

THE STUDY OF LANGUAGE AND THE MAIN DIFFERENCE BETWEEN GRAMMAR AND LOGIC IN AL-FÂRÂBÎ'S PHILOSOPHY*

Mustafa YEŞİL**

Abstract

Philosophers, sociologists, biologists, anthropologists etc. are trying to explain where language and its main elements come from. No doubt the fundamental reason the mentioned attempt considers is to explain the role of language in terms of both having an impact on the structure of theories and representing the social conditions. What Al-Fârâbî (870-950) says about the origin of language consistently support this claim and present very useful clues in terms of describing where language comes from and how it works. From his perspective, what we try to do here is to reveal some basic reasons that motivate human to be in search of language and clarify what the main difference between grammar and logic is.

Key words: language, the study of language, grammar, logic, philosophy.

(Fârâbî Felsefesinde Dilin İncelenmesi ve Gramer ve Mantık Arasındaki Temel Ayrım)

Özet

Filozoflar, sosyologlar, biyologlar, antropologlar vb. gruplar dilin ve onun temel öğelerinin nereden geldiğini açıklamaya çalışmaktadırlar. Hiç şüphesiz söz konusu teşebbüsün göz önünde bulundurduğu temel gerekçe hem kuramsal yapılar üzerinde etkiye sahip olma hem de sosyal koşulları yansıtmak bakımından dilin işlevini açıklamaktır. Fârâbî'nin (870-950) dilin kaynağı ile alakalı açıklamaları bu varsayımı tutarlı bir şekilde desteklemekte ve dilin nereden geldiğini, nasıl işlev gösterdiğini izah etme bakımından önemli ipuçları içermektedir. Bu çalışma, Fârâbî'nin yaklaşımlarından hareketle insanı dil arayışına yönlendiren bazı temel gerekçeleri açığa çıkarmayı ve gramer ve mantık arasındaki temel ayrımı ortaya koymayı amaçlamaktadır.

Anahtar Sözcükler: dil, dilin incelenmesi, gramer, mantık, felsefe.

* This research was supported by TUBITAK (The Scientific and Technological Research Council of Turkey, programme - 2214/A).

** Konya Necmettin Erbakan Üniversitesi Felsefe Bölümü öğretim üyesi

FLSF (Felsefe ve Sosyal Bilimler Dergisi), 2016 Güz, sayı: 22, s. 423-439
ISSN 1306-9535, www.flsfdergisi.com

1. Some Reasons and Conditions that Motivate Human to Be in Search of Language

Since human is born as lacking in respect of making his existence continue and reaching perfection, he needs a community to be able to achieve the lots of things that are impossible for him to access by himself. Al-Fârâbî considers this requirement to be the first reason that motivates human to be in search of language; because, that human needs a community to be able to supply his natural and social requirements definitely entails the invention and usage of communication agents.¹

For Al-Fârâbî, human -before using the language yet- applies to “sign” (al-ishâra) to be able to announce something to other people. By all means, the main purpose here is human’s desire to let other people know what he has in mind or what he means with the thing in his mind. As a matter of course, the human pointed himself has to see the sign for the realization of notification in that style of communication; because, the accomplishment of communication here directly depends on the vision of interlocutor.²

Human’s applying a sign with the intention of notification is important in terms of expressing the first way of announcement or communication.³ But this restricted notice that is done for indication neither provides a language structure nor responds the human need in this field as a whole. As a matter of fact that human continues to seek more quality statement means than sign to be able to realize the act of notifying without referring to sensed elements, transfer the obtained information to others and reflect the feelings in his mind to person spoken to. Because, he wants to tell about the things that are not possible to be indicated with sign.⁴

Al-Fârâbî addresses the “vocalization” (al-tasvîṭ) to be the second phase of notification or declaration something to others⁵ and classifies it to two parts as “natural” (ṭabʿ) and “conventional” (ṭavâṭuʿ). He considers the bird buzzies and the sounds voiced by some other living beings to be the natural calls. For example, the sounds voiced by pets (al-bahâim) because of

¹ Al-Fârâbî, Kitâb al-hurûf, ed. Muhsin Mahdî, Dâr al-Mashriq, Beirut, 1990, p. 135; Al-Fârâbî, Ârâʾ ahl al-madînah al-fâdilah, ed. ʿAlî Bumelham, Dâr wa Maktabat al-Hilâl, Beirut, 1995, p. 112.

² Al-Fârâbî, Kitâb al-hurûf, p. 135.

³ Jacques Langhade, min al-Kurʾân ilâ al-falsafa, al-lisân al-ʿarabî wa takavvun al-kâmûs al-falsafî ladâ al-Fârâbî, transl. Vacîhî Asʿad, Manshûrât Vizârat al-Sakâfa, Damascus, 2000, p. 230.

⁴ Al-Fârâbî, Kitâb al-hurûf, pp. 75-76.

⁵ Al-Fârâbî, Kitâb al-hurûf, p. 135.

horror or pleasure in their minds; the sounds voiced by some animals in some cases to warn (inzâr) other animals; the sounds resembling letters voiced by goat (al-ma'zâ) and so on; the sounds voiced by some animals learning words like parrot (al-babbağâ) and magpie (al-'ak'ak); all of these are natural callings. For him, it is not possible to accept the outlined vocalizations as letters or words. Because even if some of the mentioned sounds above partially show similarities with letters or words they are not formed by convention.⁶

That Al-Fârâbî compares the human sound (al-savt al-insânî) with the other creatures' sound bringing the concept of convention into the forefront enables us to explain both the natural ability wherewith language can be structured and the style of vocalization in the biological body. For instance, it is possible to consider the pain or cough sound occurred in the human body as a natural voice. As a matter of fact that even if human has a free will to prevent that voice, he does not spread on an effort to reshape and re-express it differently. For, although this sound contains physiological similarities, it is not a structure bringing language into existence as a whole. From Al-Fârâbî's perspective, it is possible to consider the human volition as an ability that determines the movement of the tongue inside the mouth and as a conventional basis that settles the form of vocalization. Because, after natural sound that the human language is structured on it is provided by a force carrying the breathing air from the lung and throat cavity to mouth, nose and two lips, language (al-lisân) as an organ hitting the breathing air to the parts inside of the mouth, teeth and tooth roots creates some particular vocalizations.⁷ For Al-Fârâbî, even if the human volition generally determines the formation of vocalization in question, there are also some innate tendencies and environmental factors shaping it. Because, for him, like the human from the moment he was created shows tendency to choose the easier way in his all acts;⁸ language (al-lisân) also moves to the easier place to be able to act inside of the mouth.⁹

⁶ Al-Fârâbî, Sharh al-Fârâbî li kitâb Aristûtâlîs fî al-'ibârah, ed. Willhelm Kutsch, Stanley Marrow, Dâr al-Mashriq, Beirut, 1986c, p. 31; Ca'far Al-Yâsîn, Al-Fârâbî fî hudûdihî ve rusûmihî, 'Âlam al-Kutub, Beirut, 1985, pp. 323-324.

⁷ Al-Fârâbî, Kitâb al-mûsikâ al-kebîr, ed. Ğattâs Abd al-Malik Hasaba, Mahmûd Ahmad al-Hafnî, Dâr al-Kâtib al-'Arabî, Cairo, undated, pp. 212-214; Al-Fârâbî, Kitâb al-hurûf, p. 136; Al-Fârâbî, Sharh al-Fârâbî li kitâb Aristûtâlîs fî al-'ibârah, p. 29.

⁸ Ca'far Al-Yâsîn, Al-Fârâbî fî hudûdihî ve rusûmihî, p. 415.

⁹ Al-Fârâbî, Kitâb al-hurûf, p. 136.

Al-Fârâbî claims that the movement type of language within the mouth is the same for people who hold similar lip structure in terms of creation and reside in the same country. Because the lips of people residing in different lands or countries will differentiate in terms of creation and temperament, their languages' movement type within the mouth will also become different. Thus, "vocalizations" (al-tasvîât) vary in terms of being "signs" ('alâmât) that signify the things in mind with reference to sensed and marked things. For Al-Fârâbî, this case is the first reason of differentiation in the languages of the nations; because, these first vocalizations generate "the letters of alphabet" (al-hurûf al-mu'cama).¹⁰ I think the difference of languages clearly supports this claim. Because if the letters and words were natural (tabî'yya) for people, they should have been the same for all nations.¹¹ In other words, in the event of such an assumption, the languages of all nations would have to be one and the same language.¹²

Al-Fârâbî who says human communities are different from each other explains what kinds of matters differentiate one community from another. For example, the "natural structures" and "natural dispositions" of people lived in a community fundamentally determine the mentioned communal discrepancy, because they are the basic properties formed from inborn and environmental factors. Language spoken in a community is also the quality distinguishing the communities from each other, but it is – as being distinct from natural structures and dispositions – the institution founded by (vad'î) people and societies. On that sense, people both need communities to establish their languages and separate their communities from others using these communication tools or structures.¹³

Al-Fârâbî considers the "exclamation" (al-nidâ) to be the first vocalization which contributes to the formation of language. Thus human, by way of this utterance, stimulates his interlocutor to tell what he aims in his mind, and so, while he explains the things in his mind, he points in the direction of sensed things. In this process, various vocalizations are

¹⁰ Al-Fârâbî, Kitâb al-hurûf, pp. 136-137.

¹¹ Al-Fârâbî, Sharh al-Fârâbî li kitâb Aristûtâlîs fî al-'ibârah, p. 27.

¹² Mübahat Türker Küyel, Aristoteles ve Fârâbî'nin Varlık ve Düşünce Öğretileri, Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Yayınları, Ankara, 1969, p. 108.

¹³ Al-Fârâbî, Kitâb al-siyâsat al-madaniyyah, ed. Fawzî Mitrî al-Najjar, Imprimerie Catholique, Beirut, 1998, p. 70; Al-Fârâbî, Kitâb al-cadal, ed. Rafîq al-'ajam, al-Mantq 'ind al-Fârâbî III, Dâr al-Mashriq, Beirut, 1986b, p. 74; Al-Fârâbî, Kitâb al-hurûf, p. 148; Ca'far Al-Yâsîn, Al-Fârâbî fî hudûdihî ve rusûmihî, p. 313.

determined for each of the sensed and marked things. In other words, a particular calling formation is arranged for each marked thing and then this structure is not used to indicate or tell another thing.¹⁴

For Al-Fârâbî, the exclamation that is a word associated with the vocalizing letters¹⁵ predisposes to the formation of letters in the alphabet.¹⁶ But, since the letters of alphabet are initially limited in number, new enterprises become important to establish a ground for social communication and form the linguistic structure. Indeed, because of this limitedness, societies are obliged to compose two or more letters and thus they expand the organization possibilities of linguistic structure. On that sense, letters (al-hurûf) and the first words (al-alfâz al-avval) are defined as signs ('alâmât) pointing to the things which can be sensed (mahsûsât) or signifying the meanings (ma'kûlât) which are based on sensed things; and thus many various vocalizations are generated.¹⁷

As is seen from the perspective of Al-Fârâbî, the letters and the words composed of those letters arise from what people in one community say by chance (ittafaka minhum) and then, these components form the structure of the nation's language. For instance, anyone in the community talking with another person uses one "calling" or "word" by chance in order to refer to something. In this case the hearer memorizes what is said and puts the same word into practice during speech with the first user (al-munshiu al-avval). After the first usage these two people agree (istalahâ) and compromise (tavâtââ) on the word in question; and address other people with this word until it has dispersed in society. For Al-Fârâbî, people in one nation firstly begin to form the words related to the things that are known at common first glance (al-ra'y al-mushtarak) and the things that are commonly sensed to be theoretical situations like sky, stars, surface and its contents. Then they respectively form the words related to actions derived from the nation's dispositions, the words related to habits obtained from ethic and art, the words related to what are attained from experience. They continue to produce the words in this way until they supply what they need. Thus, the language of this society continues to evolve with the similar behaviors of different people by chance and then, the accidental development stage of

¹⁴ Al-Fârâbî, Kitâb al-hurûf, pp. 135-136.

¹⁵ Al-Fârâbî, Sharh al-Fârâbî li kitâb Aristûtâlîs fî al-'ibârah, p. 51; Al-Fârâbî, Kitâb al-hurûf, pp. 162-163; Ca'far Al-Yâsîn, Al-Fârâbî fî hudûdihî ve rusûmihî, p. 605.

¹⁶ Al-Fârâbî, Kitâb kâtâğûriyâs ay al-makûlât, ed. Rafîq al-'ajam, al-Mantiq 'ind al-Fârâbî I, Dâr al-Mashriq, Beirut, 1985d, p. 93.

¹⁷ Al-Fârâbî, Kitâb al-hurûf, p. 137.

language finishes with the occurring of someone who governs them and generates the new vocalizations in line with their requirements. Al-Fârâbî claims that person is considered to be "the founder of this nation's language" (vâdî'u lisân tilka al-umma).¹⁸

To Al-Fârâbî, someone who grows up in the inside of a nation has an acquaintance with the letters of that nation, the words composed of its letters and the sentences arisen from its words. And so, he matures according to this nation's "speech habits" (i'tiyâdihim al-nutk). Thus this nation cannot go beyond its own habits and can solely speak with the routinized speech habits. Because their habits become internalized in their minds and languages, they don't know the things out of these. Since the words transferred from the first users or the previous generations and accepted as habit in minds is the language of this nation (lugat tilka al-umma), the things staying out of these are strange and wrong words for the people living in this community.¹⁹

Al-Fârâbî classifies words to be "the complete words" and "the incomplete words". In this categorization while the complete words correspond to the words that their status' are determined in terms of referring, the incomplete words conform to the words that their status' are not determined in terms of referring.²⁰ He includes the signs, letters, sounds and callings etc. in the incomplete words category. Namely, even if the mentioned things make a big contribution to the formation of language, they are devoid of systematic thought and determined reference. This doesn't mean that signs, letters, sounds and callings are completely excluded from the communication and language. Because, they have a great importance for sign-based communication even after the language has a perfect structure.²¹

Al-Fârâbî puts emphasis on rhetorical and poetic elements due to their importance in the evolution and formation of language and places the people who memorize, transport the rhetorical and poetic components at the centre of linguistic development. He also considers these people to be the organizers and authorities of language; and calls them to be the "fluent speakers" (fusahâ), "rhetoricians" (bulağğâ') and "philosophers" (hukamâ') of one nation. Namely these people who contribute to the development and enrichment of the language are the persons in the community not only use the language in the most accurate and beautiful way but also arrange the new

¹⁸ Al-Fârâbî, Kitâb al-alfâz al-musta'mala fî al-mantiq, ed. Muhsin Mahdî, Dâr al-Mashriq, Beirut, 1986a, pp. 101-102; Al-Fârâbî, Kitâb al-hurûf, pp. 137-138.

¹⁹ Al-Fârâbî, Kitâb al-hurûf, pp. 141-142.

²⁰ Al-Fârâbî, Kitâb al-hurûf, p. 74.

²¹ Al-Fârâbî, Kitâb al-alfâz al-musta'mala fî al-mantiq, pp. 102-103.

compositions of language that determine the structure of language, like determining the synonyms of words and the euphonic phrases. However, since this structure that emerges in parallel with the social development is based on oral culture, act of writing (al-kitâba) is needed to be able to overcome the deficiency of oral culture. Thus the mentioned process prepares the ground for the emergence of linguistics as an art.²²

For Al-Fârâbî, it is possible for a set of thought or action to become an art with the rules that can be handled in a systematic structure. These rules shaping the backbone of the artistic structure determine both the content of the art and the things that must be excluded from the art. Therefore, he considers the rules both as a tool providing opportunity for obtaining, telling and memorizing the knowledge related to arts and as a tool checking the information about the arts in terms of being true or false. According to his claim, from all reasons mentioned above the old named the tools with checking purpose like plummet, compass, ruler and balance as “rules” (kavânîn).²³ Since an action comes out earlier than the rules that determine itself, some actions that emerge in the formation of language like referring, speaking, writing and information sharing also come out earlier than the rules included in grammar. That is to say, after rhetoricians and poets develop and popularize the linguistic components, the words in the language access a specific maturity and so, just after the formation of typing, the art of linguistic (sinâ’at ‘ilm al-lisân) comes into existence.²⁴

Al-Fârâbî claims that grammarians scrutinize the rules related to words in terms of existing especially in their language.²⁵ This approach is definitely important to explain the formation stages of grammar for a particular language. Naturally, the required information in the introductory level for a language is “the knowledge of simple words”. That is, the information in this level contains the words referring to the types of things, the words that are subsequently included to the language, the words that are strangers to the language and the word that are famous in the language community. That people memorize and transfer the mentioned kinds of words in this grade is in the foreground. The second formation in the grammar of a language is “the knowledge of compound words”. At this phase,

²² Al-Fârâbî, Kitâb al-hurûf, pp. 143-145.

²³ Al-Fârâbî, Ihsâ’ al-‘ulûm, ed. ‘Alî Bumelham, Dâr wa Maktabat al-Hilâl, Beirut, 1996, pp. 17-18.

²⁴ Al-Fârâbî, Kitâb al-hurûf, pp. 143-145.

²⁵ Al-Fârâbî, Ihsâ’ al-‘ulûm, pp. 34-35; Al-Fârâbî, Al-Fusûl al-hamsah, ed. Raffiq al-‘ajam, al-Mantiq ‘ind al-Fârâbî I, Dâr al-Mashriq, Beirut, 1985a, pp. 67-68; Ca’far Al-Yâsîn, Al-Fârâbî fî hudûdihî ve rusûmihî, pp. 604-605.

people in the language community not only learn the compound words that are spoken and classified by rhetoricians and poets but also hand down them to the next generations.²⁶

Al-Fârâbî proceeds to another phase to explain the structural features of a grammar after he describes what the basic requirements are about it. He comes into prominence some situations related to the rules in language and then mentions that this period involves "the knowledge of rules concerning to the simple words" like the number of letters in the alphabet, the movement types and areas of speech organs, the states of vowels and consonants, the composition forms of letter and words, the pronunciations of letters and words. Philosopher claims some words which are difficult in terms of pronunciation are changed in this grade.²⁷

For Al-Fârâbî, the most important formation step in the grammar of a language is the level that "the knowledge of rules concerning to the compound words" is included in it. He divides this phase to two sections in its entirety. While the first section contains the rules that determine the composition or decomposition formats of names, verbs and particles between each other, the other section mainly shows the practice examples of the rules mentioned before. The basic purpose of grammar here is to present the most fluent and beautiful kinds of speech or type acts.²⁸ Since grammarian analyses not only the words but also the rules in terms of being available only in his own language, not in all languages,²⁹ the art of grammar arranges the language until the truth relating to one community's habit and tradition comes up and so, serves as the control mechanism of a language (ʿiyârat al-lisân) in what is possible to make mistakes in communication.³⁰

Al-Fârâbî attributes importance to the investigation and organization of words in terms of reference.³¹ When the relation between word and meaning is not precisely specified, it is possible a word to refer different more than one thing. In such a case, it is also possible a meaning to be explained by some different words. This problem of multi-word and multi-

²⁶ Al-Fârâbî, *Ihsâ' al-'ulûm*, pp. 19-20.

²⁷ Al-Fârâbî, *Ihsâ' al-'ulûm*, pp. 20-21.

²⁸ Al-Fârâbî, *Ihsâ' al-'ulûm*, pp. 21-23.

²⁹ Al-Fârâbî, *Al-Fusûl al-hamsah*, pp. 67-68; Al-Fârâbî, *Ihsâ' al-'ulûm*, pp. 34-35.

³⁰ Al-Fârâbî, *Risâlat at-tanbîh 'alâ Sabîl as-sa'adah*, *Manshûrât al-Câmi'ah al-Urduniyye*, Amman, 1987b, p. 231; Al-Fârâbî, *Al-Tawti'ah*, ed. Rafîq al-'ajam, al-Mantiq 'ind al-Fârâbî I, *Dâr al-Mashriq*, Beirut, 1985b, pp. 55-56; Majid Fakhry, *Al-Fârâbî Founder of Islamic Neoplatonism*, Oneworld Publications, Oxford, 2002, p. 41; Mustafa Ğâlib, *al-Fârâbî, Dâr wa Maktabat al-Hilâl*, Beirut, 1998, p. 39.

³¹ Al-Fârâbî, *Kitâb al-hurûf*, p. 74.

meaning that paves the way for many negative attempts like delusion and deception not only doesn't block the development of scientific language but also causes some communication problems. Scholars who take into account this concern differently address the word-meaning relation from the ordinary people. That is to say, they restrict the mentioned interconnection with certain pedestals.³²

Al-Fârâbî claims that even if the words in the first formation show the objects outside, grammarians associate these words with the familiar meanings in the eyes of public. So and so, this attitude that determines the word-meaning relations from the public views of the people also specifies the truth-value of the related issues by the same perspective.³³ Namely, since the people in a community tightly adopt the individual meanings and familiar opinions, the word-meaning relations of a grammar or language appear to be a limited and complex structure. This structure is limited because of it only concerns about the sensory things, and complex because of it doesn't logically arrange the opinions of majority. That is, the main reason of this limitedness and complexity is lacking in rational process.³⁴

For Al-Fârâbî, it is not possible to determine the truth-value of one thing from the limited information peculiar to sensory area. Since the sensory area is possible and variable, the truth-value of the thing in question will also be possible and variable. He qualifies the truth-value of public opinions in the same manner. Because, even though these views are determined by the majority of people, they actually depend on what a language community says "true" or "false". In this situation, if grammar specifies the truth and falsity from the usage of a word or sentence in one community, then what a grammarian says "true" is the correct way of speech. Al-Fârâbî doesn't accept the correct way of speech - that is established by grammarian - to be an ontological truth-value and claims that grammar deals only with the rules related to the external speech (*kavânîn fî al-mantîk al-hâric*). In fact, what he wants to mean that what grammarian says true in terms of word composition in a sentence is different from what logician says true.³⁵

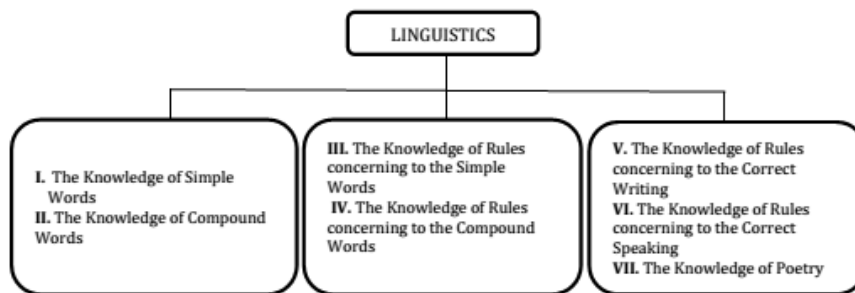
³² Al-Fârâbî, *Kitâb al-alfâz al-musta'mala fî al-mantîq*, p. 43; Al-Fârâbî, *Al-Fusûl al-hamsah*, pp. 63-64; Hasan Hanafî, *Al-Fârâbî*, ed. İbrâhîm Madkûr, Abû Nasr al-Fârâbî *fî al-zikrâ al-alfiya li vafâtihî*, al-Maktabat al-'Arabiyya, Cairo, 1983, p. 87.

³³ Al-Fârâbî, *Kitâb al-hurûf*, p. 148.

³⁴ Al-Fârâbî, *Kitâb al-hurûf*, p. 74; Al-Fârâbî, *Kitâb al-alfâz al-musta'mala fî al-mantîq*, p. 107.

³⁵ Al-Fârâbî, *Ihsâ' al-'ulûm*, s. 37; Al-Fârâbî, *Risâlat at-tanbîh 'alâ Sabîl as-sa'adah*, p. 230.

Al-Fârâbî discusses the concepts of “grammar” (‘ilm al-nahv) and “linguistics / knowledge of language” (‘ilm al-lisân) in different ways. He uses the concept of grammar while he talks about the structure of one community’s language; and applies to the concept of linguistics whenever he discusses the linguistic structure shared by all nations.³⁶ If that is so, then what does Al-Fârâbî mean with the concept of linguistics? In other words, are there any common aspects that are included in the languages of all nations? While Al-Fârâbî describes the structure of linguistics, he claims that the linguistics include the categories below to be the common aspects in the languages of all nations.



While grammarian scrutinizes these categories in terms of existing only in his own language, logician investigates them as a linguistic structure shared by all languages.³⁷ As we can understand from the board, it is not possible to consider the content in question to be the rules of linguistic structure. They are only categories. But another example Al-Fârâbî gives relating to all languages is the rule “sentence consists of noun, particle (copula)³⁸ and verb”;³⁹ and he considers this rule included in all grammars to be the main structure of logical theory. That following difference Al-Fârâbî does from the mentioned rule enables us to describe what the main difference between grammar and logic is.

³⁶ Al-Fârâbî, *Ihsâ’ al-‘ulûm*, pp. 19, 34-35; Al-Fârâbî, *Al-Fusûl al-hamsah*, pp. 67-68; Ca’far Al-Yâsîn, *Al-Fârâbî fî hudûdihî ve rusûmihî*, pp. 604-605.

³⁷ Al-Fârâbî, *Ihsâ’ al-‘ulûm*, pp. 19, 34-35; Al-Fârâbî, *Al-Fusûl al-hamsah*, pp. 67-68.

³⁸ Particles are the linguistic and logical components that are meaningful if and only if they are used with subject and predicate. (Al-Fârâbî, *Al-Fusûl al-hamsah*, p. 68; Sadik Türker, “The Arabico-Islamic Background of Al-Fârâbî’s Logic”, *History and Philosophy of Logic*, Volume 28, Issue 3: 2007, pp. 212-213; Saloua Chatti, “Syncategoremata in Arabic Logic, Al-Fârâbî and Avicenna”, *History and Philosophy of Logic*, Volume 35, No. 2: 2014, p. 175.)

³⁹ Al-Fârâbî, *Al-Fusûl al-hamsah*, pp. 67-68; Al-Fârâbî, *Kitâb al-alfâz al-musta’mala fî al-mantiq*, pp. 42-43; Al-Fârâbî, *Kitâb Bârî Armîniyâs ay al-‘ibârah*, ed. Rafiq al-‘ajam, *al-Mantiq ‘ind al-Fârâbî I*, Dâr al-Mashriq, Beirut, 1985c, p. 132.

2. The Main Difference between Grammar and Logic

According to Al-Fârâbî's claim, "Grammar is concerned with words; Logic is concerned with meanings and the words referring to these meanings".⁴⁰ We know the words in grammar that are generally used to refer to something are names and general terms. But, although both of them have their meanings, they are individual meanings, not logical meanings Al-Fârâbî thinks in universal structure.⁴¹ Because these words are conventionally learned and used, what determines the references or meanings of them is how a specific language community use themselves.⁴² For instance: "Aristotle" is the name of a famous philosopher. For Al-Fârâbî, the man referred to as a body is a unique person with all of his properties.⁴³ But people might use the name of a particular person with different meanings. Maybe some people use the word or name "Aristotle" to be "the teacher of Great Alexander". Even if the names like that generally have a particular referent, they might have dissimilar associations in different context when heard. If that is so, what about the general terms?

For grammarian, the words like "man", "living being", "matter", "tree" etc. are general terms that their meanings are determined by the usage in a language community. But, although each person, living being, matter, tree etc. are different from another in terms of being referred to with the mentioned words, ordinary people don't need to make a rational effort to determine the generality referred by these words. Maybe the only thing that interests them is what they see or speak. Some people who are experts in distinct areas might use these terms with different meanings.⁴⁴ For example, while sociologist defines the general term "man" to be "social animal", psychologist might define it as "emotional animal". Since grammarian specifies the meanings of general terms with reference to available usage only in his own language community, it is possible for people who are living in distinct communities to use these words named general terms with different meanings.

To the meanings that logic pays attention to, they are abstracted components from the things outside of the mind. Although the mentioned

⁴⁰ Al-Fârâbî, *Ihsâ' al-'ulûm*, pp. 33-36.

⁴¹ Al-Fârâbî, *Kitâb al-hurûf*, p. 74; Ca'far Al-Yâsîn, *Al-Fârâbî fî hudûdihî ve rusûmihî*, p. 545.

⁴² Al-Fârâbî, *Kitâb al-alfâz al-musta'mala fî al-mantîq*, p. 43.

⁴³ Al-Fârâbî, *Kitâb al-hurûf*, p. 139; Ca'far Al-Yâsîn, *Al-Fârâbî fî hudûdihî ve rusûmihî*, p. 297.

⁴⁴ Al-Fârâbî, *Kitâb al-alfâz al-musta'mala fî al-mantîq*, p. 43.

meanings are abstract in terms of allowing mental activity, their contents are acquired from natural sciences (al-'ilm al-tabî'î). Namely, while natural sciences are interested in the material side (bi a'yânihâ) of the mentioned meanings, logic is concerned with only meanings.⁴⁵ Thus, logical meanings don't have existence to be abstract entities out of the mind and are made by people with only epistemological aims.⁴⁶ For Al-Fârâbî, the meanings in question must primarily represent the generality included in natural things. For example, the properties of thinking and living being that exist in human nature determine the generality of meaning "man". This doesn't mean to say that classical logic denies the other properties that don't reflect the generality in terms of being variable like walking, sitting. What is stressed here is that the two properties "thinking" and "living being" representing the generality of the meaning "man" have identity structure in terms of existence both in mind and in every man. It is also possible to consider the two properties "neighing" and "living being" that represent the generality of meaning "horse" in a similar way.⁴⁷ No doubt, what this attempt shows us is the possibility of making some new definitions, like "cat is meowing animal"; "lion is roaring animal".

As we said before, for Al-Fârâbî, to explain the relation between natural objects and the meanings abstracted from them (namely, mental representations of them) is an act related to natural sciences; to clarify the relation between natural objects, the meanings abstracted from them and the words referring to these meanings is an activity related to logic. While the first relation below is naturally determined, the second relation is conventionally determined. That is to say, although it is possible for logician to choose the words from different languages to refer to meanings in mind, these meanings used in logic have to be abstracted from natural things. This is what Aristotle means when he says the relation between object and meaning is natural. Namely, what determines the meanings explained here is natural structure, not the usage of a word. I think this arrangement separates what logician does from what grammarian does; for grammarian who is only interested in usage contexts of words doesn't need to make a rational effort to determine such a logical generality. The only thing that interests him is whether there is a linguistic usage in his own community or not.

⁴⁵ Al-Fârâbî, Kitâb al-hurûf, pp. 72-73; Al-Fârâbî, Kitâb kâtâğûriyâs ay al-makûlât, pp. 116-117; Al-Fârâbî, Falsafat Aristûtâlîs, ed. Muhsin Mahdî, Dâr Macallat Shi'r, Beirut, 1961, pp. 72-73.

⁴⁶ Ca'far Al-Yâsîn, Al-Fârâbî fî hudûdihî ve rusûmihî, p. 101.

⁴⁷ Al-Fârâbî, Kitâb al-alfâz al-musta'mala fî al-mantiq, p. 83.

Al-Fârâbî stresses on the generality of meanings used in logic and the examples he uses in truth theory also support the existence of the mentioned main difference between grammar and logic. In such a way that, grammatical meanings are taken to be true or false according to what a language community speak, because grammarian is concerned with the usage of words in a language, not the arrangements of meanings in mind. For example, the sentence “Rob is walking” is meaningful and true for those who can understand English. But, from the logical point of view it is not possible to take the sentence “Rob is walking” to be true, because the name included in it is not a word referring to the meaning. That is, “Rob” is a name and doesn’t represent the general properties of a natural thing. In other words, the individual body referred to with the name “Rob” is who a unique man is; therefore, what the sentence says is what an individual action is.⁴⁸ If that is so, how can we explain the word “Socrates” used in syllogism by some philosophers to criticize the classical logic? For example:

Man is mortal

Socrates is a man

Then **Socrates** is mortal.

Classic syllogism does work with the comparison of “three terms”. For Al-Fârâbî, both subject and its predicate must be general in every proposition in terms of obtaining the “demonstrative truth” and “approximate truth to certainty”. For both subject and its predicate are meanings that represent the generality included in natural things in terms of being a scientific issue. That is, since the two sentences that contain the words “Socrates” above are only used in rhetoric with the aim of persuasion, Al-Fârâbî doesn’t consider the attempt like that to be a scientific approach.⁴⁹

As we said before, from a grammatical point of view, the sentences consisting of general terms in a language are true or false according to what

⁴⁸ Al-Fârâbî, Kitâb kâtâgûriyâs ay al-makûlât, pp. 122-123; Al-Fârâbî, Kitâb al-burhân, ed. Mâcid Fahrî, al-Mantiq ‘ind al-Fârâbî, Dâr al-Mashriq, Beirut, 1987a, pp. 21-22; Al-Fârâbî, Fusûlun muntaza’a, ed. Fawzî Mitri al-Najjar, Dâr al-Mashriq, Beirut, 1971, p. 52; Al-Fârâbî, Kitâb fî al-mantiq al-hitâba, ed. Muhammad Salîm Sâlim, Matba’at Dâr al-Kutub, Cairo, 1976, p. 9.

⁴⁹ Al-Fârâbî, Kitâb al-burhân, p. 74; Al-Fârâbî, Kitâb isâgûcî, ed. Mâcid Fahrî, Ta’âlîku ibn Bâcca ‘alâ mantik al-Fârâbî, Dâr al-Mashriq, Beirut, 1994, p. 31; Al-Fârâbî, Kitâb isâgûcî ay al-madhal, ed. Rafiq al-‘ajam, al-Mantiq ‘ind al-Fârâbî I, Dâr al-Mashriq, Beirut, 1985e, pp. 75-76; Shukri B. Abed, Aristotelian Logic and the Arabic Language in Al Fârâbî, State University of New York Press, Albany, 1991, pp. 5-6; Joep Lameer, Al-Fârâbî and Aristotelian Syllogistics: Greek Theory and Islamic Practice, Brill, Leiden, 1994, p. 38.

a language community says. For instance, some people may use the sentence “man is mortal” to tell the temporariness of life. What the mentioned instance says us is that such an approach has not a scientific worry. But Al-Fârâbî tries to describe the main difference between grammar and logic restricting the meanings used in logic to what logician aim with meaning. According to his claim, since it is not possible to determine the certain truth with variable properties of the meanings, each of the three meanings used in syllogism must be represent the essential properties⁵⁰ (certain contents) of natural things. Namely, just as truth is not possible for the meanings that do have only mental existence, it is also not possible to determine the certain truth with variable properties of meanings. Al-Fârâbî who claims it is not possible to access the certain truth in the majority of the investigated subjects uses the following example as a certain truth:⁵¹

Rational animal is man.

Man is matter.

Then rational animal is matter.

In this syllogism, A = matter; B = man; C = rational animal.

C is B;

B is A;

Then C is A.

As a result, what Al-Farabi says true in logical context is the correspondence of the relation between word in language, meaning in mind (thought) and thing in outside. Because there is no truth and falsity in isolation in terms of existing in outside, what the logician says true is the correspondence of the mentioned relation.⁵² On the other hand, since the

⁵⁰ These properties which owe their existences to the natural structure (zavâtun kâimatun bi at-tab' - hay'atun mâ fî mâdda) are known through reason, not sensory organs. For instance, the ability of seeing in eye (kuvva al-'ayn) and the faculty of thinking in human, etc.. (Al-Fârâbî, Ihsâ' al-'ulûm, pp. 36-37, 71; Al-Fârâbî, Kitâb al-alfâz al-musta'mala fî al-mantiq, pp. 50-51; Al-Fârâbî, Kitâb al-hurûf, pp. 72-73; Al-Fârâbî, Falsafat Aristûtâlîs, p. 86; Al-Fârâbî, Kitâb kâtâgûriyâs ay al-makûlât, pp. 116-117; Al-Fârâbî, Ârâ' ahl al-madînah al-fâdilah, p. 96).

⁵¹ Al-Fârâbî, Kitâb al-burhân, p. 36; Ibn Bâcca, Ta'âlfiku ibn Bâcca 'alâ kitâb al-burhân, ed. Mâcid Fahrî, al-Mantiq 'ind al-Fârâbî, Dâr al-Mashriq, Beirut, 1987, pp. 141-143.

⁵² Al-Fârâbî, Sharh al-Fârâbî li kitâb Aristûtâlîs fî al-'ibârah, ed. Willhelm Kutsch, Stanley Marrow, Dâr al-Mashriq, Beirut, 1986c, pp. 50-51; Ca'far Al-Yâsîn, Al-Fârâbî fî hudûdihî ve rusûmihî, p. 433; Deborah K. W. Modrak, Aristotle's Theory

meaning meant here is not the meaning obtained from the ordinary usage of a word, what determines the truth and falsity here is not language. Briefly stated, what this research shows us is that Al-Fârâbî's explanations include enlightening clues about not only the study and formation of language but also the difference between grammar and logic.

REFERENCES

- Abed, Shukri B., *Aristotelian Logic and the Arabic Language in Al Fârâbî*, State University of New York Press, Albany, 1991.
- Al-Fârâbî, Abû Nasr, *Al-Fusûl al-hamsah*, ed. Rafîq al-'ajam, *al-Mantiq 'ind al-Fârâbî I*, Dâr al-Mashriq, Beirut, 1985a.
- Al-Fârâbî, Abû Nasr, *Al-Tawti'ah*, ed. Rafîq al-'ajam, *al-Mantiq 'ind al-Fârâbî I*, Dâr al-Mashriq, Beirut, 1985b.
- Al-Fârâbî, Abû Nasr, *Ârâ' ahl al-madînah al-fâdilah*, ed. 'Alî Bumelham, *Dâr wa Maktabat al-Hilâl*, Beirut, 1995.
- Al-Fârâbî, Abû Nasr, *Falsafat Aristûtâlîs*, ed. Muhsin Mahdî, *Dâr Macallat Shi'r*, Beirut, 1961.
- Al-Fârâbî, Abû Nasr, *Fusûlun muntaza'a*, ed. Fawzî Mitrî al-Najjar, *Dâr al-Mashriq*, Beirut, 1971.
- Al-Fârâbî, Abû Nasr, *Ihsâ' al-'ulûm*, ed. 'Alî Bumelham, *Dâr wa Maktabat al-Hilâl*, Beirut, 1996.
- Al-Fârâbî, Abû Nasr, *Kitâb al-alfâz al-musta'mala fî al-mantiq*, ed. Muhsin Mahdî, *Dâr al-Mashriq*, Beirut, 1986a.
- Al-Fârâbî, Abû Nasr, *Kitâb al-burhân*, ed. Mâcid Fahrî, *al-Mantiq 'ind al-Fârâbî*, *Dâr al-Mashriq*, Beirut, 1987a.
- Al-Fârâbî, Abû Nasr, *Kitâb al-cadal*, ed. Rafîq al-'ajam, *al-Mantiq 'ind al-Fârâbî III*, *Dâr al-Mashriq*, Beirut, 1986b.
- Al-Fârâbî, Abû Nasr, *Kitâb al-hurûf*, ed. Muhsin Mahdî, *Dâr al-Mashriq*, Beirut, 1990.
- Al-Fârâbî, Abû Nasr, *Kitâb al-mûsîkâ al-kebîr*, ed. Ğattâs Abd al-Malik Hasaba, Mahmûd Ahmad al-Hafnî, *Dâr al-Kâtib al-'Arabî*, Cairo, Undated.
- Al-Fârâbî, Abû Nasr, *Kitâb al-siyâsat al-madaniyyah*, ed. Fawzî Mitrî al-Najjar, *Imprimerie Catholique*, Beirut, 1998.
- Al-Fârâbî, Abû Nasr, *Kitâb Bârî Armîniyâs ay al-'ibârah*, ed. Rafîq al-'ajam, *al-Mantiq 'ind al-Fârâbî I*, *Dâr al-Mashriq*, Beirut, 1985c.
- Al-Fârâbî, Abû Nasr, *Kitâb fî al-mantiq al-hitâba*, ed. Muhammad Salîm Sâlim, *Matba'at Dâr al-Kutub*, Cairo, 1976.

- Al-Fârâbî, Abû Nasr, Kitâb îsâgûcî ay al-madhal, ed. Raffîq al-‘ajam, al-Mantîq ‘ind al-Fârâbî I, Dâr al-Mashriq, Beirut, 1985e.
- Al-Fârâbî, Abû Nasr, Kitâb îsâgûcî, ed. Mâcid Fahrî, Ta‘âlîku ibn Bâcca ‘alâ mantîk al-Fârâbî, Dâr al-Mashriq, Beirut, 1994.
- Al-Fârâbî, Abû Nasr, Kitâb kâtâğûriyâs ay al-makûlât, ed. Raffîq al-‘ajam, al-Mantîq ‘ind al-Fârâbî I, Dâr al-Mashriq, Beirut, 1985d.
- Al-Fârâbî, Abû Nasr, Risâlât at-tanbîh ‘alâ Sabîl as-sa‘adah, Manshûrât al-Câmi‘ah al-Urduniyye, Amman, 1987b.
- Al-Fârâbî, Abû Nasr, Sharh al-Fârâbî li kitâb Aristûtâlîs fî al-‘ibârah, ed. Wilhelm Kutsch, Stanley Marrow, Dâr al-Mashriq, Beirut, 1986c.
- Al-Yâsîn, Ca‘far, Al-Fârâbî fî hudûdihî ve rusûmihî, ‘Âlam al-Kutub, Beirut, 1985.
- Chatti, Saloua, “Syncategoremata in Arabic Logic, Al-Fârâbî and Avicenna”, History and Philosophy of Logic, Volume 35, No. 2: 2014, 167-197.
- Fakhry, Majid, Al-Fârâbî Founder of Islamic Neoplatonism, Oneworld Publications, Oxford, 2002.
- Ğâlib, Mustafa, al-Fârâbî, Dâr wa Maktabat al-Hilâl, Beirut, 1998.
- Hanafi, Hasan, Al-Fârâbî, ed. İbrâhîm Madkûr, Abû Nasr al-Fârâbî fî al-zikrâ al-alfiya li vafâtihî, al-Maktabat al-‘Arabiyya, Cairo, 1983.
- Ibn Bâcca, Ta‘âlîku ibn Bâcca ‘alâ kitâb al-burhân, ed. Mâcid Fahrî, al-Mantîq ‘ind al-Fârâbî, Dâr al-Mashriq, Beirut, 1987.
- Lameer, Joep, Al-Fârâbî and Aristotelian Syllogistics: Greek Theory and Islamic Practice, Brill, Leiden, 1994.
- Langhade, Jacques, min al-Kur‘ân ilâ al-falsafa, al-lisân al-‘arabî wa takavvun al-kâmûs al-falsafî ladâ al-Fârâbî, transl. Vacîhî As‘ad, Manshûrât Vizârat al-Sakâfa, Damascus, 2000.
- Modrak, Deborah K. W., Aristotle's Theory of Language and Meaning, Cambridge University Press, Cambridge, 2003.
- Türker Küyel, Mübahat, Aristoteles ve Fârâbî’nin Varlık ve Düşünce Öğretileri, Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Yayınları, Ankara, 1969.
- Türker, Sadik, “The Arabico-Islamic Background of Al-Fârâbî’s Logic”, History and Philosophy of Logic, Volume 28, Issue 3: 2007, 183-255.

The Study Of Language and the Main Difference Between Grammar and Logic in Al-Fârâbî's Philosophy