

THE TERMS INTENSIVE/EXTENSIVE IN HJELMSLEV'S
THEORY OF LANGUAGE

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1 Introduction

In works on phonological (and phonetic) theory of more recent date the notion of markedness is often referred to as an important phenomenon. In general, different writers do not agree in detail on what this notion is taken to mean - nevertheless, certain characteristics are most often connected to one of the series of the oppositional pairs as opposed to the other. The marked members of such oppositional pairs are by most investigators said to be 1) more complex, 2) absent in positions where only one of the members occurs, 3) less frequent - both in a given text of a given language and in the phoneme systems of the languages of the world. Examples are numerous and probably well known to the readers, so I shall limit myself to mention only an extreme one: If a language has two series of stops: one produced with egressive airstream (A), and another produced with ingressive airstream (B), then the (B)-series is considered to be the marked one. Members of this series are more complex, absent in positions of neutralization, and found only in a few of the world's languages. There are other instances, however, where it is more difficult to decide whether a given segment is to be characterized as marked or unmarked. As an example it could be mentioned that /s/ is generally described as unmarked compared to /c/, in spite of the fact that the former is the more complex of the two segments - at least from a phonetic point of view. Segments may be categorized as marked or unmarked depending upon the priority given to the criteria chosen for categorization. For example, should the criteria for categorization be language specific or universal, should they be based primarily on form or on substance?

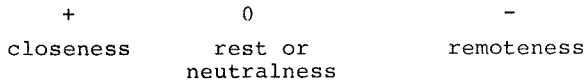
2 First appearance of the notion intensive/extensive

If form is chosen as the primary and most reliable aspect of language, the name of Louis Hjelmslev comes inevitably to mind. In his theory of language (glossematics) substance is

almost completely neglected. Only formal phenomena (i.e. relations between the elements of language) are considered. In Hjelmslev's terminology the terms marked/unmarked do not exist. The glossematic distinction which to some degree corresponds to marked/unmarked is termed intensive/extensive.

To get a deeper understanding of this notion it seems relevant to go back to the works where Hjelmslev introduced it, viz. the book on case (1935) and his paper on linguistic relations in general (1933)¹. It should be emphasized that in these early works the notion intensive/extensive was used as a device in the description of grammatical relations, and it was introduced in the preglossematic period.

According to Hjelmslev, the description of case is always related to one primary parameter or dimension, viz. directionality, which can be represented schematically as follows:



or in graphical form as in fig. 1:

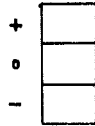


Figure 1. Graphical representation of the directionality dimension.

The term neutral (0 in the figure) may, however, have the following two interpretations: 1) a given case is termed 0 because it is neither + nor -, or 2) a case is termed 0 because it is indifferently + or - or 0. Thus we are faced with a new sort of opposition, the so-called participative opposition. The "normal" exclusive opposition (known from logics) is of the form: A vs. anything but A. The participative opposition has the following form: A vs. anything else (including A).

1) This paper was not published until 1973.

Linguistic oppositions are, according to Hjelmslev, most often participative and can be represented graphically as follows:



Figure 2. Graphical representation of the participative opposition. X is intensive and Y is extensive.

In such oppositions x is called the intensive member (characterized as precise and well specified), y is called the extensive member (vague and unspecified). In the field of grammar, examples of participative oppositions are numerous:

	y		x	
tense	present	vs.	preterit	(Danish)
mood	indicative	vs.	conjunctive	(German)
number	singular	vs.	plural	(German)

In the field of semantics examples of participation are easily found, too:

	y		x	
adjective	big	vs.	little	(English)
adjective	old	vs.	young	(English)
noun	man	vs.	woman	(English)

3 Phonological applications

An explicit application of the intensive/extensive distinction in the field of phonology is not found in the preglossematic period. When it is used in the glossematic period, the point of view has been changed in such a way that the formal relations implied by the distinction are used in "defining" (i.e. constituting) the single units (e.g. the units corresponding - more or less - to phonemes). The terms intensive/extensive can now only be used in instances of what is generally called neutralization, since it is only in such instances that it can be proved that

the extensive member covers the whole zone. As a phonological example stop consonants in German may be pointed at. Because of the neutralization in final position, p t k are described as extensive, as opposed to b d g, which are intensive.

Basing our assumptions on the presentation in Hjelmslev (1937, 1948, 1951), we now proceed to the application of the theory on real data. Parts of the French and Danish consonant systems are taken as examples.

3.1 The French consonant system

The first step of the procedure is to establish the categories. On the basis of position in the syllable (including ability to enter into clusters) the following 4 categories are set up: 1) only initial, not in clusters, 2) initial and final, not in clusters, 3) initial and final, always vowel adjacent, 4) the rest. We may focus on category 4 and, leaving out (for the sake of simplicity) the problems of the horizontal dimension, we find the following configuration (Hjelmslev, 1948):

α	p	t	f	k	s
A	b	d	v	g	z

Figure 3. Graphical representation of "category 4" (see text). (Part of the French consonant system).

According to Hjelmslev, the lower series (indicated by the capital A) is the extensive one. If neutralizations are taken into account, however, it turns out that the t/d and k/g oppositions are neutralized under dominance of "liaison" and realized as t and k, respectively. This implies (contrary to what Hjelmslev indicates) that t and k are extensive. The opposition f/v may equally be neutralized (at least in the word 'neuf') under the dominance of "liaison" - implying (in agreement with what is indicated by Hjelmslev) that v is extensive. The analysis of the s/z opposition is simplified by Hjelmslev, since for all instances of final, latent s, he represents it as z in the "underlying form". Thereby the neutralization of the s/z

opposition under dominance of "liaison" is eliminated. However, this procedure is problematic for adjectives ending in a final latent s, e.g. 'las', since such words in their "underlying form" should differ from the corresponding feminine form only by the absence of a final schwa. The last consonant pair to be considered is p/b for which pair there are no instances of neutralization. There are, it is true, a few instances of "liaison" with latent p but none with a latent b. Consequently they should be characterized as contensive. If the critical remarks and alternative propositions given above concerning the consonant system are accepted, we may suggest the following modified system:

p	t	v	k	z	A
b	d	f	g	s	α

Figure 4. Revised arrangement of "category 4". The contensive b/p opposition is shown separately.

3.2 The Danish consonant system

Another kind of problem turns up when an attempt is made to apply the intensive/extensive distinction to the Danish consonant system - such an analysis is made by Hjelmslev (1951).

At first sight it might seem evident that the Danish stop consonants fulfil the requirements for being categorized according to the intensive/extensive distinction because of the neutralization in final position (and before schwa). But the distinction becomes inapplicable, because Hjelmslev - in accordance with his principle of "greatest possible reduction of the inventory", which is of primary importance to him - reduces the Danish stop consonant system from 6 to 3 "units" (plus 3 "units" consisting of stop + h). There may still be said to be neutralization - not between p t k and b d g but between h and 0.

4 Concluding remarks

In conclusion the following points can be made:

1) An analysis based on the intensive/extensive distinction may give results different from those achieved by a "normal" markedness analysis. 2) The benefit of employing the intensive/extensive distinction may be minimized by the priority given to other procedures of analysis, e.g. reduction of the inventory.

Finally, it may be hypothesized that one of the reasons for the many problems involved in the analysis of the intensive/extensive parameter in the field of phonology is that phonological oppositions are more often exclusive than participative. In the field of grammar the situation may well be the opposite.

References

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