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TOWARDS A FORMALISED LEXICAL-CONSTRUCTIONAL ACCOUNT OF THE PREDICATE ‘SPREAD’ AND ITS ALTERNATING LOCATIVE CONSTRUCTIONS

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Much research has been done in the attempt to describe the different argumental patterns of the locative alternation. This alternation is associated to ‘position’ verbs typically illustrated in examples like *Jack sprayed paint on the wall* and *Jack sprayed the wall with paint*. Despite this proliferation of studies, Sag claims that “a more fine-grained semantic analysis of locative alternations” is required in the context of formalised grammars (2012: 133). In Sign-Based Construction Grammar (Boas & Sag, 2012), the analysis of the locative alternation has a clear lexical component, in which listemes are based on Fillmore’s frames and involve “semantic and lexemic underspecification” (Sag, 2012: 133). The two lexical class constructions that derive from a given lexeme include the specific frames plus information about the types of arguments and their semantic roles. However, this description does not reflect the syntactic process that allows the alternating behaviour of the arguments nor the semantic differences that can be observed in the two alternating patterns. Thus, enriched representations that can reflect all the lexical/semantic and syntactic phenomena that takes place in the unification of a lexeme such as ‘spread’ into two different constructions are needed. And this is where a new proposal of a formal constructional unification-based grammar has been brought into play to fully account for natural language processing: Formalised Lexical-Constructional Grammar (FL-CxG) (Cortés-Rodríguez, 2021).

FL-CxG borrows aspects from other models that have shown to be valid approaches in the description of meaning representation. From Role and Reference Grammar (Van Valin & LaPolla (1997), Van Valin (2005)), the model adopts its functional and typological syntactic apparatus that will be used in the creation of the set of feature structures and types that will be formalised as attribute-value matrixes (AVMs). From the Lexical Constructional Model (Ruiz de Mendoza & Mairal-Usón (2008, 2011), Mairal-Usón & Ruiz de Mendoza (2008)), it borrows the arrangement of lexical and constructional units into four levels of analysis and the cognitive mechanisms of subsumption and cueing. From generative semanticists such as Pustejovsky and Batiukova (2019), it borrows the structure of qualia that will be used in the analysis of the semantic structure. In the architecture of FL-CxG, two types of linguistic components are needed to thoroughly account for the meaning of language: linguistic entities, which constitute the expressions of a given natural language (sentences, phrases and lexical units), and grammatical objects, which are the tools used in the effective processing of linguistic entities and are described as generalised typed feature structures in the form of AVMs. Thus, I aim to design the AVMs for the representation of the lexical entry ‘spread’ and of the core combinatory locative constructions in which it participates. These AVMs describe their semantic structure by providing their event and qualia structures, as well as

syntactic aspects such as their valency and argument structure, and include all the relevant information that is required for the unification process with a particular linguistic entity. With this research, I aim to contribute to the population of the grammatical objects that are needed in FL-CxG at this initial state of development.

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THE FORMALIZED LEXICAL-CONSTRUCTIONAL MODEL (FL-CxG), OVERVIEW AND CHALLENGES FOR PERCEPTION VERBS: THE ATTRIBUTE VALUE MATRIX OF “HEAR”

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The FL-CxG, or Formalized Lexical-Constructional Model (Cortés, 2021), is a grammatical theory grounded on the Lexical Constructional Model (MLC, Ruiz de Mendoza & Mairal-Usón 2008, 2011; Ruiz de Mendoza & Galera 2014). It proposes a step forward in natural language processing by providing, from a unifying perspective, a mathematical formalization of most linguistic properties by means of an interface that allows, and precisely defines, the interconnection between linguistic entities by a set of rules or constraints.

These entities, which range from lexical units to sentences, are understood as formal units containing meaning and/or intention. The characteristics of these grammatical objects are encoded as a set of feature structures (Fs) which inherit the signature of Role and Reference Grammar (RRG, Van Valin, 2005). The FL-CxG provides format to these features structures by means of Attribute Value Matrixes (AVM). Inside these matrixes, feature structures are represented by a set of attributes that must contain a specific value.

The aim of this presentation is to exemplify the elaboration of AVMs for not-so-straight forward linguistic entities such as verbs from the Perception domain. As verbs from this domain have a rather