Modern Linguistics: Theoretical Aspects of the Development of Cognitive Semantics

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Summary

This article presents an examination of the major cognitive-semantic theories in linguistics (Langacker, Lakoff, Fillmore, Croft). The CST's foundations are discussed concerning the educational policy changes, which are necessary to improve the linguistic disciplines in the changing context of higher education, as well as the empowerment and development of the industry. It is relevant in the light of the linguistic specialists' quality training and the development of effective methods of language learning. Consideration of the theories content, tools, and methods of language teaching, which are an important component of quality teaching and the formation of a set of knowledge and skills of students of linguistic specialties, remains crucial. This study aims to establish the main theoretical positions and directions of cognitive-semantic theory in linguistics, determine the usefulness of teaching the basics of cognitive linguistics, the feasibility of using methods of cognitive-semantic nature in the learning process. During the research, the methods of linguistic description and observation, analysis, and synthesis were applied. The result of the study is to establish the need to study basic linguistic theories, as well as general theoretical precepts of cognitive linguistics, which remains one of the effective directions in the postmodern mainstream. It also clarifies the place of the main cognitive-semantic theories in the teaching linguistics' practice of the XXI century.

Keywords:
Linguistic Theory. Cognitive Semantics. Cognitive Linguistics. Concepts. Categorization. Frames. Semantic Fields. Prototypes. Metaphor.

1. Introduction

One of the main items in cognitive-semantic theories is meaning. The conventionality of the "cognitive linguistics" proper concept serves to present several related theories adjacent to this term. These are, first of all, cognitive grammar, semantics, phonology; metaphor theory; theory of semantic prototypes; frame semantics. All these theories have their specifics but hold the same general cognitive-functional positions, views on the phenomenon of language, where the main criterion is the algorithm of its use. This approach to the language study is relevant and fundamentally new for the new approaches' development to creating a high-quality translation, a better and faster acquaintance with the phraseology, frames, prototypes, and cultural scenarios embodied in verbal forms.

Among the main theses of cognitive theory is the thesis that speech is not a separately isolated innate characteristic of the mind. No doubt a person has a genetically determined propensity for the verbal. However, one must develop these propensities and learn the language. Full mastery of the language system depends on the physiology, experience, cultural, social factors, and cognitive abilities of the individual.

The empirical question of the innate, universal nature of grammar [23]; [15] is closely related to the factors of individual and collective experience, cognitive capacity, which determines the pivotal position of cognitive-semantic theories. Cognitive semantics is often used in the educational process to facilitate the study of vocabulary and phraseology, means of secondary nomination. Several research works [12]; [11]; [21]; [14] have actively contributed to this practice. In educational practice, the achievements of cognitive semantics are used for studies of semantics, poetics, stylistics, etc.

As a theory, cognitive semantics is in the mainstream of cognitive linguistics, which rejects the formal traditional division of linguistics into phonology, pragmatics, and syntax. Instead, semantics (meaning) is presented through the construction of content and the representation of

speakers' knowledge and world perceptions around them and their realities. This breadth of scientific interest in cognitive semantics is the reason why areas traditionally attributed to pragmatics and semantics have been examined from new positions. Many studies [22]; [7] have suggestions for the educational materials' formation on this basis, which fundamentally facilitate the mastery of stylistic and phraseological features of the language. It is one of the promising research areas in the modern linguistics field and the development of foreign language teaching methods.

Cognitive-semantic theories predominantly rely on the thesis that lexical meaning is conceptual; the lexeme meaning is not a simple reference to reality or an expression of relations in the "real world" that can be "tied" to the lexeme. Such a link is possible with a concept rooted in consciousness, based on experience or attitude. It means that semantics is not objective, and semantic knowledge is complicit with encyclopedic knowledge. Cognitive semantic theories are therefore based on the idea that semantics is subject to the same mental processes as encyclopedic knowledge proper. These theories have an interdisciplinary base and draw on theories of cognitive psychology and cognitive anthropology. These are theories of prototypes, and the theories of cognitive models (semantics of frames), which interpret the phenomena of polysemy and secondary nomination.

Therefore, promising in the postmodern mainstream educational paradigm is not a purely theoretical narrow-branch content, but one that provides an opportunity to use a linguistic tool in interdisciplinary research and is used in the teaching practice.

This study aims to define the principal theoretical positions and directions of the cognitive semantic theory in linguistics to determine the effectiveness of the study of the basics of cognitive linguistics, the feasibility of using methods of cognitive-semantic nature in the training of specialists in philological direction.

According to the aim, the following research tasks are planned to be carried out:

− to determine the main cognitive-semantic theories within the framework of the course "Cognitive approaches to the semantics of linguistic units," relevant to the modern linguistic education;

− to assess changes in students' academic performance as a result of mastering the main cognitive-semantic theories within the framework of the course;

− to establish the extent to which respondents are interested in and positively evaluate the introduction of the study of linguistic theories of cognitive-semantic direction, aimed at the development of study skills and enhancement of the professional level.

2. Literature review

The main cognitive-semantic theories are being developed in the early and middle of the 20th century. Summarizing the main directions of development of cognitive semantics, we should refer to the studies of W. Croft, C. Fillmore, M. Fried, and A. Goldberg [1]; [7] [3]. The basic premise of this direction, which has been called constructional semantics, is the thesis that language is a system of constructions, which are perceived as conventional and non-compositional language signs, and their meanings and uses are not explained only by the combination of meaning and form. Each construction is a bearer of its meaning (construction meaning) that is not the sum of the individual words' meanings of the construction composing. Thus, A. Goldberg (1995) argued that any speech construction type is a valuable component of understanding the nature of language, types of social and cognitive behavior. This theoretical position allows the development of methods for studying idioms, phrases, paremics, and others. During the study of the foreign language, the cognitive-semantic approach removes the need to construct phraseosemantic fields according to the nuclear and peripheral principles. It simplifies the process of getting acquainted with the phraseology of another language, the process of learning foreign languages [4]; [10]. In this research context [5], atypical constructions are actively considered. Such a theoretical problem can be solved from the position of constructional grammar.

Separately, cognitive semantics also distinguishes an experimental direction, which is associated with prototype theory and natural categorization, presented in the researches of Croft (2015) and Perek (2015). This theory focuses on the theoretical and everyday process features of cognizing the world through the language and describing the cognitive activity and cognitive capabilities of the speaker. Key concepts like categorization and conceptualization are at the center of this approach. The ability to distinguish and group objects of the world around and categorize linguistic phenomena in the cognition process makes possible the formation of a categorical network of human epistemological experience. This approach to linguistic phenomena makes it possible to facilitate the perception of grammatical, morphological, and phonological levels in the study of foreign languages. Certain generalizations of linguistic knowledge allow us to form concepts of phenomena of linguistic reality.

Langacker's (2000) model of cognitive semantics also contains the idea of prototypical meanings, focusing on analogy as the basis for the schematic networks' creation. Langacker's (2000) schematic structures are low-level, assuming that attributes and relations between them, each schema automatically leading to a prototype. The effort to present such grammatical schemes as meaningful research on cognition [8], cognitive linguistics [4] has focused on

constructing such schematic constructions that unify such category elements.

Separately, algorithms for incorporating innovation and cutting-edge research processes into university curricula are being developed [9].

The recent research [17]; [20]shows that generalization is both possible within a high-level schema and also, at a lower level, it is possible to determine the content and nature of generalization in a construct. There are conative constructions capable of combining all units into one type. For example, statements like "Catherine caught the ball; She ate an apple; Will opened the window." These constructions (low-level schemas) generalize semantically related verbs and, as integral units of expression, have their semantic properties.

3. Materials and Methods

The experiment involved 72 third-year students of the first (bachelor) educational level, studying in the specialty 035 Philology. The data collection took place from September 2020 to April 2021 in several Eastern European universities (Kamyanets-Podilsky National University named after Ivan Ohienko (Ukraine) at the Faculty of Foreign Philology and Kharkiv National Pedagogical University named after H. Skovoroda (Ukraine) at the Faculty of Foreign Philology).

This research presupposed a pedagogical experiment in 3 stages. The educational process in the universities, within the framework of the research project, provides the lectures of the "Cognitive approaches to the semantics of language units," where the emphasis is placed on the practical ways of applying the main cognitive-semantic theories in metamodern linguistics.

Before the 1st stage, a preliminary test was conducted to ascertain the level of education applicants' familiarity with current advances in cognitive linguistics.

Accordingly, at the 1st stage, personal data were also collected; the students' level of involvement in the modern research paradigm was determined; a curriculum and corpus of educational and practical materials were created, and thematic blocks, in which there is a special need, were established. Students were divided into four groups. The CG1 and CG2 – control groups in which the curriculum did not provide for the introduction of the discipline "Cognitive approaches to the semantics of language units," however, these hours were used to study the translation theory and the language communication theory basics. The EG1 and EG2 - experimental groups where the "Cognitive approaches to the semantics of linguistic units" discipline introduction was envisaged.

All answers and data were given voluntarily by the students, and the research team guaranteed the confidentiality of the surveys. Any personal information obtained was given anonymously and was not made public by the research team.

At the 2nd stage (the 1st semester's end), for all the groups, the respondents' success was measured on the theory and practice of using cognitive approaches to the semantics of language units at the level of comparing corpora of texts, translations. The test consisted of a corpus of 20 questions, where five tasks concerned translation skills, knowledge of phraseology and paramiology, and 15 tasks had a theoretical and methodological aspect.

During the 2nd stage, the methods of observation and questioning were used. The research team collected and analyzed the data obtained regarding the students' success in the experimental and control groups. Subsequently, the collected data was used as answers to the problematic questions posed by the study.

At the 3d (final) stage, the ultimate testing is taking place: the level of success in the experimental and control groups is being evaluated; the final analysis of the results is being made; the data is being processed and used so that it can serve the answer to the problem questions of the study, as the basis for showing the effectiveness of the discipline "Cognitive approaches to the semantics of language units" in the experiment.

To have a comprehensive picture of the analysis, the research team resorted to several theoretical studies and methodologies to answer the problem questions posed in the research. The experiment results are presented in the statistical description form, taking into account questionnaire data.

4. Results

New age linguistics has placed the correlative positions of human consciousness, mental features represented as structures of collective consciousness, collective experience, and formants of the linguistic system (spaces of expression of the former) in the research focus. Teaching materials devoted to the main cognitive-semantic theories in linguistics offer an opportunity to systematize the problematics of the latest linguistic research and apply them in educational activities. The theoretical and practical orientation of the course has a systemic nature, which must be perceived and assimilated as a holistic project.

The educational components block, first of all, should present an overview of the main cognitive-semantic theories of modern linguistics. Basic theoretical concepts such as categorization, frames, semantic fields, semantic dominants, prototypes, metonymies, metaphors, polysemy, semantic relations (antonymy, hyponymy, etc.) should be presented and discussed. An important component of mastering the basic knowledge of cognitive linguistics is also an introduction to various cognitive theories: they are cognitive grammar (Langacker), metaphor theories

(Lakoff); frame semantics (Fillmore); constructional grammar (Croft). These theoretical positions can be used in cross-lingual and systemic statutes in the structure of the language system.

An important component of such training is the tasks application system for independent and practical work in the form of brief research based on data obtained from the analysis of literary texts, corpora of translations, other text corpora of comparative nature, which students could choose independently.

Before the experiment began, the research team assessed the students' level of awareness with the main cognitive-semantic approaches in linguistics. All respondents were asked to pass a test.

Table 1. The assessment of the students' awareness level in the experimental and control groups (author's technology).

	Unsatisfactory	Satisfactory	Good	Excellent
EG1	2%	58 %	29 %	10%
EG2	0	72%	20%	8 %
CG3	2%	65 %	23 %	10 %
CG4	1%	63%	25%	11%

As can be seen, the first test showed a low result, where the majority of respondents had mediocre perceptions (score "satisfactory" – an average of 65%). Some students have no idea about the modern achievements of cognitive semantics (score "unsatisfactory" – 1.5% on average).

The 1st stage introduced the respondents to the aim, purpose, and the main content components of the "Cognitive approaches to the semantics of linguistic units"

course. In our opinion, an important stage in the study is to establish the content and role of the verbalization process in the structure and methodological organization of training courses of communicative and speech development, career orientation, development in character. Since it is a priority part of courses of this type, teaching and research are based on the positions of cognitive semantics:
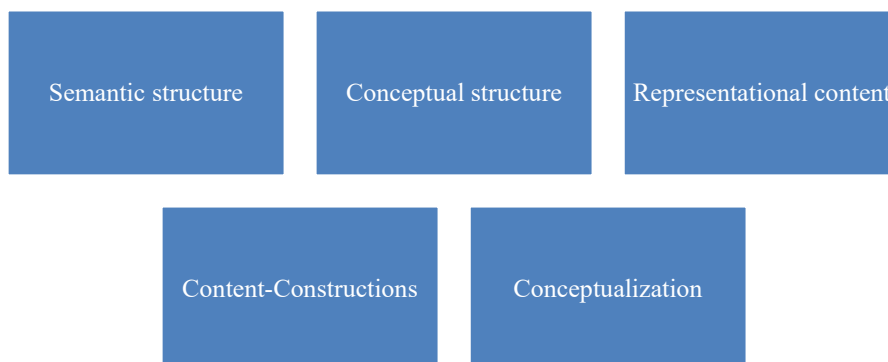

Fig. 1. The principal positions of cognitive semantics

At the 2nd stage, the intermediate testing on the awareness of the cognitive linguistics' basic theories and the ability to operate with this knowledge on a practical level was carried out. At the end of the 2nd stage, which coincides with the end of the 1st semester, there was respondents' knowledge control and success level analysis.

Table 2. The assessment of success in the experimental and control groups (author's elaboration).

	Unsatisfactory	Satisfactory	Good	Excellent
EG1	0%	50 %	34 %	16%
EG2	0	62%	26%	12 %
CG3	0%	63 %	26 %	11 %
CG4	0%	60%	28%	11%

As we can see, the experimental group's performance after completing half of the "Cognitive approaches to the semantics of linguistic units" course is on average higher than that of the control group. The largest number of

positive evaluations is in EG1 – 50% and EG2 – 38%. There are no respondents with an "unsatisfactory" grade. On the whole, the performance improved on the average in EG1 by 9%, while CG increased the performance by 3%.

During the 2nd stage, the teaching of the "Cognitive approaches to the semantics of linguistic units" course was continued to the experimental groups, and positive dynamics were revealed.

Stage 3 (final stage). The final assessment, which consisted of several indicators, was carried out. These are the results of academic performance. The control tests allowed us to measure the theoretical awareness' level of the cognitive linguistics main directions, as well as the ability

to use this knowledge. Thus, achievement consisted of the student's ability to make a qualitative and stylistically appropriate translation, self-editing, highlight lexical and semantic features of the text, and analyze the artistic and stylistic component. Important was the ability to realize different cultural scenarios, discursive practices through a set of successful statements, the ability to use the entire arsenal of text-forming means. The speech structures and idiomatic expressions variety was used by the student in practice, as well as the possession of a wide knowledge range of a theoretical nature were considered to be a success criterion.

Table 3. The progress assessment in experimental and control groups (author's elaboration)

	Unsatisfactory	Satisfactory	Good	Excellent
EG1	0%	48 %	36 %	16%
EG2	0	58%	26%	16 %
CG3	0%	60 %	28 %	12 %
CG4	0%	59%	30%	11%

After completing the pedagogical experiment on the training course implementation based on cognitive-semantic theories in linguistics, it can be noted that positive marks ("good" and "excellent") were obtained by EG1 – 52%, EG2 – 42%, in general, the overall performance of students increased by 16% on average. CG1 – 40% and CG2 – 43% had a 6% average increase in achievement.

At the final stage, all respondents were offered a questionnaire that asked: Which topics were the most

effective and exciting for you? The closed answers needed to be selected near the line with the subject "+" or "-". The results are presented as a percentage.

During the course of the discipline, students were asked to focus on achieving a range of skills, abilities and to assess how important the opportunities were to the respondents. Four items (thematic units) were presented for the respondents' consideration.

Table 4. The survey results on the participants' assessment of the course thematic blocks (author's elaboration)

Main thematic blocks	EG1 yes (+)	EG2 yes (+)	CG1 yes (+)	CG2 yes (+)
cognitive grammar: theory, case studies	42%	38%	24%	18%
frame semantics: theory, case studies	58%	57%	27%	32%
radical construction grammar: theory, case studies	48%	42%	23%	20%
metaphor theories: theory, case studies	52%	50%	41%	44%

Based on the survey results, we can state that a positive assessment of own capabilities and readiness to use the achievements of modern theories of cognitive linguistics in learning and practical activities in the members of the experimental groups averaged 16%. Active implementation of the current linguistics theories in learning activities allows realizing the potential, which is designed to form

professional skills in professional activities and will also contribute to the formation of critical thinking and communicative competence.

The cognitive-communicative approach, as a way of human mental activity verbalization, contributes to the performance growth in learning. It facilitates problem-solving, text translation, and literary creativity.

5. Discussion

Generalization of the main points of cognitive semantics has been presented in several modern studies [14]; [6]. All these developments relied on a complex of main concepts: conceptualization (a view of the idea of encyclopedic knowledge and experience), categorization (cognitive ability to conceptualize experience at the expense of alternative ways), constructs (schematic models of practical experience), and generalization is realized in the system of prototypes. It should also be taken into account that the principles proper proclaimed should not be limited to the consideration of lexical units, but work at the basis of language structures at the level of morpheme, lexeme, idiom, etc.

Goh & Burns (2012) describe many successful projects in the stream of cognitive semantics, where methods of activating and improving translation skills, working with corpora of texts, comparable studies, where the main components are verbalism, focusing on the construction of meaning through experience, cognitive-communication skills, etc., are applied. The positive experience of using box-type schemes (including dependency trees), using the method of direct constituents allowed focusing not only on the form of the linguistic unit but also on prosodic, semantics, and pragmatics [19] Our study also positively evaluates the introduction of the main theories of cognitive semantics into the foundations of linguistic education. In our research, the ideas and attitudes of constructive grammar were positively evaluated by the experimental groups (45%) and the control groups (22%).

Developments in cognitive and pragmatic metaphor theory, as well as relevance theory [22], contributed to elucidating the combinability and metaphors' stylistic labeling patterns. Both theories offer a new approach to the role and understanding of metaphor, attitudes, and reasons for use in everyday life [16]. That is why a separate place in the course is given to the theory of metaphor and its practical application in text formation, the implementation of translation activities, comparable research, and the algorithm for the texts' corpora formation. It also confirms the thesis on the need to refer to the practice of creating small research projects by students.

6. Conclusions

The active application of the cognitive-semantic theories' ideas and precepts is an important component of further professional development in the linguistic disciplines' teaching and foreign language studying.

In the "Cognitive approaches to the semantics of language units" course, the main cognitive-semantic theories in linguistics were considered: cognitive grammar (Langacker);

metaphor theories (Lakoff);
frame semantics (Fillmore);
construction grammar (Croft).

This primarily involved discussing and defining the basic content of the concepts of "frame", "metaphor", "categorization", "conceptualization", "prototype", "concept", etc. And also, there were identified the ways of applying the main cognitive-semantic theories in translation activities, text formation, the study and research of metaphor, metonymy, phenomena of polysemy, semantic fields, analysis of fiction texts, and stylistic markers of expression, and others.

As a result, the introduction of the new course contributed to the positive dynamics of students' performance in mastering the theoretical foundations of cognitive linguistics and the ability to use this knowledge in practice. In the experimental group, the academic performance increased by 16% due to the increase in grades "good" and "excellent," in all groups, at the final stage, there were no grades "unsatisfactory".

In general, respondents were positive about the cognitive-semantic linguistic theories research introduction. Such workshops were aimed at developing learning skills and increasing the professional level of future specialists. There were especially popular thematic units related to the translation theory (57% − EG1 and 58% – EG2), the basics of editing, and the phraseology use (metaphor theory: 52% − EG1 and 50% – EG2).

In the future, we should work on the development and practical application of teaching methods within the linguistic paradigm while using the main provisions of the cognitive linguistics' theories. It contributes to the training of highly qualified specialists, allows us to keep the quality of education at a high level, and make it possible to develop effective methods within the complex of linguistic disciplines.

References

[1] W. Croft, "Functional Approaches to Grammar", *International Encyclopedia of the Social & Behavioral Sciences* (Second Edition), 2015, pp. 470-475. https://doi.org/10.1016/B978-0-08-097086-8.53009-8

[2] C. C. M. Goh, and A. Burns, "Teaching speaking: A holistic approach", New York: Cambridge, 2012. 301 p.

[3] A. Goldberg, "Constructions: A Construction Grammar Approach to Argument Structure", University Of Chicago Press, 1995, 271 p.

[4] P. D. Hapsari and F. Wirawan, "The Significant Connection between Communicative Competence and Cognitive Ability in Speaking English of English Debating Team", *Humaniora,* 2018, 9(2), pp. 149–159 https://doi.org/10.21512/humaniora.v9i2.4492

[5] C. Fillmore, J. Kay and M. O'Connor, "Regularity and Idiomaticity in Grammatical Constructions: the Case of let alone", *Language,* 1988, 64 (3), pp. 501–538

[6] C. Findik and S. Ozkan, "A model for instructors' adoption of learning management systems: Empirical validation in higher education context", *Turkish Online Journal of Educational Technology*, 2013, 12(2), pp. 13–25. Available: http://www.tojet.net

[7] M. Fried, "Constructions and Frames as Interpretive Clues", *Belgian Journal of Linguistics*, 2010, 24, pp. 83–102

[8] L. Fuchs, D. Fuchs, A. Malone, P. Seethaler and C. Craddock, "The Role of Cognitive Processes in Treating Mathematics Learning Difficulties Mathematical Cognition and Learning", *Cognitive Foundations for Improving Mathematical Learning,* 2019, 5, pp. 295–320. https://doi.org/10.1016/B978-0-12-815952-1.00012-8

[9] K. Kiki-Papadakis and F. Chaimala, "The Embedment of Responsible Research and Innovation Aspects in European Science Curricula", *Revista Romaneasca pentru Educatie Multidimensionala*, 2016, 8(2), pp. 71–87.
http://dx.doi.org/10.18662/rrem/2016.0802.06

[10] J. Ko, P. Sammons and L. Bakkum, "Effective Teaching: a review of research and evidence", *CfBT Education Trust,* 2013. Available: http://cdn.cfbt.com /~/media/cfbtcorporate/files/research/2013/reffective-teaching-2013.pdf

[11] G. Lakoff, "The contemporary theory of metaphor", *Metaphor and thought*, Cambridge, 1993, 245 p.

[12] R. W. Langacker, "Concept, Image, and Symbol", Berlin and New York: Mouton de Gruyter, 1991, 405 p.

[13] R. W. Langacker, "Grammar and Conceptualization"*,* Berlin and New York: Mouton de Gruyter, 1999, 427 p.

[14] M. Lemmens, "Cognitive semantics", *Routledge Handbook of Semantics*, London & New York: Routledge, 2015, pp. 90–105.

[15] S. Levinson, "Space in Language and Cognition: Explorations in Cognitive Diversity", Cambridge: Cambridge University Press. 2003, 389 p. https://doi.org/10.1017/CBO9780511613609

[16] M. Takimoto, "Investigating the effects of cognitive linguistic approach in developing EFL learners' pragmatic proficiency", *System*, 202089,102213, https://doi.org/10.1016/j.system.2020.102213.

[17] F. Perek, "Argument structure in usage-based construction grammar, Experimental and corpus-based perspectives", Amsterdam/Philadelphia: Benjamins, 2015. 256 p.

[18] I. Rababah, "The Reality of Using Modern Teaching Methods in Teaching Arabic for Speakers of other Languages from Teachers' Perspective"*,* 2020*.* Available: https://doi.org/10.25255/jss.2020.9.1.58.94

[19] H. Sytar, "Konstruktsiyna hramatyka yak teoretychne pidgruntya doslidzhennya frazeolohizovanykh rechen'", *Typolohiya ta funktsiyi movnykh odynyts',* 2015, 2 (4), pp. 192–205. Available: https://evnuir. vnu.edu.ua/bitstream/123456789/7092/1/192-205.pdf

[20] H. Synorub and O. Medynska, "Development of information culture of students of humanitarian specialities", *Information Technologies and Learning Tools.* 2019, 72(4), pp. 152–167. https:// doi.org/10.33407/itlt.v72i4.2922

[21] J. R. Taylor, "The Mental Corpus: How Language is Represented in the Mind"*.* Oxford: Oxford University Press, 2012384 p. https://doi.org/10.1093/acprof:oso/ 9780199290802.001.0001

[22] M. Tendahl and R. Gibbs, "Complementary perspectives on metaphor: Cognitive linguistics and relevance theory", *Journal of Pragmatics*, 2008, 40(11), pp. 1823–1864. https://doi.org/10.1016/j. pragma.2008.02.001.

[23] M. Tomasello, "Language is not an instinct", *Cognitive Development*, 1995, 10, pp. 131–156. https://doi.org/10.1016/0885-2014(95)90021-7