speech partner will be able to recover, from the situation or from shared knowledge, the information necessary to make sense of what he is saying: *They have already lost their freshness, the tulips.* But also the speaker may prefer first to draw attention to the topic which he has singled out for comment: *The tulips, they have already lost their freshness.*

The two central syntactic devices: word-grouping and sentence segmentation offer the native speaker two different kinds of freedom. Within the fixed framework of the syntactic structures in which members of the morphological determined word-classes are allowed to participate, there is combinatorial freedom, so that a speaker may bring about semantic interaction of the meaning bearing elements united in the construction (white wine, red wine, but also green wine and yellow wine; brown horse and dark horse, but also if necessary: scarlet or pink horse).

The sentence segmentation gives the speaker an opportunity to choose from a large but limited number of ways of presenting the cognitive information the one which suits his communicative purposes best.

IV

Word-meaning may be defined, with Reichling, as knowledge which functions in actual speech (REICHLING 1965: 30). It is knowledge relative to linguistic forms, used in communication. A speaker of English using the word spaniel applies (not necessarily all) his knowledge about certain dogs about which one may talk by means of /spenyěl/. Although this is very often done, one should not adopt the view that appellatives such as spaniel have a fixed meaning which is the same for all members of the English speech community. There is little that speaks for such a unitarian conception. It is more realistic to accept that the knowledge people possess differs more or less widely, without of course excluding the possibility that two or more speakers share the same word-meaning. This is because word-meaning is an essentially dynamic cognitive phenomenon, always open to individual elaboration, specification, and accumulation in at present insufficiently known ways and directions. In view of the widely varying individual experiences it is not reasonable to expect that the meaning of the words should be the same for everybody. There is also no need to assume identity for the sake of understanding the undeniable fact of the by and large successful communication by means of language. On the contrary, to assume such an identity of meaning forms an obstacle for getting closer to an understanding of how word-meaning functions in actual speech.

In other words, it is likely that for a dentist *tooth* will have a much more elaborated and precise meaning than for most of his patients. The important fact to observe is that even this vast difference in meaning does not exclude successful communication between dentist and patient by means of *tooth*. However, there has to be a shared cognitive minimum. This common knowledge has to be no more than that both know that with *tooth* one can talk about «hard and bony things in one's mouth». Only in the unlikely case that the patient does not know this, will he be unable to infer what the dentist wants to tell him with *tooth*, although the patient may guess what is meant by *tooth* with the help of the context, the situation, and other words present in the sentence in which the foreign item occurs.

Another important aspect of the way word-meaning functions, is the fact that differences in integrated knowledge do not affect the identity of the word. The fact that strong is to be interpreted in certain cases as «physically strong», in others as «mentally strong», again in others as «having great muscular strength», or even as «concentrated» (strong tea), does not at all warrant the conclusion that for the native speaker of English there are two (or more) different lexical items strong, as Langendoen assumes (LANGENDOEN 1969: 401). There is -and any native speaker of English will be convinced of the fact— only one word strong in the language, just like native speakers of German know, as Schmidt has correctly observed, that there is only one word grün in their language (SCHMIDT 1966: 25-27). In other words, the experience that one makes use of the same word does not imply that the meaning is the same for everybody who uses the word. One may view word-meaning, at least of appellatives, as a spectrum-like unit to bring out the continuity of the cognitive distinctions which shade into each other, or perhaps even better as a starlike or weblike configuration to indicate the open-ended cognitive development of word-meaning in a number of directions (not the same of course for all words, and not even the same for each speaker), radiating from a centre to indicate that the identity of the word is not endangered by these developments.

This conception of word-meaning (of appellatives, that is roughly words which are nouns, adjectives, or verbs) as (1) knowledge used in speech, (2) bound up with linguistic forms, (3) in most cases not the same for all native speakers, (4) constantly open to further change, and (5) requiring for successful communication only a minimum of shared knowledge, rests on the general thesis that understanding by the hearer of what is said by the speaker is the result of an inferential process in which the information inherent in the sentence is interpreted against the background and with the help of extra-lingual knowledge. What has been said so far is perhaps sufficient for a brief indication of the ways in which a speaker may make creative use of appellative wordmeaning. It seems that there is one general and three special ways open to him: the metaphorical one, the conceptual one, and the suppositional one.

The general, and one might even say the regular way, may be described as making new semantic steps in directions within the existing web of semantic distinctions. The tentative description of the meaning of grünby Schmidt (SCHMIDT 1966: 27) may serve as an illustration of what I have in mind, although I do not share his conception of *Hauptbedeutung*.

In metaphorical use the speaker consciously applies a word to things about which one normally does not talk by means of that word. *Throw that poison away!* may be a stern command of a father to his son found reading a book of dubious value; one does not normally talk about books by means of the word *poison*. There is a second characteristic. It is very likely that for the father the meaning of *poison* contains a number of distinctions, but he applies in this case only the cognitive distinction «noxious substance». The possibility for using a word metaphorically depends not only on the inventiveness of the individual user of language, but also on the amount of knowledge already integrated in the wordmeaning. The more the meaning of a word is cognitively articulated, the more possibilities for metaphorical use may be expected to be available for an inventive native speaker.

In conceptional use the speaker makes an effort to eliminate the inherent flexibility and dynamic character of word-meaning by the introduction of a definition, declaring that within a domain of discourse indicated by him, he will use the word with a meaning which is only a part of the totality of its semantic spectrum. In this way he creates a term, while the meaning of the word is narrowed down to a concept.

In contrast to the metaphor which by its very nature is ephemeral and transient (although instances of metaphorical use may get incorporated into the meaning of a word), the conceptualization of word-meaning is intended to have a certain permanence. It introduces a new semantic entity, which is meant to retain its restricted semantic content in all its uses within the proposed domain of discourse, in order to eliminate possible misunderstanding and to facilitate consistent reasoning.

In suppositional use the speaker uses the word to refer to itself, or to its meaning, or to its sound form, or to its written representation (cat begins with a c, or you have written light without an h).

All these devices are in theory available to speakers in all languages, although there is not yet sufficient information about whether all speech communities allow the use of them to the same extent or take the same attitude towards or have the same appreciation for the metaphorical use of word-meaning. V

The fullest and most sophisticated utilization of the productive and creative resources of language is found in the first place in verbal art, as was already so convincingly shown by Mukařovský in 1940 (see now Микакоvsку 1977: 1-64). This has perhaps contributed to the mistaken view that these devices, too briefly discussed in the previous paragraphs, are only operative in poems and other instances of «deviant» use of language. Actually, in daily speech these devices are constantly at work. They are so all-pervasive and so commonly used that they are often overlooked by professional students of language. Far from being marginal, as once metaphorical use was thought to be, they occupy a central position in language, as they are largely responsible for the fact that language is able to preserve its communicative and cognitive adequacy through societal change. These devices, although still poorly understood, should also not be relegated to a vaguely defined domain called pragmatics, with the implication that by doing so one can more easily concentrate on the study of the linguistic system proper. Simplifying and reductional strategies of this type have troubled linguistics for many years. One may hope that this period is now coming to an end, as linguists of different theoretical persuasions seem again to be united in the view that the study of language finds its natural starting-point in the study of actual language use.

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