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Early 20th century beginnings of Hungarian theoretical psychology of language

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RESEARCH ARTICLE

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ABSTRACT

The paper analyzes some early theoretical works on psychology of language presented in the works of the trend setting historical linguist Zoltán Gombocz (1887–1935), Antal Klemm (1883–1963) a master of historical syntax, and Gyula Lux (1884–1957) a successful language education expert.

All three were representatives of classical mentalistic linguistics, and interpreted language as relevant for psychology, even if they emphasized change instead of structure. The paper presents the specific ideas of Klemm regarding the historical articulation of sentence structure along psychological and logical lines. Both Gombocz and Lux follow Wundt that we must draw evidence from gestural language for the origin of spoken language. Gombocz and Klemm deal with the possible mechanisms of *word class* formation. Klemm's reconstruction of word classes takes communication as a starting point. Initial communication is about an object given as a non-linguistic stimulus: [this thing] *apple*. The (psychological) subject is given, only the predicate is pronounced. This would be followed by combining two nominal words in a predicative way: *wood-fire*. Then the property words would appear, and finally the combination of object and property *(apple-red)*.

KEYWORDS

gestural origin of language, Hungarian psycholinguistics, mentalism in linguistics, psychological and logical subject, recapitulation theory of language origins

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The beginnings of Hungarian psychology of language is usually presented in historical reflections with reference to phoneticians and early child language diary studies in late 19th century, such as Emil Ponori Thewrewk, Hugo Bakonyi and Gabriella Viktor (See for modern reviews of these studies Lengyel, 1976; MacWhinney, 1976). My paper has a different perspective. Instead of a survey of early empirical child language studies, I shall discuss the underlying psychological ideas of some early 20th century Hungarian linguists talking about language in general. I shall also emphasize, in a slightly presentist manner, what is analogue in their approaches to some issues of modern psycholinguistics.

I shall discuss the psychological ideas of three linguists.

Zoltán Gombocz (1887–1935) was a successful modern historical linguist (Gombocz, 1912), who travelled extensively in France and Germany. His works were very influential in introducing instrumental phonetics to Hungary (Gombocz and Meyer, 1909), in reconstructing the sound system of Finno-Ugric languages, in historical semantics and syntax. Due to his central teaching and mentoring position (he was director of the École Normale style Eötvös Collegium between 1927 and 1933, and dean of the Budapest humanities faculty between 1933 and 1935) he played a key role in shaping the next generation of linguists in Budapest. (For a new collected volume of his writings see Gombocz (1997). A good source for his intellectual path and impact is Kicsi (2006).

Antal Klemm (1883–1963) was a Benedictine monk, and a professor of linguistics at Pécs and Budapest. He was a widely traveling successful comparative Finno-Ugric linguist (Klemm, 1925), with a central interest in historical syntax (Klemm, 1928, 1942).

Gyula Lux (1884–1957) was a successful language and educational expert from a traditional Saxonian wealthy family from Upper Hungary (presently Slovakia), educated in Budapest as a linguist and teacher. He was an expert on the local German dialect in Upper Hungary (Lux, 1961), and was the funding director of a German language teachers college in Budapest (1939–1944).

All three linguists represented classical mentalistic historical linguistics, and as part of this attitude they interpreted language and linguistics as relevant for psychology, and psychology as relevant for linguistics. This was evident mostly in their psychological interpretation of the organizational principles underlying sentences, and in their search for explanatory principles of language change, where they recognized several analogies between children's ability to create language and the historical issue of the earliest stages of the genesis of language.

My reconstruction of their psycholinguistic views mainly relies on early works of Gombocz, his review of Wundt's *Völkerpsychologie* (Gombocz, 1903), Antal Klemm's systematic syntax published in 1928, and Gyula Lux's monograph (1927) entitled *A nyelv* 'Language' published with the subtitle *A study of the psychology of language*.

MENTALISM

All three authors represent a classical mentalistic stage in the history of Hungarian linguistics, in line with their late 19th century German inspirations. Their approach labeled as psychologism at the time could be called mentalism today. Gombocz (1903), after a visit to Leipzig, interpreted Wundt's ethnopsychology in a review of over 60 pages, as an approach where *Völkerpsychologie* learns from the facts of language, mainly from the history of language. "At the present stage of science the main task of research is to use the rich psychological material provided by language history in the explanation of more complex mental phenomena" (Gombocz, 1903: 8). And as Gombocz continued, Wundt "most of the time arrived to those psychological principles he used

in systematizing these phenomena by observing linguistic phenomena" (ibid., p. 10). In the interpretation of Gombocz, the attitude regarding the relation of the two disciplines, psychology and linguistics, promoted by Wundt, is similar to that of the Chomsky (1968: 24) three generations later: "The study of universal grammar, understood in this way, is the study of human intellectual faculties […] Linguistics thus described is simply the subfield of psychology that deals with these aspects of the mind."

The **psychological interpretation of the structure of sentences** was crucial for this type of mentalism. Blumenthal (1970) in a reader of classical psycholinguistics even interpreted the heritage of Wundt from the perspective of modern Chomskyan linguistics. Nerlich and Clarke (1998) criticized this interpretation of Wundt as being too presentist in a historical sense. However, Gombocz (1903: 49) already in Wundt's time summarized the importance of these ideas in terms similar to Blumenthal. "Thus, from a psychological point of view, a sentence is a simultaneous and a successive whole at the same time: it is simultaneous since at any moment of its genesis it is present in our consciousness with its entire content; it is successive, since the state of the entire consciousness changes from moment to moment accruing to the specific ideas moving in a sequence before the point of view of consciousness."

In the work of Antal Klemm (1928), two decades after the Wundt interpretation of Gombocz, psychologism becomes even more clearly mentalism, and more directly tied to the issue of sentence structure. In his argumentative presentation of linguistic, psychological and logical conceptions of syntax of his time, he also follows the Wundtian direction: "The aim of syntax, like linguistics in general, *is to study the historical development of syntactic phenomena and the individual and social psychological conditions of development.* Psychological explanation is therefore a necessary complement to historical linguistic examination" (Klemm, 1928: 132). Sentences have a logical and a parallel psychological organization. The logic proposed to interpret sentential organization is not normative, like the traditional one, but, as Husserl's (1900) logical grammar initiated, it provides an *a priori* order of what can be thought and said at all. Syntactic theory lists categories and their possible combinatorics. According to Klemm, in the efforts to interpret sentences, there is no conflict between psychological and logical foundations of sentential organization. Such basic logical categories as substance and accidence, cause and effect "are not norms of right thinking, but psychological forms of general human thought […] Linguistic forms of meaning are closely related to the ways of thinking of our minds: forms of view (space, time) and categories of reason (substance-incident, cause-effect) are the basis of grammar's categories of meaning: word classes and constituents of sentences" (Klemm, 1928: 66). This Husserlian inspiration gives Klemm a way to go beyond the mere associative organization principles of Wundtian psychologism. The meaning based combinatorial restrictions in the hand of Klemm become very similar to the grammaticality arguments generations later. Why is it incorrect to say *Green runs* or *Smokes dangerous*. Analyzing modes of meaning reveals universal principles of the combinatorics of thought. These universal semantic principles stand for what becomes *structure and rule* for later generations of linguists.

Klemm in a summary paper about his stance on syntactic categories, written much later, after analyzing dozens of examples of word order variations and emphatic stress, came to a conclusion where the psychological organization of sentences is based on communicative saliency issues, while the grammatical-logical organization is tied to the substantial semantic categories of the mind. In this regard, grammatical organization is also interpreted in a mentalistic manner. "The psychological subject is the idea already known from the speech situation,

which becomes conscious earlier in the attention of the speaker, to use Wundt's expression, this is the dominant idea; the psychological predicate on the other hand, is the idea that is new from the point of view of communication, and thus more important, and it is put into relation with the idea of the psychological subject. The linguistic expression corresponding to the idea of psychological predicate has more emphasis (Klemm, 1948: 121).

The monograph of Lux (1927) dedicated to Gombocz, did not aim to be linguistics, but openly intended to be a psychology of language. He regards language in its integrity as a psychological reality: "language is the sum total of the spiritual skills, inclinations, and laws that govern speech at any given time" (Lux, 1927: 8). Language is a spiritual disposition (~competence), speech is how it works (~performance). Consequentially, for Lux, the subject of psychology of language is much wider than the usual approach in the reemerging psycholinguistics in the 1960s. In addition to examining what happens in the mind during speech and understanding (this would be the goal-setting in the 1960s), psycholinguistics must also deal **with the origin and development of language**. Under the issue of development and origin, he includes both the child and the humanity at large. Most modern psycholinguists, on the other hand, while having very high theoretical inspiration, carry out experimental and observational empirical work in their everyday lives, and are averse to questions that cannot be translated into an empirical idiom. Self-confidence leading to speculation is hard to revive for our generation compared to the bravery a 100 years ago.

SPECULATIONS ABOUT THE ORIGIN OF LANGUAGE

Speculation about the origin of language was one of the themes for these classical authors, similar to many of their time from Max Müller to G.H. Mead. Both Gombocz and Lux follow Wundt in claiming that we must draw evidence from gestural languages to interpret the origin of spoken language. In his survey of Wundt, Gombocz (1903) recognized that gestural language can be a model for how an emotion-expressing, involuntary system could have become voluntary and (in contemporary terminology) gradually propositional. Gombocz emphasized the shift to deictic and then to figurative signs, and the fact that combining gestures already has a specific syntax: it is based on psychological weighing. Things more important to the communicator always come first. Lux's more detailed discussion also followed Wundt, and he believed that by studying the articulation of gestural language we may learn about the original structural properties of spoken language.

Gombocz (1906) also reported on a specific debate between Hermann Paul and Wundt about the origin of words. While Paul was looking for sound imitation, Wundt was more interested in coding by articulatory movements. Gombocz sided with Wundt. He pointed out that the origin of first speech sound signals should be seen not in sound imitation, but in an 'embodied manner', in metaphoric relations between speech movements and sound. An example is the use of the contrast of front and back vowels for distance from the speaker (*hic* and *hoc*, *hier* an *dort, itt* and *ott*).

More interesting than their general speculations on the genesis of sound language was the fact that both Gombocz and Klemm dealt with the possible mechanisms of *the formation of word classes, i.e. parts of speech*. Both start from Wundt's basic idea: properties cannot be inherently imagined without objects, properties are already abstractions. Hence the primacy of object concepts and nouns. Verbs and adjectives are secondary to nouns. Klemm (1928) used a much more detailed reasoning here than Gombocz. Word classes arrive as a result of a long development. Communicative articulation is the starting point, and the differentiation of sentence parts in this process leads towards word classes. Initial communication is about an object

given as a non-linguistic stimulus: [this thing] *apple*. The (psychological) subject is given, only the predicate is pronounced. This would be followed by combining two nominal words in a predicative way: *wood fire*. Then the property words (adjectives) would appear, and finally the combination of object and property *(apple red)*. The entire historical process is assumed to be a circular bifurcation. Adjectives and adverbs would appear with the repetition, combination and relegation of the subject or the predicate to the background.

Klemm also speculated about the initial correspondence of logical (i.e. content related) and psychological (i.e. functional) sentence articulation. "In the more primitive stages of language development the logical-grammatical subject and predicate always coincided with the psychological subject and predicate. Due to the development of thinking and therefore language, due to the development of accident concepts i.e. action-,event,-quality concepts and the corresponding verb and adjective word classes, the correspondence of logical-grammatical subject and predicate to the psychological subject and predicate was discontinued" (Klemm, 1948: 126).

There was of course much speculation here. But the issue of the genesis of parts of speech (i.e. word classes) is still with us. Think of speculations on the emergence of word classes in children as a process of extracting from functional relations (Nelson, 1974), or the recent theories relating word classes to the dual visual system, anchoring nouns in the ventral, verbs in the dorsal stream (Jeannerod and Jacob, 2005).

PARALLELS BETWEEN CHILDREN'S LANGUAGE AND THE GENESIS OF LANGUAGE

The analogy between early child language and the origin of language was a central question in classical psychology of language. Gyula Lux gives a detailed overview of the debate as to whether Haeckel's (1866) pangenetic law is valid in the field of language (ontogeny recapitulates phylogeny). Wundt, for example, considered it valid only for the earliest ages, whereas the Sterns (Stern and Stern, 1907) generally upheld this. The seemingly obsolete question was first raised today in connection with the teaching of communication in primates; many have noticed analogies between gesticulating chimpanzees and the primitive grammatical categories of human children (doer, object, tool, etc.), both of which have been assimilated to categories of human tool use (Hewes, 1973). Lamendella (1976) went so far as to openly formulate the neo-recapitulation principle for the origin of language.

In the study of language development in children, there were several attempts to recapitulate the recapitulation studies in modern times. This is a non-trivial proposal. Most likely, the parallels are of a structural constraint type. It is difficult to imagine a language where compound sentences would precede simple ones, or formal organization would precede cognitive semantics-based categories. But the rest of the analogy is problematic, since modern children have a very organized input. As the cross-linguistic child language researcher Dan Slobin (2004) reviews them, there is no evidence in child language either for recapitulation of the genesis of language or recapitulation of the history of language. "Linguistic ontogeny does not recapitulate phylogeny because the form and content of 'under-two' child language is shaped by the form and content of an already existing exposure language" (Slobin, 2004: 264).

The methodological implication is the suggestion that we may learn something about the beginnings of language from studying language in children with a limited input. This line of

reasoning was pointed out by Gyula Lux. Even in his time, he pointed out the sporadic evidence that isolated (feral) children could still develop language-like signing systems, that would argue for a sophisticated recapitulationist view.

The most famous modern representative taking up this issue was the Hawaiian anthropological linguist Dereck Bickerton (1926–2018), who claimed that in the formation of so-called Creole languages observed in plantation cultures a *language bioprogram* can be identified (Bickerton, 1981, 1984). Children living on some plantation cultures grow up in a peculiar situation of communication and language learning, amid the breakdown of tradition, with no stabilized language input. This modern situation would show the language creating abilities of ancient humans. They show a clearer recapitulation then the acquisition of cultural languages characterized by tradition. New grammatical inventions not taken from any adult model are made by children who are facing incoherent input. This grammar would correspond to the original biological structure of language (Bickerton, 1981, 1984). Bickerton showed that in this situation new languages were developed by a new generation of children. These languages showed similar features in very different geographical settings. For example, they usually use word order to code grammatical relations, they have few function words, no rules for deletion, etc. From these observations Bickerton also draws conclusions that man's original language may have exhibited a similar organization (Bickerton, 1984). We could add the same happenings with the few cases of self-developed signing in deaf-mute children as well (Goldin-Meadow, 2003).

Givón (2009) moves beyond simple recapitulation and gives a motivated comparison of early child language and ancestral communicative language.

He pointed out important parallels of early humans with the situation of the child. These are: life in a small kin-based group, with genetic homogeneity, life in a restricted territory, and in a flat social structure. Two differences constrain the social similarity. The situation of the child, unlike our ancestors, is characterized by knowledge and power imbalance.

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There are important missing aspects in these classical Hungarian mentalistic psycholinguists from a historical perspective. They mostly lacked the concept of *system and rule*, as well as the search for proofs of an *experimental type*. However, the speculative side of their mentalistic approach to language makes these early Hungarian works relevant towards understanding the gradual unfolding of modern psycholinguistics.

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