

Routledge History of World Philosophies
Volume I



History of Islamic Philosophy

Part II



Edited by
SEYYED HOSSEIN NASR
and
OLIVER LEAMAN



CHAPTER 52

Language¹

Shukri B. Abed



Throughout fourteen centuries of history, Islam as a civilization has faced major external cultural challenges on two separate occasions. The first of these occurred during the early days of Islam, when Greek, Indian and Persian philosophy and science were transmitted to the Islamic world contemporaneously with the rise of the Muslims as a power in the Middle East region; the second began about two hundreds years ago with European colonization of the Middle East. On both occasions, the Arabs found it advisable and even necessary to re-evaluate certain aspects of their own indigenous culture in light of the cultural and scientific challenges presented by the West. The Arabic language, the language of the holy Qur'ān, was not only the medium through which these challenges were debated but also itself a central subject matter of the debates.

The purpose of this chapter is to characterize the debates concerning the development of the Arabic language (*al-'arabiyyah*) and to identify the specific mechanisms through which linguistic accommodations have been (and are being) made in the Arabic language to adapt to evolving circumstances. The first section will deal with the reaction of Arab intellectuals to the introduction of Greek, Indian and Persian philosophy and science into the Islamic world beginning in the second/eighth century. This reaction was mirrored in a series of debates concerning the relative merits of (Greek) logic and (Arabic) grammar. These culminated in a particularly important debate, documented toward the middle of the fourth/tenth century, which will serve as a focus for discussion in the first section of the chapter. The second and third sections will address the impact of the two external cultural confrontations cited above on the Arabic language, during the classical and the modern periods of Islam, respectively. The fourth and final section will briefly summarize contemporary debates concerning the future of the Arabic language.²

LANGUAGE AND LOGIC IN CLASSICAL ISLAM

The question of the relationship of the Arabic language to Greek logic arose during the early stages of the "philosophical movement" in the Islamic world. Al-Kindī's student Aḥmad ibn al-Ṭayyib al-Sarakhsī (d.286/899), for example, was reportedly the first in the Arab world to write about the difference between logic and Arabic grammar. Although his treatise on "the difference between the grammar of the Arabs and logic" is not extant, al-Sarakhsī, we are told, considered logic to be a *universal grammar* and as such superior to Arabic grammar and to any other particular grammar, for that matter.³

This view – according to which logic is superior to language because the former is a necessary science dealing with meanings and with what is universal, whereas the latter is conventional and accidental – is a view that prevailed among Arab logicians throughout the tenth and eleventh centuries. In fact, according to the Arab logicians of this period, language should not even be considered an issue for logicians in their logical inquiries. Logic, they claimed, is concerned with utterances (*alfāz*) only accidentally and only in so far as these utterances signify the concepts (*ma'ānī*) themselves, which (in the logicians' view) are the only proper subject matter of logic.

This theme is clearly stated in a debate concerning the relative merits of logic and grammar that took place in Baghdad in 331/932 between grammarians (represented by Abū Sa'īd al-Sīrāfī) and logicians (represented by the Nestorian Christian Abū Bishr Mattā). A second theme formulated during this debate and relevant to our discussion is the Arab grammarians' claim that, in order to introduce Greek philosophy and science into the Islamic arena, the Arab philosophers had resorted to "building a language within a language";⁴ that is, they were distorting the original and pure Arabic language as revealed in the Qur'ān in an unnecessary and irresponsible manner. This debate, translated into English toward the beginning of the fourteenth/twentieth century,⁵ has been the subject of several scholarly studies in recent years.⁶ I nevertheless propose to summarize briefly herein those sections of the debate which suggest that the linguistic arguments upon which the opposing positions are ostensibly based may in fact mask socio-political arguments identifiable just beneath their surface.

At the outset of this debate, Abū Bishr Mattā is quoted by the vizier Ibn al-Furāt as having claimed that "there is no way to know truth from falsehood, verity from lying, good from bad, proof from sophism, doubt from certainty except through logic".⁷ Mattā, present when the vizier attributed this claim to him, attempted to defend his position as follows:

The logician has no need of grammar, whereas the grammarian does need logic. For logic enquires into the meaning, whereas grammar enquires into the utterance. If, therefore, the logician deals with the utterance, it is accidental, and it is likewise accidental if the grammarian deals with the meaning. Now, the meaning is more exalted than the utterance, and the utterance humbler than the meaning.⁸

Statements of this sort clearly belittled the study of Arabic grammar and the status of the Arab grammarians. It is not difficult, therefore, to comprehend why the logicians' position drew a strong reaction from the circle of Arab grammarians, a reaction later endorsed by certain influential theologians (such as Ibn Taymiyyah in the seventh/thirteenth century). The grammarians criticized Mattā and the other logicians on the grounds that the intelligible meanings they present as universal and eternal can be achieved only through the mastering of a specific language.

Abū Sa'īd al-Sīrāfi, described by al-Tawhīdī as a dignified, pious and earnest man,⁹ undertook the challenge of open debate with Mattā to defend the grammarians' point of view. Towards the beginning of the debate, al-Sīrāfi asked Mattā to define what he means by logic so that their discussion concerning logic would be "according to accepted rules and a defined method".¹⁰ Mattā replied as follows:

I understand by logic an "instrument" [*ālāh*] of "speech" [*kalām*], by which correct "speech" is known from incorrect, and unsound "meaning" [*ma'nā*] from sound: like a balance, for by it I know overweight from underweight and what rises from what sinks.¹¹

Speaking for the grammarians, al-Sīrāfi criticized Mattā on the grounds that there is no such thing as "language" in general, rather we speak and express meanings by using a particular language, and each language has its own tools and instruments by which one determines what is correct and what is incorrect when that language is used.

Abū Sa'īd [al-Sīrāfi] said: You are mistaken, for correct speech is distinguished from incorrect by the familiar rules of composition and by the accepted inflection [*i'rāb*] when we speak in Arabic; unsound meaning is distinguished from sound by reason when we investigate meanings.¹²

According to al-Sīrāfi, then, on *the language level*, correct speech is distinguished from incorrect speech by following the standard rules of Arabic grammar and syntax, rather than the formal rules of logic; whereas on *the level of intelligibles*, unsound meaning is distinguished from sound meaning by utilizing reason. In other words, al-Sīrāfi rejects the notion

that one instrument (logic) can be used simultaneously on two different levels: the language level and the level of intelligibles or concepts.

Al-Sīrāfi further attacks the very analogy of "balance" employed by Mattā:

Suppose you determine the relative weight of two or more objects, how can you know which one of the things weighed is iron, which gold, which copper and which lead? Hence, after you know the weight, you still need to know the substance of what is weighed, its value and the rest of its qualities.¹³

Al-Sīrāfi's point seems to be the following. Even if we grant you that logic is capable of distinguishing between correct and incorrect language usage, as well as between sound and unsound meanings, there are still many aspects of both the utterances and the meanings that cannot be known by logic. Furthermore, al-Sīrāfi argues,

not everything in this world can be weighed. Some things are weighed, others are measured with respect to their volume, others with respect to their length, . . . and still others can be guessed at. And if this is the case in the realm of visible bodies, this applies also to the domain of intelligibles.¹⁴

Elsewhere in the debate, the logicians are urged to concentrate on the knowledge of a particular language (Arabic, in this case) as a necessary condition for mastering the art of logic. Knowledge of the Arabic language is required if logicians wish to convey the logical theories of the Greeks to speakers of the Arabic language, al-Sīrāfi concludes.

This [Arabic] language in which you dispute or agree with us, you should instruct your friends in accordance with the way it is understood by those who speak it, and interpret the books of the Greeks according to the custom of those whose language it is. For then you will come to know that you can dispense with the meanings of the Greeks as well as you can dispense with the language of the Greeks.¹⁵

According to al-Sīrāfi, then, there is no distinction between logic and language.¹⁶ Logic for him is the logic of a particular language, and there is no such thing as "universal logic". The logic the logicians are promoting is a purely Greek logic, derived from Greek language and grammar.¹⁷

Al-Sīrāfi moves on to argue against the very notion that other nations should accept a logical system based on a specific language:

Furthermore, since logic was established by a Greek man [i.e., Aristotle] according to the language of his country's people, according to their understanding of it and their conventions

regarding its definitions and properties, why should the Turks, the Indians, the Persians and the Arabs study it and take it as their judge and arbitrator, who decides for them and against them such that they must accept what he agrees to and reject what he denies?¹⁸

In other words, al-Sirāfi rejects the notion that logic transcends national and language boundaries (rendering it a universal instrument), a notion that is the cornerstone of the logicians' position, as is clear from the following counter-argument by Mattā:

This follows since logic investigates the intellegibles, the intentions and the conceived meanings . . . As far as intelligibles are concerned, all human beings are equal, as is evident from the fact that [the sum of] four plus four is the same for all nations.¹⁹

Again, al-Sirāfi accuses Mattā of offering a misleading example. For al-Sirāfi, this mathematical example fails to reflect the complex nature of the problems for which logic is presumed to be the solution or the means to a solution. He in fact charges Mattā and his fellow logicians with a conscious effort to mislead people:

If the things conceived by the mind and expressed by words with all their various divisions and diverse paths could be reduced to the level of simplicity [in the statement] "four plus four equals eight", then the disputes [among people] would disappear and there would be total agreement. But this is not the case. Your example is misleading, and you [logicians] are accustomed to misleading others.²⁰

Later on in the debate,²¹ al-Sirāfi in fact accuses the logicians of purposely using invented terminology (such as the Arabic counterparts for "genus", "species", "essence", etc.) – terms with which most people are not familiar – in order to confuse the ignorant and create the impression that logic is a magical solution to the problems of the world.

For al-Sirāfi this logic which Mattā and his fellow logicians hold in such high regard is nothing more than *Greek* logic and as such it cannot be employed by other nations, since it is based on and derived from the Greek language. Al-Sirāfi charges that in essence Mattā is asking the Arabs to study not a universal logic but the Greek language. Yet this same Greek language Mattā wants them to study "perished long ago, its speakers have disappeared and the community that used to communicate their intentions by means of its inflections are now extinct".²²

Although al-Sirāfi seriously doubts Mattā's assertion that the translations from Greek to Arabic have managed to preserve the meanings and the truth, he is nevertheless willing, for the sake of argument, to grant

that this is the case. Al-Sirāfi is perfectly willing to ignore the question of the reliability of these translations, since he detects that Mattā's assertion is in fact based on a quite different assumption, and one he categorically rejects. "You seem to be implying," al-Sirāfi says, "that there is no reliable authority [*ḥujjah*] other than the intellects of the Greeks, no demonstration except what they have established and no truth except what they brought to light."²³

Al-Sirāfi strongly criticizes Mattā's blind support of the Greeks, thereby implicating all the other defenders of Greek culture. He completely rejects Mattā's insinuation that the Greeks are a special nation and that "of [all] [nations], it was they who applied themselves to the pursuit of wisdom [*ḥikmah*] and to the investigation of the apparent and hidden aspects of the world", and that "the discovery and propagation of every kind of science and art is due to them, something we cannot attribute to other [nations]".²⁴ Accusing Mattā of being prejudiced [*ta'assabta*] and of committing an error by making such a statement, al-Sirāfi goes on to explain that the Greeks are not different from any other nation, as "they were right about certain issues and wrong about others, they knew certain things and were ignorant of other things".²⁵

At this point, al-Sirāfi's strategy becomes clear. He means to discredit the entire Greek culture, considered by its defenders in the Arab world as superior to other cultures, including the Arab/Islamic culture. Al-Sirāfi seems to single out Aristotle and his teachings, above all his logic, for particular disparagement. The reason for this is clear, as well. Aristotle was considered by his defenders *the authority*. It was, in fact, customary for the Arab philosophers to refer to Aristotle as "the First Teacher", a designation with quasi-religious connotations. Yet Aristotle, in al-Sirāfi's view, cannot be identified with the Greek nation. He is only one man, who learned from his predecessors just as his successors learned from him. Nor can he be considered "an authority [*ḥujjah*] over all God's creation . . . he has opponents among the Greeks and among other nations".²⁶

The logicians' reported defeat²⁷ in this particular confrontation with the Arab grammarians did not alter their position that logic is concerned with meanings rather than with utterances as such, while Arabic grammar [*naḥw*] is concerned exclusively with utterances.²⁸ It did, however, lead them to take the grammarians and their field of endeavour more seriously. The Achilles' heel of the first generation of Arab logicians had been their profound ignorance of the discipline they so summarily dismissed.²⁹

The next wave of logicians – including al-Fārābī, Yahyā ibn 'Adī (both disciples of Mattā) and Abū Sulaymān al-Sijistānī (a disciple of Ibn 'Adī) – was broader in its analysis of the relationship between logic and language. These philosophers still believed that logic is a universal grammar and therefore more significant than any particular language which, by definition, is restricted to a particular nation. But the defeat of Abū Bishr

Mattā, whose openly admitted ignorance of Arabic grammar had left him vulnerable to the Sirāfīan attacks, suggested that serious logicians might do well to master their own language as a firm basis from which to pursue their logical studies. Al-Fārābī, Ibn 'Adī and al-Sijistānī all engaged in serious study of Arabic grammar and were able to argue their positions much more convincingly than Mattā, leader of the fourth/tenth-century Baghdad logicians, had been able to do. These logicians continued to maintain that logic is superior to grammar, with the only utterances seriously considered by the logician being those that signify universal concepts or meanings. Yet, unlike their predecessors, these men accorded the beauty and intricacies of the Arabic language due respect, realizing that language and logic are closely, indeed inextricably, interrelated.³⁰

While the details of these debates are fascinating in and of themselves, what is important to realize is the context they form for the language development issues to be dealt with in our subsequent discussion. At the time these debates took place, the Arabic language was being deluged by a tremendous influx of new terminology required to convey the scientific and philosophical ideas and discoveries of other nations. The grammarians and their supporters genuinely feared an attempt by the logicians of fourth/tenth-century Baghdad to ravage the Arabic language, while importing foreign ideas and modes of thought that were not only ill-suited but also downright contradictory to certain essential tenets of the Arabic/Islamic culture. This fear is clearly reflected in the grammarians' charge that the logicians, in response to the linguistic and philosophical developments of the period, were threatening to "build a language within a language [which is already] well defined among its native speakers [*muqarrarah bayna ahlihā*]"³¹ – an attack levelled not only at the introduction of foreign terminology but also at the imposition of new and artificial structures on the Arabic language.³²

Al-Sirāfī's attempt to discredit the Greeks and their major supporters among the Arab philosophers clearly has implications above and beyond a single debate concerning the relative merits of logic and language. Al-Sirāfī's criticism penetrates deeply into the question of the Muslim attitude towards foreign cultures and the perceived threat they pose to the Arabic/Islamic culture. In other words, it is an attempt to combat the influence of the Greeks and other foreigners on the Arabic culture, a battle that was to continue into the thirteenth and fourteenth centuries, ultimately pitting the philosophers against the Islamic religious establishment. In fact, as we shall see, the battle rages on to this day, enveloping religious, political and artistic dimensions along with the linguistic.

With this theoretical background, we will now examine in concrete terms the linguistic process that took place as a result of the medieval philosophical movement in Islam and continued in a similar form with the advent of Western colonialist expansion in the Middle East.

THE MEDIEVAL PERIOD – THE TRANSMISSION OF GREEK PHILOSOPHY AND SCIENCE TO THE ARAB WORLD

The Qur'ān, the holy book of Islam, was revealed to the Prophet Muḥammad during the first part of the first/seventh century and is considered by Muslims as the word of God. Among other things, it includes thoughts about humanity and knowledge. The term *ilm*, which in Arabic has two closely related meanings ("knowledge" and "science"), appears repeatedly in the Qur'ān, as well as in the *Ḥadīth*. All believers, male and female, old and young are obliged by the teachings of the Qur'ān to acquire knowledge; knowledge is to be sought and acquired from cradle (birth) to grave (death). Muslims are urged to pursue knowledge even if they must travel to China for that purpose.

Scientific activity in Islam, however, did not begin when the Qur'ān was revealed during the first part of the first/seventh century, nor when it was assembled several decades later; rather it did not begin in earnest until the third/ninth and fourth/tenth centuries.³³ Thus, while clearly encouraging the followers of Islam in the pursuit of knowledge, the Qur'ān in and of itself was *not* a sufficient condition to stimulate scientific activity. Initially, the inhabitants of the Arabian peninsula, to whom the Qur'ān was first revealed, were simply not prepared to engage in scientific activity, nor were they in the least aware of the scientific and philosophical developments that had taken place in Greece, Persia and India more than a thousand years before the appearance of Islam. The early Muslims of Arabia excelled in poetry and in warfare, but were blissfully ignorant of Euclid's theorems in geometry, Ptolemy's astronomy and the philosophical treatises of Plato and Aristotle.

Even the Arabic language was not equipped to function as a scientific language. At the time, for instance, its writers and speakers had not yet begun to exploit the *-iyyah* ending later so productive in generating the abstract nouns required to discuss philosophy and scientific theories. The Qur'ān itself included no more than two terms with this ending: *rahbāniyyah* (monasticism) in *Al-Ḥadīd* (27); and *jāhiliyyah* (ignorance [of God]) in *Āl-Imrān* (154), *al-Mā'idah* (50), *al-Aḥzāb* (33) and *al-Fath* (26).

The translation of Greek philosophical works into Arabic, however, presented an opportunity for a fresh, new look at the Arabic language. Faced with the task of creating equivalent terms to express meanings conveyed in the original Greek (and other language) texts, the translators set about developing the means to expand the Arabic language and enhance its ability to adjust to changing realities. These translators, most of whom were Nestorian Christians, translated Greek works into Arabic primarily via their native language of Syriac.

Following is a summary of the linguistic techniques these early translators employed in order swiftly and effectively to close the gap between the Arabic language as it then was and the barrage of new concepts and ideas they wished to express by means of it.

Formation of abstract nouns (the suffix -iyyah)

One of the most productive word generation techniques employed by the early translators was the aforementioned formation of new abstract terms by means of the suffix *-iyyah*, a mechanism that has become an integral part not only of the Arabic philosophical language, where it finds the majority of its uses, but also of the Arabic language in general.

In Arabic, the relative adjectives (*al-asmā' al-mansūbah* or *al-nisbah*) are formed by adding the termination *-iyy* to the words from which they are derived. They denote the fact that a person or thing belongs to or is connected with the thing from which its name is derived (in respect to origin, family, birth, sect, trade, etc). According to W. Wright, Arabic abstract nouns of the form *-iyyah* are morphologically derived from relative adjectives.³⁴

Using the *-iyyah* suffix to generate abstract nouns not only solved a major problem for the translators in their work with philosophical and other texts but also proved productive in everyday life during the translation period and thereafter. The *-iyyah* suffix could be used with question particles, such as *kam* (how many or how much?) and *kayfa* (how?), to create abstract nouns such as *kamiyyah* (quantity) and *kayfiyyah* (quality). It could be used with pronouns, such as *huwa* (he), to create a noun such as *huwiyyah* (being). It could be used with particles, such as *inna* (truly) to create a noun such as *inniyyah*³⁵ (nature [of a thing]), etc.

Despite the alternatives suggested by several scholars of the time,³⁶ then, the translators and subsequently the Arab philosophers had no need to look beyond the Arabic language in order to find a suffix with which to produce abstract nouns. All they did was *broaden* the scope of application for an *existing* suffix. The only new element introduced was the idea that this suffix might be applied to terms that were not nouns – such as *huwa* (a pronoun), *kayfa* and *mā* (question particles) – and even to semi-verbs such as *ays*³⁷ (there is, existence) and *laysa* (there isn't, negation of existence, it is not the case), to create *aysiyyah* (being) and *laysiyyah* (non-being), respectively,³⁸ or to terms such as *ghayr* (other), to create *ghayriyyah* (otherness).³⁹

The use of the suffix *-iyyah* as a means to generate abstract nouns is discussed by several leading philosophers of medieval Islam, primarily by al-Fārābī (fourth/tenth century) and Ibn Rushd/Averroes (sixth/twelfth century). Both al-Fārābī and Ibn Rushd discussed this issue in relation

to the term *huwiyyah*, derived from the pronoun *huwa* in order to render the Greek *ousia* (being).

Al-Fārābī states, for example, that *-iyyah* is the form of the *maṣdar* of certain nouns that are both non-declinable and prototypal⁴⁰ (*fa-inna hādha'l-shakl fi'l-'arabiyyah huwa shakl maṣdar kull ism kān mithāl^m awwal^m wa-lam yakun lah taṣrīf*), such as *insāniyyah* (humanity), which is the abstract noun of the non-declinable prototype *insān*.⁴¹ This is a somewhat surprising statement, since *maṣdar* generally refers to the infinitive (or verbal noun), and it hardly seems appropriate to categorize a noun such as *insāniyyah* as an infinitive. However, given that another (more essential) meaning of the term *maṣdar* is 'source', the statement begins to make sense.

In al-Fārābī's view, although we arrive at the abstract concepts (which are second order concepts) during a (chronologically) later stage in the language acquisition process, these forms are nevertheless *ontologically prior* to the first order concepts. It is in this sense, then, that the form *insāniyyah* can be considered a 'source' (*maṣdar*) for the term *insān*, just as the second order concept *ṭūl* (tallness, length) is ontologically prior, in al-Fārābī's view, to the particular *ṭawīl* (tall, long), although we first become acquainted with the latter and later abstract to the former.

Therefore, al-Fārābī can state (as he does in his *Kitāb al-ḥurūf* ("Book of Letters")) that when the suffix *-iyyah* is added to *substantive nouns* (both non-declinable and prototypal), it produces a *maṣdar* (or 'source'). The examples given by al-Fārābī to illustrate this point are: *insān* (man) from which *insāniyyah* (humanity) is derived; *ḥimār* (donkey) from which *ḥimāriyyah* (donkeyness) is derived; and *rajul* (man) from which *rujūliyyah* (manhood) is derived. Al-Fārābī seems to take the liberty of identifying "abstract nouns" with *maṣādir* because this serves his purpose. Having once been coined, the abstract nouns, as second order terms that correspond to second order concepts, become *sources* (*maṣādir*) from which everything else (linguistically speaking) is derived.

Averroes, as mentioned above, also addresses this question in his *Tafsīr mā ba'd al-ṭabī'ah* ("Commentary on Aristotle's *Metaphysics*").⁴² In essence, he repeats al-Fārābī's explanation that *huwiyyah* was derived from the pronoun *huwa* following the pattern of deriving (abstract) nouns from nouns. It is unusual for the Arabic language to derive a noun from a pronoun, and Averroes explains that it was done in this case in order to replace the term *mawjūd* used by the translators (mainly in the *Posterior Analytics*). It is clear that Averroes, like al-Fārābī before him, speaks of this pattern of derivation as a natural phenomenon in the Arabic language. Neither suggests that the *-iyyah* suffix is modelled on similar suffixes in other languages.

The use of the suffix *-iyyah* was only one of several linguistic devices used by the translators of that period in order to expand the Arabic

language to encompass the new ideas pouring into the Arab world from the Greek and other cultures. These included borrowing, altering the meaning of existing terms, abbreviating, producing compound terms and creating new terms from existing roots.⁴³

Borrowing terms from other languages
(al-ta'rib, i.e. "arabicization" or al-mu'arrab, the "arabicized")

This method, which refers to the generation of arabicized words or *al-dakhil* (foreign or strange [words and expressions]),⁴⁴ was already in use during the pre-Islamic period, primarily involving borrowings from Aramaic, Hebrew and Persian. The Qur'an itself includes several terms the origin of which can be traced back to other languages.⁴⁵ This fact in itself apparently legitimized the method of borrowing terms from other languages as the need arises.

During the philosophical and scientific movement in Islam, many more loan-words were introduced into Arabic from Greek and Persian, primarily in the fields of pharmacology and medicine. According to Josef Bielawski, Greek and Persian loan-words "are particularly numerous among the names of plants and mineralogy, but very rare in the [fields] of jurisprudence, philosophy, theology and philology".⁴⁶ Words – such as *jawhar* ("substance", borrowed from the Persian), *falsafah* (from the Greek *philosophia*),⁴⁷ *safsatah* (from the Greek *sophistry*), *hayūla'* (from the Greek *hylé*, meaning "matter", *usuqussāt* (from the Greek for "elements") and *qāṭighūriyāt* (from the Greek for "categories") – became assimilated into works of the Islamic philosophers, even when an Arabic term had also been coined for them.⁴⁸ Once a term was assimilated, the rules of derivation for pure Arabic terms were applied to the borrowed term as well.⁴⁹

The pros and cons of accepting loan-words into Arabic was discussed by Sībawayh, the second/eighth-century founder of the study of Arabic grammar, in his definitive work entitled *al-Kitāb*.⁵⁰ The topic was taken up again by grammarians of the fourth/tenth century (al-Sīrāfi's view that the philosophers were building a language within a language was meant to address precisely this point) and is still a subject of debate today. Apart from purely linguistic considerations (such as the suitability of borrowed words for Arabic nominal or verbal patterns), the assimilation of foreign words into Arabic has social, religious and political implications that have occasioned strong objections, then as now.

It is worth noting that many of the "arabicized" words (i.e., those accepted as loan-words) were modified in order to fit certain noun or verbal patterns.⁵¹ For example, the term *falsafah* (derived in the Classical period of Islam from the Greek *philosophia*) was adjusted to fit the pattern

fa'lalah (like *'arqalah* (impeding, hindering), and the term *dirham*⁵² (derived from the Greek *drakhme*) was modified to fit the pattern *fi'āl* (like *'isba'* (a finger)). Other terms, however, were modified without accommodation to an existing Arabic pattern (for example, *jughrafiā* (derived from the Greek *geō graphia*, meaning literally *earth description*; the combination of the two words produces *geographia*, i.e., geography)), and still others were borrowed without any change whatsoever even though they did not follow any Arabic pattern (for example, *asturlāb* or *usturlāb* (astrolabe)).⁵³

As we shall see, the derivation of new terms from Arabic roots generally follows a certain pattern native to the Arabic language. This does not mean, however, that every word that fits such a pattern is an Arabic (i.e., non-borrowed) term; as noted above, some loan-words were adjusted to fit Arabic patterns. Rather, we can conclude only that every term that does not fit an Arabic language pattern is an arabicized term [*mu'arrab*]. This is the basis for one of seven criteria developed by the Arab grammarians to distinguish between Arabic words and foreign words adopted by the Arabs: "If a term does not fit one of the Arabic nominal patterns [*awzān al-asmā' al-'arabiyyah*], such as *ibrīsam* [the term should be considered foreign]."⁵⁴

Altering the meaning of existing terms (al-majāz)

This technique takes an existing Arabic term and modifies or expands it to encompass a new meaning. In essence, this method is what Arab grammarians refer to as *majāz* (figurative speech), which basically means going beyond the original (usually concrete material) meaning of a term and attaching to it a new meaning.⁵⁵ Whereas in the previous method [*ta'rib*] terms are borrowed from other languages to be used generally within the same discipline, this method often involves borrowing terms from the same language to be used in different disciplines. Examples of this include *ḥadd* (essential definition), *rasm* (description), *jins* (genus), *naw'* (species), *'arad* (accident), *faṣl* (differentia), *madhhab* (discipline) and *irq* (vein). Each of these terms existed before the transmission of Greek philosophy and science to the Muslims, but all were given new – and in most cases, technical – meanings to augment or complement any existing meaning(s).

The term *ḥadd*, for example, acquired the technical logical meaning conveyed by the Greek term *horos*. Both terms – the Greek *horos* and the Arabic *ḥadd* – mean in ordinary usage "boundary", "border" or "limit". But just as the Greek term acquired the meaning of the Aristotelian notion of "essential definition" (i.e., a definition by means of a thing's "essential difference" and its "genus", two further terms that acquired technical

meanings of their own), the parallel Arabic term also became identified with the technical concept of "essential definition". This type of definition is based on the notion of defining objects by delineating the boundaries that separate them from one another in an essential way as opposed to a non-essential way (i.e., by means of their "accidental properties"). In this latter (non-essential) case the distinction between the objects is made through "description" (*rasm*) rather than through "definition".

Similarly, the term *ʿirq* (pl. *ʿurūq*), originally meaning "root of a plant", acquired the medical meaning of "vein", probably owing to analogy of form and function.

To provide yet another example, the verbal noun *manṭiq* (logic) is derived from the root *n-ṭ-q*, the basic meaning of which is "to speak". The term *manṭiq* appears already in the Qurʾān,⁵⁶ although not yet in its technical meaning as "logic". Yet as "logic" and "language" are so closely related, it was but a small cerebral step for the translators to assign the term its new technical meaning.⁵⁷

Compound construction through abbreviation (*naḥt ikhtizālī*)⁵⁸

The technique of fusing words together to produce new meanings is used to construct new terms in many languages (English, German and even modern Hebrew). In Arabic, one can distinguish two variations of this device, which I will term "abbreviated compounds" (*naḥt ikhtizālī*) and "joined compounds" (*naḥt bi-wāṣiṭāt al-tarkīb al-mazjī*).

Strictly speaking, *naḥt* is the derivation of one term from two or more other terms (*istikhrāj kalimah wāḥidah min kalimatayn aw akthar*).⁵⁹ In some cases, *naḥt* involves a truncation of the terms forming the composite. An example of this would be the abbreviation of certain recurrent (primarily religious) phrases, as in the reduction of *lā ḥawla wa-lā quwwat illā bi-llāh* ("There is no power and no strength save in God") to the verb *ḥawlaqa* (the act of pronouncing this phrase); or the reduction of *bi-ism Allāhi al-rahmān al-rahīm* ("In the Name of Allāh, Most Gracious, Most Merciful") to the verb *basmalah* (the act of pronouncing this phrase).⁶⁰ In this sense, then, *naḥt* is a kind of abbreviation, as the fourth/tenth-century grammarian Ibn Fāris rightly observes,⁶¹ and as such requires morphological changes in the original terms.

However, just as in borrowing a term from a foreign language (*taʿrīb*) one should attempt to conform it to the verbal or nominal patterns of the Arabic language, so in constructing this type of abbreviated compound term (*naḥt ikhtizālī*), one must also try to follow Arabic language rules to the extent possible. These include:

- 1 To use in this process, as much as possible, original letters of the terms involved in this process.
- 2 If the derived term is a noun, it must agree with one of the noun patterns.
- 3 If the derived term is a verb, it must follow the pattern *fāʿlala* or *tafaʿlala*.⁶²

As stated earlier, this type of abbreviated compound was reserved primarily for religious phrases, rather than to derive new scientific or philosophical terminology. The limited use made of it was principally confined to expressions from the religious realm.

Compound construction through joining (*naḥt bi-wāṣiṭāt al-tarkīb al-mazjī*)

Yet *naḥt* has a broader usage, as well. It can also refer to a phrase resulting from the combining of two terms without causing any morphological change to either. The resulting combination must be considered "one term [*ism^{an}*, lit. 'a noun'] in terms of inflection and structure, whether the [combined] terms are of Arabic origin or arabicized".⁶³ Modern Arab linguists refer to this process as *al-tarkīb al-mazjī* (the compound construction), and we will follow them in treating this broader sense of *naḥt* as a separate category.⁶⁴

A clear example of this type of derivation is the compound numbers (such as *ithnā ʿashara*, lit. "two-ten", meaning "twelve"), but the scope of this method of word formation is much broader, including adverbs of time (such as *ṣabāḥ^a masā^a*, lit. "morning-evening", meaning "all the time", "non-stop"); adverbs of place (such as *bayn^a bayn^a*, lit. "between-between", meaning "in the middle").

This method was used extensively during the translation period to translate *literally* philosophical terms that represented similar compound terms in the original language (generally, Greek). The majority of these compound terms consisted of a negation particle along with a noun. Examples include *lā-wujūd* (non-existence); *lā-nihāyah* [lit. "no-end", meaning "infinity"]; *al-ghayr maḥsūs* (the intangible); *al-ghayr mutaharrik* (the immobile); *al-ghayr mādḍī* (the immaterial).

However, there are also examples of compound expressions without negation particles, as well. An example would be *mā baʿd al-ṭabīʿah* (lit. "that which is beyond nature", meaning "metaphysics").⁶⁵

*Derivation or the creation of new terms from
existing roots (ishtiqaq)*

Important as they were, the methods thus far discussed – formation of abstract nouns (using the suffix *-iyyah*), use of borrowed terms (*ta'rib*), semantic change of existing words (*majāz*), abbreviation (*naht*) and (the closely related method of) creating compound terms (*tarkīb mazjī*) – were used only for a relatively limited number of terms. These methods alone would not have been able to produce the full range of new technical terms needed to convey ideas transmitted from Greek science and philosophy without “building a language within a language”, the charge levelled by the Arab grammarians against the logicians. The translators of the second/eighth, third/ninth and fourth/tenth centuries, realizing the limitations of the methods previously discussed,⁶⁶ ultimately made a maximum use of the unique richness of the Arabic language in terms of *derivability*. The Arabic language, like other Semitic languages and even more so, offers the means to derive from any given root a significant number of related words according to patterns. This characteristic of Arabic, called *ishtiqaq* (derivation), has been the single most productive method used by Arab philologists, past and present, to meet the influx of new terminology and ideas through “neologisms”. We will provide two extended examples to illustrate this method and then list some of the most common patterns employed to produce new terms during the Classical period of philosophical and scientific activity in Islam.

Firstly, the term *qiyās* (syllogism) is a verbal noun derived from the root *q-y-s*, the basic meaning of which is “to measure” or “to compare”. As the Aristotelian syllogism basically “measures” or “compares” against each other premisses considered to be true, in order to reach a conclusion, the verbal noun *qiyās* (“measuring” or “comparing”) was selected to convey the technical meaning of “syllogism”. *Qiyās*, while used in logical contexts to render “syllogism”, was employed by both Arab grammarians and Muslim jurists in their respective fields to mean “analogy”.

Secondly, the term *iṣṭilāḥ* or its synonym *muṣṭalah*⁶⁷ is derived from the root *ṣ-l-h* the basic meaning of which is “to be suitable” or “to be in good condition, without defects”. The eighth form of this verb (*iṣṭalaha*) means “to agree, accept, adopt”. The verbal noun of the eighth form (*iṣṭilāḥ*) and the passive participle (*muṣṭalah*) were both adopted to mean “a technical term”, since it is something agreed upon and accepted.

This derivation method sometimes employed a given pattern to derive terms of the same category. The pattern *fu'āl*, for example, was used to derive terms relating to sickness *ṣudā'* (“headache”, from *ṣ-d-*, meaning “to split, to separate”); *zūkām* (“cold”, from *z-k-m*, meaning “to cool, get cold”), *duwār* (“dizziness”, from *d-w-r*, meaning “to turn around” or “to move in a circular motion”), and *su'āl*, (“cough”, from *su'ala*, “to cough”).

Similarly, as the tenth form (*istaf'ala*) often expresses “taking”, “seeking” or “asking for” that which is referred to by the simple (first) form, the verbal noun of this form (*istif'al*) was used in various disciplines to deduce terms expressing the concept of “seeking”. In logic, for example, the term *istiqrā'* (induction) was derived according to this principle from the root *q-r-w*. The tenth form of this root (*istaqrā'*) means: to pursue things and examine their conditions and properties.⁶⁸ Consequently, the verbal noun of this form, *istiqrā'*, was chosen to mean “induction” since in induction “one examines the individual cases in order to reach an affirmative universal judgment”.⁶⁹ Similarly, *istintāj* (reaching a conclusion) was derived from *n-t-j* (to result).⁷⁰ The medical term *isitsqā'* (derived from *saqā* which means “to water” or “to give to drink”) was coined to refer to the disease “hydropsy” (or “dropsy”), involving an excessive accumulation of fluid in the cellular tissues.

Maṣādir (verbal nouns) of various forms were used in the classical period to derive new terms, such as *khitābah* (rhetorics), a verbal noun derived from the root *kh-t-b*, the basic meaning of which is to “give a speech”, “to preach”; and *jadāl* (dialectics), a verbal noun derived from the root *j-d-l*, the basic meaning of which is “to twist [a rope] firmly; to braid”. This term acquired the meaning “dialectics” (*jadāl*), since in dialectical discussions it is “as though each of the two parties twisted the other from his opinion: or, as some say, it originally means the act of wrestling, and throwing down another upon the *jadālah* (or ground)”.⁷¹ Similar analysis leads us to the rationale behind assigning new technical, philosophical meanings to already existing verbal nouns such as *tahlīl* (analysis), from the second form of *h-a-l-l* (i.e., *ḥallala*, “to resolve into the component parts of a thing”), *tarkīb* (classification), from the second form of *r-k-b* (i.e., *rakkaba*, “to construct, assemble, to put together”), and *qismah* (division), from the root *q-s-m* (the basic meaning of which is “to divide, split, separate”).⁷²

THE SECOND CONFRONTATION
WITH THE WEST – COLONIZATION BY
WESTERN POWERS

For historical and internal reasons, the details of which go beyond the scope of this chapter, the Arab/Islamic culture lost its momentum after the ninth/fifteenth century and began to decline in terms of scientific and intellectual achievement and development. This stagnation continued throughout, and perhaps was further enhanced by, the Ottoman rule of most of the Arab world for over four centuries. The occupation of Egypt by the French in 1798 and later by the British in 1882, however, marked the beginning of a new phase of confrontation

between the Arabs and the West, a confrontation with both political and intellectual dimensions.

Given the influx of new concepts and terms entering from other cultures over the past two hundred years, contemporary Arab linguists, like their counterparts from the Classical period, have attempted to coin equivalent new terms in Arabic using various methods. They have essentially employed the methods elaborated upon earlier in this chapter: borrowing words from other languages, modifying the meaning of existing terms, abbreviating, forming compound terms and deriving new words from existing roots. As in the Classical period, the latter method has experienced the most frequent use, whereas borrowing has been the method least often employed.

*Borrowing terms from other languages (al-ta'rib)*⁷³

It is interesting to note that – in contrast to other Middle Eastern languages, such as Persian, Turkish, Hebrew and even colloquial Arabic – written Arabic (or what has become known as Modern Standard Arabic) has been very conservative when it comes to accepting borrowed terms (loan-words).⁷⁴ This can probably be attributed to cultural/religious as well as political considerations. In the words of Charles Issawi:

the intense Arab nationalism has, quite rightly, fastened on the Arabic language as the main bond – together with Islam – holding the otherwise rather diverse Arab peoples and the one differentiating them from their non-Arab Muslim neighbours and has further strengthened their attachment to and jealousy for their language; hence any borrowing that might increase the diversity of the Arabic used in various parts is looked upon with deep suspicion as a disruptive factor.⁷⁵

None the less, many terms have been borrowed by the Arabs in the thirteenth/nineteenth and fourteenth/twentieth centuries. Among the first wave of European terms the Arabs encountered in the modern period were terms of a primarily political nature. Borrowed political terms include *dīmuqrāṭī/dīmuqrāṭiyyah* (democratic/democracy); *barlamān* (parliament); *qunṣul/qunṣuliyyah* (consul/consulate); *diktātūr/diktātūrī* (dictator/dictatorial).⁷⁶

Following closely on the heels of these political loan-words were borrowed terms from Western science and technology, such as *rādyu* (radio); *tilfizion* (television); *sīnamā* (cinema); *film* (film); *vidyū* (video); *talafon* (telephone); *kombūtar* (computer); and the names of the chemical elements, such as *uksūjīn* (oxygen) and *haydrujīn* (hydrogen).

Arabic terms coined to replace many of these loan-words were either rejected or used interchangeably with the foreign term they were meant to replace. The term *mirnāt*, for example, coined to replace *telfizion*, was totally ignored by the speakers of the language, as well as by those using the written language; whereas *hātif*, coined to replace *talafin*, has managed to exist alongside its foreign counterpart.⁷⁷ The borrowed term *kumbūtar* has evinced itself particularly resistant to supplantation by indigenous Arabic substitutes. Jamīl al-Malā'ikah documents as many as ten suggested replacements for the tenacious term, ranging from *al-'aql al-iliktronī* (lit., "the electronic mind") to *al-nazzāmah* (lit., "the machine that organizes", generated according to the *fa'alah* pattern discussed under "Derivation" below).⁷⁸

Altering or expanding the meaning of existing terms

The second method of semantically modifying existing words⁷⁹ has also been employed during the modern period. According to Bernard Lewis, Arabic made much "use of an important new vocabulary coined by the Ottoman scholars, officials and journalists".⁸⁰ These were often words of Arabic origin adapted by the Ottomans for use in translating terms of European origin and later on re-adopted back into Arabic, gaining virtually universal acceptance in their newly acquired meanings. Examples of such terms include *jumhūriyyah* (republic), *qawmiyyah* (nationality), *ishtirākī* (socialist), *iqtisādī* (economic), *khārijīyyah* (foreign affairs), *dākhiliyyah* (domestic or internal affairs), and *baladiyyah* (municipality).⁸¹

Examples of other terms produced by this means include *ḥukūmah* (government),⁸² *azmah* (classical meaning, "shortage or famine"; modern meaning, "crisis (political or economic)"); *muḥarrik* (originally used to express the Aristotelian term "prime mover" or "God" as the first cause; modern meaning, "motor or engine"); *dharr* (originally, "small particles"; modern meaning, "atoms").⁸³

The formation of compound terms

The method of producing compound terms in its broader sense (i.e., *tarkīb mazjī*, rather than *naḥt*) has actually gained momentum during the modern period. Whereas in the Classical period only isolated compound terms were produced by means of this method, a relatively long list of compound terms has been compiled in the modern period. Examples include: *lā-silkī* (wireless); *al-'aql al-lā wā'ī* (the subconscious mind); *al-ashī'ah fawq al-banaḥsajīyyah* (lit., "the rays that are above the violet", i.e., "ultraviolet rays").

The above examples closely resemble those presented in this same category for the Classical period, i.e., they represent literal translations of foreign compound terms. It is worth noting, however, that a new trend has appeared in the modern period representing non-literal, which is to say, conceptual translations of new or foreign terms. The more conceptually (i.e., non-literally) translated compounds rely heavily on a powerful construct in Arabic called *idāfah*, which suggests through the positioning of two nouns in a sentence (or compound) a relationship of possession between the second and the first. Examples of these more conceptually translated compounds include *ilm al-nafs* ("science of the soul", i.e., "psychology"); *ilm al-ijtimā'* ("science of society", i.e., "sociology"); *marad al-nafs* (lit., "sickness of the soul", i.e., "mental illness"); *naṭīḥat al-sahāb* (lit., "that which butts against the sky", i.e., "skyscraper"); *jawāz safar* (lit., "permit to travel", i.e., "passport"); and many more.

Derivation or the creation of new terms from existing roots

Just as in the Classical period, however, *ishtiqāq* (derivation of new terms from existing roots according to certain patterns) has been the main method used by modern Arabic speakers to generate new terms. There follow illustrations of two of the more common patterns in current use.⁸⁴ Firstly, the pattern *fā'ālāh*, the basic meaning of which is "capable of doing", is employed in the feminine form to indicate "instruments capable of doing". Thus, *thallājah* (refrigerator) is derived from *th-l-j* (snow); *ghawwāṣah* (submarine) is derived from *gh-w-ṣ* (diving). Second is the pattern *mif'al*, the basic meaning of which is "to perform the act involved in the meaning of the root". Thus, from the verb *ša'ida* (to ascend) the term *miṣ'ad* (lift, elevator) is derived; from the verb *jahara* (to reveal, make public, or make known) the term *mijhar* (microscope) is derived.

CONTEMPORARY DEBATES CONCERNING THE FUTURE OF THE ARABIC LANGUAGE

This concludes our discussion of the methods by which new terms have been generated in the Arabic language, past and present. There are, however, further topics relating to the development of the language that are relevant to the modern period but were not really at issue during the Classical period.

Although the French occupation of Egypt lasted only about three years, European influence spread rapidly in Egypt and later throughout the rest of the Arab world. Muḥammad 'Alī, a Turk sent with Ottoman

forces to battle the French forces in Egypt, ruled the country between 1805 and 1848. During these years, he instituted scientific and social reforms aimed at improving the economy and the standard of living in Egypt. His modernization plans occasioned the first real encounter with Western civilization in the modern era, a turning point in terms of the Arabs' self-esteem and their view of their own culture. Since that time, the Arabs have been literally overwhelmed militarily, politically and technologically by the West.

The Arabs' political and military impotence and their social backwardness have prompted serious questions and inquiries concerning the ability of the Arab-Islamic culture to cope with the challenges of the modern period, marked as it is by a clear superiority of the West. A major task Arab intellectuals have set for themselves is that of divining solutions for their peoples' predicament. These attempts have in turn led to divisions within the Arab intellectual community, the effects of which go far beyond the intellectual realm.

The debates that have taken place regarding the Arabic language and its ability to reflect the scientific and technological innovations of the modern period clearly illustrate these deep divisions. Sāṭi' al-Ḥuṣrī (1882–1968), a leading member of one of the intellectual factions and regarded as the spiritual father of Arab nationalism, summarizes these current philological debates in his *al-Lughah* as follows:

Whereas some Arab philologists go to the lengths of declaring 'Arabiyyah to be the richest language in the world, other [Westernized] authors go to the other extreme, asserting that Arabic is incapable of adopting the scientific terminology necessary for our generation. We share neither of these extremes.⁸⁵

Al-Ḥuṣrī himself represents a third trend between the two extremes, which calls for modernization of the Arabic language, roughly along the lines adopted during the medieval period.⁸⁶

Yet contemporary debates concerning the Arabic language centre not only on the question of how to coin or incorporate new terminology into the existing linguistic network but also on the problem of how to reduce or eliminate the degree of alienation that exists between the language and its speakers. For almost any language, there is a more or less pronounced dichotomy between the language as it is spoken and the language as it is written. For Arabic, the gap between the two levels more closely resembles a chasm. Spoken Arabic consists of a set of widely differing (and in some cases mutually unintelligible) regional dialects, whereas written Arabic is essentially the language of the Qur'an. A major challenge faced by contemporary Arab linguists, then, is to devise means for narrowing the gap between 'ammiyyah (the spoken language) and fuṣḥā (the written language).

Prominent intellectuals – such as the Egyptians Ṭaha Ḥusayn (1889–1973), Salāmah Mūsā (1887–1958), and Yūsuf Idrīs (1927–1991); and the Lebanese Mikhā'il Nu'aymah (1889–1987) and Anīs Frayḥah – strongly suggest that the gap between the spoken and the written language must be closed so that Arabic speakers may express themselves in a language closer to their hearts, a language they use every day. Ṭaha Ḥusayn, for example, has repeatedly demanded that the written form of Classical Arabic, as well as its grammar, should be simplified in order to make it accessible to everyone in Egypt and the Arab world in general.⁸⁷ Salāmah Mūsā, too, has argued that the language should be simplified, lest it become a language of monks, which only a few people know and use.⁸⁸

Others, such as Mikhā'il Nu'aymah, have gone even further, demanding that plays, for example, should be “written” in the spoken language. Otherwise one is artificially imposing a language on the characters that real people would not use.⁸⁹ Yūsuf Idrīs has actually written many of his plays and short stories in colloquial Arabic, precisely because he believes that Classical (or written) Arabic is an alien tongue to the majority of his readers and that it would be unrealistic to impose on the characters in his drama and fiction a language they would not use in daily life. Idrīs was the first writer in the Arab world to follow the practice of using both colloquial Arabic (for the language of his characters) and classical Arabic (in his descriptive matter) in one and the same story.

Those who oppose the use of colloquial Arabic in writing are not only anxious about violating the purity of the language of the Qur'ān, but also fear the political consequences of abandoning Classical Arabic as the written language. Since the Arabic language is perhaps the single most important aspect of the Arab identity, the promotion of colloquial Arabic would undermine the potency of this unifying factor. The future of the Arab countries, these intellectuals fear, would be similar to that of Europe, where many languages, and consequently many nations, emerged with the disappearance of Latin as a living language.⁹⁰ Even those who advocate the use of colloquial Arabic in writing are aware of this dilemma (*al-'uqdah*, lit., “the complexity”) and seem unable to offer a solution to it.⁹¹

There is no doubt that the linguistic issues facing the Arab world today are exceedingly complex, with compelling arguments on both sides. It is too soon to tell what course the future development of the Arabic language will take, but one thing is sure, the philosophers, theologians and other important thinkers for whom Arabic is a native tongue will be in the forefront of the debate, just as they were during medieval times. They must help guide the community of speakers of the language in preserving their rich linguistic heritage, while also contributing to and benefiting from the fact that they are citizens of a larger and rapidly evolving global community.

❧ NOTES ❧

- 1 I would like to acknowledge the invaluable assistance of my former teacher and mentor Wolfhart Heinrichs of Harvard University, who read a draft of this chapter and offered numerous insightful comments and suggestions, many of which have been incorporated in this final version.
- 2 Owing to space limitations, other important linguistic issues, such as the discussion of the nature and the origin of language (i.e., whether it is conventional or inspired) cannot be dealt with here. A summary of various views on these subjects in the writings of medieval Islamic intellectuals may be found in J. al-Dīn al-Suyūṭī (n.d.): 7ff. For the origin of the term *lughah* (language), consult the *Encyclopaedia of Islam*, new edition, s.v. “*Lughah*”, contributed by A. Hādī-Salah.
- 3 G. Endress (1977): 110.
- 4 Abū Ḥayyān al-Tawḥīdī (n.d.): 122, p. 15.
- 5 English translation with an introduction by D. S. Margoliouth, “The Discussion between Abu Bishr Matta and Abu Sa'id al-Sirafi on the Merits of Logic and Grammar”, *Journal of the Royal Asiatic Society* (1905): 79–129. For further details regarding this translation consult Muḥsin Maḥdī (1970): 55 n. 12.
- 6 Maḥdī (1970); Gerhard Endress (1977) and (1986); A. El Amrani-Jamal, *Logique Aristotelienne et grammaire Arabe: Etude et documents* (Paris, 1983). Concerning the general attitude to logic and science in medieval Islam, one should consult Goldziher's “Mawqif Ahl al-Sunnah al-Qudama' Bi-iza' 'Ulum al-Awa'il” in 'Abd al-Raḥmān Badawī (ed.) *al-Turāth al-yūnānī fī-l-ḥadārah al-islāmiyyah* (Cairo, *al-nahḍah al-miṣriyyah* 1940): 123–72.
- 7 *Ibid.*: 108. 10–12. A very similar view was held by the fifth/eleventh-century philosopher Ibn Sīnā (980–1037). See, for example, his *al-Najāt* (Book of Deliverance'), ed. al-Kurḍī (Cairo, 1938): 3.
- 8 *Imtā'*: 114, ll. 6–9.
- 9 *Ibid.*: 129, l. 2.
- 10 *Ibid.*: 109, ll. 9–10.
- 11 *Ibid.*: 109, ll. 11–13.
- 12 *Ibid.*: 109, ll. 14–16.
- 13 *Ibid.*: 109, l. 16; 110, ll. 1–3.
- 14 *Ibid.*: 110, ll. 7–10.
- 15 *Ibid.*: 113, ll. 13–16.
- 16 *Ibid.*: 115, ll. 1–2.
- 17 *Ibid.*: 111, para. 11, where he states, “You are not, therefore, asking us [to study] the science of logic, but rather to study the Greek language.” Al-Sirāfi's position on this issue represents what some contemporary philosophers of language call a “naturalistic” (rather than a “constructionistic”) point of view and can be summed up in the words of Fred Sommers as follows: “The naturalist believes with Aristotle and Leibniz that logical syntax is implicit in the grammar of natural language and that the structure attributed by grammarians to sentences of natural language is in close correspondence to their logical form” (Sommers (1982): 2).
- 18 *Imtā'*: 110, ll. 11–14.
- 19 *Ibid.*: 111, ll. 1–3.
- 20 *Ibid.*, ll. 4–7.
- 21 *Ibid.*: 123, ll. 7ff.

- 22 *Ibid.*: 111, ll. 13–14. Al-Sirāfi seems here unaware of the close relationship between the Byzantine Greek spoken by his contemporaries (*al-rūmiyyah*) and the ancient Greek of Aristotle and his contemporaries (*al-yūnāniyyah*).
- 23 *Ibid.*: 112, ll. 5–6. The translation of this particular passage is by Muḥsin Maḥdī (1970): 67.
- 24 *Ibid.*: 112, ll. 7–10. See Maḥdī (1970): 67.
- 25 *Ibid.*: 113, ll. 4ff.
- 26 *Ibid.*: 113, ll. 8ff.
- 27 At least this is the picture painted in al-Tawḥīdī's description of this debate. At various junctures, in response to particularly incisive points made by the grammarian Abū Sa'īd al-Sirāfi, the logician Mattā "was bewildered" (*Imtā'*: 114, l. 5) or "was troubled and hung his head and was choked by his saliva" (*ibid.* 119, l. 2), unable to produce counter-arguments.
- 28 Utterances not in the sense of speech-acts but rather of composite utterances, i.e., utterances in the context of sentences.
- 29 Witness the following blunt admission by Abū Bishr Mattā in the debate that took place between him and the grammarian al-Sirāfi: "This is grammar, and I have not studied grammar" (*Imtā'*: 114, l. 6). This position was also defended by Avicenna. Cf. Ibn Sīnā (1970): 5. Elsewhere Avicenna says that logicians need natural languages only in order to be able to address logical issues and to communicate with others about these issues. Logic, according to him, does not deal with utterances per se because these are only a tool and can theoretically be replaced by some other device (*ḥilāḥ*) through which one can express logical relations without the mediation of a natural language. Ibn Sīnā (1952): 22.
- 30 Abū Naṣr al-Fārābī was the most thorough and systematic among the second generation of Arab logicians in analysing the relationship between Arabic grammar and Greek logic. For further details concerning al-Fārābī's views on this issue, see S. Abed (1991), introduction and conclusion.
- 31 *Imtā'*: 122, l. 15.
- 32 Although the details of this argument exceed the scope of this chapter, let one example suffice to demonstrate, namely, the issue of the copula. The tenth-century logician and student of Mattā, Abū Naṣr al-Fārābī (258/870–339/950), conducted a logical analysis of the language that led him to assume the implicit presence of the copula in Arabic sentences where it would naturally not be present, such as "*Zayd (yūjad) 'ādil*". In making this assumption, he was following Aristotle's assertion that every sentence must have a verb. Al-Fārābī knew, of course, that Aristotle's rule did not accurately describe the Arabic language. He therefore applied the rule only to the logical form of the sentence, arguing that the copula exists in the *logical* structure of every Arabic sentence.
- 33 By "scientific activity" I here refer to activity in the *natural* sciences. As early as the eighth century, legal reasoning and linguistic thinking were already quite well developed.
- 34 W. Wright (1975), 1. 149, 165: "The feminine of the relative adjective serves in Arabic as a noun to denote the abstract idea of the thing, as distinguished from the concrete thing itself, e.g., *ilāhiyyah* (divine nature), *insāniyyah* (humanity)."
- 35 For a discussion of the origin and meaning of this term, see R. M. Frank (1956): 181–201.

- 36 For example, L. Massignon and P. Kraus, "La formation des noms abstraits en arabe", *Revue d'Etudes Islamiques* (1934): 507ff., where it is suggested that "this suffix was copied from the Syriac, which in turn adopted it from the Greek =*ia*, the common suffix denoting abstraction". S. M. Afnan (1964), from whom the last quotation was adopted, suggests (p. 32) that the inclination of the Arabs to form abstract nouns of the *-iyyah* variety is likely to have been influenced by Pahlawi and Persian. The holder of this opinion bases his assumption on the observation that there are far more abstractions in the writings of philosophers of Persian origin (probably a reference to the works of philosophers such as Ibn Sīnā and Mullā Ṣadrā) than in those of philosophers of Arab origin. He also observes that in Persian the mere addition of the suffix *-ī* makes a perfectly good abstraction out of almost any word in the language. This last observation is supported by al-Fārābī, who in *Kitāb al-ḥurūf* ("Book of Letters") (1970: 111, l. 82) illustrates this linguistic feature of the Persian language by means of the terms *ḥast* (is) and *mardum* (men), each of which becomes an abstract noun through the simple addition of the Persian suffix *-ī*. See Abed (1991): 155ff. for a reply to these views.
- 37 This is a rare word in Arabic philosophical terminology; see, however, al-Kindī's use of this term in *Rasā'il al-Kindī al-falsafīyyah* ("Al-Kindī's Philosophical Essays") (1950: 182); see also Abū Rīdah's commentary on this term (*ibid.*).
- 38 These too are rare; see, however, the list produced by al-Sirāfi in his critique of the philosophers, in al-Tawḥīdī (n.d.): 123, ll. 8–10. Al-Sirāfi mentions in that list abstract terms such as *ḥālīyyah*, which is derived from the question particle *ḥāl* ("is it the case?"; an interrogative particle introducing direct and indirect questions), and *ayniyyah* (derived from *ayna*, which is also a question particle meaning "where?").
- 39 See al-Kindī (1950): 174–5.
- 40 For the meaning of *mithāl auwal* (prototype), consult F. W. Zimmermann (1981): xxxf, xxxvi; and Abed (1991): 146ff.
- 41 Al-Fārābī (1970): 112, l. 83.
- 42 Ibn Rushd (1938–48), 2: 557.
- 43 For a detailed study of these methods, consult J. Bielawski (1956): 263–320.
- 44 Cf. al-Jawālīqī (1867). The term *al-dakhīl* is contrasted by al-Jawālīqī with *al-ṣarīḥ* (i.e., the pure [Arabic]), p. 3. There are also several relatively modern works dealing with this question. Cf. Al-Sayyid Adday Shīr (1908); Tūbyā al-Ḥalabī (1932).
- 45 The sixteenth-century scholar Jalāl al-Dīn al-Suyūṭī lists several Qur'ānic terms as foreign, mentioning (though not always accurately) their respective origin; al-Suyūṭī (n.d.): 1: 268. Later grammarians developed seven criteria through which to determine whether a word is of Arabic origin or borrowed (*ibid.*: 270). For a comprehensive study of foreign words in the Qur'ān consult A. Jeffery (1938).
- 46 Bielawski (1952): 285.
- 47 More accurately, *falsafah* is an Arabic derivation from *ḥaylasūf* which in turn is derived from the Greek via Syriac (*philosophia*); likewise *safāṭah* in relation to *sufistā'ī*, etc.
- 48 *Falsafah* = *ḥikmah*; *ḥayūlā* = *māddah*; *qāṭighūriyāt* = *maqūlāt*; etc.
- 49 For example, the past tense verb *tafalsafa* (philosophized) was derived from *falsafah*. See Bielawski (1952):

- 50 Sībawayh (1966–77), 4: 303ff.
- 51 Arabicized words, i.e., those accepted as loan-words from other languages, do not violate the “truth of the Kuran’s being [altogether] Arabic; for when a foreign word is used by the Arabs, and made by them comfortable with their language in respect of desinential syntax and determinateness and indeterminateness and the like, it becomes Arabic”. Lane (1980), under the term *qustus* (balance – arabicized from Greek). See the discussions on this issue in al-Suyūṭī (n.d.): 268–9.
- 52 See Sībawayh (1966–77): 303.
- 53 Al-Suyūṭī (n.d.): 269–70. With the exception of *dirham*, however, the examples are not from al-Suyūṭī.
- 54 *Ibid.*: 270.
- 55 This is true of other related methods used by Arab grammarians and philologists, such as *isti’ārah* (metaphor), *ittisā’* (extension, which is a subcategory of *majāz*), and *tasāmuh* (licence), all of which are used to expand the meanings of existing terms. Ibn Jinni, in his *al-Khaṣā’iṣ*, for example, claims that terminology derived by *majāz* comprises most of the terms used in a language (*al-Khaṣā’iṣ*, 2: 447). For al-Fārābī’s view of these concepts see Abed (1991): 171.
- 56 For example, “We have been taught the speech [*manṭiq*] of birds” (27: 16). In two other passages in the Qur’an the verb *naṭaqa* is associated with “saying the truth”: “Before us is a record which clearly speaks the truth [*yanṭuq*] *bi’l-ḥaqq*” (23: 62); “This our record speaks about you with truth [*yanṭuq*] *‘alaykum*” (45: 29).
- 57 Bielawski (1952): 278 classifies this term among the derived terms, rather than among the terms that have acquired new meaning.
- 58 Literally, “carving (usually a stone or a piece of wood)”. Al-Suyūṭī (n.d.), 1: 482, quotes the following definition of *al-manḥūt* (passive participle of *naḥṭ*): “[A word is called] *manḥūtah* [carved] from two words just as the carpenter carves two pieces of wood and combines them into one.”
- 59 I. Anīs (1966): 71.
- 60 For further examples see Anīs (1966): 72ff.
- 61 Ibn Fāris (1977): 461. In his definition, Ibn Fāris mentions only “two terms” rather than “two or more”, and then adds that *naḥṭ* is “a kind of abbreviation [*ikhtisār*]”.
- 62 M. Khalaf Allāh Aḥmad and M. Shawqī Amīn (eds) *Kitāb fī uṣūl al-lughah* (“A Book Concerning the Principles of the (Arabic) Language”) (Cairo, 1969): 49.
- 63 *Ibid.*: 52, 61.
- 64 Apparently this terminology is a latecomer to Arabic linguistics. It cannot be traced in the writings of Arab grammarians until the fourteenth century. See *ibid.* p. 58.
- 65 See Bielawski (1952): 284–5.
- 66 The method of “borrowing” has the further drawback of introducing non-Arabic elements into the Arabic language. This is something the Arabs tend to be uneasy about, as it may corrupt the purity of the language, which is after all the holy language of the Qur’an.
- 67 This example is analysed by Bielawski (1952): 278.
- 68 Lane (1980); *s.v. q-r-’*. See also al-Tahānawī (1966), 5: 1229.
- 69 *Ibid.*
- 70 For further details, the reader is referred to Bielawski (1952): 279ff.

- 71 Lane (1980), *s.v. jadal*.
- 72 For the technical meaning of these last two terms see Abed (1991): 95–100.
- 73 One should distinguish here between two senses of the term *ta’rīb*: “borrowing” as opposed to “arabicization”. The first of these senses refers to the borrowing of terms from foreign languages for use in Arabic, usually with some adaptation to Arabic patterns. The second sense refers to a comprehensive change of the official language used in a country – from the tongue of the colonizers to that of the native Arab inhabitants. This second process – politically, as well as culturally motivated – is currently under way in the former French colonies of North Africa (Algeria, Tunisia and Morocco), which for decades have employed French as their official language but are now in the process of converting to Arabic. A similar conversion took place during the early days of the Arab empire when the Umayyads established Arabic as the official imperial language, replacing other languages then in use (such as Persian). See, for example, N. Aḥmad (1986).
- 74 Charles Issawi studied the European loan-words in a Nagīb Maḥfūz trilogy and, on the basis of his findings, he evaluated “the Arabic response to the challenge of the foreign vocabulary by comparing it with that of three other Middle Eastern languages – Persian, Turkish, and Uzbek” (1967: 110–33). Issawi summarizes his study as follows (p. 128): “The conclusion of this study may be briefly stated. Modern Arabic has shown a very marked reluctance to take in European (or other) loan-words, Persian has been somewhat more receptive, Turkish has been very hospitable and Uzbek has been flooded with such words.”
- 75 *Ibid.*: 110.
- 76 For a comprehensive study of political terms in Arabic in the modern period, see Ayalon (1989): 23–42.
- 77 This occurred also during the Classical period. Al-Suyūṭī, for example, devotes an entire chapter to “arabicized terms that have names in the language of the Arabs” (n.d.: 283–5).
- 78 J. al-Malā’ikah (1984): 52.
- 79 Bernard Lewis (1973): 285–6 refers to this method as “semantic rejuvenation or resemanticization”, which he describes as follows: “This occurs where an old word, which may or may not be obsolete, is given, more or less arbitrarily, a new meaning different from those which it previously expressed.”
- 80 *Ibid.*: 283.
- 81 *Ibid.*: 283–5. See also Ami Ayalon (1989): 23: “In meeting the challenge, the Arabs could largely benefit from the experience of their Turkish counterparts who, as rulers of the empire, were first to encounter European political ideas and to respond to the resultant linguistic needs.”
- 82 See Lewis (1973): 286, for the semantic change in this case, as well as in the case of the term *dustūr* (constitution).
- 83 For a relatively detailed list, see Bielawski (1952): 294–5.
- 84 For further details, see Bielawski (1952): 294ff.
- 85 Quoted in Bassam Tibi (1990): 96.
- 86 This debate regarding the future of the Arabic language mirrors a deeper undercurrent of divisions in the Arab world concerning the future not only of the Arabic language but also of the Arabic culture in general. There are those who wish to

- transform the culture via cultural revolution, others who believe that the Arabic culture is "viable for modern life if only understood and interpreted better, and if certain of its elements are developed in light of modern needs and the experience of modern nations", and still others who seek "to return to the Islamic roots of their culture". For further details, consult I. Boullata (1990): 3–4.
- 87 See, for example, his lecture *Mushkilat al-i'rāb* ("The Problem of Declension"), delivered in 1955 before the Academy of the Arabic Language in Cairo (1981).
- 88 See, for example, his book *al-Balāghah al-aṣriyyah wa'l-lughah al-'arabiyyah* ("The Contemporary Art of Composition and the Arabic Language" (Cairo, 1964), particularly 43–6, "*Al-Lughah wa'l-mujtama'*" (Language and Society").
- 89 See, for example, Mikhā'il Nu'aymah (1967): 15.
- 90 See, for example, N. Aḥmad (1986): 27.
- 91 See, for example, Nu'aymah (1967): 15–16.

❧ BIBLIOGRAPHY ❧

- Abed, S. (1991) *Aristotelian Logic and the Arabic Language in Alfārābī* (Albany).
- Afnan, S. (1964) *Philosophical Terminology in Arabic and Persian* (Leiden).
- Aḥmad, N. (1986) *Al-Ta'rīb wa'l-qawmiyyah al-'arabiyyah fi al-Maghrib al-'arabi* ("Arabicization and Arab Nationalism: (The Case of) Arab North Africa") (Beirut).
- Aḥmad, M. Khalaf Allāh and Amīn, M. Shawqī (eds) (1969) *Kitāb fi uṣūl al-lughah* ("A Book Concerning the Principles of the [Arabic] Language") (Cairo).
- Anīs, I. (1966) *Min asrār al-lughah* ["Secrets of the [Arabic] Language"] (Cairo).
- Ayalon, A. (1989) "Dīmuqrāṭiyya, Ḥurriyya, Jumhūriyya: the Modernization of the Arabic Political Vocabulary", *Asian and African Studies* (Journal of the Israel Oriental Society), 23(1) (March): 23–42.
- Bielawski, J. (1956) "Deux périodes dans la formation de la terminologie scientifique arabe", *Rocznik Orientalistyczny* 20: 263–320.
- Boullata, I. (1990) *Trends and Issues in Contemporary Arab Thought* (Albany).
- The Encyclopedia of Islam* (1913–38) (Leiden and Leipzig).
- The Encyclopedia of Islam*, new edition (Leiden and London, 1960ff.).
- Endress, G. (1977) "The Debate Between Arabic Grammar and Greek Logic", *Journal for the History of Arabic Science*, 1(2) (November).
- (1986) "Grammatik und Logik: Arabische Philologie und griechische Philosophie im Widerstreit", in *Sprachphilosophie in Antike und Mittelalter*, Bochumer Studien zur Philosophie, 3 (Amsterdam).
- al-Fārābī, A. N. (1970) *Kitāb al-ḥurūf* ("Book of Letters"), ed. Muḥsin Maḥdī (Beirut).
- Frank, R. M. (1956) "The Origin of the Arabic Philosophical Term *aniyyah*", *Cahiers de Byrsa*, 6: 181–201.
- Goichon, A. M. (1938) *Lexique de la langue philosophique d'Ibn Sina* (Paris).
- Al-Ḥalabī, T. (1932) *Tafsīr al-alfāz al-dakhilah fi'l-lughah al-'arabiyyah* ("Interpretation of Foreign Words in Arabic"), 2nd ed. (Cairo).
- Ḥusayn, T. (1981) *Mushkilat al-i'rāb* ("The Problem of Declension"), delivered in 1955 before the Academy of the Arabic Language in Cairo, in *Al-majmū'at al-kāmilah li-mu'allafāt Ṭaha Ḥusayn* ("The Complete Works of Ṭaha Hussein") (Beirut), 16: 380–96.

- Ibn 'Adī, Y. (1978) "On The Difference Between Philosophical Logic and Arabic Grammar", *Journal for the History of Arabic Science*, 2.
- Ibn Fāris, A. (1977) *Al-Ṣāhibī fi fiqh al-lughah* ("Semantic Studies"), ed. al-Sayyid Aḥmad Ṣaqr (Cairo).
- Ibn Rushd (1938–48) *Tafsīr mā ba'd al-ṭabī'ah* ("Averroes' Commentary on Aristotle's Metaphysics"), ed. Maurice Bouyges, 3 vols (Beirut).
- Ibn Sīnā (1938) *Al-Najāt* ("Book of Deliverance"), ed. M. al-Kurdī (Cairo).
- (1952) *Al-Shifā', al-Manṭiq, 1: al-Madkhal* ("Isagoge: Book of Healing, part 1"), eds G. Anawati, M. al-Khodairī and F. al-Ahwānī (Cairo).
- (1970) *al-Shifā', al-Manṭiq, 3: al-Tbārāh* ("De interpretatione: Book of Healing, part 3"), ed. M. al-Khodairī (Cairo).
- Issawi, C. (1967) "European Loan-Words in Contemporary Arabic Writing: a Case Study in Modernization", *Middle Eastern Studies*, 3 (January): 110–33.
- Al-Jawālīqī, (1867) *Al-Mu'arrab min al-kalām al-a'jamī* ("Arabicized Foreign Words"), ed. E. Sachau (Leipzig).
- Jeffrey, A. (1938) *The Foreign Vocabulary of the Qur'an* (Baroda).
- Al-Kindī (1950) *Rasā'il al-Kindī al-falsafiyyah* ("al-Kindī's Philosophical Essay"), ed. M. Abū Rīdah (Cairo).
- Lane, E. (1980) *Arabic-English Lexicon* (Beirut).
- Lewis, B. (1973) *Islam in History* (New York).
- Mahdī, M. (1970) "Language and Logic in Classical Islam", in G. E. Von Grunebaum (ed.) *Logic in Classical Islamic Culture* (Wiesbaden).
- Al-Malā'ikah, J. (1984) *Al-Muṣṭalah al-ilmī wa-waḥdat al-fikr al-qawmī* ("The Formation of Scientific Concepts and the Unity of National Thought"), *al-Mustaqbal al-'Arabī* ("The Arab Future"), 60 (February).
- Mūsā, S. (1984) *Al-Balāghat al-aṣriyyah wa'l-lughah al-'arabiyyah* ("Contemporary Art of Composition and the Arabic Language"), (Cairo) particularly pp. 43–6 ("*Al-Lughah wa'l-mujtama'*" ("Language and Society")).
- Nu'aymah, M. (1967) *Al-Ābā' wa'l-banūn* ("Fathers and Sons") (Beirut).
- Al-Sayyid Addy Shīr (1908) *Al-Alfāz al-fārisiyyah al-mu'arrabah* ("The Arabicized Persian Words") (Beirut).
- Sibawayh, 'Amr ibn 'Uthmān (1966–77) *Al-Kitāb*, 5 vols, ed. 'A. S. M. Harūn (Cairo).
- Sommers, F. (1982) *The Logic of Natural Language* (Oxford).
- Al-Suyūṭī, J. D. (n.d.) *Al-Muḥṣir fi 'ulūm al-lughah wa-anwā'ihā* ("The Luminous in the Sciences of [Arabic] Language and its Various Kinds") (Cairo), 2nd ed. 1: 7ff.
- Al-Taḥānawī (1966) *Kashshāf iṣṭilāḥāt al-funūn* ("A Dictionary of the Technical Terms"), eds Mawlawies Moḥammad Wajīh, Abd al-Ḥaqq and Gholām Kadir (Beirut).
- Al-Tawḥīdī, A. H. (n.d.) *al-Imtā' wa'l-mu'ānasah*, 2 vols, eds A. Amin and A. al-Zayn (Beirut), 1: 104–29.
- Tibi, B. (1990) *Islam and the Cultural Accommodation of Social Change*, trans. Clare Krojzl (San Francisco).
- Wright, W. (1975) *A Grammar of the Arabic Language*, 2 vols (Cambridge).
- Zimmermann, F. W. (1981) *Al-Fārabi's Commentary and Short Treatise on Aristotle's De Interpretatione* (Oxford).

HISTORY OF ISLAMIC PHILOSOPHY

- Detailed discussions of the most important figures from earliest times to the present day
- Chapters on key concepts in Islamic philosophy, and on related traditions in Greek and Western philosophy
- Contributions by 50 leading experts in the field, from over 16 countries
- Analysis of a vast geographical area with discussions of Islamic philosophy in the Arab, Persian, Indian, Turkish and South East Asian worlds as well as Jewish philosophy
- Comprehensive bibliographical information and an extensive index

Routledge History of World Philosophies
Volume I



11 New Fetter Lane
London EC4P 4EE
29 West 37th Street
New York, NY 10018
Printed in Great Britain

ISBN 0-415-13160-X



9 780415 131605