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# Dictionary of Abbreviations in Linguistics: Towards Defining Cognitive Aspects as Structural Elements of the Entry

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## Abstract

The first part of the article deals with general information about the project of compiling a dictionary of abbreviations in linguistics. It also contains a short overview of past research together with their main results. So far, some specific theoretical and practical solutions were proposed. Theoretical solutions refer to the Multi-level approach in collecting data for submorphemic word-formations, which consists of three aspects: 1) *Structure and Modes of Production*, 2) *Cognitive Aspects*, and 3) *Functional Aspects*. Practical solutions for the structure and modes of production have already been recommended with the results properly substantiated by the examples of abbreviations. The second part presents results of the analysis for the cognitive aspect of the multi-level approach. The semantic part reveals the relationship between an abbreviation type and the semantic (sub-)field it might be assigned to. Semiotic part is achieved by designating a specific interpretation of a sign's meaning, while the analysis of lexicalization and institutionalization confirms their contingent addition to this scientific lexicon. The motivational aspect takes two conceptual perspectives in consideration: the narrower and broader senses of the formation, and various semantic relationship patterns which led to the classification of fully and partially motivated abbreviations.

**Keywords:** dictionary; abbreviations; linguistics; micro-structure; analysis; multi-level approach; cognitive aspect; semantics; semiotics; motivation; lexicalization; institutionalization

## 1 Introduction

The overall aim of this paper is to provide specific theoretical and methodological models in preparing both a macro- and micro-structural framework for compilation of the future bilingual and bidirectional (English – English – Croatian), specialized and explanatory dictionary of abbreviations in linguistics. The dictionary would cover the core areas of linguistics and its interdisciplinary areas as well. The main triggers which motivated us to study the lexicon of abbreviations are, by all means, the lack of consistent categorisation and typology, as well as fixed boundaries between the respective types of abbreviations, which are, unfortunately, their most distinctive characteristics. The classification of abbreviations used here largely relies on López Rúa's (2006) work. We find this taxonomy ap-

appropriate because it clearly distinguishes certain abbreviation types. *Abbreviations* are divided into *simple* and *complex abbreviations*. According to López Rúa, an *initialism* is made of initial letters or occasionally the first two letters of the words in a phrase and combined to form a new sequence (2006: 677). The term initialism denotes an abbreviation created through the usage of initial letters, which applies to both alphabetisms and acronyms. The term alphabetism denotes an abbreviation pronounced as a series of letters of the alphabet, while the acronym denotes abbreviations pronounced as whole words. *Clippings* are either shortened words or syllables without a change in meaning or functions (López Rúa 2006: 676). *Blends* are created by “[...] joining two or more word-forms through simple concatenation or overlap and then by shortening at least one of them” (López Rúa 2006: 677).

## 2 Previous Research in the Field

Previously explained and described in the past research (cf. Fabijanić 2014, in print), the main objectives in compiling the dictionary and its main characteristics refer to the following concepts: bilingual and bidirectional type of dictionary according to the number of languages, alphabetical order of headwords according to the order of presentation, appropriate use of the data which should be provided within the microstructural confines, and scientific, identified by the domain-specific collection of abbreviations in linguistics from specialized publications. So far, I have proposed some specific theoretical and practical solutions to be utilized in compilation of the entries (Fabijanić 2014, in print). These solutions refer to the concept of multi-level approach in collecting data for submorphemic word-formations (cf. Fandrych 2008a).

The triaspectual multi-level approach is comprised of the following stages: 1) *Structure and Modes of Production*, i.e. the structural aspects and word-formation potential, word class, medium and origin; 2) *Cognitive Aspects*, i.e. semantic, semiotic and motivational aspects, lexicalization and institutionalization, and 3) *Functional Aspects*, i.e. stylistic and sociolinguistic aspects, pragmatic and text-linguistic aspects. The application of this interdisciplinary approach will give a fuller and a more transparent picture of various orthographic, morphological, semantic, stylistic and functional processes involved in the production and uses of abbreviations.

As for the first aspect of *Structure and modes of production*, abbreviations have been classified according to two criteria – *narrower* and *broader sense* (cf. Fabijanić 2014, in print). The narrower sense refers to those formed by using initial letters of each element in the expansion (pertaining mostly to alphabetisms), and pronounced either by individual names of letters or as a word. The broader sense implies the ways and processes of formation, more or less different from the orthographic norms (pertaining mostly to hybrid forms, acronyms, blends and clippings featuring some orthographic changes), in consequence of which, one or more initials are used for various smaller elements of the expansion (smaller than words, yet bigger than initials). Due to this, initials for graphemes, compounds, and affixes, grammatical and lexical words found in the final form of an abbreviation, as well

as different orthographic changes, such as ellipsis, conversion, metathesis, addition, etc., were analysed and (sub-)classified.

For the purpose of their differentiation, a system of exclusive classification and subclassification of abbreviations was proposed (Fabijanić, Malenica 2013). Miscellaneous realisations of abbreviations are generally diversified into two main groups: those realised in the narrower sense and those in the broader sense. Abbreviations in the narrower sense are exclusively explained with an *LLL* descriptor for initials used in their formation. Abbreviations in the broader sense are represented with a whole set of additional different letters or initials (written either in capital or small letters) added to a three-letter descriptor: e.g. *l* for small letters, *P* for initial affixes, *N* for numerals, *S* for syllables, and *W* for a word. Further orthographic changes are explained by other descriptors, e.g. *E* for ellipsis, *C* - conversion, *M* - metathesis, and *A* for addition of a word or a diacritic sign not normally found in expansions. Comprehension and consequently classification of abbreviations depends on the degree of their (non-)coordination with the common orthographic norms.

The research in *Structure and modes of production* of abbreviations has proven that most of the alphabetisms are formed according to the criterion in the narrower sense, while the ratio of those formed in the narrower and the broader sense for acronyms (which were fewer in number than alphabetisms) was in favour of the broader-sense formations (cf. Fabijanić 2014 in print). As for the hybrid-form ratio, the broader-sense criterion is also more evident. The direct results of the analysis have attested the possibility of applying previously devised descriptors (Fabijanić, Malenica 2013), as well as some new descriptors, which have emerged in the analysis of abbreviations in linguistics (e.g. *P-LL* for alphabetisms, *FLL* for acronyms and some clippings in broader sense, *SFL* and *FFL* for blends, *Lll* and *lll* for clippings in broader sense, and *LLW*, *PLW*, *L/LW*, *FLW*, *F-LW*, *S-LW*, *SFL*, *WLL*, *W-LL* for hybrid formations). The Structure and modes of production aspect will be described by labels referring to form(s) of abbreviations, medium, word class, origin (cf. § 7).

### 3 Aims and Objectives of the Current Research

The immediate aim of this research is to bring forth the results of the analysis for the second aspect of the Multi-level approach, i.e. the cognitive aspect inherent to non-morphematic word-formations. The *Cognitive aspect* deals with semantic, semiotic and motivational aspects, as well as with the lexicalization and institutionalization of abbreviations. The semantic part gives answers to the relationship between a given word-formation of a specific abbreviation type and the semantic (sub-)field it may be assigned to. Semiotic part is achieved by designating a specific interpretation of a sign's meaning, while the analysis of lexicalization and institutionalization of abbreviations confirms their contingent addition to the lexicon of a language or to the specific scientific lexicon. As far as motivation is concerned, the relationship between the structural pattern of abbreviations, their meaning(s) and

phonemic, graphemic and sub-morphemic elements was analysed, which led to the classification of abbreviations into those fully or partially motivated.

## 4 The Corpus of Abbreviations

The abbreviations analysed in this article were taken from different dictionaries of general linguistics and dictionaries of various linguistic disciplines (e.g. phonetics and phonology, lexicography, etc.; cf. Sources). The corpus comprises 446 abbreviations, belonging either to the category of simple or complex abbreviations. There are 270 alphabetisms, 67 acronyms, 5 blends, 19 clippings, 22 simple abbreviations and 63 hybrid forms. Alphabetisms, simple abbreviations and clippings were mainly formed according to the criterion of narrower sense formations, while acronyms, blends and hybrid formations were mainly formed according to the criterion of broader sense (cf. Fabijanić 2014, in print).

The corpus provides additional information about each abbreviation in the following order: abbreviation, expansion, descriptor of abbreviation form, source, abbreviation type, and details of the analysis for lexicalization, institutionalization, semantics, semiotics, and motivation.

## 5 Research Methods

The explication of research methods in the article refers to the stages of analysis for the cognitive aspect of the Multi-level approach. They will be dealing with the description of methods applied for the analysis of semantics, semiotics, motivation, lexicalization, and institutionalization, i.e. the features of the mentioned subsidiary aspects which can be attributed to abbreviations.

The application of semantic aspect is understood through the possibility of assigning a specific abbreviation type to its semantic field, i.e. the (sub-)field of linguistics or the interdisciplinary disciplines. The practice of assigning a semantic field does not certainly mean that an abbreviation could have only been appointed to that specific field; on the contrary, each abbreviation can be assigned to other semantic fields as well, but what we wanted to point out by this practice is the immediate textual and contextual surrounding an abbreviation was found in. Semiotic aspect is realised by determining the relations between the elements of an abbreviation or a sign. Due to the fact that two elements of the sign – the sign itself and the object – are already present in the form of abbreviations and their expansions, I find the interpretant (the sense/meaning) to be the element which can and has to be analysed by the implementation of Peirce's three-graded diversification of sign's clarity or understanding, i.e. by implementing the grade of the immediate interpretant (sign's first meaning), the grade of the dynamic interpretant (the actual effect of the sign) or the grade of the final interpretant (the final interpretative result of the sign).

Motivation in the formation of abbreviations was analysed by taking two conceptual perspectives in consideration. The first concept is connected to the narrower and the broader senses of the formation,

while the second one is connected to the classification of abbreviations according to various motivational patterns (e.g. homophony, homography, homonymy, metaphor).

Lexicalization in this work is understood within the confines of the synchronic sense in which the lexicalization of abbreviations corresponds to *the process of listing* and the *listedness* (cf. Hohenhaus 2005: 356). For the purpose of the analysis, abbreviations are classified into those that were or were not listed or lexicalized. Being specific in their formation, listing/listedness of abbreviations will inevitably be sub-classified according to their specific structure and modes of production. Therefore, abbreviations like simple abbreviations and clippings, due to their graphic and spoken arbitrariness, will not be listed (or can be considered to be in the process of listing), while alphabetisms, acronyms, blends, and hybrid formations will be listed. Finally, institutionalization “[...] refers to the stage in the life of a word at (or form) [brackets in original] the transitional point between the status of ex-nonce-formation-turned-neologism and that of generally available vocabulary item, i.e. a formation that is listed but not (necessarily) [brackets in original] lexicalized in the diachronic sense yet [...]” (cf. Hohenhaus 2005: 359). Institutionalization, in terms of this part of the research, refers to the fact whether an abbreviation as such can be considered as institutionalized within the lexicon of linguistics or not.

## 6 Cognitive Aspects: The Analysis

### 6.1 Semantic and Semiotic Aspect

As described in the previous section, the semantic aspect of abbreviations was realised in accordance with the nearest corresponding semantic field. The analysed abbreviations were allocated to various sciences and disciplines, both linguistic or non-linguistic ones, according to the principle of immediate context within the entries. Here are the semantic fields with the information on total number of allocated abbreviations and an example with its expansion: *Applied linguistics* (39; ASTP - ‘Army Specialized Training Program’), *Cognitive linguistics* (1; ICM - ‘Idealized Cognitive Model’), *Computational linguistics* (38; COBOL - ‘Common Business-Oriented Language’), *Corpus linguistics* (9; BNC - ‘British National Corpus’), *Neurolinguistics* (6; TDH - ‘Trace-Deletion Hypothesis’), *Historical linguistics* (8; PIE - ‘Proto Indo-European’), *Linguistic anthropology* (2; LISA - ‘Language and Identity in Sociocultural Anthropology’), *Psycholinguistics* (12; PALPA - ‘Psycholinguistic Assessment of Language Processing in Aphasia’), *Sociolinguistics* (19; LSPT - ‘Language Status Politics’), *Pragmatics* (71; AP - ‘Applying Pragmatics’), *Theoretical approaches* (4; TG - ‘Transformational grammar’), *Phonetics and phonology* (16; VOT - ‘Voice Onset Time’), *Morphology* (27; SG - ‘Singular’), *Syntax* (56; NP - ‘Noun Phrase’), *Semantics* (13; SFH - ‘Semantic Feature Hypothesis’), *Dialectology* (1; ADS - ‘American Dialect Society’), *Stylistics* (1; DS - ‘Direct Speech’), *Lexicology* (1; ALLEX - ‘African Languages LEXical project’), *Lexicography* (25; OED - ‘Oxford English Dictionary’), *Linguistic typology* (2; ASL - ‘American Sign Language’), *Text analysis* (2; PISA - ‘Procedures for Incremental Structure Analysis’), *Discourse analysis* (1; SA - ‘Speech Acts’), *Literary*

*linguistic analysis* (1; NI – ‘Internal Narration’), *Translational studies* (1; TT-ST – ‘Target Text–Source Text’), *Philosophy of language* (1; CF – ‘Context-Free’), *Semiotics* (1; ISL – ‘Iconicity in Sign Language’), *Cognitive pragmatics* (1; ICM – ‘Idealized Cognitive Model’), *Cognitive technology* (1; CT/TC – ‘Cognitive Technology/ Technological Cognition’), *Speech recognition* (1; HMM – ‘Hidden Markov Model’), *Speech technology* (2; AVIOS – ‘American Voice Input and/Output Society’), *Media* (2; BBC English – ‘British Broadcasting Company English’), *Computational science* (9; WOZ – ‘Wizard-of-OZ simulation’), *Medicine* (1; TBI – ‘Traumatic Brain Injured patient’), *Literacy* (2; NLS – ‘New Literacy Study’), *Communicology* (6; SAT – ‘Speech Accommodation Theory’), *Education* (25; CABE – ‘Central Advisory Board of Education’), *Associations* (20; EURALEX – ‘European association for LEXicography’), *Organisations* (12; CALLSSA – ‘Center for Applied Language and Literacy Studies and Services in Africa’), *Conferences* (1; LTRC – ‘Language Testing Research Colloquium’), *Journals* (5; IJOAL – ‘International Journal Of Applied Linguistics’), and *Databases* (1; LAPTOC – ‘Latin American Periodical Table Of Contents’).

Most of the abbreviations were allocated for the following fields: *Pragmatics* (71), *Syntax* (56), *Applied Linguistics* (39), *Computational linguistics* (38), *Morphology* (27), *Education* (25), and *Lexicography* (25), while the least allocated, i.e. a field with one example, are: *Dialectology*, *Stylistics*, *Lexicology*, *Discourse analysis*, *Literary analysis*, *Semiotics*, *Cognitive Pragmatics*, *Cognitive technology*, *Speech recognition*, *Medicine*, *Conferences*, and *Databases*. A cross-sectional view of abbreviation types in some semantic fields will disclose the following data about the most frequent abbreviation type and its formation structure: the most frequent type of abbreviations in the fields of *Pragmatics*, *Applied linguistics*, *Syntax* and *Computational linguistics* is the type of alphabetisms with the narrower sense formation structure of *LLL*.

Semiotic aspect refers to the analysis of three grades of interpretants: immediate, dynamic and final. Most of the abbreviations were classified within the class of sign having an immediate interpretant (approx. 230 abbreviations), followed by the class of final interpretants (approx. 120), and the ones with the dynamic interpretant (approx. 90). I believe that in case of abbreviations, the classification of interpretants is firmly connected to the cognition of relationship between the abbreviation type(s), its/their expansion(s), variability of expansion, some inner features of different abbreviation types (e.g. those of acronyms’ when compared to alphabetisms), and frequency of use. The immediate interpretant indicates “[...] the effect the sign first produces or may produce upon a mind without any reflection upon it” (cf. *Semiotics and Significs* 1909: 110-1). From the previous quotation, it might be possible to assume that primary effects on our understanding of some abbreviations can be considered *sui generis*. Such is the case for some alphabetisms, clippings and hybrid forms whose understanding is conditioned by their immediate (con-)textual surrounding or expansion, e.g. primary understanding of the alphabetism AAAL (‘American Association for Applied Linguistics’) is conditioned by its expansion provided in the text. Furthermore, clippings like ACC (‘ACCusative’), ACT (‘ACTive’), COP (‘COPula’), or hybrid formations like, ALLEX (‘American Association for Applied Linguistics’), BSAfE (‘Black South African English’), CCSARP (‘Cross-Cultural Speech Act Realization Project’), LCPT (‘Language Corpus Politics’), LRs (‘Language Rights’), ATN grammar (‘Augmented Transition Network grammar’) is by all means conditioned by that primary effect of understanding. Direct evidence of this claim is

supported in the following example: the difference in understanding the ALLEX and EURALEX, although some extensional as well as structural and formational features are being shared, is evident in the finality of understanding of the latter hybrid (connotation for *EUR-* is more immediate than for *ALL-*).

With regard to the dynamic interpretant, understanding of abbreviations within this category is mostly conditioned by the variability of extensions or the form of an abbreviation. The dynamic interpretant “[...] is that which is experienced in each act of Interpretation and is different in each from that of the other [...]” (cf. Semiotics and Significs 1909: 110-1). I believe that this can be witnessed in the following examples of simple abbreviations, acronyms, alphabetisms and clippings: M for ‘Movement’ or ‘Metapragmatic joker’; ACE for ‘Automatic Content Extraction’ or ‘Australian Corpus of English’; CT for ‘Cognitive Technology’, ‘Conversational Theory’ or ‘Centering Theory’; AUX or Aux for ‘Auxiliary’.

The final interpretant is “[...] the one Interpretative result to which every Interpreter is destined to come if the Sign is sufficiently considered [...]” or “[...] the effect the Sign *would* [italics in original] produce upon any mind upon which the circumstances should permit it to work out its full effect [...]” (cf. Semiotics and Significs 1909: 110-1). Due to their completeness of graphic and phonetic forms, i.e. the possibility of being read as words, and their frequency of use, most of the analysed blends, acronyms, and some hybrids, which are very similar to acronyms, together with some infrequent alphabetisms, were classified into the class of abbreviations having the final interpretant. The sum of the meanings or the final interpretative result the signs would inevitably have, can be confirmed by the examples of: acronyms – COBUILD (‘Collins Birmingham University Information’), ECHO – (‘European Commission Host Organisation’); blends – (‘AFRICan association for LEXicography’), FORTRAN (‘FORMula TRANslation’); hybrids – AUSTRALEX (‘AUSTRalian Association for LEXicography’), ITSPOKE (‘Intelligent Tutoring SPOKEN dialogue system’); alphabetisms – HTML (‘HyperText Mark-up Language’), L1 (‘First Language’).

## 6.2 Motivational Aspect

As it has already been explained (cf. § 5), motivational aspect was analysed through two conceptual perspectives. The first concept takes into consideration the formational difference between various types of abbreviations, previously classified according to the aspects of narrower and broader sense:

The narrower sense of their creation refers to those formed by using initial letters of each element in the expansion (mainly alphabetisms) [brackets in original], and pronounced either by individual names of letters or as a word. The broader sense implies the ways and processes of formation, more or less different from the orthographic norms (mainly hybrid forms, acronyms, blends and clippings featuring some orthographic changes) [brackets in original], in consequence of which, one or more initials are used for various smaller elements of the expansion (smaller than words, yet bigger than initials) [brackets in original]. (Fabijanić 2014; in print)

The motivational aspect for the abbreviations analysed in this work assumes that some of them are fully motivated, while the others are partially motivated. I find fully motivated abbreviations to be the ones which largely correspond to the norms of narrower sense creations, i.e. alphabetisms and acronyms, simple abbreviations, blends and clippings formed by the orthographic norm and in which every element of the expansion is traceable. Partially motivated are those that principally fall into the group of broader sense formations, i.e. alphabetisms, acronyms, simple abbreviations, clippings, blends, and hybrid formations which are not formed by the orthographic norms and in which more or less elements of expansions can be traced. The second conceptual perspective of the motivational aspect takes into consideration the specific patterns which motivated the emergence of abbreviations. These might be homophonous, homographic, homonymic, and metaphorical patterns. I shall provide some examples of different abbreviation types for each pattern. The homographic pattern, in which initials from extensions are repeated in abbreviations, is mostly evident in narrowly formed alphabetisms, e.g. IPA – ‘International Phonetic Association’, NLU – ‘National Lexicographic Unit’. The homophonic pattern, in which part(s) of extensions or initials (in acronyms) are either echoed in a resultant abbreviation or make a word having different meaning in the general lexicon, can be detected in the example of clippings ACT (‘ACTIVE’), INACT (‘INACTIVE’), in the acronym ACE (‘Automatic Content Extraction’), or the blend AFRILEX (‘AFRICan association for LEXicography). Sometimes the overlapping of patterns can be realized as in the example of BANA acronym (‘Britain, Australasia, and North America’) in which homographic and homophonic principles can be traced (the repetition of initials and homophony with other words and abbreviations like the surname *Bana*, a drink named *BANa* or *BANA* for ‘*British Acoustic Neuroma Association*’, ‘*Bulimia Anorexia Nervosa Association*’, ‘*Bath Area Network for Artists*’, etc.). The homonymic principle is realised in examples of hybrids and acronyms like BIT – ‘BINary digiT’ (homonymic with *bit* ‘amount of sth, part of sth’) and CAM – ‘Center of Auditory Memories’ (homonymic with *CAM* ‘Computer Aided Manufacturing’, *cam* ‘a wheel part which changes the movement of the wheel’, *cam* ‘a clipped form from *camera*’). *The homonymic principle can be disrupted by the addition or deletion of graphemes otherwise not found in original words, e.g. the acronym KWIC (‘KeyWord In Context’) in which <KWI> suggests the group of graphemes <qui>, while <C> suggests the group <ck> as in quick, or in case of the hybrid CHILDES database (‘CHILD Language Data Exchange System database’) in which its form might suggest the ungrammatical plural form of the noun child. Metaphorical principle of motivation is evident in subsequent forms of acronyms or hybrid forms: NORM – ‘Non-mobile, Older, Rural Male’; MACK – Multimodal Autonomous Conversational Kiosk’; CHAT – ‘Cultural-Historical Activity Theory’; BASIC English – ‘British, American, Scientific, International, Commercial English’, while humorous touch is felt in metaphorically motivated FUG (‘Functional Unification Grammar’), MUD (‘Multi-User Domain’), DARE (‘Dictionary of American Regional English’), LISA (‘Language and Identity in Sociocultural Anthropology’), ELI (‘English Language Institute’), PISA (‘Procedures for Incremental Structure Analysis’), etc.*



### 6.3 The Aspects of Lexicalization and Institutionalization

For the purpose of this research, Lipka's definitions on lexicalization and institutionalization of complex lexemes will be applied (2005: 4). According to Lipka, "[...] complex words [...] were coined according to productive morphological or semantic process [...], and they have [...] been affected – to a greater or lesser degree – by formal and/or semantic changes subsumed under the concepts of **lexicalization** and **institutionalization** [bold in original]." He defines lexicalization as: "[...] the process by which complex lexemes tend to become a single unit with a specific content, through frequent use. In this process, they lose their nature as a syntagma, or combination [of smaller units], to a greater or lesser extent" (1992: 107). In his later research (2005: 7), the definition of lexicalization was extended by the features of gradual, historical process which involve changes in phonology and semantics, as well as loss of motivation.

Since all the above definitions with some additional descriptions in Lipka's work (together with other work of specialists cited in his works), fit well to the topic of my research and since the lexicon to which the two processes can be applied is compatible with their patterns of verification, I shall propose a three-stage model of lexicalization for abbreviations, i.e. preliminary, primary and secondary stage. The *preliminary stage* is understood as a preparatory stage in the process of lexicalization. It refers to a small group of simple abbreviations whose final abbreviated form is too short or arbitrary to be considered either partially or fully lexicalized, e.g. A – 'Adjective', L – 'Location', M – 'Metapragmatic joker' or 'Movement', N – 'Noun'. The *primary stage*, with partially lexicalized abbreviations, is disclosed in formational incompleteness and variability of abbreviations. Thus we have alphabetisms with both small and capital letters (CmC – 'Computer mediated Communication'), clippings with small and capital letters, which, additionally, are not pronounced (Aux – 'Auxiliary', Utt – 'Utterance'), hybrid formations with small and capital letters (LHRs – 'Linguistic Human Rights', SaPs – 'Speech acts Projections'), and alphabetisms with various diacritics (R-A – 'Referentially Autonomous expression', CT/TC – 'Cognitive Technology/Technological Cognition'). The *secondary stage* with completely lexicalized abbreviations refers to those which are more easily recognized as lexical units, i.e. acronyms (LAD – 'Language Acquisition Device', LAPTOC – 'Latin American Periodical Table Of Contents'), hybrids in combinations with words (LISP language – 'LIST Processing language'), alphabetisms in narrower sense (MHG – 'Middle High German'), blends (AFRILEX – 'AFRICan association for LEXicography), some clippings with consistent and utterable orthography (COP – 'COPula', FEM – 'FEMinine').

Institutionalization, in Lipka's view, refers to "[...] the sociolinguistic aspect of this process and can be defined as the integration of a lexical item, with a particular form and meaning, into the existing stock of words as a generally acceptable and current lexeme" (2005: 8). Lipka further defines institutionalization as the process in which a specific speech community (e.g. doctors, medical people, linguists, etc.) accepts the specific lexemes into the lexicon. (2005:11). He also states that "[both lexicalized and] institutionalized words, ie item-familiar ones, are registered and listed in good dictionaries [...]"

(2005: 12). If we take into consideration all the above viewpoints and aspects of institutionalization, as well as the facts about our corpus confirmed and compiled from specialized (mostly encyclopaedic) dictionaries, than we can conclude that all the analysed examples of abbreviations have been fully institutionalized. For the purposes of defining the entry structure, institutionalization will be explained by two attributes – affirmed or not affirmed institutionalization.

## 7 The Entry and its Elements

As it had previously been suggested, after having completed the analysis of *Structure and modes of production aspect* (cf. Fabijanić 2014, in print), an entry would consist of the following elements: a headword, (a) variant(s), pronunciation, the type of word-formation, the information on the word class (where applicable), a descriptor which will inform users about the mode of production, expansion elements in English and their translation in Croatian, the information about the medium and the origin of abbreviations, both in English and Croatian.

The following examples of different abbreviation forms (an alphabetism, an acronym, a clipping, a blend and a hybrid form) present the micro-structure of the future dictionary entry with the addition of elements for the *Cognitive aspect*, i.e. information on the semantic field, interpretation of the sign's interpretant (immediate, dynamic or final), information on the motivational aspect (fully or partially motivated), the information on the lexicalization (preliminary, partial and complete lexicalization) and institutionalization (institutionalized or not). The subsequent (simple) abbreviations have been suggested for the use within the entry: *T* (type), *E* (expansion), *M* (medium), *D* (descriptor), *O* (origin), *SF* (semantic field), *SI* (sign's interpretant), *MT* (motivation), *L* (lexicalization), and *I* (institutionalization).

- **ADS** [ˈeɪˈdiːʔes] **T:** *alph.* | **E:** *American Dialect Society/Američko dijalektalno društvo* | **M:** *written/ pisani, spoken/govorni* | **D:** *LLL* | **O:** *ADS was founded in 1889 with the intention of creating a dictionary of American dialects. (ELL)/Američko dijalektalno društvo osnovano 1889. s namjerom stvaranja rječnika američkih narječja.* | **SF:** *dialectology/dijalektologija* | **SI:** *immediate/ neposredan* | **MT:** *full/potpuna* | **L:** *complete/dovršena* | **I:** *affirmed/potvrđena*
- **ACE** [eɪs] **T:** *acr.* | **E:** *1) Automatic Content Extraction/Automatsko ekstrahiranje sadržaja, 2) Australian Corpus of English/ Korpus australskoga engleskog* | **M:** *written/pisani, spoken/govorni* | **D:** *1) LLL, 2) LLL E = prep.;* | **O:** *1) The ACE program is a successor to ® MUC that has been running since a pilot study in 1999. (ELL)/ACE program provodi se još od pilot-projekta iz 1999., a naslijedio je MUC., 2) The corpus of Australian English compiled at Macquarie University using texts published in 1986. (HEL) / Korpus australskoga engleskog sačinjen na Macquarie sveučilištu iz tekstova objavljenih 1986.* | **SF:** *computational and corpus linguistics/ računalna i korpusna lingvistika* | **SI:** *dynamic/ dinamičan* | **MT:** *1) full/ potpuna, 2) partial/djelomična* | **L:** *complete/dovršena* | **I:** *affirmed/potvrđena*

- **AUX, Aux, aux** [-] **T:** *clip.* | **E:** *Auxiliary/pomoćni* | **M:** *written/pisani* | **D:** *Lll* | **O:** *Lat. auxiliaris - 'giving aid' (RDLL)/lat. pomoćni - 'koji pomaže'.* | **SF:** *morphology/morfologija* | **SI:** *dynamic/dinamičan* | **MT:** *partial/djelomična* | **L:** *partial/ djelomična* | **I:** *affirmed/ potvrđena*
- **AFRILEX** [ˈæfrɪˌlɛks] **T:** *blend* | **E:** *AFRICan association for LEXicography/Afričko leksikografsko udruženje* | **M:** *written/ pisani, spoken/govorni* | **D:** *LSF E= noun, prep.* | **O:** *AFRILEX was founded in 1995 and strives to promote all aspects of lexicography on the African continent. (ELL)/Organizacija osnovana 1995. u svrhu promocije svih aspekata leksikografije na afričkom kontinentu.* | **SF:** *associations, lexicography/udruženja, leksikografija* | **SI:** *dynamic/dinamičan* | **MT:** *full/ potpuna* | **L:** *complete/dovršena* | **I:** *affirmed/ potvrđena*
- **ALGOL** [ˈælgɒl] **T:** *hybr. (syll+s.abb.)* | **E:** *ALGOritmic Language/algoritamski jezik* | **M:** *written/pisani, spoken/ govorni* | **D:** *SSL* | **O:** *Programming computer language appeared in 1958. (RDLL)/ Programski računalni jezik nastao 1958. godine.* | **I:** *affirmed/ potvrđena* | **SF:** *computer science/računalne znanosti* | **SI:** *final/konačan* | **MT:** *partial/djelomična* | **L:** *complete/ dovršena* | **I:** *affirmed/ potvrđena*

## 8 Conclusion

In closing, I would like to stress again the overall and immediate aims of this research. The overall aim is to provide the basis for the future dictionary of abbreviations in linguistics, which would be bilingual, bidirectional, specialized (domain-specific, technical), synchronic, explanatory, alphabetically arranged dictionary, informative and encyclopaedic in content, and serve both non-specialized and specialized audience. The solution for the lexicographic presentation of abbreviations is based on Ingrid Fandrych's *Multi-level approach* which is comprised of three aspects: *Structure and Modes of Production*, *Cognitive Aspect*, and *Functional Aspect*. The immediate aim of the research is to bring forth the results of analysis for the second aspect, i.e. the Cognitive aspect, which deals with semantics, semiotics, motivation, lexicalization and institutionalization.

Summing up the results of this research, I would like to state that the sources used in compiling the corpus of abbreviations in linguistics, have proved to be trustworthy, valuable and fundamental for the cognitive aspect, just as they were for the structures and modes of production. Furthermore, the research has proved that the criteria of narrower and broader sense classification can be reiterated for the elements of the cognitive aspect too.

I hope to have shown that the stages of the cognitive aspect can be defined by the recommended methods in analysing semantic, semiotic, motivational features of abbreviations, as well as the facts about their lexicalization and institutionalization. The semantic aspect was realised in accordance with the nearest corresponding semantic field for a specific abbreviation. The abbreviations were allocated to various sciences and disciplines, such as *Pragmatics*, *Syntax*, *Applied Linguistics*, *Computational linguistics*, etc. The analysis of the semiotic aspect was realised by the application of three grades of interpretants: immediate (sign's first meaning), dynamic (the actual effect of the sign) and final (the fi-

nal interpretative result of the sign). Most of the abbreviations were classified within the class of sign having an immediate interpretant, followed by the class of final interpretants, and the class of the dynamic interpretant. The motivational aspect for the abbreviations analysed in this work assumes that some of them are fully motivated (those which largely correspond to the norms of narrower sense creations), while others are partially motivated (those that principally fall into the group of broader sense formations). The second conceptual perspective of the motivational aspect takes into consideration the homophonous, homographic, homonymic, and metaphorical patterns which motivated the emergence of abbreviations. As far as lexicalization is concerned, a three-stage model of lexicalization for abbreviations (preliminary, primary and secondary stage) is proposed. The preliminary stage is a preparatory stage in the process of lexicalization. The *primary stage*, with partially lexicalized abbreviations, is disclosed in formational incompleteness and variability of abbreviations. The *secondary stage* with completely lexicalized abbreviations refers to those which are more easily recognized as lexical units. In dealing with the aspect of institutionalization, the crucial moment for the application of dichotomous differentiation between affirmed and not affirmed institutionalization, is recognized through the fact that abbreviations have been lexicographically attested.

Finally, with regard to the micro-structure of the future entry, its second level will consist of five structural elements which will be represented by the following abbreviations/symbols: *SF* (semantic field), *SI* (sign's interpretant), *MT* (motivation), *L* (lexicalization), and *I* (institutionalization).

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