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# Definition of Language and Linguistics: Basic Competence

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Abstract---This paper is intended to understand and be able to explain the meaning of language and linguistics, to understand and be able to explain linguistic scholarship and to understand and be able to explain the history and nature of language. Linguistic knowledge also provides benefits for compilers of textbooks or textbooks. Linguistic knowledge will provide guidance for textbook compilers in composing appropriate sentences, choosing vocabulary that is appropriate for the age level of the readers of the book. As for the linguistic benefits for statesmen or politicians, first, as a statesman or politician who must fight for ideology and concepts of state or government, orally, he must master the language well. Second, if the politician or statesman mastered linguistic and sociolinguistic issues, in particular, in relation to society, then of course he will be able to reduce and resolve social upheavals that occur in society as a result of language differences and conflicts.

*Keywords*—choosing vocabulary, ideology, language and linguistics, language differences, linguistic scholarship, mastered linguistic, nature of language, sociolinguistic issues.

### Introduction

When we are asked: "What language is that?" so often we answer that language is a means of communication. The answer is not completely correct, because not all the

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meaning of language has been explained, it only explains the function of the language. A number of linguists try to make a definition of language (Ramus et al., 1999; Schleppegrell, 2001).

In Greek times philosophers examined the meaning and nature of language. These philosophers agreed that language is a system of signs. It is said that humans live in signs that cover all aspects of human life, for example buildings, medicine, health, geography, and so on. But regarding the nature of language - whether language resembles reality or not - they do not agree (Brown, 2005; Halliday, 2003). Two great philosophers whose thoughts continue to be influential today are Plato and Aristotle. The definition of language according to experts is as follows.

- Gorys Keraf, for example, provides two meanings of language. The first
  definition states that language is a means of communication between members
  of society in the form of sound symbols produced by human speech tools.
  The second meaning, language is a communication system that uses arbitrary
  vowel symbols (speech sounds).
- Owen explains the definition of language, namely language can be defined as a socially shared combinations of those symbols and rule governed combinations of those symbols. and combinations of symbols governed by provisions).
- Language is a systematic tool for conveying ideas or feelings by using agreed signs, sounds, gestures, or signs that contain understandable meanings (Zadeh, 1975; Tseng, 2018). According to this definition, language includes all things that are used as a means of communication, both in the form of verbal and non-verbal signs. Non-verbal signs include the sound of a bell, car bell, morse, and limb movements (gestures) and so on.
- Language with the meaning intended in this definition, in Arabic there are expressions of the lughatu-l Qur'an 'Qur'anic style', lughatu-l 'uyūn' eye language ', lughatu-l thuyūr' the language of birds' and so on (Zadeh, 1975; Zadeh, 1975). The nature of language as intended in this definition, is different from that meant in the definition of language as follows. Language is the sound used by every nation or society to express ideas (Gómez, 2009; Chambers, 1997). Language is a system of arbitrary sound symbols, used to exchange thoughts and feelings between members of the language community group (Ullman & Pierpont, 2005; Fedorenko & Thompson-Schill, 2014).

### Method

After reading this chapter, learners are expected to be able to understand and be able to explain all the language, to understand and can explain language units and to understand and can exemplify phonemes, morphemes, words, phrases, clauses, sentences, and discourses in English. Language universals refer to the general characteristics of language that are found in all languages. The term language universals was first introduced by Chomsky (1966) and Zadeh (1971). The characteristics of language that are common to all languages include (1) every human being must have language, (2) all languages change, (3) there is no primitive language, every language has its own degree of complexity, (4) all languages have vowels and consonants, (5) all languages have a set of sounds that can be combined into meaningful elements, and (6) in every language, the number of nasal vowels is always lower than the number of vowels without a nasal.

Language is a mental system that forms bonds or rules on the elements of language, both at the phonological, morphological, and syntactic levels (Kravchenko, 2007; Chater & Manning, 2006). Tarigan provides two definitions of language. First, language is a systematic system as well as language is a generative system. Second, language is a set of symbols or arbitrary symbols. Another definition of language according to Mackey is a form and not a state (language may be form and not matter) or an arbitrary sound symbol system, or also a system of many systems, a system of an order or an order in systems. Jackendoff & Pinker (2005) argue that language is an arbitrary vocal symbol used in human communication (language is a system of arbitrary vocal symbols used for human communication). Narrog (2005) argues that language is a possible set of sentences, and the grammar of a language is the rules that distinguish between sentences and those that are not sentences (a language will be defined as the set of all possible sentences, and the grammar of languages as the rules which distinguish between sentences and nonsentences).

Meanwhile, according to Chaika (1974) language is a system of meaningful and articulating sound symbols (produced by speech tools) that is arbitrary and conventional, which is used as a means of communication by a group of people to produce feelings and thoughts. Almost in line with the opinion of Knott & Sanders (1998) expressing the definition of language is the most complete and effective communication to convey ideas, messages, intentions, feelings and opinions to others. Another opinion about the definition of language is expressed by Isphording & Otten (2014) who provides two meanings of language. First, language is a tool used to shape thoughts and feelings, desires and actions, tools which is used to influence and be influenced. Second, language is a clear sign of good and bad personalities, a clear sign of family and nation, a clear sign of human dignity.

Rindflesch & Fiszman (2003) argues that language is a system that expresses and reports what happens to the nervous system. The final opinion of this short paper on language was expressed by Canagarajah & De Costa (2016) that language is a means of spiritual connection which is very important in living together. As a term in linguistics, it defines language as a system of arbitrary sound symbols, which are used by members of a society to cooperate, interact, and identify themselves.

### Results and Discussions

Linguistics is the study of language or linguistics. Linguistics is commonly defined as the 'science of languages' or 'the scientific study of language' (Gordon & Ladefoged, 2001). Linguistics, in The New Oxford Dictionary of English (2003), is defined as follows: "The scientific study of language and its structure, including the study of grammar, syntax, and phonetics. Specific branches of linguistics include sociolinguistics, dialectology, psycholinguistics, computational linguistics, comparative linguistics, and structural linguistics." The word "linguistic" comes from the Latin word lingua which means language. "Linguistics" means "linguistics". In "Romance" languages (that is, languages of Latin origin) there are still words similar to lingua in Italian. English takes from French the word which is now a language. The term linguistic in English is related to the word language, just as in French the term linguistic is related to language. In Indonesian, "linguistics" is the name of a field of science, and the adjective is "linguistic" or "linguistic".

Modern linguistics science originated with the Swiss scholar Ferdinand de Saussure. Modern linguistics comes from the Swiss scholar Ferdinand de studying the essential nature and position of language as a human activity, as well as the conceptual and theoretical basics of linguistics, and seventh, dialectology, which is the study of the boundaries of dialect and language in a particular area. This dialectology is an interdisciplinary science between linguistics and geography (Ji, 1997; Braae & Rutherford, 1979).

# Applied linguistics and theoretical linguistics

Theoretical linguistics is a study that investigates language, or also the relationship of language with factors outside of language to find applicable rules in the object of study. Its activities are for theoretical purposes only. Meanwhile, applied linguistics is a study that seeks to investigate language or the relationship of language with factors outside of language for the purpose of solving practical problems that exist in society. The activities are mostly for applied purposes. For example, linguistic research for the benefit of language teaching, textbook preparation, book translation, dictionary compilation, historical research, political problem solving, and so on.

Linguistics based on the flow of language theory and based on the theory used in language investigation, there are traditional linguistics, structural linguistics, transformational linguistics, semantic generative linguistics, relational linguistics and systemic linguistics. This field of linguistic history seeks to investigate the development of linguistics itself from time to time, as well as to study the influence of other sciences, and the influence of various social institutions (beliefs, customs, education, etc.) on linguistics throughout the ages.

# Microlinguistics and macrolinguistics

Micro linguistics directs its study of the internal structure of a particular language or the internal structure of language in general. The subdisciplinary micro linguistics includes, first, phonology which investigates the characteristics of the sound of language, the way it occurs, and its function in the linguistic system as a whole. Second, morphology which investigates the structure of words, their parts, and how they are formed. Third, syntax, which is the science of investigating the units of words and other units above words, their relationship to one another, and how they are distorted so that they become a unit of speech. Fourth, semantics is the science that investigates the meaning of language, both lexical, grammatical, and contextual. And fifth, lexicology is the science that investigates the lexicon or vocabulary of a language from various aspects (Kacprzyk & Zadrożny, 2005).

Macro linguistics is a science that investigates language in relation to factors outside of language, discussing more factors outside the language than the internal structure of language. Macro linguistics subdisciplines include, first, sociolinguistics which studies language in relation to its use in society, the place of use of language, grammar level, due to contact between two or more languages, and the time to use various languages. Sociolinguistics is an interdisciplinary science between sociology and linguistics. Second, psycholinguistics, which is the study of the relationship between language and human behavior and reason, including how language skills can be obtained. So, psycholinguistics is an interdisciplinary science between psychology and linguistics. Third, anthropolinguistics, which is the study of the relationship between language and culture and human cultural institutions.

Anthropolinguistics is an interdisciplinary science between anthropology and linguistics. Fourth, stylistics, namely the study of the language used in literary forms. So, stylistics is an interdisciplinary science between linguistics and literature. Fifth, philology is the study of language, culture, institutions, and history of a nation as contained in written materials (for example, ancient manuscripts). Philology is an interdisciplinary science between linguistics, history, and culture. Sixth, the philosophy of language is the science that whose book Cours de linguistique generale (Subjects of general linguistics) appeared in 1916, was posthumously. De Saussure distinguishes

(French words) langue and langage. He also distinguishes the parole ('speech') of the two terms.

For de Saussure, langue is a language (for example, French, English, or Indonesian) as a "system". Conversely, language means language as a characteristic of human beings, as in the saying "Humans have language, animals do not have language", parole "speech" is language as it is used in a concrete way: "accent", "speech", "speech". In linguistics, scholars often use these French words (langue, language, and parole) as professional terms. (Note: the French term language is spelled without the letter u, while the English word uses the letter u.)

Linguists in Indonesian are called "linguists", which is borrowed from the English word linguist in everyday (English) language, linguist means "someone who is fluent in various languages". For example, the expression He is quite a linguist means "He is fluent in several languages". On the contrary, as a scientific term, linguist is defined as a linguist. It is clear that a person fluent in several languages is not absolutely necessary to be the same as a linguist. Therefore, it is necessary to distinguish the English word linguist in everyday language from the term linguist "linguist".

Also pay attention to the word linguistic in the phrase linguistic analysis. The term can be interpreted as an analysis carried out by linguists, and it can also be interpreted as a school of philosophy (which happens to come from England). These linguistics and philosophical schools have almost nothing to do with one another. Linguistics is often called general linguistics, meaning that linguistics does not only investigate one language, but linguistics concerns language in general. By using a term from de Saussure, we can formulate that linguistics does not only examine one langue, but also language, which is language in general. Language, according to Ferdinand de Saussure, is divided into language, langue and parole. The three terms from French in Indonesian are combined with just one term, namely 'language'. Language refers to language as a characteristic of humans, language in general, as in the saying "humans have language while animals do not have language" or a system of sound symbols used to communicate and interact verbally. This language is abstract. The term langue refers to a specific system of sound symbols used by a certain group of members of society. Langue is a language (e.g. Arabic, English, and Indonesian) as a system. Meanwhile parole or speech is the language used by humans in concrete terms and parole is the concrete form of langue which is used in the form of utterances or utterances by members of the community with each other.

# Linguistic science

Basically every science, including linguistics, still undergoes three stages of development as follows. The first stage, namely the speculation stage. At this stage, discussion about something and how to draw conclusions is carried out in a

speculative manner. This means that the conclusion is made without the support of empirical evidence and carried out without certain procedures. Even though our views or visions are often not in accordance with reality / factual truth. In language studies, people used to think that all the languages of the world descended from Hebrew, so people also thought Adam and Eve used Hebrew in the Garden of Eden. Even as late as the 17th century a Swedish philosopher still stated that in Heaven God spoke with Sweden, Adam spoke Danish, serpent spoke French. All of that is just speculation which today is difficult to accept (Yasuda, 2011).

The second stage is the observation and classification stage. At this stage the experts in the new language field carefully collect and classify all language facts without giving any theory or conclusion. This method has not been said to be scientific because it has not yet reached the stage of drawing a theory. This second stage of work is still needed for the benefit of linguistic documentation in this country because there are still so many languages in this archipelago that have not been documented.

Diachronic linguistics seeks to study language at an unlimited time, from the very beginning of its birth, development, to the extinction of the language. These studies are usually historical and comparative. The purpose of diachronic is to find out the structural history of the language along with all forms of change and development (Munnich et al., 2001). Comparative historical linguistics is a branch of linguistics that compares allied languages and studies the development of language from one period to another and observes how languages change and finds out the causes and effects of these language changes. Language development results in changes, there are two changes, namely changes in external history and internal history.

Internal history, namely the development or change of language that occurs in the history of the language, the changes include vocabulary, sentence structure and others. Meanwhile, external history, namely the development or change of language that occurs outside the history of the language, the changes include social, cultural, political, geographic and others.

# Comparative linguistics

Comparative linguistics according to Desmet et al. (2012) is a study or study of language which includes comparisons of allied languages or the historical development of a language. Comparative linguistics, according to Cheng et al. (1999) is included in the field of linguistic studies which has a very important role in making a valuable contribution to understanding the nature of language work and the development (change) of languages in the world. Pinker & Jackendoff (2005) say that historical comparative linguistics (comparative historical linguistics) is a branch of linguistics that questions language in the field of time and changes in language elements that occur in the time field. According to Kasper (1990) historical-comparative linguistic studies can

be grouped into (1) synchronic linguistic studies and (2) diachronic linguistic studies. So actually this is the main idea or notion in any research on linguistic universality.

# Traditional grammar

Traditional grammar or traditional grammar is a term that is often used to summarize a range of attitudes and methods encountered during the grammatical study period before the advent of linguistics. The "tradition" in question has a history of some 2000 years, and includes the work of grammarians of ancient Greece and Rome as well as the works of scholars and Renaissance writers and 18th century prescriptive grammarians. Traditional grammar analysis is based on rules of other languages, especially Greek, Roman, and Latin. All understand that the characteristics of Indonesian, for example, are not the same as these languages. Greek, Roman, and Latin are classified as declinative languages, namely those whose word changes indicate the category, case, number, or type (Seargeant, 2009), while Indonesian is classified as an inflectional language, namely the change in the form of the word shows a grammatical relationship (Tomasello, 2000).

# Diachronic linguistics

The terms diachronic and synchronic linguistics come from Ferdinand de Saussure. In the 19th century almost the entire field of linguistics was historical linguistics, especially concerning Indo-European languages. The area of study of historical linguistics at that time was, for example, how Ancient Greek and Latin denote simplicity. This was discovered thanks to research on the Sanskrit language. In that century it was also studied how the families of German languages (such as German, Dutch, English and Scandinavian languages) are historically related to each other, and how Romance languages (such as French, Oksitan, Spanish, Portuguese, etc.) derived from Latin.

The third stage is the stage of theory formulation. At this stage each discipline tries to understand basic problems and ask questions about those problems based on the empirical data collected. Then formulated hypotheses that attempt to answer these questions and compile tests to test hypotheses against the existing facts. Today, the discipline of linguistics has undergone the three stages above, so that the discipline of linguistics can now be said to be a scientific activity. Linguistics places great importance on empirical data in carrying out its research and should not be contaminated by the knowledge / beliefs of the researcher. As an empirical science, linguistics seeks to find regularities or essential rules of the language it is researching. Because of that linguistics is often called the science of numbers. Linguistics never stops at a single point of conclusion, but will continue to refine these conclusions based on subsequent empirical data (Everaert et al., 2015).

### Conclusion

Linguistics will provide direct benefits to those engaged in language-related activities, such as the linguist itself, language teachers, translators, textbook compilers, dictionary compilers, information officers, journalists, politicians, diplomats, and so on. For linguists themselves, extensive knowledge of linguistics will certainly be very helpful in completing and carrying out their duties. For researchers, critics, and literary enthusiasts, linguistics will help them understand literary works better, because language, which is the object of linguistic research, is a place for literary works to emerge.

For teachers, especially language teachers, linguistic knowledge is very important, starting from the sub-disciplines of phonology, morphology, syntax, semantics, lexicology, to knowledge of the relationship between language and society and culture. If they have linguistic knowledge, then they will be able to convey their subjects more easily. For translators, linguistic knowledge is absolutely necessary not only with regard to linguistic morphology, syntax, and semantics, but also with regard to sociolinguistics and linguistic contrastives. For a dictionary composer or lexicographer mastering all aspects of linguistics is absolutely necessary, because all linguistic knowledge will be of benefit in completing his task. To be able to compile a dictionary, he must start by determining the language phonemes that he will choose. Without knowledge of all aspects of linguistics it is unlikely that a dictionary can be compiled.

Linguistic knowledge also provides benefits for compilers of textbooks or textbooks. Linguistic knowledge will provide guidance for textbook compilers in composing appropriate sentences, choosing vocabulary that is appropriate for the age level of the readers of the book. As for the linguistic benefits for statesmen or politicians, first, as a statesman or politician who must fight for ideology and concepts of state or government, orally, he must master the language well. Second, if the politician or statesman mastered linguistic and sociolinguistic issues, in particular, in relation to society, then of course he will be able to reduce and resolve social upheavals that occur in society as a result of language differences and conflicts (Herrera-Viedma & Peis, 2003; Kohnert, 2010; Mayberry & Lock, 2003).

### References

Braae, M., & Rutherford, D. A. (1979). Theoretical and linguistic aspects of the fuzzy logic controller. *Automatica*, 15(5), 553-577. https://doi.org/10.1016/0005-1098(79)90005-0

Brown, K. (2005). Encyclopedia of language and linguistics (Vol. 1). Elsevier.

- Canagarajah, S., & De Costa, P. I. (2016). Introduction: Scales analysis, and its uses and prospects in educational linguistics. *Linguistics and Education*, 34, 1-10. https://doi.org/10.1016/j.linged.2015.09.001
- Chaika, E. (1974). A linguist looks at "schizophrenic" language. *Brain and language*, 1(3), 257-276. https://doi.org/10.1016/0093-934X(74)90040-6
- Chambers, F. (1997). What do we mean by fluency? *System*, 25(4), 535-544. https://doi.org/10.1016/S0346-251X(97)00046-8
- Chater, N., & Manning, C. D. (2006). Probabilistic models of language processing and acquisition. *Trends in cognitive sciences*, 10(7), 335-344. https://doi.org/10.1016/j.tics.2006.05.006
- Cheng, C. H., Yang, K. L., & Hwang, C. L. (1999). Evaluating attack helicopters by AHP based on linguistic variable weight. *European journal of operational research*, 116(2), 423-435. https://doi.org/10.1016/S0377-2217(98)00156-8
- Chomsky, N. (1966). Explanatory models in linguistics. In *Studies in Logic and the Foundations of Mathematics* (Vol. 44, pp. 528-550). Elsevier. https://doi.org/10.1016/S0049-237X(09)70617-2
- Desmet, K., Ortuño-Ortín, I., & Wacziarg, R. (2012). The political economy of linguistic cleavages. *Journal of development Economics*, 97(2), 322-338. https://doi.org/10.1016/j.jdeveco.2011.02.003
- Everaert, M. B., Huybregts, M. A., Chomsky, N., Berwick, R. C., & Bolhuis, J. J. (2015). Structures, not strings: linguistics as part of the cognitive sciences. *Trends in cognitive sciences*, 19(12), 729-743. https://doi.org/10.1016/j.tics.2015.09.008
- Fedorenko, E., & Thompson-Schill, S. L. (2014). Reworking the language network. *Trends in cognitive sciences*, 18(3), 120-126. https://doi.org/10.1016/j.tics.2013.12.006
- Gómez, M. C. (2009). Towards a new approach to the linguistic definition of euphemism. *Language Sciences*, 31(6), 725-739. https://doi.org/10.1016/j.langsci.2009.05.001
- Gordon, M., & Ladefoged, P. (2001). Phonation types: a cross-linguistic overview. *Journal of phonetics*, 29(4), 383-406. https://doi.org/10.1006/jpho.2001.0147
- Halliday, M. A. K. (2003). On language and linguistics (Vol. 3). A&C Black.
- Herrera-Viedma, E., & Peis, E. (2003). Evaluating the informative quality of documents in SGML format from judgements by means of fuzzy linguistic techniques based on computing with words. *Information Processing & Management*, 39(2), 233-249. https://doi.org/10.1016/S0306-4573(02)00049-3
- Isphording, I. E., & Otten, S. (2014). Linguistic barriers in the destination language acquisition of immigrants. *Journal of economic Behavior & organization*, 105, 30-50. https://doi.org/10.1016/j.jebo.2014.03.027
- Jackendoff, R., & Pinker, S. (2005). The nature of the language faculty and its implications for evolution of language (Reply to Fitch, Hauser, and Chomsky). *Cognition*, 97(2), 211-225. https://doi.org/10.1016/j.cognition.2005.04.006

- Ji, S. (1997). Isomorphism between cell and human languages: molecular biological, bioinformatic and linguistic implications. *BioSystems*, 44(1), 17-39. https://doi.org/10.1016/S0303-2647(97)00039-7
- Kacprzyk, J., & Zadrożny, S. (2005). Linguistic database summaries and their protoforms: towards natural language based knowledge discovery tools. *Information Sciences*, 173(4), 281-304. https://doi.org/10.1016/j.ins.2005.03.002
- Kasper, G. (1990). Linguistic politeness:: Current research issues. *Journal of pragmatics*, 14(2), 193-218. https://doi.org/10.1016/0378-2166(90)90080-W
- Knott, A., & Sanders, T. (1998). The classification of coherence relations and their linguistic markers: An exploration of two languages. *Journal of pragmatics*, 30(2), 135-175. https://doi.org/10.1016/S0378-2166(98)00023-X
- Kohnert, K. (2010). Bilingual children with primary language impairment: Issues, evidence and implications for clinical actions. *Journal of communication disorders*, 43(6), 456-473. https://doi.org/10.1016/j.jcomdis.2010.02.002
- Kravchenko, A. V. (2007). Essential properties of language, or, why language is not a code. *Language Sciences*, 29(5), 650-671. https://doi.org/10.1016/j.langsci.2007.01.004
- Mayberry, R. I., & Lock, E. (2003). Age constraints on first versus second language acquisition: Evidence for linguistic plasticity and epigenesis. *Brain and language*, 87(3), 369-384. https://doi.org/10.1016/S0093-934X(03)00137-8
- Munnich, E., Landau, B., & Dosher, B. A. (2001). Spatial language and spatial representation: A cross-linguistic comparison. *Cognition*, 81(3), 171-208. https://doi.org/10.1016/S0010-0277(01)00127-5
- Narrog, H. (2005). On defining modality again. Language sciences, 27(2), 165-192. https://doi.org/10.1016/j.langsci.2003.11.007
- Pinker, S., & Jackendoff, R. (2005). The faculty of language: what's special about it?. *Cognition*, 95(2), 201-236. https://doi.org/10.1016/j.cognition.2004.08.004
- Ramus, F., Nespor, M., & Mehler, J. (1999). Correlates of linguistic rhythm in the speech signal. *Cognition*, 73(3), 265-292. https://doi.org/10.1016/S0010-0277(99)00058-X
- Rindflesch, T. C., & Fiszman, M. (2003). The interaction of domain knowledge and linguistic structure in natural language processing: interpreting hypernymic propositions in biomedical text. *Journal of biomedical informatics*, *36*(6), 462-477. https://doi.org/10.1016/j.jbi.2003.11.003
- Schleppegrell, M. J. (2001). Linguistic features of the language of schooling. *Linguistics and education*, 12(4), 431-459. https://doi.org/10.1016/S0898-5898(01)00073-0
- Seargeant, P. (2009). Language ideology, language theory, and the regulation of linguistic behaviour. *Language Sciences*, 31(4), 345-359. https://doi.org/10.1016/j.langsci.2007.12.002
- Tomasello, M. (2000). The item-based nature of children's early syntactic development. *Trends in cognitive sciences*, 4(4), 156-163. https://doi.org/10.1016/S1364-6613(00)01462-5

- Tseng, M. Y. (2018). Creating a theoretical framework: On the move structure of theoretical framework sections in research articles related to language and linguistics. *Journal of English for Academic Purposes*, 33, 82-99. https://doi.org/10.1016/j.jeap.2018.01.002
- Ullman, M. T., & Pierpont, E. I. (2005). Specific language impairment is not specific to language: The procedural deficit hypothesis. *Cortex*, 41(3), 399-433. https://doi.org/10.1016/S0010-9452(08)70276-4
- Yasuda, S. (2011). Genre-based tasks in foreign language writing: Developing writers' genre awareness, linguistic knowledge, and writing competence. *Journal of second language writing*, 20(2), 111-133. https://doi.org/10.1016/j.jslw.2011.03.001
- Zadeh, L. A. (1971). Quantitative fuzzy semantics. *Information sciences*, 3(2), 159-176. https://doi.org/10.1016/S0020-0255(71)80004-X
- Zadeh, L. A. (1975). The concept of a linguistic variable and its application to approximate reasoning—I. *Information sciences*, 8(3), 199-249. https://doi.org/10.1016/0020-0255(75)90036-5
- Zadeh, L. A. (1975). The concept of a linguistic variable and its application to approximate reasoning-III. *Information sciences*, 9(1), 43-80. https://doi.org/10.1016/0020-0255(75)90017-1
- Zadeh, L. A. (1975). The concept of a linguistic variable and its application to approximate reasoning—II. *Information sciences*, 8(4), 301-357. https://doi.org/10.1016/0020-0255(75)90046-8