

A NOTE ON THE INFLUENCE OF LOUIS HJELMSLEV'S SUPRASEGMENTAL PHONOLOGY

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ABSTRACT

Louis Hjelmslev's influence within the history of phonology, usually deemed marginal, can at least in part be re-evaluated under the light of little known references to the Dane linguist, which suggest that his early concern for suprasegmental units did not pass unnoticed by other phonologists.

Keywords: history of phonology, suprasegmental phonology, Hjelmslev, glossematics.

1. INTRODUCTION

Glossematics, associated with the names of Louis T. Hjelmslev (1899-1965) and his close collaborator Hans J. Uldall (1907-1957), is one of the classical schools of phonology (and of linguistics more generally), more or less contemporary with other prominent trends as the Prague school, Prosodic Analysis and American structuralist phonemics. Trying to give a detailed account of its tenets in a few lines would be an arduous task, and in any case both [10] and [3] include valuable descriptions of Hjelmslev's phonological thinking; for the purposes of this paper, I will only mention some points he made which proved to be relevant for subsequent phonological theorizing, although he published very few and incomplete concrete phonological analyses ([14], [18] and little else).

Hjelmslev had a strong interest in what would be called today 'non-linear' phenomena since the very beginning of glossematics, which he and Uldall presented for the first time in two talks [13, 29] at the Second International Congress of Phonetic Sciences (London 1935). A clear example of this attitude is the introduction of the term 'prosody' (later changed to 'prosodeme'), which was used by Hjelmslev to designate suprasegmental units in a very broad sense, not limiting it only to stress, tone or similar phenomena, but extending it to seemingly segmental properties as well (e.g. [h] and *stød* in

Danish), provided that their position could be demonstrated to depend on other than purely linear reasons.

Another reason to adopt non-linear representations followed from what Hjelmslev used to call *analogie du principe structurale* ([15, 17] among others), that is the assumption that phonology and syntax share the same basic structural principles, which implied recourse to hierarchic structures also in phonology, for instance to describe stress and intonation. Under this view, also the nature of the syllable, with a focus on its internal architecture, was a fundamental concern, e.g. in [16]. Also Hjelmslev's proposal of 'latent', phonetically empty segments was related to the syllabic and suprasegmental domain.

However, all in all the actual impact of Hjelmslev's ideas in the history of phonology seems considerably lower than that of his most prominent contemporaries; actually, it is considered virtually insignificant by most. His name is usually included in historiographic works, but his theory is often presented as an isolated and rather esoteric school of thought, with little or no impact on contemporary or subsequent theories; sometimes it is even dismissed with unfavourable if not scathing words, the most explicit (and humorous) probably being by G. Sampson [28]: "Hjelmslev did not develop his theory by applying it to any serious extent to the description of concrete linguistic facts, but rather by elaborating a highly complex, sparsely illustrated terminology for describing hypothetical relations of various kinds [...]. Hjelmslev himself seems to have felt about the real world rather as some people feel about alcohol, that while it might be all right in its place he personally had little time for it" (p. 168).

Yet there are some clues which suggest that this conventional picture, although widespread, is incorrect in several respects: not only it can be shown that Hjelmslev's ideas were sometimes

ahead of their time, and contained intuitions which were to be rediscovered decades later; even more remarkably, although strictly speaking he had virtually no followers, it can be demonstrated that echoes of his ideas surface in the writings of the most unexpected linguists, and he effectively influenced other phonologists.

The goal of this paper is to begin to bring to light some of such neglected facts. Since Hjelmslev's writings are (in)famous for being very dense and framed in a very personal terminology, a detailed comparison of his ideas with those of other linguists would require a considerable amount of pages; therefore I will limit myself to little more than listing a few in my opinion revealing quotations and hinting at some interesting similarities, leaving room for a thorough analysis to future research.

2. INFLUENCE OF HJELMSLEV'S NONLINEAR APPROACH

Hjelmslev's use of the term 'prosody', obviously recalls J. R. Firth's, who is usually credited with introducing it in modern linguistics. The homonymy is not due to chance, according to the authoritative account of D. Abercrombie [1]: "[i]t was from these [i.e. Hjelmslev's and Uldall's] papers, I am quite sure, that Firth got the term *prosody*, used as a countable noun, as a name for a phonological unit. Firth never acknowledged this, and as far as I know attention has never been drawn to it. Firth certainly listened to both papers" (p. 8; emphasis in the original).

Besides Abercrombie's report, there are several interesting analogies between Firth's and Hjelmslev's arguments: to name just one, in [6] Firth regards Danish *stød* as a prosody, not a phoneme, since it is dependent on syllabic properties, which is virtually the same point Hjelmslev and Uldall made in their papers.

As Abercrombie observes, Firth never acknowledged having been inspired by Hjelmslev (for example with respect to Danish *stød* he quotes H. Sweet, not Hjelmslev). Indeed in his writings he criticized Hjelmslev on several points, but his criticisms are flanked by positive remarks and acknowledged similarities. Cf. for instance statements as: "Descriptive linguistics in recent years has turned much more decisively to the sentence and the longer stretches of speech as the object of study. This is certainly true of the London group [...] and also of those associated with

Professor Louis Hjelmslev of Copenhagen." [8] (p. 100).

As for the apparently sensible observation that after all the influence could be reduced to a relatively insignificant matter of terminology, Firth's following opinion on Hjelmslev's terminology is revealing: "[t]he technical language for the systematic statement of the facts of language, cannot, any more than for mathematics, be the language of everyday common sense. Professor Hjelmslev, fully realizing this, has endeavoured to frame a sort of linguistic calculus which might serve the linguistic sciences in the way mathematics has served the physical sciences. Even if the attempt be considered unsuccessful, it has not been sufficiently understood that the work of Professor Hjelmslev in general linguistics has been in the direction of our emancipation from the handicap of our common sense idiom and 'self-explanatory' nomenclature in half a dozen languages, and from the limitations of the technique of comparative grammar. However much we may disagree with it or dislike it, *the terminology is necessitated by a system of thought*" [7] (p. 140; emphasis added).

Probably also such key concepts in Firth's Prosodic Analysis as 'paradigmatic' and 'syntagmatic' are related to Hjelmslev's thinking (obviously they ultimately stem from Saussure, but it is sometimes ignored that the term 'paradigmatic' was proposed for the first time by Hjelmslev, while Saussure used *associatif*, and this change involved a significant shift in the meaning of the concept as well, which in Saussure was closer to a kind of psychological association between elements; anyway, they were almost forgotten before Hjelmslev 'rediscovered' them).

In more recent times another aspect of glossematics, the parallelism between phonological and syntactic structures, has played a relevant role in the development of J. Anderson's 'structural analogy' (actually, this very phrase is the translation of Hjelmslev's *analogie du principe structurale*), for example in [2]: "[a]s far as I am aware (always a vulnerable admission – so I await brickbats, but with some curiosity as well as trepidation), there has in modern times been little by way of explicit articulation of anything resembling the structural analogy assumption since – or before – Hjelmslev's contention of an isomorphism between the two planes of expression and content" (pp. 3-4). The concept is assumed to

be fundamental by Anderson: “[u]nfortunately [...] there has been no systematic attempt to pursue the consequences of Hjelmslev’s far-reaching inter-planar analogy assumptions [...]. But such a strong assumption, if pursued appropriately, promises to throw light on a wide range of phenomena, even in the process of its possible disconfirmation” (p. 5).

2.1. Hjelmslev and the syllable

Hjelmslev’s name and ideas are quoted in several classical works on the syllable: by J. Kuryłowicz [23, 24], C. Hockett [21], E. Fudge [11]. For example Hockett [21] makes it clear that Hjelmslev is among the inspirers of his hierarchic approach to the internal structure of the syllable: “[t]he insistence of Hjelmslev on a kind of parallelism [...] between the level of expression and the level of content opens the way for an extension to phonology (expression) of the immediate-constituent approach” (p. 2).

Kuryłowicz [24], aiming to “vulgariser la glossématique tout en restant dans les cadres de la terminologie traditionnelle et courante” (p. 48), proposed some of the nowadays classic arguments (distribution of consonants, vowel quantity, placement of stress, etc.) in favour of splitting the syllable first into a *partie accessoire* (containing the prevocalic consonant(s)) and a *partie constitutive*, then splitting the latter into a *membre constitutif* (containing the vowel(s)) and a *membre accessoire*; if Kuryłowicz’s terms are replaced with ‘onset’, ‘rhyme’, ‘nucleus’ and ‘coda’ respectively, the close resemblance to the model of syllable which is still today standardly adopted is evident.

Another of Hjelmslev’s goals was the search for linguistic universals. With regard to possible onset and coda clusters, in [13] he stated that “as a general phonematic law, [...] if a language admits more complicate consonant clusters, consisting of more than two consonants, these complicated consonant clusters never admit combinations which are not permitted in simple clusters of the same language” (p. 53). This hypothesis was drawn on by J. Greenberg, who stated in [12]: “[a] suggestion which has proven useful for this study is that of Hjelmslev in regard to resolvability, that is, the principle that longer consonant sequences in general contain as partial sequences shorter ones which are likewise occurrent.” (p. 244).

2.2. Latent segments

In Hjelmslev’s terminology ‘latent’ was a technical term, adopted to indicate segments which can have no phonetic content, but nevertheless show their presence through effects on surrounding segments or re-appear once the phonological context is changed. For example in [18] explained the appearance in Danish of a stem-final [d] after suffixation of /i/ (e.g. [manʔ] ‘man’ vs. [mandi] ‘human’) as a change in the conditions allowing phonetic realization of /d/, which would be already present in the bare stem but would remain phonetically ‘latent’ when word-final.

Separating segmental content from syllabic positions is close to what ‘CV’ and ‘X-slot’ phonological theories do. Again, at least one historical link with more recent theories can be traced: looking for an explanation of French liaison, Clements and Keyser ([5], p. 101) state that “[t]he germ of a solution is contained in [a] comment by Malmberg [[26], p. 140]”, which suggests that consonants undergoing liaison are ‘latent’ phonemes requiring specific conditions to be realized. Now, B. Malmberg was in his turn influenced by Hjelmslev’s ideas in several respects: as for ‘latent’ consonants in French, what Hjelmslev said in [19] was almost identical, that is “one can maintain the existence of a latent *d/t* in French *grand*, *sourd* because a *d* or *t* appears in these expressions when the conditions are changed: *grande*, *sourde*; *grand homme*” (p. 93).

Malmberg, under Hjelmslev’s influence, applied the same concept to Finnish as well (anticipating analyses adopting empty slots, like [22]). In Finnish there is raising of /e/ to /i/ word-finally (e.g. stem *yhte-*, nom. *yten*, but gen. *yksi*), and /k/ is deleted when it is the onset of a closed syllable (e.g. *Turku*, but gen. *Turun*). Given a stem like *luke-*, the word *lue* seems to violate both regularities; moreover, when a word showing this unexpected behaviour is followed by another word, the first consonant of the latter geminates: *lue nyt* is [luen:yt]. The paradox is solved by Malmberg [25] introducing “an abstract unit without any substance of its own (a real ‘cēneme’ in the glossematic sense)” (p. 236 n2) after the /e/ of *lue*, “a phoneme with a zero manifestation but the effects of which are seen in the behaviour of other phonemes in the syntagm” [27] (p. 142).

Incidentally, also Hjelmslev’s alleged total refusal of the phonetic dimension of phonology

could be brought into question in view of the influence he had on a phonetician like Malmberg: glossematic ideas were important for the latter, also from a methodological point of view, to shape his formulation of the phonetics-phonology relation, leading him to propose different levels of abstraction to properly account for the many-sided aspects of phonetic data [25, 27 among others].

3. CONCLUSION

This rather unstructured foray into the history of phonology leaves open many questions, since the precise nature of the influences remains to be studied much more in detail. Obviously no one of the above mentioned linguists can be considered a in a strict sense a follower of glossematics; indeed, in other pages many of them express radical doubts on the practicability of other ideas of Hjelmslev's. Nonetheless a bulk of interesting quotations and similarities remains.

A few years ago it was advanced [4] that the history of phonology showed more interpenetration among distinct linguistic frameworks than a manual-like picture – in which hermetic linguistic frameworks succeed with little or no interaction – would imply. It was suggested instead a kind of 'porosity' among theories, to describe the sometimes little evident exchange and adaptation of insights between apparently incompatible theories. This paper can be seen as an attempt in the same direction.

4. ACKNOWLEDGMENTS

I would like to thank Laura Vanelli and two anonymous reviewers for their comments and suggestions. All remaining errors are my own.

5. REFERENCES

- [1] Abercrombie, D. [1980] 1991. Fifty years: a memoir. *Work in Progress* 13. Republished in Abercrombie, D. *Fifty Years of Phonetics*. Edinburgh: Edinburgh University Press, 1-11.
- [2] Anderson, J. 1992. *Linguistic Representation: Structural Analogy and Stratification*. Berlin, New York: Mouton de Gruyter.
- [3] Anderson, S. 1985. *Phonology in the 20th Century: Theories of Rules and Theories of Representations*. Chicago: Chicago University Press.
- [4] Clements, G.N. 2000. Some antecedents of nonlinear phonology. *Folia Linguistica* 34/1-2, 29-55.
- [5] Clements, G.N., Keyser, S.J. 1983. *CV Phonology: A Generative Phonology of the Syllable*. Cambridge: MIT Press.
- [6] Firth, J.R. 1948. Sounds and prosodies. *Transactions of the Philological Society*, 127–152. Republished in [9], 120-138.
- [7] Firth, J.R. 1949. The semantics of linguistic science. *Lingua* 1, 393-404. Republished in [9], 139-147.
- [8] Firth, J.R. [1956] 1968. Descriptive linguistics and the study of English. In: Palmer F.R. (ed), *Selected Papers of J. R. Firth 1952-1957*. London: Longmans, 96-113.
- [9] Firth, J.R. 1957. *Papers in Linguistics 1934-1951*. London: Oxford University Press.
- [10] Fischer-Jørgensen, E. 1975. *Trends in Phonological Theory*. Copenhagen: Akademisk Forlag.
- [11] Fudge, E.C. 1969. Syllables. *Journal of Linguistics* 5, 253-286.
- [12] Greenberg, J. H. 1978. Some generalizations concerning initial and final consonant clusters. In: Greenberg, J. H. (ed.), *Universals of Human Language. Volume 2. Phonology*. Stanford: Stanford University Press, 243-280.
- [13] Hjelmslev, L.T. 1936. On the principles of phonematics. *Proc. 2nd ICPHS London*, 49-54.
- [14] Hjelmslev, L.T. 1937. Accent, intonation, quantité. *Studi Baltici* 6, 1-57.
- [15] Hjelmslev, L.T. 1938. Essai d'une théorie des morphèmes. *Actes du IV Congrès International des Linguistes* Copenhagen, 140-151. Republished in [20], 161-173.
- [16] Hjelmslev, L.T. 1939. The syllable as a structural unit. *Proc. 3rd ICPHS Ghent*, 266-272.
- [17] Hjelmslev, L.T. 1948. Le verbe et la phrase nominale. *Mélanges de philologie, de littérature et d'histoire ancienne offerts à J. Marouzeau*, 235-81. Republished in [20], 174-200.
- [18] Hjelmslev, L.T. 1951. Grundtræk af det danske udtrykssystem med særligt henblik på stødet. *Selskab for nordisk filologi. Aarsberetning for 1948-49-50*, 12-24.
- [19] Hjelmslev, L.T. [1953] 1961. *Prolegomena to a Theory of Language*. Madison: University of Wisconsin Press.
- [20] Hjelmslev, L.T. 1971. *Essais linguistiques*. Paris: Editions de Minuit.
- [21] Hockett, C. 1955. *A Manual of Phonology*. Baltimore: Waverly Press.
- [22] Kiparsky, P., Keyser, S.J. 1984. Syllable structure in Finnish phonology. In: Aronoff, M., Oehrle, R.T. (eds), *Language Sound Structure*. Cambridge (Mass): MIT Press, 7-31.
- [23] Kuryłowicz, J. 1948. Contribution à la théorie de la syllabe. *Bulletin de la Société Linguistique Polonaise* 8, 80-114.
- [24] Kuryłowicz, J. 1949. La notion de l'isomorphisme. *Travaux du Cercle Linguistique de Copenhague* 5, 48-60.
- [25] Malmberg, B. [1962] 1971. Levels of abstraction in phonetic and phonemic analysis. *Phonetica* 8, 220-242. Republished in Malmberg, B. *Phonétique générale et romane*. Mouton: The Hague, 231-248.
- [26] Malmberg, B. 1972. *Phonétique Française*. Malmö: Hermods.
- [27] Malmberg, B. [1969] 1973. Linguistic theory and phonetic methods. *English Studies* 50/5, 417-435. Republished in Malmberg, B. *Linguistique générale et romane*. Mouton: The Hague, 126-144.
- [28] Sampson, G. 1980. *Schools of Linguistics*. Stanford: Stanford University Press.
- [29] Uldall, H.J. 1936. The phonematics of Danish. *Proc. 2nd ICPHS London*, 54-57.