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Historical Prelude

Fārābī's Philosophical Project

The idiosyncratic development of the problem of predication in the Arabic tradition can only be appreciated in the peculiar historical context of its appropriation. It is first necessary to understand the ways in which the conception of linguistic meaning became a contested issue. Then, how certain new but fundamental grammatical and logical notions emerged as part of the development of Arabic grammar. And how this development unfolded in tension between a descriptive and normative approach to language that itself was in competition with the emerging "foreign" Aristotelian logic. Only then can we fully appreciate Fārābī's original approach to the semantic role of the copula as being central to his overall philosophical project. Taking a step aside from the discussions on the copula, this chapter is a prelude to the Arabic story, providing the background to situate Fārābī's interpretation of the *DI* and his reconceptualization of the copula in his overall philosophical project. The impatient reader may skip this chapter and return to it later.

HISTORICAL CONTEXT: A CONFLUENCE OF TRADITIONS

The formative period of medieval Islamic civilization is marked by a historically peculiar situation that Gutas has called the "war of signification."[1] In the time leading up to the 4th/10th century, as some of the major autochthonous Arabic sciences—like grammar (*naḥw*), dialectical theology (*kalām*), and jurisprudence (*uṣūl al-fiqh*)—were coming of age, and a host of "foreign" scientific texts was being made available in Arabic, new technical terminologies were being forged. With them arose the need to explain them. The translations of Greek texts posed problems, as the "vocabulary whose specialized meanings and implicit sense and

reflection of the way things are [. . .] not only did not arise congenially out of native Arabic usage but were in many instances dissonant with it and awkwardly superimposed upon it."[2] The question not only of what but also of how words mean became central to virtually all scientific disciplines. This preoccupation with linguistic and semantic questions across the Islamic scientific curriculum was tied to the translation movement and peculiar to the Arabic tradition. There is arguably no equivalent in medieval Europe.[3]

How much of a continuous story we can tell of the transmission of Greek learning from Alexandria to Baghdād remains an open question in scholarship.[4] Concerning the *Organon*, Gutas argued that there were two traditions of teaching the *Organon* in late antiquity and early Islam.[5] One was primarily Greek and the other primarily Syriac. The former comprised the first four books of the *Organon* with the exception of modal logic at *APr* A8–22. The latter excluded everything after *APr* A7.[6]

In light of recent research this needs to be revised. Instead of two distinct traditions, we rather must assume a widespread diglossia among scholars in the 6th and 7th centuries, so that we should speak of a continuous existence, from Alexandria to Baghdād, of Graeco-Syriac and predominantly Syriac environments.[7]

The abridgement of the *Organon* exhibited in the sources may just indicate certain teaching practices already present in the Alexandrian context.[8] We have to assume that all of the *Organon* was available and studied in several places, only not as part of introductory logic curricula. More generally, recent research indicates that there was a much livelier Aristotelian tradition in Syriac than our sparse sources suggest, and that the broader development from the Alexandrian veneration of Plato to the focus on Aristotle among the Baghdād Peripatetics took shape already in the Graeco-Syriac tradition.[9]

The first known Syriac commentator on Aristotle was Sergius of Rēshʿaynā, a priest and physician (d. 536) who had himself studied, likely under Ammonius, in Alexandria (in Greek).[10] The first Syriac translation of the *DI* was made by Probus, archiater of Antioch, in the 6th century; the second by George, bishop of the Arabs (d. 105/724), in the 1st/7th.[11] Probus also wrote a commentary on the *DI*, the only one extant in Syriac.[12] Paul the Persian (*fl.* 6th century) composed an epitome, written in Middle Persian (Pahlavi) and translated into Syriac by Severus Sabokht, bishop of Qenneshre.[13] The earliest Arabic writings on Aristotle's *Organon* we know of are by Ibn al-Muqaffaʿ (d. shortly after 139/756).[14] The earliest known commentarial work on the *DI* in Arabic is by the East Syriac Metropolitan of Moṣul, ʿAbdīshū Ibn al-Bahrīz (d. *ca.* 212/827).[15]

These scholars were multilingual and of diverse backgrounds with distinct perspectives. In their pioneering work they preconfigured in many ways the Arabic reception of Aristotelian logic already before the organized translation efforts began. The first such effort was led by Abū Yaʿqūb b. Isḥāq al-Kindī (d. *ca.* 257/870) and sponsored by the caliph al-Maʾmūn (*reg.* 198–218/813–833).[16] Next was the

workshop of Ḥunayn b. Isḥāq (d. 259/873), who with his son Isḥāq b. Ḥunayn (d. *ca*. 297/911), Abū ʿUthmān al-Dimashqī (d. ca. 308/920), and Ibrāhīm b. ʿAbd Allāh al-Kātib (d. *ca*. 328/940), in a mammoth effort spanning two generations (*ca*. 230–290/840–900), produced the standard Arabic translations for the entire *Organon* (except the *APo* and the *Poetica* (*Poet*)).[17]

The Baghdād Peripatetics, a third group of translator-philosophers consisting of Abū Bishr Mattā b. Yūnus and his pupils, the Muslim Fārābī and the Jacobite Christian Yaḥyā Ibn ʿAdī (d. 363/974), were no longer as multilingual (Abū Bishr did not know Greek, and Fārābī probably neither Greek nor Syriac), but building on the terminological and exegetical work of their predecessors, they completed the translations of the *Organon*, and first fully appropriated it in an Arabic context.

Grammar and the Traditional Sciences on (the Arabic) Language

At the same time, in this period the traditional Islamic disciplines developed into their mature form, both in tension and in conversation with the translated sciences. Arabic grammar, a discipline first formalized in Sībawayhi's (d. 180/796) *al-Kitāb* (The Book), developed between antagonistic camps of grammarians in Kūfa and Baṣra and found a mature expression in the work of Ibn al-Sarrāj (d. 316/928). Ibn al-Sarrāj was Fārābī's contemporary and the first representative of the Baghdād school to synthesize the Kūfan and Baṣran approaches to grammar. His *al-Uṣūl fī l-naḥw* (Principles of Grammar) clearly shows the influence of Greek logical and grammatical thought.[18]

The early Baṣrian grammarians had approached the Arabic language of pre-Islamic poetry and the Qur'ān on the supposition that language in some substantial sense mirrored a rational reality.[19] Their efforts were thus aimed at a rational systematization of language in order to provide a normative grammar. Any linguistic phenomenon defying subsumption under the system had to be rationalized as an exception to the rule. While the Baṣrians sought to explain all linguistic phenomena by appealing to a paradigm (*aṣl*) and rules of derivation that could be employed by analogy (*qiyās*), the Kūfans, generally speaking, paid more attention to linguistic usage and thus sought to explain well-attested irregularities not in terms of regular deviations, but on a case-by-case basis.[20]

As a result, the two approaches often produced quite different theories. But for both, at the beginning of any grammatical theory, there stood a comprehensive theory of morphology as governed by inflection and derivation (*taṣrīf* and *ishtiqāq*) and an exhaustive classification of linguistic items into noun (*ism*), verb (*fiʿl*), and particle (*ḥarf*).[21]

A major point of controversy was how to apply the notion of derivation (*ishtiqāq*) to the infinitival forms (*maṣādir*) and active participles (*asmā' al-fāʿil*) on the one hand, and to nouns and verbs on the other.[22] Derivation (*ishtiqāq*) may be translated with "etymology" and the only extant early work dedicated exclusively to *ishtiqāq* is in fact a work on etymology.[23] However, given the particularities of Arabic word formation, *ishtiqāq* is closely tied not only to historical word formation,

but also to word formation by grammatical inflection (*taṣrīf*). Perhaps the first to systematize the notions of *taṣrīf* and *ishtiqāq* was Ibn Jinnī (d. 392/1002).[24]

The close relation between the two notions could arise naturally only because Semitic word formation is systematic in a way in which in Indo-European languages it is not. In Arabic, virtually all vocables consist of three root consonants. These may be modified by changing the intervening short vowels (which need not be written), or by adding augments, to nuance their semantic force. The semantic spectrum of the trilateral root is considered basic. Modifications, like any of the fourteen different verbal forms (expressing, for example, causative, reciprocal, or passive modifications of the basic meaning), participial or infinitival forms, as well as tensed conjugations or declinations, are considered derivative. They are derivative both on the level of morphology and on the level of meaning. One assumption was, as we will see later for Fārābī, that, historically, words signifying basic meanings came first. Derivations of words by means of *ishtiqāq* signify meanings that were later derived from basic meanings. It is here that for Arabic grammarians etymology and grammatical inflection converge: grammatical forms are seen as having etymologies.[25]

Depending on the rules for grammatical inflection (*taṣrīf*) and the conception of historical word formation (*ishtiqāq*), infinitival and participial forms of verbs will be classified differently. The Baṣrians derived the inflected verbal forms from the supposedly more basic tenseless infinitive. The Kūfans considered the tensed verbal forms primary and the infinitival forms secondary derivations.[26] Ibn al-Muqaffaʿ, for example, in line with the grammarians of Kūfa, had grouped the participial forms under *ḥarf* (particle) and taken them to signify an extended time (*fiʿl al-ḥāl*/*fiʿl dāʾim* in the grammarians' terminology).[27]

Discussions on semantic matters were central to other traditional disciplines as well, often cross-pollinating one another. In theology and especially in jurisprudence, at stake was not only the success of a theory, but serious implications for dogmatics or even criminal law.[28] A prime example is the debate about the createdness of the Qurʾān resulting in the inquisition of the *miḥna* (218–232/833–847). The question was here about the nature of the Arabic language understood as one of God's attributes (*ṣifāt*)—the Qurʾān being an expression of His pre-existing "speech"—and had far-reaching political consequences.[29]

Another example is the debate on the extensions of general terms in Islamic theology and jurisprudence. Beginning with the Baṣrian Muʿtazilite Wāṣil b. ʿAṭāʾ (d. 131/748–9) and the Kūfan Abū Ḥanīfa (d. 150/767), eponym of the Ḥanafī school of law, Schöck has shown how Qurʾānic exegesis, Arabic grammar, and Aristotelian logic mutually influenced one another in a quest for hermeneutical theories all the way down to Avicenna. The theory of derived nouns (*asmāʾ mushtaqqa*) as presented in Ibn al-Muqaffaʿ's theory of judgment or in Fārābī's position on propositional quantification was informed by both their readings of the *DI* and the current debates of the grammarians. As controversial contributions to the ongoing confrontation between *kalām* and *falsafa* they ultimately had palpable consequences for criminal law.[30]

Or, as a third example, Marwan Rashed has explored the algebraic-combinatorial theory of language propounded by the influential Muʿtazilite theologian Abū Hāshim al-Jubbāʾī (d. 321/933), which may have influenced Fārābī's theory of inference.[31]

Questions about the meaning and reference of words were thus debated across many disciplines. A particularly interesting case are works on *adab*, a genre of writing that had, by Fārābī's time, developed into a *sui generis* form of learned and witty belle-lettrism. Ibn al-Muqaffaʿ may be seen as pivotal in broadening the conception of *adab* with his works. Abū ʿUthmān ʿAmr al-Jāḥiẓ (d. 255/868–869) already presented a full-fledged theoretical discussion of meaning in his *Kitāb al-Bayān wa l-tabyīn* (Book of Eloquence and Exposition) that may be seen as a rival account to the Peripatetic one.[32]

One text is especially relevant here: Fārābī's younger contemporary Abū Ḥayyān al-Tawḥīdī (*fl.* mid- to late 4th/10th century), himself an *adīb* and admirer of al-Jāḥiẓ, recorded a public debate—said to have taken place in 326/937 at the court of the vizier Ibn al-Furāt—between the chief grammarian of Fārābī's time, Abū Saʿīd al-Sīrāfī (d. 368/979), and Fārābī's fellow Peripatetic Abū Bishr Mattā on the relative merits of Arabic grammar and Aristotelian logic.[33]

The Debate between Abū Bishr Mattā and Abū Saʿīd al-Sīrāfī

At the heart of the dispute as presented by al-Tawḥīdī is the question of which science can claim privileged access to understanding meanings (*maʿānī*). Abū Bishr holds that only logic deals with meanings to begin with, because it is in the business of clarifying the rules of thought irrespective of the language they are expressed in, as it investigates the intelligible meanings by scrutinizing their affections in the soul (111.1ff.). Logic thus deals primarily with meanings (*maʿānī*), and only accidentally with the forms of utterances, whereas grammar is said to deal with the forms of utterances of a specific language only (i.e., with *iʿrāb, taṣrīf, ishtiqāq* in Arabic). But as we have seen, especially the Baṣrians had made it their business to systematize the forms of utterances based on their *maʿānī*. Abū Saʿīd then retorts that the grammarians do in fact deal with *maʿānī*, and that their access to them is not only privileged but exclusive.

As Endreß has argued, Abū Bishr's claim was based on a semantic theory extracted from *DI* 1, and extracted in such a way that the Arabic *maʿnā*, which Isḥāq b. Ḥunayn had used to translate the Greek *pragma*, referred to things, as opposed to the meanings of linguistic signs.[34] Abū Saʿīd, on the contrary, takes the meaning (*maʿnā*) of a linguistic sign to be a reality in the mind that is first formed by linguistic mediation (111.1). It is thus only through language that meanings arise. Hence, according to Abū Saʿīd, it is absurd to claim *a priori* validity for logic as a tool to discern the true from the false by directly dealing with meanings, for the logician must use language to form those meanings (*maʿānī*), and the rules of Aristotelian logic are rules devised for and from within the Ancient

Greek language (110.11f.). Even if perfect translation were possible, the rules of logic would be the rules of a language long dead (111.13f.). However, since no two languages are exactly the same as to how they allow for meanings to be formed and conveyed, exact translation is virtually impossible to begin with (112.1–9).

Neither Abū Saʿīd nor Abū Bishr seems to be aware of their different conceptions of "*maʿnā*," but I think that they differ not only on some minute terminological detail. In the translations of Aristotelian logic familiar Arabic words became technical terms, and often the simultaneous use of such words in traditional and translated sciences led to confusion.[35] This particular confusion is paradigmatic of the different conceptions of "*maʿnā*" in Arabic grammar and Aristotelian logic. Abū Saʿīd's hostile remarks on Abū Bishr's poor Arabic are not mere *ad hominem* arguments. As a Syriac speaker with no knowledge of Greek and poor knowledge of Arabic (from a grammarian's point of view), Abū Bishr lacked the linguistic expertise to even notice such confusions.

One way to avoid terminological confusion was to create neologisms. Abū Saʿīd ridicules the Baghdād Peripatetics for that practice (123.6–124.6). His invective partly serves to show that he himself is well versed also in Aristotelian logic (in contrast to Abū Bishr, who repeatedly admits that he has not studied Arabic grammar), but it is noteworthy that his list of ridiculous and empty neologisms includes many of the key concepts of Aristotelian philosophy, and all are construed by adding the suffix "*-iyya*" to form abstract meanings from particles.[36] That procedure was, for Fārābī, a crucial tool for forging new concepts formerly non-existent in Arabic usage. It was also evidence for his theory of concept-formation.[37]

The historical background of the Graeco-Syriaco-Arabic transmission of the *Organon*, the "war of signification," the grammatical discussions about the notion of *ishtiqāq*, and the specific arguments about privileged access to meaning help better understand how Fārābī conceived of his philosophical project. He saw himself as the direct heir of a continuous Aristotelian tradition for the expression of which he felt he needed to construct a new technical language in Arabic that allowed talking *about* language in a logically perspicuous way.

FĀRĀBĪ AND HIS PHILOSOPHICAL PROJECT

Abū Naṣr Muḥammad b. Muḥammad al-Fārābī was born in the second half of the 3rd/9th century, likely in Fārāb, a district by the middle Syr Darya (Jaxartes) in modern-day Kazakhstan.[38] At some point he moved to Baghdād, where he sought out Abū Yaḥyā Ibrahīm al-Marwazī and Yuḥannā ibn Ḥaylān from Moṣul to study Aristotelian logic. On his own testimony, he read with them all books of the *Organon*. Fārābī had several students in his later years in the capital, among whom the most important was the Jacobite Christian Yaḥyā Ibn ʿAdī (d. 363/974). Sometime between 330/942 and 331/943 Fārābī moved to Damascus and subsequently

spent several years in Syria. He stayed at the court of the Ḥamdānid prince Sayf al-Dawla in Aleppo, where he dictated his commentary on the *APo* to his student Ibrahīm Ibn ʿAdī (Yaḥyā's brother?). Around 337/949 Fārābī was in Egypt. He died in Damascus in Rajab 339, between December 950 and January 951.

We still lack a critical inventory of Fārābī's works.[39] But it is clear that most of his writings on philosophical matters (his other great interest was music) deal with language and logic broadly, and many of them with the *Organon* specifically.[40] In fact, probably a good half of his output deals with logic. It can be classified into (1) epitomes of the *Organon* following the model of late antique prolegomena, (2) Alexandrian-style commentaries on most books of the *Organon*, (3) minor writings.[41] How are we to make sense of this unprecedented gravitational pull toward Aristotle, and to language and logic, in Fārābī's œuvre? An answer will have to involve an assessment of how Fārābi interacted with his immediate historical context, especially vis-à-vis the translation movement, the war of signification generally, and the grammatical tradition specifically.

Fārābī's "Alexandria to Baghdād" Narrative and His Knowledge of the Tradition

Reading Fārābī's account of the emergence of Aristotelian philosophy in the Islamic world may provide the basis for an explanation. As historically unreliable as his account in *Fī Ẓuhūr al-falsafa* (On the Emergence of [Aristotelian] Philosophy) may be, it is an important source for how Fārābī presented his own role in the historical context of his time.[42]

In the context of the translation movement and the Graeco-Syriaco-Arabic transmission process of Aristotle, Fārābī perceived his scholarly task to be—at a crucial moment in history—to facilitate the introduction of Aristotelian thought, and especially logic, into the Islamic scientific canon. It has been noted that the subtext of his account is clearly anti-Christian, anti-Byzantine, and phil-Hellenic.[43] Fārābī presents himself—in a direct lineage from Aristotle through Alexandria, Antioch, Marw, and Ḥarrān—as the savior of philosophy at the crucial moment in history when philosophy had come to an end everywhere else under Christian censorship.[44]

This is peculiar. First, why should Fārābī, who closely worked with several Christians in Muslim Baghdād, stylize himself as the savior of Aristotle from Christian censorship? And why should he insist on a continuous and single line of transmission from Aristotle to his own school—which he likely knew was historically inaccurate? The following is a possible explanation. As Gutas suggested, the anti-Christian element, which Fārābī's account shares with all others we have, may stem from intermediary sources written in the spirit of the Ma'mūnid ideology of "anti-Byzantinism is philhellenism."[45] Fārābī used it to the same effect for which the imperial propaganda had been designed: to contrast himself with the benighted and fanatic Byzantine Christians of the past who prohibited the study of the ancient sciences—and especially logic—for religious reasons.

In the intellectual climate intimated by the account of the Sīrāfī-Mattā debate, and at a time when the Byzantine threat was far greater than under al-Ma'mūn, Fārābī's self-representation then served to pit him against the enemies of Greek logic, like al-Sīrāfī, whom he implicitly assimilates to the Byzantine fanatics.[46] The same may hold for his insistence on the continuity of the transmission and his singular role in it. At any rate, it clearly was an appeal to authority, framed in terms of the Islamic notion of an uninterrupted chain of *ḥadīth* transmitters (*isnād/musnad*), which would have been more readily acknowledged in a majority Muslim context.

Thus, Fārābī's account may be read as a self-representation of his role as the savior of philosophy in the historical process. For the veneration of Aristotle instead of Plato, Fārābī might have found precedence in the Graeco-Syriac tradition. But, in any case, his concern with pleading the case for the utility of logic would have found little help in Plato.[47] It was the *Organon* that held the promise. That Fārābī not only presented himself as the savior of Aristotle, and specifically of his logic, but also perceived himself as such is borne out by the fact that he wrote more on Aristotle's logic in Arabic than anyone before him.[48]

The tendentious nature of Fārābī's account of the history of philosophy raises the question of how much he actually knew about the tradition. He likely read neither Syriac nor Greek and himself made no translations.[49] Concerning the *Organon*, we know from quotations in his extant works that he read the *Isag, Cat, DI, APr, APo, Top, Soph. El.*, and some version of the *Rhet*, all in Arabic translations.[50] Even though the Arabic translations of the *Organon* that Fārābī had at his disposal were far from perfect and in some cases outright spurious, there can be no doubt that he knew most of the *Organon*, and that he knew it very well.

The matter stands differently with Fārābī's knowledge of the commentaries. Almost all of Fārābī's references to the "commentators"—he hardly ever names individuals—were clearly not based on any knowledge of primary texts.[51] The most plausible scenario is that he was acquainted with their contributions through fragments and paraphrases he may have found in the margins of his Aristotelian text, like in the Parisinus Ar. 2346, and in didactic abridgements.[52]

Overall, however, his knowledge of the commentary tradition was rather thorough, and his sources must have come from both the Aphrodisian-Porphyrean and the Iamblichean-Ammonian commentary complex.[53] But Fārābī's access to the tradition was through Arabic alone, and his philosophical project was conceived on the basis of a theory of (the Arabic) language.

The Kitāb al-Ḥurūf: *The Origin of Language, Linguistic Constructivism, and Translation*

In the war of signification, the central issue at stake was how to claim privileged access to meanings (*maʿānī*). One way to do this was to provide a theory of language to support such claims. I think this is what Fārābī does in what is perhaps his most independent philosophical work, the *Kitāb al-Ḥurūf* (Book of Letters/Particles, henceforth *KḤ*).[54] The theory of language developed there I call "Linguistic

Constructivism," and I think Fārābī employs it to justify the Aristotelian method. According to Linguistic Constructivism, language is essentially the product of a linguistic community's combining of signs to express meanings as need arises. In the process new concepts are formed for which then new signs are created, until gradually different sciences are constructed. Linguistic Constructivism is continuous with Fārābī's own philosophical project of forging a new terminology and language for Aristotelian philosophy in Arabic.[55]

On my reading of the *KḤ* Linguistic Constructivism casts the development of all sciences in a progressive historical account of the development of human language, based on a constructivist view of the formation of both words and concepts. On this theory the socio-historical development of language leads, on one hand, via new words and new concepts to new knowledge and new sciences. On the other hand, it leads to a usage of language that, even though sanctioned as "correct" by grammarians in accordance with the habits of its speakers, is however misleading as to the meanings and their arrangements it used to, and should for the purposes of demonstrative science, express.

Fārābī's mistrust of the surface structure of language is rooted in the idea that humans are inclined to use utterances metaphorically. Utterances are becoming increasingly estranged from the meanings they were initially forged for in connection to immediate experience. Only philosophy (*falsafa*) has the tools to unravel language and make it fit for demonstrative science. Without giving here, for lack of space, a sustained argument for this reading, the following summary may at least make the overall idea plausible.[56]

The *KḤ* consists of three parts (*abwāb*), the order of which is disputed.[57] What I take to be the first part (Mahdi's part 2) lays out the historical basis for Linguistic Constructivism, explaining how words came to be ambiguous. In the remainder of the work Fārābī applies the theory by working back to disambiguate the notions central to logic (part 1) and metaphysics (part 3). What I take to be part 1 is a detailed account of the origin and development of (the Arabic) language and the syllogistic sciences, from gesture and ostension in primitive communities to the rise of demonstrative science in Fārābī's day.

This story is remarkable for the fact that language is depicted as entirely conventional—in opposition to most contemporary theological arguments about the origin of language.[58] The two principles driving linguistic change are what I call the principle of inertia (§§115,118), according to which humans tend to choose the easiest path to arrive at their goals, and the principle of alignment (§122), according to which humans by their nature are inclined to systematize, and thus seek to align utterances and meanings in such a way that similar meanings are expressed by similar utterances. (§§123–124)

Different linguistic communities develop different languages because they have distinct physical features and some will find certain sounds easier to produce than

others, so that, by the principle of inertia, they will then use the sounds they find easy to produce in the early stage of language development where phonemes are joined to ostension (§§117–118). Similarities between different languages are presumably simply due to similarities of human experience. As there are fewer distinct phonemes (*ḥurūf*) than meanings, humans began to combine phonemes that are gradually accepted in a linguistic community (§119).

In this early stage of language development, speakers begin to form concepts as follows (§§120–123). By pointing at something and accompanying it with the speech-sound communally accepted for it, and then pointing at a similar thing using the same speech-sound, a crucial step from referring to particulars toward a conception of universals is made. The community, or an individual, will continue to institute names for all meanings relevant for the necessities of life (§120).

Moving gradually from phenomena immediately accessible to perception to more abstract mental phenomena, at a certain point speech-sounds come to be instituted to signify actions (§121). With verbs at their disposition, it is supposedly at this point that the linguistic community acquires the ability to communicate APs (that is, beyond propositions only involving 1-place being and ostension, like pointing at a stone asking "Stone?"—and someone nodding, saying "Stone."). In the intermediary stage of language development, the existing vocabulary becomes increasingly systematized. The community begins to hierarchically organize universal terms into genera and species. As some speech-sounds signify meanings that are fixed and stable, but have changing accidents, they seek to reflect this in the forms of the utterances (§§123–127).

This is crucial, because I take this to refer to what the grammarians were to call *taṣrīf* and *ishtiqāq*. For example, the trilateral root BYḌ becomes instituted as *bayaḍ* to deictically refer to "this-white," then turning into the universal term "white." Gradually, new morphologies are derived to express changing accidents of the basic meaning. The root BYḌ and the meaning of "white" remain fixed. But with, e.g., *abyaḍḍa* (to whiten) or *bayāḍ* (whiteness), the changing accidents of the basic meaning are reflected by the changing intermittent sounds around the basic root consonants. Abstract terms ending in "*-iyya*" are formed by derivation, too, but may then be considered basic. Fārābī calls them *maṣadir*, not because they are grammatically infinitival forms, but because they come to be used to signify the source (*maṣdar*) meaning, abstracted from all changing accidents (*cf.* §83).

This process will at some point inevitably lead to ambiguity. Some utterances will be used for quite dissimilar meanings or different utterances for the same meaning, and homonymy and synonymy arise, followed by metonymy and metaphor. The mode of expression of the linguistic community is now rhetorical, increasingly developing the resources for poetic expression (§127). This is the beginning of the emergence of the practical syllogistic arts (Rhetoric, Poetry).

Language will increasingly be used to tell and orally transmit stories that matter to the linguistic community, until the tradition becomes too extensive to be memorized and writing is invented (§131). Subsequently the art of the knowledge of language begins to emerge (§132).[59] Then—and this I take to be a description of the emergence of Arabic grammar—people who inquire into utterances in the record will systematize them in terms of the similarities or differences they exhibit among one another (§136). Here, another crucial step is taken. To talk about the characteristics of utterances, new utterances to express these new meanings are required. These can be forged by either neologisms or metaphors (§136). Both are admissible and common practice, but Fārābī urges that it is best to use an existing utterance whose meaning is most similar to the new one (§136).

It will become clear that the utterances used to talk about utterances are utterances of second imposition, signifying secondary intelligibles. And this, as we shall see in the next chapter (see Texts 27–31), is precisely what Fārābī does by investing "*mawjūd*" with a new technical signification to express what he thinks the Greek *esti* expressed: the secondary intelligible of a predicative function. Fārābī has thus shown grammar its place in the development of the sciences.

Later, the community will gradually develop dialectical argumentation to validate their opinions (§140). They will come to distinguish sophistical from truly dialectical arguments and perfect the dialectical method. Fārābī thinks that this stage was reached in Greek civilization at the time of Plato (§142). The process continues until it reaches its goal, as it had with Aristotle: the method of demonstrative science in theoretical and practical philosophy (§143). The truths of philosophy are then taught by demonstrative proofs to the scholarly elite, and disseminated to the people in the more easily accessible guise of rhetorical or poetical discourse (§143).

Here, Fārābī puts the theologians into place. Only when the truths of philosophy are used to run a society can an excellently valid religion arise. If, however, religion arises before philosophy is perfected, it likely includes many false doctrines and will be corrupt (§§147–149). Both a religion and philosophy may be taken over from another society (§§149–152). It seems clear that Fārābī saw himself at the forefront of promulgating the already perfected philosophy of the Greeks to a society that had a religion before reaching philosophical perfection.

Fārābī's closing remarks connect his programmatic self-representation discussed above with his project of Linguistic Constructivism: "It is obvious that in every religion (*milla*) that is opposed to philosophy (*falsafa*), it is the discipline of theology (*kalām*) that opposes philosophy, the adherents of the former being pitted against the adherents of the latter, to the degree that the religion is opposed to philosophy" (157.1–3). To this statement, perhaps alluding to the *topos* of the "Byzantine fanatics," is appended a last chapter on coining and transferring names.

Fārābī offers a set of guidelines for the constructivist project—interestingly first framed by a scenario in which not philosophy is imported to a linguistic community, but religion—for how to proceed in cases when a certain philosophical

meaning has no equivalent in that linguistic culture (§154; §§155–158). If the technical meaning of a philosophical term in the source language is derived from an ordinary meaning, then the translator should use an equivalent term in the target language that has the same ordinary meaning and institute it as a technical term. If there is no such equivalent, either a similar term with an ordinary meaning may be instituted as a technical term, or a neologism may be forged. A neologism may be forged either by transliterating the foreign word, or by creating a new word in the target language. These guidelines read like a considered response to al-Sīrāfī's ridiculing of Peripatetic neologisms.

This technique is continuous with the historical process described by Linguistic Constructivism. You just need to agree on, or stipulate, a sign to be used for a certain meaning. Hence the same problem arises: new technical terms are then used homonymously, synonymously, or else by virtue of other similarities may be used ambiguously. This ambiguity arises between technical and ordinary meanings of words, but also within the technical terminology, and it is the task of the philosopher to disambiguate language to make it fit for demonstrative science.

All this I take to be a *prolegomenon* providing the theory of language needed to ground the claim that Aristotelian logic is not only the best but the only way to access meanings in such a way as to allow for the certainty resulting from demonstration. Parts 2/3 (Mahdi's 1/3) then put theory into practice and in an exemplary fashion disambiguate the meanings of the particles that are most important for Aristotelian philosophy. Part 2 itself deals with particles relevant to logic, mainly the particles used to ask about the categories, while Part 3 deals with particles used to ask the questions relevant to demonstrative science described in *APo* B 1–2.

The notion of derivation (*ishtiqāq*) is central to Part 2, and it is here spelled out in connection with terms of first and second imposition. Based on his historical account of word formation, Fārābī thinks that the morphologically simplest forms of the Arabic language, the simple substantive noun or the Form I *maṣdar* (verbal noun), historically were coined first and used to name substances. He calls them, likely a calque from the Greek, prototypes (*al-muthul al-ūlā*).[60] From those prototypes names and verbs that always name attributes and thus co-signify an indeterminate subject were derived.

The grammarian will classify those derived words, but the logician will have to determine where among all the expressions of a language (that the linguistic community has tried to make resemble their meanings, resulting in ambiguity) morphology goes against logical syntax. The logician has developed a vocabulary to talk about the things that signify substances and attributes in the way that concept-formation is described, a meta-language to describe the object-language, so to speak.

The vocabulary of the meta-language refers to secondary intelligibles that unlike primary intelligibles have no reference to anything outside the soul. Examples are "genus," "prototype," "noun," "verb," "copula." This, I think, is how Fārābī

conceives of his philosophical project. How, on that account, does Fārābī demarcate logic from Arabic grammar?

Grammar versus Logic

We have a treatise dedicated specifically to the difference between Aristotelian logic and Arabic grammar by Fārābī's younger contemporary and fellow student of Abū Bishr's, Yaḥyā ibn ʿAdī. It may have been redacted as a response to the debate between Abū Bishr and al-Sīrāfī.[61] In it, Ibn ʿAdī distinguishes the two disciplines along the same lines as his teacher Abū Bishr had done: grammar deals with the forms of linguistic signs of a particular language, while logic deals with meanings.

Fārābī did not write such a treatise, but the demarcation of logic from grammar features prominently in several of his works, notably in his *Iḥṣā' al-ʿulūm* (Enumeration of the Sciences).[62] Fārābī thinks that grammar deals with the rules for linguistic utterances insofar as they are manipulated in accordance with the arrangements and inflections peculiar to the practice of a particular linguistic community. Logic, in turn, deals with the rules for meanings insofar as they are expressed by linguistic utterances, or, which comes down to the same, with the rules for linguistic utterances insofar as they refer to meanings (17.5–7).[63]

This is slightly different from Abū Bishr's and Yaḥyā's claim: just like grammar, logic also deals with linguistic items, only from a different angle. And Fārābī was acutely aware that the grammatical rules of a particular language might be misleading with regard to the rules of logic. Whereas the rules of grammar are contingent on a given linguistic community, the rules of logic are universal (18.4–7).

In the case of simple predication, for example, a phenomenon common to all languages, this would mean that the grammarian investigates the issue only insofar as it arises in a particular language, whereas the logician investigates it insofar as it is common to all languages and as such a universal feature of thought (18.11ff.). Particular languages might differ in terms of the accuracy with which they reflect these universal features. It is therefore legitimate for the logician to turn to the grammarians, of different languages, if possible, for help in understanding these underlying features.

Much of Fārābī's philosophical project can be seen as an attempt to make conspicuous these traps of natural language, and he does turn to grammarians, Greek, Syriac, and Arabic, for help. Fārābī believes, for example, that the division of utterances into names, verbs, and particles is a feature common to all languages, reflecting a universal feature of thought; and it would seem that he thought the same of morphological derivation (*ishtiqāq*).[64] The use to which he puts this threefold division, and especially the role he assigns to the particles, as well as to the notion of morphological derivation (*ishtiqāq*), is however foreign to Aristotle. The theory should be seen as a result of the mutual influence between grammarians and logicians in the formative period of their respective disciplines, when fundamental classifications and the specific technical vocabularies were being developed.[65]

As Karimullah has convincingly argued, Fārābī held that the subject-matter of logic was primary intelligibles, and the most general of those, which Karimullah identifies with the ten categories.[66] On that picture, the logician is concerned with those utterances which signify intelligibles that have arisen from likenesses in the soul of things in the extramental world. These intelligibles are universals, abstracted from the experience of several similar *concreta*, as described by Linguistic Constructivism.

Of those, the most general are of the greatest importance to the logician: these most general intelligibles are the categories. This explains why Fārābī in the *KḤ* belabors the particles with which you ask about the categories. Secondary intelligibles, i.e., those that are true of first intelligibles, but not of anything in the extramental world, are those that the logician needs to use in order to describe the properties of and rules for combining first intelligibles. The utterances with which these secondary intelligibles are signified, e.g., "name," "statement-word," "universal," "copula," are the logician's vocabulary. And many of those are discussed in the *DI*.

SUMMARY

In the historical context of the translation movement, Fārābī saw himself as constructing a framework in Arabic with which Aristotelian logic could be imported to his own Arabo-Islamic civilization. A firm grasp of the demonstrative method would ensure a just and good society based on certain knowledge of philosophical truths. Casting his own philosophical project within his historical account of scientific progress, Fārābī ties his theory of the development of language and science to his own work as a logician engaged in Linguistic Constructivism. Under the pressure of theologians and grammarians he clearly demarcates logic from grammar in a way that ensures the universal applicability of the former—on the grounds that it deals with certain utterances insofar as they signify the most general first intelligibles, namely, the categories—whereas the latter has the parochial character of a specialized science only applicable within a given linguistic community.

At the same time, Fārābī engaged in what we may call a project of linguistic archaeology. By analyzing language from the standpoint of its historical formation, Fārābī sought to unravel the ambiguities of linguistic signs. That required making two fundamental distinctions. One with regard to the morphology of Arabic words (prototypal/derivative) and the other with regard to intelligibles (primary/secondary intelligibles). The prime example of a meaning for which Arabic had no ready equivalent, much less a linguistic sign, was the meaning expressed by the copula as discussed by the Greek commentators. Fārābī institutes "*mawjūd*" as a technical term, signifying the secondary intelligible of a predicative relation. But more than any other, this word was misleading on account of its morphology.