Juan Antonio Pacheco

(University of Seville, Spain)

IBN 'ARABĪ AND ARISTOTELIAN LOGIC

Abstract

An inquiry into the works of Ibn 'Arabī reveals them to be like a web with indefinite frontiers between reason and faith, because his thought is primarily a *thought* and it must be linguistic or symbolic in character; that is, it must presuppose communication, and above all, understanding. In the vast and fecund wealth of ideas which was the intellectual background of Ibn 'Arabī, the originality of his rational thought grows from a broad and solid logical foundation as a product of his conviction that rational and mathematical elements must provide proof of spiritual achievements. The aim of this paper is to demonstrate the presence of logic in two of his works, *The Book of Alif* and *Fuşūş al-Hikam*, as a paradigm of truth values that by means of its evident and rational principles can aid the Sufis' efforts to gain a correct understanding of the Truth.

Logic as a subject of debate

In an earlier article, we had tried to show the elements of Aristotelian logic and rational elements in some of the works of Ibn 'Arabī.¹ To get a full theory of this subject, we should read and analyse all the works of the Andalusian Sufi, and this exploration requires considerable further discussion of the purposes implicit in his text taken as a whole. In the following pages, our aim is to see how the Shaykh al-Akbar adopted the premises of Aristotelian logic to demonstrate spiritual experiences despite his general denial of rational knowledge which he considered, as many Sufis do, to be a kind of lesser truth. Having this in mind, we will be limited to two of Ibn 'Arabī's Epistles: the *Fuṣūş al-Hikam* and *The Book of Alif.* In both, we can find a preliminary explanation of the presence of Aristotelian logic in the mind of Ibn 'Arabī as a study preparatory to access to a vast dominion.

As we know, in the first half of the fourth/tenth century there arrived in Baghdad the tradition of the Alexandrian school centered on the study and com-

¹ Pacheco J.A. "Ibn 'Arabî. Número y Razón" // Actes du Colloque Symbolisme et herméneutique dans la pensée de Ibn 'Arabî. Damas: IFPO, 2007. P. 99–113.

mentary of the Aristotelian corpus that had already been translated into Arabic many years before. The members of the new school came to be known as the "logicians" (*mantiqiyyūn*), to distinguish them from thinkers who were called "physicists" or "naturalists" ($tab\bar{i}$ ' $iyy\bar{u}n$). The claims they made about the new logic stressed its importance as the only way to scientific knowledge, and the learned dialectical theologians, jurists and philologists became aware of the possibilities of the new method of reasoning.

In 320/932, a celebrated debate on the respective values of language and logic took place in Baghdad, in the salon of the Abbasid caliph al-Muqtadir's vizier, al-Fadl ibn Ja'far ibn al-Furāt, whose vizierate extended through the year 932. The defender of logic in this debate was Abū Bishr Mattā ibn Yūnus (d. ca. 940) and his opponent, a dialectical theologian, philologist and jurist, Abū Sa'īd al-Sirāfī (280–368/893–979). The debate was a major literary event and accounts of it continued to circulate among learned men in the following generations due to the interest in the relationship between language and logic.²

In the text of the debate that Abū Ḥayyān al-Tawhīdī has preserved for us in his *On Pleasure and Conviviality*,³ we read that al-Sīrāfī's critique of Mattā's logic was based on a non-Aristotelian doctrine of knowledge, which rested on the distinction between the natural and the conventional given to a thing in a particular language. This doctrine and its development is the same as was developed by Ibn Kullāb in the middle of the third/ninth century as an effort to harmonize the Mu'tazilite doctrine of the conventional character of names. Ibn al-Furāt asserted that Mattā's view of logic is contrary to religion as well as to the truth and requested his guests to come forward and defend both religion and the truth rather than religion as opposed to the truth, or the truth of reason. In the debate, al-Sīrāfī presents himself as a champion of the truth of reason against Mattā, who is accused of being a champion of convention and blind acceptance of Aristotle's authority.⁴

In fact, in the debate, al-Sīrāfī defends religion indirectly by defending the truth that is confirmed by religion and he substantiates his charge against the logicians by listing some of the terms used by them with the observation that they are all borrowed from the Arabic language. At the end of the debate, al-Sīrāfī turns to expose the logicians' aim and intention saying that they want to waste an ignorant man's time and to humble the powerful. Their aim is to impress people with big words, then sit back and pretend that their operations in

² *Muhsin Mahdi.* "Language and Logic in Classical Islam" // *Grunebaum G.E.* (ed.). Logic in Classical Islamic Culture. Wiesbaden: Otto Harrassowitz, 1970.

³ Abū Hayyān al-Tawhīdī. Al-Imtā' wa'l-Mu'ānasah. Ed. Ahmad Amîn and Ahmad al-Zain. 3 vols. Cairo, 1939–1944. Pacheco J.A. "Abû Hayyân al-Tawhîdî aw al-'âlamî al-fard"// Fuşûl, jarīf n., 3. Cairo, 1995. P. 48–56.

⁴ Muhsin Mahdi. Op. cit. P. 60.

formal syllogistic reasoning are a kind of magic or supernatural creation, when they are nothing but myth and sophistry.

Based on that purpose, al-Sīrāfī says that the art of logic and its technical language, as well its formal operations, are not indispensable. They can be dispensed with by a man of sound reasoning, good discrimination, keen judgment and enlightened soul, which are divine favours "that Allah bestows on those of His servants whom He wills." Those who pursue the art of logic have no ground for priding themselves on it and are wrong in claiming that it is the best way to knowledge.⁵ Rejection of logic, in the sense of Aristotelian logic or Hellenistic logic, versus its acceptance seems to be the basis of a controversy or dilemma among the theologians for a long time after the famous debate held in Baghdad.

Contemporaries of Ibn 'Arabī (d. 638/1240) were two important scientists and logicians: 'Abdallaṭīf al-Baghdādī (d. 629/1232), physician and scientist of early Ayyubid times, and the Persian philosopher Athīr al-Dīn al-Abharī (d. 1265) who in his *Revealing Thoughts* developed a theory of several different logics of propositions containing complex terms.⁶ The former observes that nobody among the older *fuqahā*' had shown any interest in logic.⁷ But this assertion seems somewhat doubtful, for no Islamic jurist or, in a sense, any theologian, could do without logic because they had to use subtle hermeneutic methods to interpret the Qur'an. In Islamic theology, the use of logic seems to be necessary because theology is by definition nothing more than a logical demonstration of the believed truth.

However, as van Ess says, we must be careful not to construct a problem that does not exist and we should take into account the ambiguity of the term "logic." The Islamic theologians and jurists used logical methods, but did not like the Aristotelian logic, that is the kind of logic al-Bagdādī had in mind. Theologians avoided the word *mantiq* and they preferred to speak of $\bar{a}d\bar{a}b$ *al-kalām* or $\bar{a}d\bar{a}b$ *al-jadal.*⁸ We must have in mind that, from the beginning, Muslim theology had to think in terms of defence and attack and in this struggle there was no time for profound reflections about eternal truths.

The dialectical debates in the field of Islamic theology made it necessary to have a proof, $dal\bar{\imath}l$, of the opinions, but this $dal\bar{\imath}l$ is not a proof in the Aristotelian sense, the *burhān* used by the *falāsifa*. *Dalīl* is neither a demonstration scheme nor a methodical set of argumentation like a syllogism or an induction. However, Muslim theologians usually differentiated between $dal\bar{\imath}l$, proof in the sense of a

⁵ Ibid. P. 80.

⁶ Tom P. "Abhārī on the Logic of Conjunctive Terms"// Arabic Sciences and Philosophy. Vol. 20 (2010). Cambridge: Cambridge University Press, 2010. P. 105–119.

⁷ Stern S.M. "A Collection of Treatises by 'Abd al-Laṭīf al-Baghdādī"// Islamic Studies (Karachi). Vol. I, No. 1 (1962). P. 65.

⁸ van Ess J. "The Logical Structure of Islamic Theology"// Grunebaum G.E. (ed). Op. cit. P. 22.

"sign," and $dal\bar{a}la$, proof in the sense of a scheme with its proper structure. In the Stoic logic, we can find similarities, not only in the system as a whole but also in vocabulary. Although we cannot say that the logic of $kal\bar{a}m$ is identical with Stoic logic, it is possible to make clear the fact that it is built on a Stoic basis.

Stoicism emerged in its time, we know, as the most powerful intellectual expression of Hellenistic culture, from the beginning of the Hellenistic age c. 300 B.C. to the decline of the Roman Empire in 300 A.D., and had an impact on the politics, ethics and religion of Islamic civilization and, of course, on Islamic logicians. The Stoic doctrine of *logos* played an important role in the Islamic *Umma* and Muslim scholars such as Ibn 'Arabī seem to accept the *logos* doctrine as the creative, animating and rational principle and, as such, as the Reality of realities. To Ibn 'Arabī, as well as to other Sufis, the reality of Muhammad came to be identified with *logos* whose manifestation is to be found in the Perfect Man. According to it, von Grunebaum portrayed this Perfect Man as an Islamic *logos* in whom all the attributes or macrocosm are reflected and maintained that the Perfect Man is an outward manifestation of the essence of Muhammad.⁹

In this brief introductory general explanation of the field concerning the relation between logic and spirituality as viewed by the Sufis, it can be useful to say, as a general principle, that for the Islamic philosophers, especially those of the later period, traditional philosophy has always been a way in which the truths of religion were expressed in terms of intellectual and rational discourse. The truth reached by traditional philosophy is for the *hukamā*' an aspect of the truth itself, of *al-Haqq*, which is a Divine Name as well as the source of all revealed truth.

If we think of philosophy and rational discourse in this general sense, several traditional Islamic disciplines can be related to it, these disciplines being *kalām*, jurisprudence and Sufism, in particular its intellectual expression which is also known as *al-'irfān* or gnosis. In the later period of Islamic history, in most of the Islamic world *falsafah* became a distinct school, which later disappeared, supplanted by *kalām* and Sufism that started to fulfil its intellectual functions. In fact, many authors contemporary to Ibn Khaldūn emphasized the importance of both disciplines as forms of Islamic philosophy.

Besides, the Peripatetic philosophy after Ibn Rushd, the School of Illumination founded by Suhrawardī and metaphysical and Gnostic forms of Sufism, closely identified with the school of Ibn 'Arabī (not to speak of philosophies related to specific religious forms such as Ismā'īlī philosophy), can be labelled with a general form or rationale, in which the thought of al-Shaykh al-Akbar can be found as an emerging point in the vastness of the subject. Despite this implicit acceptance of rational philosophy, we can detect an opposition to *falsafah* and its rational tools, such as syllogism, that came mainly from three groups, clearly

⁹ von Grunebaum G.E. Medieval Islam: A Study in Cultural Orientation. Chicago–London, 1966. P. 133.

differentiated in their purposes: the purely religious scholars concerned with *fiqh*, the theologians, especially of the Ash'arite school, and certain Sufis, among whom we find Ibn 'Arabī.

The opposition of the Ash'arites to *falsafah* was much greater than that of the Mu'tazilites. The well-known attack of al-Ghazzālī (d. 1111) against *falsafah* is aimed only at Peripatetic philosophy, especially the rationalistic tendencies within it. But this criticism was of such a positive nature that it changed the flow of Islamic intellectual life instead of putting an end to it; and the background which made possible the spread of the sapiential teachings of Suhrawardī and Ibn 'Arabī owes much to al-Ghazzālī. However, al-Gazzālī himself, despite his refutation of them, made considerable efforts to keep alive the fields of logical speculation, which he considered to be a valid way to give new life to certain points of the Muslim credo.

Ibn Khaldūn said that the early theologians vehemently disapproved of the study of logic and considered it innovation or unbelief. However, says Ibn Khaldūn, recent theologians since al-Ghazzālī decided that logic is not in contradiction with articles of faith, even though it is in contradiction with some of the arguments for them. We know that al-Ghazzālī is famous for writing a number of works dealing with logic. Among these works, we find the text entitled *Qistās al-mustaqīm (The Correct Balance)* in which the author seeks to demonstrate that syllogistic logic is found in the Qur'an and is therefore a legitimate tool for use by Muslim theologians.

The criticism of *falsafah* on the part of Muslim theologians was, more than anything else, a creative interplay between *falsafah* and *kalām*, which left an indelible mark upon both of them and later forced the *falsafah*, as well the Peripatetic school, to deal with certain specifically religious issues, while *falsafah* influenced ever more the formulation and argumentation of *kalām* itself. So, the so-called opposition of *kalām* to *falsafah*, far from destroying *falsafah*, influenced its later course. Moreover, in much of the Sunni world, *kalām* absorbed *falsafah* after the 7th/13th century, with the result that, as already mentioned, such a figure as Ibn Khaldūn was to call this late *kalām* a form of philosophy.

In considering these premises, we find in the *Qistās* of al-Ghazzālī how the philosopher seeks to show that revelation and reason do not conflict, because revelation incorporates reason. By taking the title of his book from the Qur'an itself,¹⁰ he wishes to emphasise that the subject matter is indeed Qur'anic. The logic to be found in the Book comprises variations on the basic form "All A is B; all B is C; therefore all A is C," and for each type of syllogism he discusses, he summarises the logical principle behind it which, in this case, is that a judgment applying to the more general also applies to the more particular.¹¹

¹⁰ Qur'an, 17:35: "Give full measure, when you measure, and weigh with even scales."

¹¹ Whittingham M. "Al-Ghazzālī and the Qur'an: One Book, Many Meanings." Chapter 5, "Syllogisms as the Steps to Heaven". London: Routledge, 2007. P. 81–101.

Although al-Ghazzālī seems to have drawn out the basic way by which the Muslim theologian can unerringly seek out the appropriate tool to interpret and demonstrate the faith, and considering that the Sufis are the most accurate followers of this faith by means of their *ihsān*, the criticism that some of them levelled at *falsafah* must be viewed in the light of the nature of Islamic esotericism. Sufi metaphysics could not become associated with the lesser truth of Aristotelianism against whose inherent limitations it reacted with criticism.

Sufi spirituality tends to take the human intellect as a ladder to the light of the Spirit, as we can see in Ibn 'Arabī, 'Abd al-Karīm al-Jillī, Ṣadr al-Dīn Qūnawī and the like. However, the final result, which is union with God, can only be reached by means of divine Illumination or *tajallī*. From this point of view and with this spiritual path in mind, we can read in Ibn 'Arabī's *Fusūs al-Hikam* that:

"The intellect cannot perceive (the fact of spiritual illumination) by means of logical investigation, for this sort of perception only exists through divine unveiling, by which one recognises the basis of the forms of the Universe, which receive the spirits."¹²

For Ibn 'Arabī, the intellect shows a kind of weakness since it passes judgement on cause, and that cause is not an effect of the one who is the cause (*'illa*):

"This is the judgement of the intellect, which is evident. There is only this in the knowledge of *tajallī*, and it is that the cause is an effect of whatever it is the cause. The ruling of the intellect is sound when discernment is clarified. Its limit in that is that, when it sees the matter to be different from what the logical proof provides, it says that the source ... is not an effect of its effect, so that its effect would become a cause to it. This is his limit when he sees the matter as it is, and does not stick to his logical discernment."¹³

Ibn 'Arabī: the thought of a Sufì

Sufism's criticism of the goals of intellect implies two assumptions: the first is that in the Islamic revealed tradition itself one can find all that intellect requires since none are more reasonable than the Messengers, and they brought what they brought in transmission from the Divine Presence. As we read in the Word of Ilyas of the *Fuşuş*, "they confirmed what intellect confirmed." In addition to this, the Messengers gave more in that which the intellect alone does not possess by its perception and which the intellect does not imagine directly.

Secondly, the acknowledgement of intellect's weakness regarding intellectual aims implies a high level of knowledge of the rational tradition, of its premises as well as of its more representative figures, and Ibn 'Arabī is well aware of it

¹² Ibn 'Arabī. Fuşūş al-Ḥikam. Ed. Abū al-'Alā 'Afīfī. Beirut: Dār al-Kitāb al-'Arabī, n.d. P. 23.

¹³ Ibid. The Fass of Ilyas.

and of the distinction between the two kinds of knowledge. However, the Andalusian Sufi adds another kind of knowledge to his vision of the ways to access the truth. Having this in mind, we can observe that Ibn 'Arabī's purposes are more universal than the purposes assumed by the Sufis of his time.

In dealing with knowledge, Ibn 'Arabī starts from three points, in which revealed science, as the cornerstone of the building of human thinking, is superior to any other kind of knowledge. On a secondary level, he poses human intellectual experience and the tools that are employed in it. This level is followed by the last one — the degree of the common believer who does not need any form of proof or argumentation, and whose precedent we find in the Mu'tazili 'Abd al-Jabbār (b. 320/932), who in his *Mughnī* asserts that man finds himself reflecting and does not need an indication (*dalīl*) to arrive at this knowledge.¹⁴

Henry Corbin says that these diverse ways from which Ibn 'Arabī starts can be found in the revealed verse of the Qur'an (50:37): "Surely in this there is a reminder in that for every man who has a heart (*qalb*) or gives an ear (*sam*') and is aware (*shahīd*)."¹⁵ The man who has the science of the heart is a Sufi and, among them, the most perfect in the Path. The pupils of the intellectual reasoning, those who possess an accurate and ideal sense of hearing, are the followers of the *kalām*, *al-mutakallimūn*. For them, knowledge based upon the data of divine revelation is not direct knowledge and is not self-evident, since it must always be based on reflection and inference. At least, one has to show that his sources are trustworthy, and, in many cases, one needs to employ argumentation to deduce the real meaning of the data of divine revelation.

The words of Ibn 'Arabī referring to the correct use of logical argumentation are addressed to the *mutakallimūn*, in light of the above explanation. In the Fusus, he says:

"When it is said that *There is a reminder in that for every one who has a heart*, it is said because the heart is transformed (*taqallaba*) into various forms and attributes. He did not say 'to him who has an intellect,' because the intellect limits and confines the matter to a single description, but reality refuses to be confined. It is not a reminder for those who have intellect, and they are those who have creeds, some of which deny others, and some curse others, and they do not have helpers. The god of the one with a creed does not have jurisdiction over the god of someone with another creed. The one who has a creed defends it; he defends what he believes about his god, and supports it. But what he believes in, does not support him."¹⁶

¹⁴ '*Abd al-Jabbār*. Al-Mughnī fī abwāb al-tawḥīd wa 'l-'adl. 14 vols. Cairo: Al-Dār almiṣriyya li 'l-ta'līf wa 'l-tarjama, 1958–1965. Vol. XII. P. 5.

¹⁵ Corbin H. L'Imagination créatrice dans le soufisme d'Ibn 'Arabî. Paris: Flammarion, 1993. P. 177.

¹⁶ Ibn 'Arabī. Fuşūş. The Faşş of Shu'ayb.

The Gnostic is the one who has a heart, since he knows the transformation of Allah in forms by the transformation in shape and it is His word, "*anyone who has a heart*," which transforms the shapes by His transforming. As for the people of belief, in Ibn 'Arabī's view,

"They are the imitators who imitate the Prophets and Messengers in what they transmitted from Allah. They are not those who imitate the people of thoughts and those who interpret the transmissions received by tracing them to their logical proofs. The ones who imitate the Messengers, may Allah bless them and grant them peace, are the ones meant by His words '*who have given ear with a present mind*' to what divine transmissions relate of the *sunna* of the prophets."¹⁷

The arguments of Ibn 'Arabī, given in the Word of Shu'ayb, manifest a knowledge of the logical arguments and rational concepts of the *falāsifa* and the Mu'tazilites and show how these concepts and the relevant terminology undergo the appropriate modifications in the explanations of the Andalusian Sufi. After saying that the Mu'tazilites believe that Allah will inflict the punishment on the rebel should he die without repentance, Ibn 'Arabī transforms the Aristotelian concept of substance into a concept that was suitable for the doctrine of *waḥdat al-wujūd* and its related themes in a manner similar to that employed in the texts of al-Tūsī, due to the fact that this Sufi doctrine deals with a process that cannot be explained in the traditional Aristotelian terms of substance. For Ibn 'Arabī, there is One Source but it is an intelligible multiplicity in the source of One and

"In the *tajallī*, it is multiplicity witnessed in the one source, like matter, which you obtain in the definition of each form. Regardless of the multiplicity of forms and their variety, in fact, it comes down to one substance (*jawhar*), which is their matter (*hayūla*). Whoever recognises himself with this recognition, recognises his Lord."¹⁸

The main purpose of this argument consists in the reconstruction of a philosophical scheme in which the notion of substance and the set of conceptual terms associated with it can be formulated in a new shape that differs from the Aristotelian view only in its final goals. It is only against this background that we can understand the refusal of Ibn 'Arabī to endorse the validity of rational proofs and argumentations. So says Ibn 'Arabī to the philosophers and masters of reflective thought,

"And among the ancients and the *mutakallimun* in their discourse on the self and its whatness, none of them stumbled on its reality, and logical speculation

¹⁷ Ibn 'Arabī. Fuşûş. The Faşş of Shu'ayb.

¹⁸ Ibid.

can never provide it. He who seeks knowledge of it by means of logical speculation, mistakes tumour for fat and boasts without vigour or substance."¹⁹

This refutation is based on Ibn 'Arabī's conviction that the Divine address comes according to what agrees with the addressees and what logical reflection accords it. It does not come according to what unveiling gives. For that reason, says the Sufi, there are many believers, but the Gnostics who possess unveiling are few and only they can correctly interpret philosophical assumptions, although it would imply the use of Aristotelian concepts:

"How excellent is what Allah said about the universe and its changes with breaths in the new creation in one entity. He said in respect to some, rather to most of the world, '*Yet they are dubious about the new creation*.' This means that they do not know the renewal of the affair with breaths. However, the Ash'arites have hit on it in some existent things, namely, the accidents. The *Hisbāniya* hit on it regarding the entire universe. The logical philosophers consider them ignorant on it. However, the groups erred. As for the error of the *Hisbāniya*, in spite of what they said regarding the change in the entire universe, they did not notice the oneness of the entity of the substance (*jawhar*), which receives this form ... As for the Ash'arites, they did not know that the entire universe consists of a collection of accidents (*a'rād*). It changes in every moment, since accidents do not last for two moments."²⁰

A profound reflection on the question of the peculiar use by Ibn 'Arabī of Aristotelian terminology in his arguments against the Ash'arites needs, obviously, certain qualifications and clarifications, which are impossible to make in this paper, since our aim here is only to show the use of a philosophical nature without any significant implications, and because Ibn 'Arabī only handles Aristotelian concepts as a useful tool in his exegesis. However, in some of complex passages, he is forced to deal with the key terms of Aristotelian thought:

"So when the Ash'arites define the thing, from their definition follows that it is [nothing else but] accidents. The accidents mentioned in its definition are its very substance and its independent reality. Inasmuch as it is a non-essential, it is not independent. But the sum of what is not independent turns out to be something independent, like the occupation of space and the receipt of accidents in the essential definition of an independent essential substance."²¹

The acceptance of logical proofs in the Fusik

In the Word of Ibrahim in the $Fu_{s}\bar{u}_{s}$ we find the similarities described by Ibn 'Arabī between the two discourses, apparently divergent, but confluent in their

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibn 'Arabī. Fuşūş. The Faşş of Shu'ayb.

goal as mentioned: "Divine address came according to what agrees with the addressed ones and what logical reflection accords. It does not come according to what unveiling gives. For that reason, there are many believers, but the Gnostics who possess unveiling are few."²² In this assertion, Ibn 'Arabī seems to be aware of the fact that logical reflection, and especially the tools of logic, can play a positive role in preparing the mind for illumination and contemplation. Al-Kindī asserted that the truth was one and that the instrument of knowledge for both *falāsifa* and Gnostics was the same; with this premise in mind, the Shaykh al-Akbar opened the door to logic regarded as a tool with many benefits for the correct understanding of the Sufi discourse, this tool being expressed by means of syllogism.

Ibn Sīnā defined a syllogism in his works on logic, following the teachings of the Aristotelian school, as a type of proof in which, if its premises are accepted, a conclusion necessarily follows from them. In order to demonstrate the evidence of the origin of Creation, and having previously admitted that bringing the world into existence is based on uniqueness (*fardiyya*), Ibn 'Arabī says that uniqueness has triplicity, which is from three and upwards, because three is the first singular taken as a whole. From this assertion, we can proceed to the syllogistic argument:

"Thus engendering is based on triplication, i.e. on three, on both sides: the side of Allah and the side of creation. That applies to bringing meanings into existence by proofs. The proof must consist of three parts according to a special structure and a special condition, and then it will inevitably give a result. Namely, the thinker constructs his proof from two propositions. Each proposition contains two terms, and so it makes four. One of the four is repeated in both propositions, in order to link one to the other as in marriage. So, it is three and not anything else, because one is repeated in both of them. Thus, what is sought is achieved if they are arranged in this specific way, namely, that these two propositions are connected to each other by the repetition of that term, through which triplication takes place. The special condition is that the ruling (*hukm*) must be more general than the explanatory principle (*'illa*) or equal to is, in order to validate the conclusion. If it is not like that, then it will give a result which is not true."²³

In this text Ibn 'Arabī seems to expound the "theory" of syllogistic structure, following closely the explanation given in Aristotle and his commentators on logic and the description made by Ibn Sīnā in his *Ishārāt*, which distinguishes the three figures of the categorical syllogism according to the role of the middle term related to the first figure (known in mediaeval Latin logic as having several modes named *Barbara*, *Celarent*, *Darii*, *Ferio*. The vowels in these words refer

²² Ibid. The Fass of Ibrahim.

²³ Ibid. The Fass of Sālih.

to the extension of the premise: universal or particular and negative or positive in each of the propositions).

Syllogistic structure contains three propositions, two of which are premises, the third being the conclusion. Each proposition comprises two terms, the subject and predicate. The terms have a quantitative relation, as already said, to each other. The predicate of the conclusion is the major term and the subject of the conclusion is the minor term. The term repeated in the premises does not appear in the conclusion.

After the "academic" explanation made by Ibn 'Arabī, he proceeds to demonstrate the reality of the revealed facts and the truth of the conclusion by means of the syllogistic schema previously explained:

"This is found in the world, like the ascription of actions to the slave, without ascribing them to Allah or the ascription of engendering, the object of our discussion, to Allah absolutely. But Allah only ascribed it to the thing which was told, 'Be!' Thus, for example, if we wish to prove that the universe exists from a cause, we say that every temporally originated ($h\bar{a}dith$) thing has a cause. Thus we have the temporally originated being and the cause. Then, in the other proposition, we say that the universe is temporally originated. Thus, 'temporally originated' is repeated in both propositions. The third term is 'the universe.' Hence, it follows that the universe has a cause, and in the conclusion appears what was mentioned in the first proposition, that is, the cause. The special aspect is the repetition of the term 'temporally originated,' and the special condition is the universality of the explanatory principle, because it is what is universal in the temporal origination of the world from God, that is, the ruling. We therefore make the judgement that every being which is temporally originated has a cause, regardless of whether that cause is equal to the ruling or the ruling is more general than the cause, so that the latter comes under its ruling. Thus, the result is true."²⁴

It is not our aim now to discuss the correctness of Ibn 'Arabī's use of syllogism, because the central argument of Fustas is beyond this purpose. This logical tool is present in the work only in order to present logic to the reader, using an argumentation which is both graphic and familiar to him, and which surely will help in the acceptance of the revealed truth. Although there is no specific information about the original syllogistic reference to Ibn 'Arabī, it is best to accept the conviction that, for him, syllogistic logic is the best way and superior to other forms of reasoning in order to grasp Muhammad's wisdom related to Allah's wisdom itself:

"The first odd number is three, and what exceeds this firstness, of the odds, comes from three. The Prophet, may Allah bless him and grant him

²⁴ Ibn 'Arabī. Fuşūş. The Faşş of Şāliķ.

peace, is the surest proof of his Lord, so he was given all the words, which are the names of the Adam's names. He resembles the proof in its trinity, and the proof is a proof of itself. His reality grants the first oddity, which is three-fold in structure."²⁵

The same can be said about other mathematical references in the two works of Ibn 'Arabī here analyzed:

"So things are mixed and numbers appear by the one in the known ranks. Thus, 'one' brought number into existence, and number divides the One. The ruling of number only appears through the numbered. A part of the numbered is non-existent and a part of it exists. The thing may be non-existent in relation to the senses but existent in relation to the intellect. There must, of necessity, be the number and the numbered. It must grow from one, which grows because of it. Every rank of numbers has one reality, like nine, for example, and ten, and down, and up, without end, and this reality is not a sum, but the name of the sum of ones is inseparable from it. Two is one reality, and three is one reality, and so on until the end of these ranks. Even though the entity of numbers is one, the entity of one of them is not the entity of the others. ... Whoever recognises what we have related of the numbers, and that negation is the same as their affirmation, knows that the Real purified from the creature is the Real assimilated to it, even though the creature is distinct from the Creator. The affair is the creature/Creator and it is the Creator/creature. All this is from one entity — or, rather it is one entity and many entities."26

In this passage, we can see again the same aim demonstrated by means of arithmetical procedure. However, concerning this discourse, one thinks not only of the purposes but of the manner in which these purposes are assumed and written. And, consequently, one can seek an opportunity to mix in the same text two different levels of knowledge: the human and the divine. Perhaps the answer is in the text itself: "The thing is non-existent in relation to the senses, while it is existent in relation to the intellect," or, "Whoever recognises what we have related of the numbers, and that negation is the same as their affirmation, knows that the Real purified from the creature is the Real assimilated to it, even though the creature is distinct from the Creator." This subject requires a very brief discussion, which follows.

In al-Fārābī's œuvre, there is a central concept that constitutes a valid keystone in understanding the transition from the level of spiritual truth to the level of mathematical and logical concepts. The concept presented by al-Fārābī is that of *naqla*, which in terms of transmission and translation can be generically ren-

²⁵ Ibn 'Arabī. Fuşūş. The Faşş of Muḥammad.

²⁶ Ibid. The Fass of Idrīs.

dered as *transfer*.²⁷ The description of the essential character of the transfer can be found in the text of *Kitāb al-'Ibāra*. In this regard, De Vaulx writes,

"L'entité transférée est l'objet de l'étude, c'est ici le nom. Il est transféré d'un support-source à un support-sortie dont les propriétés doivent être plus ou moins adéquates à l'entité transférée ou, pour reprendre le vocabulaire du rapport entre la forme et la matière, 'congruents' à elle. Ainsi, la notion commune du langage courant et la notion spécifique à un art sont dites ici ressemblantes."²⁸

So, the *naqla* is a notion that pertains to a high degree to rupture in linguistic, logical or temporal continuities, and hints at confusing contiguities in the use of words as well as in demonstrations.²⁹ Surely, Ibn 'Arabī is well aware of this fact, and his integration of the modes of reasoning pertaining to Aristotelian logic and to the arithmetic tradition becomes a kind of mechanism of logical transference from the level of theology to the level of rational argumentation. For this reason, Ibn 'Arabī explains clearly at the beginning of his arguments the "canonical" form or scheme, as he does in the theory of syllogism and in the mathematical concepts of number, avoiding any kind of misinterpretation and, surely, possible attacks not only from the theologians but, first of all, from the philosophers and mathematicians.

Mathematics and Logic in the Book of Alif

In this treatise, also known as *The Book of Unity*, Ibn 'Arabī tries to explain the concept of One which accepts no relationship whatsoever but which implies, nonetheless, the infinity of the possibilities of existence. But the notion of Oneness is a very complex one and has other related concepts which need explanation and clarification. For this reason, the treatise begins with an introductory discourse, in which we can see a chain of reasoning in the form of sentences that can be related to modal logic:

"Unity is the praise of the Unique One for its own Uniqueness. Uniqueness is the praise of the One for its own Unity. Singularity is the praise of the Odd for its Oddness. Oddness is the praise of the Singular for its Singularity."³⁰

²⁷ De Vaulx d'Arcy G. "La naqla. Étude du concept de transfert dans l'œuvre d'al-Fârâbî" // Arabic Sciences and Philosophy. Vol. 20 (2010). P. 125–176.

²⁸ Ibid. P. 136.

²⁹ De Vaulx. "La naqla." P. 125.

³⁰ Ibn 'Arabī. The Book of Alif or The Book of Unity. Translated by Abraham Abadi // Journal of the Muhyiddin Ibn 'Arabī Society. Vol. II (1984). P. 16.

The conclusion of these related premises is manifested in another set of reasoning in the same manner of modal explanation:

"Uniqueness is the praise of the Unique One for its polarity. Singularity is the praise of the Singular for its evenness. Oddness is the praise of the odd for its counterpart. However, the praise of the One subsists only for Its own Unity."³¹

Rescher says that, according to the available information, it would seem that the theory of temporal modalities represents the most significant addition made by the medieval Arabic logicians to the body of logical material that they received from the Greeks, although much work remains to be done before our feet can be set on firm ground.³² We do not know the origin of the theory of logical modalities in the philosophical background of Ibn 'Arabī, but it is clearly demonstrated by the historians of Arabic logic that the first author to treat the subject profoundly was al-Shirwānī, a late medieval Persian scholar presumably of the early fifteenth century, which obviously makes access to his work impossible for the Andalusian Sufi.

It is much more probable that he had access to the arithmetical theory of numbers developed before the age of Ibn 'Arabī, in which the science of logic, the problem of the classification of the sciences, the methodology of the sciences and their interaction with the rest of Islamic culture were all deeply influenced by the *falāsifa* and its particular modification in Islam. During this early period, most of the great scientists and mathematicians were also philosophers, so that in these centuries and even later, we can speak of a simple type of the Muslim savant who was at the same time philosopher, mathematician and scientist. From this point of view, we can say that Ibn 'Arabī benefits from the climate of rational thought and from the instrument of logical and mathematical reasoning of Aristotelian and Greek origin which, once developed, were adopted by the various Islamic arts and sciences for their own ends and in accordance with the nature of Islam and its teachings.

In order to develop logically the concept of divine Oneness and its proper essence, the masters of Sufism integrated in their explanations mathematical concepts. In al-Andalus, we find Ibn al-Sīd al-Batalyawsī (b. 444/1052) who adopted the theory of numbers to explain clearly the emanation of creatures from the One and in whose philosophy we can detect the influence of the *Rasā'il Ikhwān al-Ṣafā'*. According to the thought of Ibn al-Sīd, the transition from the Divine *Aḥadiyya* to the multiplicity of the creatures is explained by the Plotinian theory of emanation. The entities derive from Allah in the same manner as numbers derive from the first of them, that is to say, from one. Number three does not derive directly from one, nor does five from two. The case is the same concern-

³¹ Ibid.

³² Rescher N. Temporal Modalities in Arabic Logic. Dordrecht, 1966.

ing the emanation of the creatures, which are linked in a continual order, the most perfect of them being nearest to its origin.

In the *Book of Alif*, Ibn 'Arabī shows again the demonstrative arithmetical chain that we have seen in the Fusi us, and his proposal is close to what Ibn al-Sīd had previously exposed:

"There is nothing but the Unique One ... And the number two is none but the number one, and so are the three, the four, the ten, the hundred, the thousand and to infinity. Nothing exists beside the number one, not even in the case of multiplicity, since (all that the multiplicity implies is that) the number one appears in two conceptual degrees, wherefore it is referred to as two; rather like this: II. Then it appears in three degrees, like this III, wherefore it is referred to as three. Thereupon, by the addition of one it becomes four, and then five in the same manner exactly."³³

In making the conceptual transfer, Shaykh al-Akbar says that in the same way we can understand the nature of the Uniqueness of Allah and the multiplicity of His creatures:

"So then, this is the nature of the Uniqueness of Allah. We are manifested by His existence; if He were not, we could not be; yet if we were not, it would not necessitate that He, glory to Him, is not, in the same way that the non-existence of the five does not necessitate the non-existence of the one. Since numbers are derived from the one, while the number one is not derived from them, they are manifested by it, but it does not cease due to their ceasing. This appertains, on the other hand, to the realisation of the Unique One from the side of the degrees."³⁴

In the thought of Ibn 'Arabī, all the structures of the universe are manifest to us, and no special cognitive procedures seem to be necessary. However, there are some structures that remain occult or latent and can be known through mathematical tools. The method employed to get this knowledge is referred to as finding "balance" and "correspondence," and, for this reason, numeric structures are used by the Great Master in search of mutual structural correspondences. By using this method, Ibn 'Arabī describes, in as detailed a way as possible, the metaphysical and spiritual world, as well as the natural world. The structural correspondence between the chain of natural numbers and the chain of the created existents is also a criterion for the verification of existing knowledge:

"That is why the duplicating of the Unique One by the Unique One does not yield either a multiplicity or a plurality, for they (the two uniquenesses)

³³ Ibn 'Arabī. The Book of Alif. Op. cit. P. 21.

³⁴ Ibid. P. 22.

are that which It is in Itself. That is to say, the duplicating of a thing by its own self does not manifest anything other than itself."³⁵

The arithmetical method serves well in the exposition and structuring of already acquired knowledge but not in the search for new knowledge. The help of the theory of natural numbers is a criterion for the verification of existing knowledge in matters related to Allah's world. So, in cognitive spiritual procedures the structure of this world is taken as an immutable paradigm to be verified by numerical correspondence:

"Let us consider then as an example of that which we have mentioned above concerning the integers, the multiplication of four by four which results in sixteen. By posing sixteen, one is actually saying: I have moved the one four as a whole through each of the units of the other four, or through its own units. Obviously, the four is a unique reality, and the sixteen is a unique reality, therefore nothing has stemmed from the Unique One except the Unique One (and inasmuch as the result is the sum total of all the 'reflections'), of necessity it must be sixteen. In the same way, when we consider the multiplication of seven by eight, which is a case of the multiplication of different (integers), the sum total which results from them is fifty six. (Again by positing fifty six) one is actually saying: When I move the seven through the units of the eight, or the eight through the units of the seven, how many degrees will appear from the units?, and the inevitable answer can only be fifty six, which is none but the movement of the Unique One through fifty six stages and so on, and it is thus that the Unique One is known."³⁶

Ibn Sīnā and Suhrawardī had spoken about two kinds of true knowledge immediate intuitive knowledge and logical knowledge or, in other terms, "truthful witnessing" and "research." Awareness of the Unique One by intuitive knowledge serves, for Ibn 'Arabī, as an archetype of the direct cognition of the truth but, bearing in mind that the majority of people are unable to experience this kind of knowledge, he has to resort to indirect logical cognition, which starts with basic and unquestionable premises taken from a "lesser" truth delivered by mathematical and logical procedures.

The importance that Ibn 'Arabī attaches to the syllogistic method is due to the fact that, for him, it is a necessary propaedeutic for the correct understanding of metaphysical and mystical discourse. The doctrines of Ibn Sīnā and Suhrawardī demonstrated that logic may be regarded as an incomplete version of the Real truth, and Ibn 'Arabī adopts the same position. So, the knowledge obtained through syllogism is true because it has been demonstrated that there can be no doubt about its scientific results. The highest stage of truth is to see things

³⁵ Ibid. P. 23.

³⁶ Ibid.

in Allah and this is an ability of the heart. The intellect, inner sight and the heart form an ascending hierarchy of organs with their corresponding methods of cognition. Then, knowledge is acquired by moving from premises to a conclusion under the condition that we may assume the three as a paradigm, because three is the number of propositions constituent of the syllogistic schema: "The three is the first of the singular numbers. Accordingly, the singularity which is associated with the human spirituality contradicts its own uniqueness, because its singularity is established for the Unique One through the progression of the polarity."³⁷

Ibn 'Arabī clearly determines the possibility or impossibility for the human intellect to answer the central question: does any production ever result from a unique one as such? Ibn 'Arabī's answer is that the intellect cannot grasp the vastness of the problem unless it uses the rational procedures of syllogistic grounds, since "The majority of the people, who are of those who do not know, imagine that the production is derived from two existents, and that the singularity of the Unique One is irrelevant, since in their opinion it results from an existential ternary (as opposed to a latent ternary), which consists of the two and the singular itself (wherein the singular is perceived as an independent entity, and not as the place of manifestation of the Unique One)."³⁸

The intuitive "witnessing" first brings into sight the thing, and then, once inside it, discovers the Uniqueness of Allah. By going along the "narrow path," that is to say, the path determined by syllogistic method, one can reach the supreme goal:

"The same applies to the philosophical premises whose purpose is the formulation of speculative knowledge by proofs. No proof can be ever formulated except from two premises, where each premise consists of two particles, of which one of the particles is a predicate of the other. Yet this in itself does not ascertain a result, for it is similar to our saying, for example, that: 'The Sultan is a tyrant and Khalid is a man'; even though these are four particles, as they include no common denominator, there is no conclusion which may be derived from them. That is to say, when these four cannot be reduced to three in every respect, due to the Uniqueness (which requires the preservation of the unique individuation of each particle), they cannot yield a result, except if one of these four is repeated in the two premises, for then they will be three and the conclusion possible."³⁹

The first aim of Ibn 'Arabī in this proposal is to prevent the reader from making any mistake in the correct formulation of the syllogistic procedure, because the goal is the correctness of the conclusion and so, "It is necessary, if the yielding of a result is to occur, for the formulation to be according to a 'special face'

³⁷ Ibn 'Arabī. Ibid. P. 24.

³⁸ Ibid.

³⁹ Ibid.

(*wajh khāşş*), which is that one of the four terms should be repeated in both premises, so that there will be three and not four terms altogether, as well as according to a 'special condition' (*shart makhşūş*), which requires that the determination (ruling) should be more general than the cause, or at least equal to it, that is (this latter condition is necessary) if you wish for a result of some advantage, for otherwise the conclusion will be of no consequence."⁴⁰

Despite the efforts and strategies deployed by Ibn 'Arabī in order to manifest the importance of syllogistic tools, he fears "that you will not comprehend our explanation until I present you with an example of this principle, which will demonstrate our exposition as legitimate, so that it will be made easier for your understanding owing to your familiarity with the laws of religion."41 Accordingly, the Sufi master goes down to the field of sharī'a, being the common source of understanding in Muslim daily life and to this statement he applies the syllogistic scheme. So he says: "If you wish the edict 'wine is forbidden' to be brought into existence, then you should state that 'wine is an intoxicant,' thus obtaining these two terms, intoxicant and forbidden (from which another premise is formed). Next you should restate (the first premise which differentiated the desired conclusion so that the latter appeared in the image of the two premises) 'wine in an intoxicant,' and thereby these are (now the two premises which provide) two terms and (a common denominator which is the term) 'intoxicant.' Accordingly, it necessarily follows, and without any contradiction, that wine is forbidden, that is (with any contradiction) with regard to the (desired) conclusion only."42

In an accurate observation of the manner, in which the syllogisms have been explained, Ibn 'Arabī repeats and analyzes the formulation, to avoid any doubt about the canonical structure of the formula and, according to this purpose, he, like a teacher of the logical art, says to his pupil that "When you examine these two premises, you will find them composed of three particles in four degrees, which are the terms 'intoxicant,' 'forbidden' and 'wine.' Now, as there is no fourth (particle) except for the repetition of the term 'intoxicant,' it is the required common denominator by which the yielding is effected, because its particularity is its repetition. As for the ruling of the special condition which appertains to this (mode of) coupling, it is that in this case the determination is more general than the cause, and this is due to the fact that the cause is the intoxication while the determination is the prohibition, where prohibition is more general than intoxication, since prohibitions are more numerous than (those which apply to) either intoxicants or non-intoxicants."⁴³

⁴⁰ Ibid. P. 36.

⁴¹ Ibid.

⁴² Ibid.

⁴³ Ibid.

The question of whether the edict is valid or not is a matter which Ibn 'Arabī does not enter to elucidate, because "it is a matter which requires another gnosis," since his subject is solely the production which is "the particularised manifestation of existence through the being of the Singular Unique One." Well assured that the result of his explanations have been understood by the student, Ibn 'Arabī can proceed along with his discourse, since "it has been clarified to you that all matters and affairs are effects of the Unique One and that it is only He who is sought."

Conclusion

We finish our paper by stating that, as it is known, the crowning glory of Aristotelian logic is the syllogistic theory, outlined in the *Prior* and *Posterior Analytics*, especially in the latter. The purpose of this cognitive tool is to provide the means whereby knowledge is to be acquired, as we learn from al-Fārābī, who said that it is the strongest and pre-eminent in dignity and authority. Religious Muslim scholars and theologians generally used rhetorical and poetical syllogisms to persuade the populace, since religion is viewed as an image or reflection of philosophical demonstrative truth, propounded in language and argumentative forms that can be easily understood by believers.

Ibn 'Arabī, who was known as "the Plato of his time," seems to go beyond this premise despite his manifest criticism of intellectual and rational discourse. However, having in mind that the luminous skies of illumination and gnosis can only be reached by *tajallī*, it is always possible for the Sufi scholars and believers in general to grasp the Truth with the aid provided by certain logical devices such as the syllogistic procedure.

According to Ibn 'Arabī, if our language is to possess cognitive meaning, it must be defined by the ways in which it is used communicatively. His explanations become, in certain of his works, like *The Book of Alif* and *Fuşūş al-Ḥikam*, not a mere metaphysical theory, but a logical rule. Perhaps the Andalusian Sufi was aware that few persons, Sufis or common believers, care to study logic, because everybody conceives himself to be proficient enough in the art of reasoning. For this reason, Ibn 'Arabī also teaches logic in its Aristotelian version and explains difficult concepts, which can become properly familiar by means of *dhawq*. By so doing, he shows that he is both a Sufi and an attentive student of the history of philosophy. His effort to place rational thought in a correct context is an attitude that rests on his conviction that rational elements of Aristotelian origin are branches of progressive inquiry and that logical proofs make this progressive inquiry possible.