Psycholinguistic aspects of complex words

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The aim of the proposed workshop is to provide a state of the art in the field of psycholinguistic investigation of various aspects of complex-word formation and interpretation and to map the latest advancements in theoretical and empirical research in this field. The following brief overview of the directions and focus of previous research thus also serves as a scope of topics to be discussed at the workshop.

Complex words have been an object of intensive research within various theoretical frameworks since the 1960s, primarily in terms of their word-formation characteristics and their interpretation principles (e.g., Lees 1960, Zimmer 1971, Downing 1977, Levi 1978). This latter area attracted the interest of psycholinguists who came up with various models mainly (but not exclusively) accounting for the interpretation of novel context-free N+N compounds.

First, an approach putting stress on the role of the head noun (head concept) functioning as a schema with a certain number of slots that are filled by the modifier values. This model is called a feature model or schema model (e.g., Allen 1978, Cohen & Murphy 1984, Murphy 1988, 1990, Smith & Osherson 1984, Smith, Osherson, Rips & Keane 1988), and is based on the semantic representations of the constituent nouns and associated encyclopaedic knowledge. According to this approach, differences in the interpretability of context-free primary compounds are related to the relative salience of particular meaning aspects (slots in a schema-based model, attributes in the feature-based model). Thus, ‘high-interpretable’ compounds are based on more salient meaning aspects of their motivating constituent and ‘low-interpretable’ compounds are based on less salient meaning aspects (Coolen, van Jaarsveld & Schreuder 1991).

Second, the relation model (Gagné & Shoben 1997, Gagné 2001) emphasizes the central role of thematic relations between compound constituents and the language speaker’s linguistic knowledge of the relative strength of the individual thematic relations bound to a particular modifier concept. This knowledge facilitates the interpretation of compounds by preferring the interpretation based on a thematic relation which is more readily available to the modifier concept.

Third, the analogy-based model (Derwing & Skousen, 1989, Skousen 1989, Ryder 1994, Wisniewski 1996, etc.) accounts for the interpretation of novel, context-free compounds primarily by lexicalized (i.e. established, institutionalized) compounds that serve as certain interpretation patterns or models.

Recent decades have witnessed an elaboration of these fundamental approaches and the introduction of new topics, such as the issue of semantic transparency (e.g., Libben 1998, Pollatsek and Hyönä 2005, Blais-Gonnerman 2012, El-Bialy, Gagné and Spalding 2013). In
such an approach, it may be assumed that semantically transparent complex words are those whose constituents are used in one of their fundamental meanings and the extent to which the meanings of the constituents pattern semantically with other members of the positional families of words (Libben 2014). Gagné and Shoben (1997) relate semantic transparency of a particular relation in conceptual combinations to the frequency of its occurrence with the modifier concept.

The definition of the notion of semantic transparency is accompanied with a number of related factors. Thus, it is assumed that the relative modifier-head position of the transparent-opaque constituents may also affect the interpretation of complex words (Libben et al. 2003, Marelli and Luzzatti 2012). Views also differ in assigning relative importance to complex word constituents for the process of interpretation. For example, while the CARIN model (Gagné and Shoben 1997, Gagné 2001, Spalding and Gagné 2008) attributes a crucial role to the modifier concept, its elaborated version, the RICE model (Spalding et al. 2010) assigns higher significance to the modifier only in suggesting potential relations, while both modifier and head are believed to be crucially involved in their evaluation. Tarasova (2013), too, assumes that both of them are important (even though with different roles) for the interpretation of compounds. Contrary to this, Körtvélyessy, Štekauer & Zimmermann (2015) maintain that semantic transparency cannot be restricted to semantic information provided by the complex word’s constituents and that it depends on the presence/absence of morphological representation of the relational component in complex words.

Another new area of psycholinguistic research into complex words is the issue of competition. This direction of research can be set into the broader problem of competition in biological and social systems (cf. MacWhinney, Makukov & Moravcsik, 2014). In psycholinguistic research into complex words it is manifested as competition among various strategies of forming new complex words (Körtvélyessy & Štekauer 2014), on one hand, and competition among various possibilities of interpretation of novel complex words, on the other. This direction of research is captured in various models such as the Competition-Among-Relations-In-Nominals (CARIN) theory of conceptual combination (Gagné and Shoben 1997, Gagné 2001, Spalding and Gagné 2008), its updated version in the form of the Relational-Interpretation-Competitive-Evaluation (RICE) model (Spalding, Gagné, Mullaly and Ji 2010), and the competition-based meaning predictability theory (Štekauer 2005). Another aspect of competition concerns possible competition among representations of the complex word and its constituents (e.g., Gagné, Spalding, Nisbet & Armstrong, 2018).

Much attention has also been paid to a multiplicity of problems related to the processing and representation of complex words (for a representative overview see Baayen 2014).

Furthermore, considerable attention has been paid to the role of metaphor and metonymy in complex-word formation and complex-word interpretation (e.g., Benczes 2006) and the inter-relation between word-formation and word-interpretation (Štekauer 2017).

This brief outline of psycholinguistic research into complex words thus establishes a framework for the basic scope of topics to be discussed within the proposed workshop:

- The role and the relative significance of the head, the modifier and the thematic relations in interpretation of complex words.
- Competition among various strategies of complex-word formation and various interpretation possibilities / meaning predictability of novel context-free complex-words, especially with regard to the struggle between the contradictory tendencies of economy of expression vs. semantic transparency.
- The role of metaphor and metonymy in complex-word formation and their influence upon complex-word interpretation.
- The interrelation between complex-word formation and complex-word interpretation.
- The concept of semantic transparency in relation to complex-word interpretation.
- The influence of psychological factors, such as creativity, upon complex-word formation and complex-word interpretation.
- The role of inference in complex-word interpretation.
- Processing and representation of complex words.
- Empirical and experimental methods of psycholinguistic research into complex-word formation and interpretation.

References


