

Al-Farabi on Meno's Paradox
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The paradox of inquiry--also known as Meno's paradox--is one of the most well-known epistemological puzzles in the history of Western philosophy. First introduced by the character in Plato's eponymous dialogue the *Meno*,¹ and alluded to by Aristotle in both the *Prior* and *Posterior Analytics*,² the paradox also garnered the attention of medieval Arabic philosophers, including al-Farabi. Farabi discusses Meno's paradox in three different contexts: (1) first, in the accounts of Plato's philosophy provided in the *Philosophy of Plato (Falsafah Aflatun)* and the *Harmony of the Two Sages (Kitab al-jam')*; (2) second, in his *Book on Demonstration (Kitab al-burhan)*, the part of his *Epitome of the Organon* corresponding to Aristotle's *Posterior Analytics*; and (3) third, in a lengthy discussion in the surviving portion of his *Long Commentary on the Prior Analytics (Sharh al-qiyas)*.³ In this paper I will examine the strategy that Farabi

¹ See Plato, *Meno* 80d-86c, especially 80de: 'M: How will you look for it, Socrates, when you do not know at all what it is? How will you aim to search for something you do not know at all? If you should meet with it, how will you know that this is the thing that you did not know? S: I know what you want to say, Meno. Do you realize what a debater's argument you are bringing up, that a man cannot search either for what he knows or for what he does not know. He cannot search for what he knows—since he knows it, there is no need to search—nor for what he does not know, for he does not know what to look for.' Translation in G. M. A. Grube, *Plato: Five Dialogues*, Indianapolis 1981, p. 69.

² See Aristotle, *Posterior Analytics* 1.1, 71a1-b8, esp. 71a30-31: 'Otherwise the puzzle in the *Meno* will result; for you will learn either nothing or what you know.' Translation by J. Barnes, Aristotle's *Posterior Analytics*, Oxford, 1975, p. 2; *Prior Analytics* 2.21, 67a21-b27, esp. a27-30: 'And the argument in the *Meno* that learning is being reminded is similar: for it never results that people know the particular in advance, but rather that they get the knowledge of the particulars at the same time, by means of the induction, like those who recognize. For there are some things which we know right away...' Translation by Robin Smith, *Aristotle: Prior Analytics*, Indianapolis, 1989, p. 96.

³ See *Kitab al-burhan*, ed. M. Fakhry, in vol. 4 of *Al-Mantiq 'inda al-Farabi*,

adopts in response to Meno's paradox in the first two texts, with a view to determining its role in Farabi's epistemology in general, and in his interpretation of the theory of demonstration in particular. I hope to return to the discussion in the *Prior Analytics* commentary in a later study.

Meno's Paradox in Farabi's 'Platonic' Texts

In his summary of the *Meno* in the *Philosophy of Plato*, Farabi identifies the dialogue as an epistemological work, closely associated with the *Theaetetus* and *Protagoras*. In those two dialogues, according to Farabi, Plato establishes the possibility of knowledge in an absolute sense by defeating Protagorean relativism and scepticism, and in the *Meno* he takes up the question of whether and how such knowledge might be attained by us:

For [Meno] claimed that investigation, instruction, and study (*fahs*, *ta'lim*, *ta'allum*) are futile, useless, and do not lead to knowledge; that a human being either knows a thing, not through investigation, instruction, or study, but by nature and chance (*bi-tib' wa-al-ittifaq*); or he does not know it. What is unknown cannot become known either by investigation or by study or by inference (*bi-al-istinbat*); and the unknown remains unknown forever, despite what the protagonists of investigation assert ...⁴

Farabi's Plato resolves the paradox of inquiry by showing that knowledge is attainable 'by means of a technical capacity through which investigation proceeds' (*bi-quwwah sina'iyah yakunu bi-ha dhalika al-fahs*).⁵ The pivotal role that the

Beirut, 1987 (the discussion of Meno's paradox begins on p. 79); *Sharh al-qiyas*, ed. M. T. Daneshpazuh, in vol. 2 of *Al-Mantiqiyat li-l-Farabi*, Qum, 1987, pp. 454-494. For the Platonic texts, see *Falsafah Aflatun*, ed. R. Walzer, London 1943, pp. 5-6; English translation by M. Mahdi in *Alfarabi's Philosophy of Plato and Aristotle*, Ithaca, New York, 1962, p.55; and *Kitab al-jam' bayna ra'yay al-hakimayn Aflatun al-ilahiy wa-Aristutalis*, ed. and trans. (French) F. M. Najjar and D. Mallet, in *L'harmonie entre les opinions de Platon et d'Aristote*, Damascus, 1999; §§ 47-52, pp. 116-127; English translation in C.E. Butterworth, *Alfarabi: The Political Writings*, Ithaca and London, 2001, pp. 150-53.

⁴ *Philosophy of Plato*, p. 5; Mahdi (modified), p. 55.

⁵ *Ibid.*, p. 6 (my translation).

doctrine of recollection plays in the Platonic resolution of the paradox is not mentioned here at all. Instead, **Farabi** suggests that for Plato successful inquiry requires the construction of a rule-governed art which provides techniques and methods for discovering the truth--a view that echoes the one adopted by **Farabi** himself in the *Demonstration*, according to which the methods embodied in the Aristotelian syllogistic arts ultimately provide the means for a resolution to the paradox of inquiry.

In contrast to the *Philosophy of Plato*, the *Harmony* contains a discussion of Meno's paradox which attempts to show that the Platonic doctrine of recollection, detailed in the *Phaedo* and *Meno*, is not inimical to Aristotelian empiricism. In this text **Farabi** presents a clear summary of the paradox, and then he proceeds to sketch his understanding of the ensuing attempt to resolve it:

Similarly, in his book known as the *Meno*, he expresses the doubt Aristotle recounts in the *Posterior Analytics* about anyone seeking knowledge inevitably doing so in one of two ways: he is seeking either what he is ignorant of or what he knows. If he is seeking what he is ignorant of, how will he be certain that his knowledge, when he does come to know, is what he is seeking? And if he already knows it, his quest for additional knowledge is superfluous and unnecessary.⁶

As was the case in his discussion of the *Meno* in the *Philosophy of Plato*, here again **Farabi** shows no awareness of the dialogue's original question regarding virtue, nor of the episode in which Socrates questions the slave-boy. Instead, **Farabi** conflates the episode in the *Meno* in which Socrates attempts to draw out the slave-boy's understanding of the Pythagorean theorem with the discussion between Simmias and Socrates in the *Phaedo* over how one determines whether a particular piece of wood is equal or unequal by attempting to match the wood to the pre-existing notions of equality and inequality within the soul.⁷

The account of recollection which **Farabi** proceeds to offer in the *Harmony* is a rather weak one, clearly tailored to the purpose of reconciling Plato with Aristotle. Most notably, **Farabi** downplays the role that recollection plays in the Platonic proofs

⁶ *Harmony*, §47, p. 117; Butterworth, p. 150.

⁷ *Phaedo* 73c-77c.

for the soul's immortality. While **Farabi** acknowledges that Plato's focus is psychological whereas Aristotle's is logical and epistemological,⁸ he also insists, somewhat anachronistically, that Plato himself makes no claim to offer a 'demonstration' (*burhan*) of the soul's immortality in these texts. At best the dialogue offers the reader 'signs and indications' (*'alamat wa-dala'il*) which do not rise to the level of scientific, philosophical rigour.⁹ By the same token, **Farabi** also accords the theory of recollection a very limited role in defeating the paradox of inquiry. Recollection ends up being nothing but Plato's more colourful version of the view expressed by Aristotle in the opening lines of the *Posterior Analytics*, that 'all instruction (*ta'lim*) and all learning proceed only from previously existent knowledge (*ma'rifah*).'¹⁰

⁸ See *Harmony*, §52, p. 127; Butterworth, p. 153 (modified): 'There is, however, this difference between the two positions. That is, the sage Aristotle mentions this when he wants to clarify the nature of knowing (*amr al-'alim*) and the syllogism (*qiyas*), whereas Plato mentions what he mentions when he wants to clarify the nature of the soul (*amr al-nafs*).'

⁹ *Ibid.*, §48, p. 119; Butterworth p. 151. **Farabi** also notes that Plato is simply 'relating these things "of" or "from" ('*an*) Socrates.' Butterworth interprets this to mean that Plato is not reporting his own views, but only recounting a story about Socrates' views and practices, since he translates '*an Saqrat*' as 'on Socrates' authority' (p. 151). Yet this reading seems a bit strong. While **Farabi** is clearly trying to distance Plato from accepting any proofs of immortality as apodictic, there is no evidence that he believes Plato is merely deferring to Socrates. Rather, **Farabi** seems to accept that the arguments in the *Phaedo* and *Meno* do indicate something legitimate about the soul's knowledge, even if they are unable to serve as self-standing proofs of its immortality. Thus the more neutral rendering of the French translation by Najjar-Mallet is perhaps preferable here: 'Platon rapporte seulement cela de Socrate' (p. 118).

¹⁰ Aristotle, *Al-Burhan* (Arabic version of the *Posterior Analytics*), ed. A. R. Badawi, in vol. 3 of *Mantiq Aristu* (*Aristotle's Logic*, Arabic version of the *Organon*), Beirut and Kuwait, 1970, p. 329. The Aristotelianizing of the paradox of inquiry is evident in **Farabi**'s very formulation of it as a problem about 'the condition for

The Aristotelian tenor of the solution to Meno's paradox presented in the *Harmony* is evident in **Farabi's** emphasis on the process by which the soul acquires intelligibles from its experience of particulars, in accordance with the accounts of *Posterior Analytics* 2.19 and *Metaphysics* 1.1. Though **Farabi** claims that Plato and Aristotle are in agreement on the core issues, it is clear that Platonic reminiscence offers only a partial solution to Meno's paradox in **Farabi's** eyes because it fails to address the ultimate origins of human knowledge, a lacuna that these Aristotelian accounts attempt to fill.

According to **Farabi**, then, Plato holds that there are 'things'-- **Farabi** is initially very vague about their ontological status--such as 'equality' and 'inequality', that are already existent in the soul of the inquirer. Recollection is the process that is triggered when a person senses some object, such as a piece of wood, and that act of sensation causes her either: (1) to recognize the similarity (*shabih*) between the sensed object and something in the soul (e.g., equality); or (2) to recognize that the nature and state (*amr; hal*) of the sensed object are conjoined or attached to one of a pair of opposites pre-existing in the soul ($p \vee \sim p$, e.g. equality or inequality).¹¹ Because what I am looking for is already existent in my soul, I will recognize it as soon as I encounter a new sensible object that resembles it.¹² On **Farabi's** account of Platonic recollection, then, what is in the soul is 'prior' to what is sensed not only temporally (equality is

knowledge and *the primary premises* to come about.' See *Harmony*, §48, p. 121 (my translation; emphasis added).

¹¹ **Farabi's** understanding of the nature of inquiry here seems to be influenced not only by the examples in Plato's *Phaedo* (which, as was noted above, is conflated with the *Meno*), but also to reflect the standard Arabic construal of the goal of syllogistic reasoning, in which the conclusion or object sought (*al-matlub*) is the discovery of which disjunct of a contradictory pair, $p \vee \sim p$, is true of a subject, *S*, that is under investigation.

¹² See *Harmony*, §47, pp. 117-119; Butterworth p. 150: 'That is, equality exists in the soul, and when a human being senses the equal—like a piece of wood or anything else equal to something else—he recollects the equality that is in his soul and thus knows that this equal is only equal due to an equality similar to that existing in the soul.'

already present in the soul before one senses it in the piece of wood),¹³ but also causally and epistemically. **Farabi** speaks of one knowing (*fa-‘alima*) that this equal thing is equal only because of its resemblance (*shabihah*) to the equality in the soul.¹⁴ In this way, Meno’s paradox is resolved.

One striking feature of **Farabi**’s account of the Platonic theory of recollection in the foregoing text is the limited explanatory function that recollection seems to play. **Farabi** is noncommittal on a number of key features of the theory: in addition to his reticence regarding the ramifications of recollection for the pre-existence and immortality of the soul, **Farabi** also says very little about the nature and status of the pre-existent ‘things’ in the soul, or about how these things came to be in the soul in the first place. Most notably, **Farabi** says nothing about whether the theory of recollection commits one to, or even supports, any form of innatism. Platonic reminiscence as here understood is only of limited epistemological value, and as a weapon against the paradox of inquiry it is rather ineffectual. In the *Philosophy of Plato*, as we’ve seen, **Farabi** reads Meno’s paradox as insinuating that knowledge only comes about ‘by nature’ or ‘by chance.’ Recollection may arm Meno’s adversary against the claim that knowledge only comes about ‘by chance’; but it does little to address the claim that we possess knowledge ‘by nature.’

To address that part of Meno’s challenge, any recourse to innate ideas must also be rejected, a strategy that can only be accomplished through appealing to the Aristotelian thesis of the empirical origins of *all* knowledge. In turning to Aristotle, then, **Farabi** takes a step back from Plato, since the Aristotelian equivalent of Platonic recollection forms the *second* stage of the Aristotelian response to the paradox of inquiry. The first stage, absent in Plato, is Aristotle’s account of how the absolutely first principles of knowledge arise. **Farabi** begins by reminding us that a basic tenet of Aristotelian psychology--the identification of the human intellect as essentially potential--blocks all appeals to innate knowledge. *Prima facie*, then, Aristotle seems

¹³ Ibid., §47, p. 119: ‘Whoever seeks knowledge of something only seeks, in another thing, what had already existed in his soul as realized (*‘ala tahsil*). ... When he finds one of them, it is as though he has recollected what was existing (*mawjudan*) in his soul.’

¹⁴ Ibid., §47, p. 117.

to face a more pressing problem in responding to Meno than does Plato, since he concedes that all new learning depends upon prior understanding, while denying that there is any inborn knowledge to which the knowledge we acquire is ultimately reducible.¹⁵ The Aristotelian solution, of course, is that in place of actually innate knowledge, human beings are born with an innate intellectual capacity for acquiring knowledge, while being endowed at the same time with sense organs to serve as instruments aiding the intellect in its operations.

While none of this is especially novel, **Farabi**'s emphasis in what follows on the empirical origins of all knowledge is noteworthy. **Farabi** argues that universals are 'in reality' ('*ala al-haqiqah*) experiences, despite the popular tendency to treat only one subclass of universals--those which we acquire consciously or 'intentionally' ('*an qasad*)--as equivalent to 'experience' (*al-tajribah*):¹⁶

So we say that it is evidently clear that the infant has a soul that is knowing in potency, and that it has senses as instruments of perception (*idrak*). And the perception of the senses is only of particulars, whereas from particulars universals arise--universals being in reality experiences. But among experiences there are those which arise intentionally, and those which arise unintentionally. And it's the custom of the masses to call those universals

¹⁵ Or more accurately, Aristotle actually faces this problem explicitly; as **Farabi** presents Plato here, he does not so much escape this difficulty as simply fail to engage it.

¹⁶ **Farabi** himself treats empirical propositions in the strict sense as a special class of intelligibles distinct from the primaries (see *Demonstration*, pp. 23-25). His point here does not contradict this more refined distinction, however. All he wishes to indicate in the present context is that even our knowledge of first principles depends in some way upon sensation, and is to that extent empirical--as *Posterior Analytics* 2.19 explains. For discussions of empirical knowledge in **Farabi** and other Arabic philosophers, see P. Adamson, 'Knowledge of Universals and Particulars in the Baghdad School', forthcoming in *Documenti e studi sulla tradizione filosofica medievale*; and J. McGinnis, 'Scientific Methodologies in Medieval Islam', *Journal of the History of Philosophy* 41, 2003, pp. 307-27.

which arise from a prior intention ‘experiences.’¹⁷

Farabi identifies the first principles of demonstration with the universals that we acquire ‘unintentionally’ (*la ‘an qasad*), and he notes that because these principles arise in us without any conscious effort or awareness on our part, their empirical character is often overlooked:

When cognitions arise in the soul only unintentionally and at the outset, the human being does not *remember* the time when any part of them arose. Most people thus suppose that they have always been in the soul and that there is a way to knowledge other than through the senses.¹⁸

Recollection, then, is unable to play any role in explaining our acquisition of first principles. Yet **Farabi** argues that it is equally mistaken to take our lack of awareness and memory as an indication of the *innateness* of first principles. The principle that all knowledge originates in the senses admits of no exceptions, to such an extent that **Farabi** is willing to declare that ‘understanding (*‘aql*) is nothing but experiences. And whenever these experiences multiply, the more complete in understanding is the soul.’¹⁹

¹⁷ *Harmony*, §49, p. 121; Butterworth, pp. 150-51, modified. Distinguishing between experience and first principles on the basis of the presence or absence of an intentional effort on the part of the knower reflects a general view among the *falasifah* that first principles are acquired without our being aware of when and how they arise. **Farabi** repeats this distinction in his discussion of the differences between natural and empirical propositions in *Demonstration*, p. 23 (cf. n. 16 above). The same point is later echoed by Averroes when he uses the labels ‘natural’ and ‘voluntary’ to differentiate primary from secondary intelligibles in his *Long commentary on the ‘De anima.’* See *Averrois Cordubensis Commentarium magnum in Aristotelis De anima libros*, ed. F. S. Crawford, Cambridge, Mass., p. 496.

¹⁸ *Harmony*, §50, p. 123; Butterworth, p. 152, modified; (emphasis added).

¹⁹ *Ibid.*, §50, p. 123; Butterworth, p. 152, modified. In the last sentence **Farabi** refers to the traditional idea that the habitual intellect becomes more perfect the more intelligibles it amasses, until it finally attains the stage of the acquired intellect. See, for example, *Risalah fi al-‘aql (Treatise on the Intellect)*, ed. M. Bouyges, Beirut, 1948, pp. 16-20; English translation in A. Hyman and J. J. Walsh, eds., *Philosophy in*

The first prong of the Aristotelian response to Meno's paradox, then, is to affirm and clarify the dictum that *all* knowledge, not only that which is obviously empirical, but even the understanding of first principles, depends upon prior acts of sense cognition.²⁰ It is a response that has no parallel in **Farabi's** account of Plato. The harmony between the two philosophers on this matter only becomes evident once we consider the intellect *after* it has already been actualized through the spontaneous acquisition of principles and is able to seek new knowledge voluntarily. On this point, **Farabi** presents Aristotle as being in general agreement with Plato that inquiry will involve a process whereby the learner attempts to associate the properties of a newly-encountered object with concepts that she has previously acquired:²¹

Then whenever a human being intends to know (*qasada li-ma'rifah*) something and wishes to grasp one of its states (*wuquf 'ala hal min al-ahwal*), he undertakes to associate (*ilhaq*) this thing in this state with what he was previously acquainted with. And this is nothing but seeking what is existent in the soul concerning this thing. For example, whenever he yearns to know

the Middle Ages: The Christian, Islamic, and Jewish Traditions, 2d ed. Indianapolis, 1973, pp. 216-217.

²⁰ *Harmony*, §50, p. 123: *Fa-al-ma'arif innama tuhsilu fi al-nafs min tariq al-hiss* ('Knowledge only arises in the soul by way of sensation'). A somewhat different perspective on the distinction between innate and empirical knowledge in **Farabi** against the backdrop of the later Greek philosophical tradition is provided by P. Vallat in *Farabi et l'école d'Alexandrie: Des prémisses de connaissance à la philosophie politique*, Paris, 2004, pp. 207-238. Vallat concludes that **Farabi's** view attempts to combine empiricism and innatism into a single theory of knowledge (p. 237), a position not entirely at odds with the one I have taken here. I differ from Vallat in my interpretation of **Farabi's** use of innatist terms such as *gharizah*, *fittrah*, and their cognates, and in my understanding of exactly what **Farabi** includes under the category of primary knowledge. It is, however, beyond the scope of the present article to address these issues.

²¹ Here **Farabi** repeats the vocabulary used in his account of Platonic recollection, namely, 'associating' or 'attaching' (*ilhaq*) the state of the newly encountered object with its match in the soul.

whether a certain thing is living or not living, and the meaning (*ma‘nan*) of living and not living has previously arisen in his soul, he seeks one of the two meanings by means of his mind, his senses, or both together.²²

In contrast with the account of Platonic recollection, in which the mental contents to be recollected were left unlabelled, **Farabi** now refers to them as ‘meanings’ ‘ideas’, or ‘intentions’. Learning occurs whenever an inquirer encounters sensible ‘indications, signs, and meanings’ (*dala‘il wa-‘alamat wa-ma‘anin*) in the course of her investigation which point to mental contents that she has previously learned, a process which **Farabi** compares with what happens when the sensible characteristics of some physical object remind us of something with which we had previously been acquainted but have since forgotten.²³ The terminology **Farabi** chooses here is significant--presumably both the qualities that we encounter through sensation and the things in the mind which they recall can be called ‘meanings’, since the matching-up process that learning involves requires some similarity, if not identity, between the

²² *Harmony*, §50, p. 123; Butterworth p. 152, modified.

²³ This analogy to the process whereby we recognize a sensible individual whom we have forgotten on the basis of accidental qualities which serves as mnemonic signs is evocative of the illustration of Meno’s paradox found in Themistius’ paraphrase of the *Posterior Analytics*, cited by both Avicenna and Averroes in their commentaries on Aristotle. Plato’s slave boy, the subject of Socrates’ questioning, is transformed by Themistius into the example of a ‘fugitive slave’ who can be recognized on the basis of his physical description even by those who have never seen him before. While the Arabic version of the Themistius paraphrase does not survive, there is an edition of Gerard of Cremona’s medieval Latin translation from the Arabic by J. R. O’Donnell in ‘Themistius’ *Paraphrasis* of the *Posterior Analytics* in Gerard of Cremona’s Translation’, *Mediaeval Studies* 20, 1958, pp. 239–315. Meno’s paradox, with the example of the *servus fugiens*, occurs on pp. 246-47. For the ‘*abd abiq*’ in Avicenna, see *Al-Shifa’: al-Burhan (Healing: Demonstration)*, ed. A. E. Affifi and I. Madkour, Cairo, 1956, pp. 74-76; in Averroes, see *Talkhis kitab al-burhan (Middle Commentary on the Posterior Analytics)*, ed. M. M. Kassem, C. E. Butterworth, and A. A. Haridi, Cairo, 1982, p. 36. Unlike his successors, **Farabi** does cite Themistius in his exposition of Meno’s paradox in the *Posterior Analytics*.

two orders. To the extent that there is some order of priority between the sensible and mental instances of such properties, at least in the process of learning, sensibles may also be viewed as ‘signs’ or ‘indications’ of the contents of the mind.²⁴ So the process of inquiry is a joint effort of the mind (*dhihn*) and sensation (*hiss*), one which terminates in the seeker’s ‘coming to rest’ in the matching idea (*sukun ‘inda-hu*). In this way, Aristotle’s account of how we apply previously acquired concepts in our efforts to understand the nature and characteristics of what we encounter is exactly what Plato means by ‘recollection’:

If he finds it, he comes to rest, feels assured, and delights in being released from the pain of perplexity and ignorance. This is what the sage Plato says, namely, learning is recollection. For learning is but undertaking to know (*takalluf al-‘ilm*), and recollection undertaking to remember (*takalluf al-dhikr*). And the yearning seeker is someone with a certain undertaking. Accordingly, whenever he finds indications, signs, and meanings of what was previously in his soul in what he intends to know, it is as though he recollects it at that point.²⁵

It is hard not to be struck by the echoes of *kalam* terminology in **Farabi**’s presentation of the recollective aspect of learning on which Plato and Aristotle purportedly agree. **Farabi** echoes the *kalam* vocabulary for analogical reasoning in his description of the method of recollecting (*dalil; ‘alamah*) and he refers to the recognition in which recollection terminates as a kind of ‘quietude’, evoking the theological account of assent as *sukun al-nafs*. It seems unlikely that these echoes are merely accidental--both suggest terminology that is generally appropriated by the *falasifah* to describe *rhetorical* modes of inference and the cognitive states that they produce. Through the use of such vocabulary, **Farabi** would appear to be suggesting that while Plato and Aristotle agree that something like recollection provides a broad solution to Meno’s paradox, the technique of matching one’s new and current

²⁴ I have rendered *dalil* here as ‘indication’ rather than ‘proof’, even though it is likely that **Farabi** at least partly intends to refer to inferential processes using signs. Still, what **Farabi** describes here suggests more broadly any perceptual activity upon which subsequent proofs depend, rather than the inferential processes themselves.

²⁵ *Harmony*, §§50-51, pp. 123-125; Butterworth, p. 152, modified.

perceptions to those already present in the soul provides nothing like a comprehensive response to the paradox of inquiry. While such techniques explain how we might be able to acquire new ‘knowledge’ in the weak sense that we are able to subsume new particular items under the universals we have already grasped, nothing in the account of recollection that is common to Plato and Aristotle addresses the origins of new knowledge in the strong sense of the term--that is, as necessary, universal, certain, and immutable cognition. It appears, then, that not only does the doctrine of recollection lack a non-innatist explanation of the origin of primary cognitions that can meet the paradox’s challenge; its account of the acquisition of secondary, intentional cognitions also falls far short of explaining more obviously empirical forms of knowledge. Indeed, upon closer examination, recollection as understood by **Farabi** does not appear to supply any account of how we acquire universals, be they spontaneous or voluntary, and hence, it is not really an account of the origins of *knowledge* at all.

At the end of his discussion of recollection, **Farabi** adds some further observations on the degree to which the intellect is able to surpass the senses in its operations. At first reading these remarks do not seem apposite. **Farabi**’s intention, however, may be to forestall the obvious objection to the anti-innatist, strongly empirical stance he has just taken on the origins of knowledge. For one might worry that on **Farabi**’s account, it is hard to see in what sense the intellect is superior to the senses: Meno’s paradox is resolved by appealing to the idea that the intellect is a disposition naturally able to acquire new knowledge by employing the senses as its instruments. Everything that is in the intellect thus depends in a radical way upon the prior activity of the senses. **Farabi**, in fact, exacerbates this impression by declaring that the intellect ‘has no proper activity without sensation’ (*wa-laysa li-l-‘aql fi’l yakhassu bi-hi duna al-hiss*). He adds the following exceptions, however: the intellect is able to make comparisons and recognize similarities, and ‘to suppose the states of the existents to be other than what they are’ (*‘ala ghayr ma hiya ‘alay-hi*).²⁶ That is, the intellect is able capable of engaging in abstractive thought, forming judgements, and performing acts of counterfactual reasoning. While all of these activities still depend on the senses to provide their raw materials, they also allow the intellect to gain new items of

²⁶ Ibid., §51, p. 125.

knowledge that are not directly transmitted by the senses. In this way, then, they indicate that there is a special form of cognitive freedom and spontaneity peculiar to the intellect alone:

Intellect, without the senses, has no function peculiar to it except for the apprehension (*idrak*) of what is similar and [the ability to] suppose that the conditions of existents are different from what they are. For the senses perceive the state of the conjoined being (*al-mawjud al-mujtima*)²⁷ as conjoined, and the state of the separate being as separate, that of an ugly existent as ugly and of a beautiful one as beautiful, and so on. The intellect, on the other hand, perceives of the state of every existent as sensation perceives it, as well as its opposite (*didd-hu*). So it perceives the state of conjoined existents as conjoined and as separated as well, and the state of separate existents as both separate and conjoined. And so on with similar things.²⁷

In the context of **Farabi**'s efforts to resolve Meno's paradox, then, this passage seems to reinforce **Farabi**'s absolute commitment to the empirical origins of all knowledge. Since all knowledge originates in the senses, Meno's paradox can be addressed through an epistemic 'descent' that terminates in the inquirer's awareness of the particulars she encounters through the senses. There are no innate intelligibles to which we can or need appeal, despite what the terminology of 'recollection' might suggest. Nonetheless, the Aristotelian resolution of the paradox of inquiry through an appeal to sense experience does not jeopardize the distinctive status of intellectual knowledge, since the special disposition that comprises the material intellect permits it to manipulate sense impressions in ways that are truly ampliative and productive of new forms of knowledge. To this extent, the **Farabian** response to Meno's paradox here may even be overdetermined. Meno worries about our ability to recognize what we are seeking if we do not already know it; that challenge is met by the limited Platonic account of recollection, which explains in what sense we can be said to know in advance the objects we are seeking. But that Platonic account, as I have observed, says little about our ability to go beyond what we've already encountered in our prior experiences--especially when Platonic recollection has been stripped of its innatist trappings. The **Farabian** response, by contrast, points out that once the intellect has

²⁷ Ibid., §51, p. 125; Butterworth, p. 153, modified.

accumulated a store of intelligibles through experience, it is able to acquire knowledge of things that it has not and perhaps cannot encounter in the external world. This is a scenario of epistemic optimism that Meno's paradox, in its traditional formulation, does not even begin to envisage.

Meno's Paradox in the Book of Demonstration

In his epitome of the *Posterior Analytics*, Farabi presents a solution to Meno's paradox that is more attuned to logical concerns, where the problem is framed as one about the possibility of instruction (*ta'lim*), and the solution is based on the distinction between the mental acts of conceptualization (*tasawwur*) and assent (*tasdiq*) that is at the core of medieval Islamic logic.²⁸ In this text Farabi's treatment of the paradox of inquiry is prefaced by an extensive discussion of how genuine instruction differs from analogous activities, such as habituation, technical education, and the training of non-human animals. Only those forms of teaching whose sole aim is to produce purely theoretical knowledge (*'ilm*) are worthy of the label, 'instruction'.²⁹

And the instruction from which unqualified knowledge arises only occurs through speech (*mukhatabah*) and what takes the place of speech. Speech includes that which makes actually present in the mind of the hearer something which he knew before. For a thing may be in a human mind in only one of two ways: either potentially or actually. And by 'potentially' I mean proximate potency, such as one's capacity to write or to speak or to consider a thing whenever one wishes, without there being any impediment at all to one's ability. And its being in actuality is for one to see the image of the thing (*khayal al-shay'*) impressed in his soul. And some speeches are intended to

²⁸ While Aristotle's remark that all instruction presupposes prior understanding occurs in the very first line of the *Posterior Analytics*, Farabi himself does not take up the theme of instruction until the fifth and final chapter of his epitome (*Demonstration*, p. 77).

²⁹ *Demonstration*, pp. 78-79. Farabi considers rationality a necessary condition for instruction (*ta'lim*), so animals cannot be instructed in the proper sense of the term. The specific example he uses to make this point is training a parrot to talk. As far as instruction in moral matters (*akhlaqiyah*) is concerned, Farabi suggests the proper label to use here is 'education' (*ta'diban*).

make the thing which is in the mind of the hearer in proximate potency come to be present in actuality. But this sort of speech is not instruction; rather, its name is either 'reporting' or 'reminding' (*tadhkir*) or something close to these expressions.³⁰

It is interesting to note the implicit reference to Platonic recollection at the end of this passage, especially the reluctance to treat recollection as a full-blown form of instruction on the grounds that it merely brings forth for actual consideration an intelligible that has already been learned. While the stance here is somewhat more negative than that taken in the *Harmony*, both texts suggest that **Farabi** views recollection as an inadequate and incomplete response to Meno's paradox, whose relevance to the problem of instruction **Farabi** proceeds to explain as follows:

And one type of speech is that by which it is intended that there arise in the mind of the hearer knowledge (*ma'rifah*) which he did not have before, either in complete actuality or in proximate potency. And instruction is included under this type of speech. And Meno had doubts [about this], so he employed a syllogism from which it followed necessarily that the knowledge of the thing at whose knowledge the instruction was aimed had in some respect arisen in the learner before he had learned, while he was also ignorant of it in some other respect. And Meno doubted that this was the case, namely, that there is any learner of anything--for either he knows it [already] or he is ignorant of it. But if he knows it he has no need to begin anew the inquiry into what he already knows; and if he is ignorant of it, then how can he seek what he does not know despite this? For if he happens to hit upon it, he will not be aware that what he has hit upon is what he was previously seeking. And whenever either one of these two extremes of this doubt is conceded, it paralyzes him.³¹

Farabi then urges that an adequate solution to Meno's paradox cannot be offered without a more precise examination of the goal at which inquiry aims. The paradox of inquiry will therefore require distinct resolutions corresponding to the different types of knowledge which instruction seeks to produce. This is a fundamental principle overlooked by Meno, one which **Farabi** will attempt to remedy by framing his own

³⁰ *Demonstration*, pp. 78-79.

³¹ *Ibid.*, p. 79.

response in terms of the epistemological distinction between conceptualization and assent (*tasawwur* and *tasdiq*):³²

And knowledge (*ma‘rifah*) includes conceptualization (*tasawwur*) and assent (*tasdiq*). So if the conceptualization of something is intended by instruction, then it is necessary for this thing to have been conceptualized in some way before, whereas another representation (*khayal*) was unknown. It is also necessary that one will in some way have assented before to that which is intended to produce assent. But Meno’s paradox did not distinguish between conceptualization and assent. For what is necessarily required in the case of what intends to cause assent to occur is that it have been conceptualized [before].³³

Since any new inquiry on which we embark can be aimed at the acquisition of either a new concept or a new belief, we must determine what sorts of preconditions must be met in each case, since it is possible that those conditions may vary between conceptualization and assent. The possibilities that must be considered are three: (1) that every new conceptualization requires a prior conceptualization; (2) that every

³² Initially one might suppose that the appeal to the conceptualization-assent distinction is an attempt to systematize Aristotle’s division of the types of pre-existent knowledge into knowledge of the meaning of a term (*legomenon*), and knowledge of existence or the fact under investigation (see *Posterior Analytics* 1.1, 71a12-17). But **Farabi** discusses both knowledge of meaning and knowledge of existence under the rubric of conceptualization. Nor can I see any obvious explanation in the Arabic version of the *Posterior Analytics* to account for **Farabi**’s emphasis on the *tasawwur-tasdiq* distinction. While the verbs *tasawwara* and *yusaddiqu* are both used in the course of this discussion (*Mantiq Aristu: Burhan*, p. 330, ll.13, 15), they do not seem to map on to the distinction between knowledge of the fact and knowledge of the meaning of a word. The Arabic Aristotle speaks of *conceptualizing* that the thing is *existent* (*mawjudah*), and of *assenting* to either an affirmation or a negation, both of which fall under pre-existent knowledge of the fact. After **Farabi**, the appeal to this distinction reappears as part of both Avicenna’s and Averroes’ resolutions of Meno’s paradox.

³³ *Demonstration*, p. 79.

new assent requires a prior conceptualization; and (3) that every new assent requires a prior assent.³⁴ Yet **Farabi** does not proceed directly to the consideration of these three possibilities. While the ensuing discussion is rather difficult to follow, and its overall purpose and direction is often unclear, what **Farabi** seems to be up to is the following. First he offers a more dialectical and general solution to the paradox of inquiry, in which he attempts to address possible objections--first in the case of conceptualization, then in the case of assent--to the fundamental thesis that all instruction rests upon some prior knowledge. The upshot of this part of the discussion is to establish the absolutely minimal preconditions for the acquisition of new concepts and new beliefs through inquiry. Once these preliminaries have been resolved, **Farabi** then embarks on a more substantive consideration of the kind of pre-existent knowledge that is necessary to attain the unique cognitive goals of demonstrative science.³⁵ In this second part of the account, **Farabi** places special emphasis on determining the conditions that must be met for antecedent knowledge to be truly *productive* or *causative* of new knowledge, be it conceptualization or assent.

³⁴ **Farabi** doesn't consider the fourth possible combination, that every new conceptualization requires a prior assent. This is presumably because conceptualization is traditionally understood to be the simplest and most basic form of knowledge possible, from which acts of assent are compounded. To require a prior act of assent for any concept would entail a form of vicious circularity that **Farabi** doesn't deem serious enough to merit his attention.

³⁵ *Demonstration*, pp. 79-83. This section terminates with the disclaimer regarding divine instruction, discussed at ??? below.

Antecedent Conceptualization: A Minimalist Account

The most striking feature of **Farabi**'s effort to determine the minimal content required of prior acts of conceptualization is the narrow linguistic framing of the question: acquiring a new act of *tasawwur* is initially conceived of as learning the meaning of a word. **Farabi** asks us to envisage a scenario in which there is some word or name (*ism*) of whose meaning (*ma'nan*) we are ignorant. Our ignorance prompts us to acquire the concept that this term signifies: once we have learned the meaning, do we in fact have a new item of conceptual knowledge, and if so, what is the antecedent knowledge on which it depends?

Farabi suggests that two possible replies are available here: first, that the new knowledge we acquire is some sort of relational property that unites a pre-existing concept, *c*, with the new word, *w*, which is (one of) its signifiers. This solution will only work for cases in which the new term we are learning is synonymous with some term we already possess.³⁶ A second possibility, however, will cover both these cases and the more basic ones where we have not yet grasped *c* at the outset of our inquiry. Under such circumstances, however, we still possess some prior conceptual knowledge, namely, that *w* is significant, and not a collection of inarticulate sounds. That, **Farabi** says, is sufficient to satisfy the dual requirements of any adequate

³⁶ *Demonstration*, p. 80. The interpretation I am offering here is somewhat tentative, since the exact lexical situation in which **Farabi** wishes us to envisage ourselves is unclear. What he seems to have in mind is a case where I do, in fact, already possess a concept or *ma'nan*--the mental content, if you will--that corresponds to the word whose meaning I'm seeking to discover. What I don't realize, however, is that the unknown word maps on to that mental content, even though I may have another name to designate it. In the text, **Farabi** initially refers to *two* names, one of which is unknown to the inquirer and the other known. In the very same passage, however, he also refers to the object of the inquiry as something which has *no* other name or nominal equivalent. The interpretation that seems to make the most sense of the passage describes a situation in which some object has *two* names and no more, and we know the thing by one name but not by the new one we've just heard. For example, I may know what a 'hollyhock' is but be unaware that the term 'alcea' is its botanical name (assuming that the flower has no other names than these two).

solution to Meno's paradox, namely, that inquiry should both result in new knowledge, and be dependent on knowledge that we already possess:

But if this is the case, then what is the thing whose conceptualization is sought, and of which thing were we ignorant? For it seems that this would have been conceptualized in us insofar as it is the thing signified by the name which is known to us, and we would have been ignorant of it insofar as it is the thing signified by the name that is newly occurrent. And along with this, it is necessary that we will have known whether this mentioned name is significant or non-significant. For if we did not know it to be significant, it would not be necessary for us to seek the conceptualization of its meaning until after we knew whether it is significant or not. But if we knew it to be significant, then we would have conceptualized that which this name signifies in some respect, namely, that it is some meaning or something intelligible. It was conceptualized, therefore, by way of conceptualization taken generally. So this conceptualization is stipulated in this way, and then one seeks to conceptualize it by another conceptualization.³⁷

To begin a search for new conceptual knowledge, one must at least know *that* such knowledge is available in the case at hand.³⁸ Such knowledge consists, minimally, in recognizing that the term one wants to acquire is significant. But this, in turn, constitutes prior--in the sense of partial or generic--knowledge of the meaning of *w* that one is seeking. For it requires us to recognize that *w* signifies an intention (*ma'nān*) or an intelligible (*ma'qul*), and on the basis of that property, to seek more precisely to *which* concept or intelligible *this* significant vocal sound corresponds.³⁹

³⁷ *Demonstration*, p. 80.

³⁸ **Farabi's** point here is evocative of the declaration that Alice makes in Lewis Carroll's, *Through the Looking Glass*, after hearing the poem about the *Jabberwocky*: 'Somehow it seems to fill my head with ideas--only I don't exactly know what they are!'

³⁹ In explaining his claim that the minimal prior knowledge we need to learn a new vocabulary item is the recognition that the term is significant and not mere gibberish, **Farabi** notes that this need not entail that what the term signifies is existent, though it may happen accidentally that we learn simultaneously that a term is significant, and

In sharp contrast to the approach that **Farabi** takes in *Harmony*, where Meno's paradox serves as an occasion to determine the ultimate sources of pre-existent knowledge and to deny all forms of innatism, here in the *Demonstration Farabi* seems to eschew any foray into deeper epistemological questions, and focuses his attention on purely lexical problems. In this context Meno's paradox does not seem to pose a real challenge, but serves merely as the occasion for explaining how new items of knowledge relate to old ones. It's taken for granted, following Aristotle, that we need prior knowledge to learn and build upon, and the issue then becomes articulating the relations among old and new concepts as they frame the task of inquiry. This may, of course, stem from the fact that in the *Demonstration Farabi* links Meno's paradox to the overarching theme of modes of instruction. The task here is not to explain the cognitive mechanisms by which humans acquire knowledge, but simply to set forth the context within which demonstrative instruction can be successfully carried out.

Nonetheless, the narrowness of the discussion here is surprising against the backdrop of **Farabi**'s broader philosophical project, even granted the linguistic and pedagogical focus of this particular text. In resolving Meno's paradox as it pertains to conceptualization, **Farabi** has assumed a fully developed social context in which linguistic structures can themselves be taken for granted, and the learner is able to assume in advance that the vocal sounds whose meaning she is seeking *are* already endowed with significance. Like the question of the ultimate origin of knowledge, then, the question of the ultimate origin of language itself is bracketed in this text. And it is hardly the case that this is a topic in which **Farabi** has no interest in its own right. **Farabi**'s account of the origin of language in the central section of the *Book of Letters (Kitab al-huruf)* comprises one of the most extensive discussions in the history of philosophy of the ultimate conditions under which human language

that it signifies something real. This leads **Farabi** into a brief but interesting excursus on the question of the names of non-existents--both fictional entities, such as the phoenix and goatstag, and negations, such as the void and the infinite. This is picked up again a bit later in the text in a discussion of how we can conceptualize falsehoods (discussed at ??? below), since this seems to be a necessary condition for investigating the question of whether or not some object is existent. See *Demonstration*, pp. 80-81.

originates.⁴⁰ It is for this reason that the failure even to mention such questions in the context of his own linguistic and logical response to the paradox of inquiry seems an odd and inexplicable lacuna.

Meno's Paradox in the Realm of Assent

If the recognition that a term is significant constitutes the absolutely minimal prior conceptualization upon which all new conceptual knowledge must be based, what is the corresponding minimal knowledge required for new acts of assent? While the obvious answer would be that the inquirer must possess some prior conceptualization of the terms of the proposition whose truth she is investigating, **Farabi** begins his discussion of antecedent assent dialectically, by entertaining an objection to this supposition that arises from the problematic case of false beliefs: 'For the false is what is absolutely non-existent (*ghayr mawjud aslan*), so it is not possible for it to be conceptualized. Nor is it therefore possible for corrupt beliefs (*al-i'tiqadat al-fasidah*) to be conceptualized.'⁴¹ To dissolve this objection, **Farabi** considers two cases:

- (1) Falsehoods composed from two single concepts, each of which is existent in isolation;
- (2) Falsehoods which involve the belief that *S* exists, where *S* is a simple non-existent, i.e., a fictional entity.

In case (1), since the single concepts themselves represent real existents, they can be conceptualized in isolation, and thereby provide the inquirer with the prior acts of conceptualization upon which the false belief ensues. **Farabi** argues further that our grasp of the simple concepts from which a proposition is constructed also provide the inquirer with a antecedent act of assent from which her investigation can begin. If I am seeking to learn whether *S* is *p*, and *S* and *p* are themselves veridical concepts, then I can independently assent to both the claim that '*S* exists' and the claim that '*p* exists' prior to their false combination: 'But if a composite of false things is formed from two existents, each one of which is [existent] in isolation, then it is possible for

⁴⁰ See *Kitab al-huruf: Alfarabi's Book of Letters*, ed. M. Mahdi, Beirut, 1969, part II, cc. 20-23, §§114-146, pp. 134-53.

⁴¹ *Demonstration*, p. 80. As noted in n. 39 above, this discussion appears to pick up on an **Farabi**'s earlier excursus on the conceptualization of fictional and privative concepts.

the composite to be analyzed into the simples; in this way it follows necessarily that assent to [the simples] will have occurred before.⁴²

The same solution will not work for case (2), however: ‘Yet if this is the case, then how can there be statements concerning the conceptualization of simple things in whose existence people believe, while they are in reality non-existent, nor are they analyzable into parts, since they are not composite?’⁴³ In this case **Farabi** argues that we conceptualize these non-beings by ‘analogy’ or ‘relation’, by which I take it he means that we conceptualize them with reference to something that is actually existent and conceivable. So this case appears to reduce to the first--two true things are combined to make a false composition, but each part is conceivable in its own right: ‘For it seems that these things would be lacking conceptualization, except by analogy (*bi-al-manasabah*). But if this is the case, then what is conceptualized of them is the composition of two true things (*min sadiqayn*).’⁴⁴

While this response may establish that all acts of assent can and must be preceded by some conceptualization of their parts, **Farabi**’s main interest is in the question of whether every new act of assent must be traceable to a prior act of *assent*. More specifically, he is concerned with establishing not merely that all acts of assent can be preceded by prior assents, but that this is necessary and essential to the acquisition of any new judgements. So **Farabi** proceeds to offer an argument to show that one very specific form of prior assent is inadequate to provide essential knowledge of the conclusion that we’re seeking. The position which **Farabi** undertakes to refute is one which holds that the antecedent knowledge on which we build has the same propositional content as the knowledge we are seeking, though our grasp of it antecedently is epistemically inferior to our final act of assent. On this view I have previously assented in some way to the very proposition which I am now seeking to learn, say, ‘S is p.’ My prior assent, however, was merely an act of opinion, which I

⁴² *Demonstration*, p. 81.

⁴³ *Ibid.*, p. 81.

⁴⁴ *Ibid.*, p. 81. **Farabi** appears to be evoking something like Aristotle’s account in *De anima* 3.6 of how we know privations by analogy to their corresponding positive concepts. It is not entirely clear, though, how this response accounts for the original problem that was posed, namely, that the non-existents in question are *simples*.

accepted on authority or for the sake of argument, for example, and the assent I am now seeking is one that confers certitude.⁴⁵ **Farabi** is anxious to deny that this sort of prior assent contributes in any way to causing the certain knowledge that eventually displaces it: “It does not follow that in the case of things about which we intend to gain certitude, there necessarily precede in us an assent to them without certitude, though this may happen accidentally, without its having any utility at all for the assent which arises.”⁴⁶

Farabi is willing to allow that in some cases, I may indeed give prior assent at a lower epistemic level to some proposition which I later come to know with certitude. But in the end, this prior assent is merely *indefinite*. That is, if the proposition at which I am aiming is indeed one that meets the criteria for certitude, then any prior knowledge I have of it is really just an instance of my recognizing that either p or $\sim p$ is true of S .⁴⁷ So long as my assent is less than certain, I do not cleave determinately to either one of the two disjuncts: instead, when I achieve the certain assent that I’m seeking, I replace this indefinite assent with definite assent to the truth of one of these two, e.g., ‘ S is p .’ Prior indefinite assent does, of course, offer a response to Meno’s paradox, since our recognition that either p or $\sim p$ is true establishes a definite object of inquiry for us without pre-determining the outcome of that inquiry.⁴⁸ But indefinite assent cannot be productive (*fa‘ilah*) of the assent being sought, since at most it results in a sort of ‘renewed’ but now determinate assent to one of the two disjuncts.⁴⁹

⁴⁵ Compare Aristotle’s discussion in *Posterior Analytics* 1.33 on the extent to which knowledge (*episteme*) and opinion (*doxa*) can be of the ‘same’ object.

⁴⁶ *Demonstration*, p. 81.

⁴⁷ Antecedent assent in such cases reduces to antecedent conceptualization of the parts of the proposition, p , of negation, and of the law of the excluded middle.

⁴⁸ Note the similarity in this case to the *Harmony*’s account of recollection based on the *Phaedo*: what I am recollecting is which property of a contradictory pair (‘equal’ or ‘not equal’) matches the thing I am currently experiencing.

⁴⁹ In elaborating on the nature of indefinite assent here, **Farabi** anticipates his later discussion of the role of syllogistic in dissolving Meno’s paradox: ‘But since the assent may have been either indefinite or definite--for assent to one of two contraries as determinately realized is definite assent, whereas assent to [either] one of the two is

On the basis of these reflections, then, **Farabi** stipulates three criteria for antecedent assent to meet: it must (1) lead the learner to *new* knowledge; (2) be *productive* of that new knowledge; and (3) establish a real correspondence between our thought and an extramental object or reality (*amr*). Indefinite assent fails all these tests:⁵⁰

So the indefinite assent preceding the assent which is being sought is not the knowledge productive of the knowledge being sought; rather, [the knowledge being sought] is a knowledge of [the object] through agreement with it (*bi-tawatu' al-amr*), because it makes known another knowledge than the first, and this is the knowledge by which it is possible to arrive at the thing sought. And as for whether it is necessary that there be another antecedent knowledge which produces the anticipated knowledge concerning this object which is being sought, it is necessary to investigate this.⁵¹

Farabi's approach here is still aporetic: while he has now determined the conditions that antecedent assent would have to meet, he has not determined whether antecedent assent is in fact necessary in all cases. It remains possible that we could acquire new knowledge by some means other than instruction and apart from rational, determinate modes of inference. In the words of the *Philosophy of Plato*, it is still possible that new assentive knowledge could come about merely 'by chance.' **Farabi's** next move, then, is to rule out one possible and traditional claim that new knowledge can indeed come about *ex nihilo*.

Antecedent Assent and Divine Inspiration

What concerns **Farabi** in this regard are attempts to trace human knowledge back

indefinite [assent] ..., and the syllogism alone produces definite assent--it seems that the antecedent assent prior to the existence of the syllogism ... is indefinite assent' (*Demonstration*, p. 81).

⁵⁰ I take it that it fails the new knowledge test because it merely reiterates either *p* or $\sim p$. That seems to be the point of talking about 'renewed assent' (*al-tasdiq al-musta'naf*). It fails the correspondence test for much the same reason: we're simply reasserting one part of a proposition, but not on the basis of any new empirical evidence.

⁵¹ *Demonstration*, p. 81.

to acts of ‘inspiration’ (*al-ilham*), whereby God simply causes an idea to come to mind (*al-ikhtar bi-al-bal*). Though **Farabi** is quick to dismiss divine inspiration as a legitimate philosophical response to Meno’s paradox, he does not simply reject inspiration as impossible out of hand. He is merely agnostic both as to its divine origin and as to its claim to be a form of ‘instruction’ in the relevant sense necessary to satisfy the demands of logical inquiry. Even if inspiration is granted by God to some humans, and even if it is sometimes a source of new knowledge, it is not *logical* instruction in any proper sense. **Farabi** suggests that at best such a conferral of knowledge is a form of instruction only equivocally, and he gives three reasons why this must be the case: (1) it does not take place through discourse; (2) it is not the product of natural human abilities and not under our voluntary control; and (3) the intelligibles acquired through it are not human intelligibles (*al-ma‘qulat al-insaniyah*):

So we say first that it is appropriate that it be neither inspiration (*al-ilham*) nor something just coming to mind, and that a knowledge additional to some antecedent knowledge--which is what ‘instruction’ means--should arise in a human mind. This [inspiration] is of a rank which people believe to be through some divine action. For if this too is called an ‘instruction’, it is not this sort of instruction about which we are now speaking. So let us leave this to those who practice the sort of philosophy which is outside what it is possible for a human being to do. Rather, we are now only discussing this in the case of the human instruction which is included within philosophy, and which consists of human intelligibles. This is also what Socrates was speaking about in his *Apology* to the leaders of the people of the city of Athens: ‘Oh people, I do not say that this divine wisdom of yours is a futile thing, I say only that I am not worthy of it; for I say only that I am wise with a human wisdom.’ So this instruction with which our discussion is concerned is the instruction which takes place through human discourse (*bi-mukhatabah insaniyah*).⁵²

Since **Farabi** does not explain what exactly ‘divine instruction’ and ‘inspiration’

⁵² *Ibid.*, p. 82. In his opening discussion of the proper definition of logical ‘instruction’, **Farabi** had ruled out all forms of *taqlid* (authority), and he may well think of divine inspiration as falling under the rubric of mere authoritative acceptance.

are, it is impossible to determine exactly what the target of this passage, with its intriguing interpretation of Socratic ignorance, is meant to be.⁵³ I think that **Farabi** is here anticipating a point that Averroes will later make explicit in his *Epitome of the Parva naturalia*,⁵⁴ namely, that knowledge is not just a matter of grasping *any* true propositions by *any* means whatsoever. It matters how the knowledge we have acquired was produced, and how the proposition to which we ultimately assent is related to the propositions that led us to accept it. That is why Meno's paradox requires a response like Aristotle's, in which the character of the pre-existent knowledge from which instruction begins has a determinate structure and content. If there is no necessary causal connection between antecedent knowledge and what we learn, and if we have no need of following proven inferential methods, then the paradox of inquiry will admit of no satisfactory resolution. If new knowledge can just arrive through inspiration, then Meno is right that we need not and perhaps cannot know in advance what we are seeking; and if there is no determinate way to connect our antecedent knowledge to our discoveries, then we will not be able to defend our belief that *this* is indeed what we were after in the first place. Knowledge will be a simple matter of luck and good fortune.

Conclusion: Meno's Paradox and Aristotelian Logic

⁵³ It is interesting to note the parallels between the way **Farabi** represents Socrates here as denying that he possesses divine wisdom, and the closing paragraphs of the *Philosophy of Aristotle*, where **Farabi** makes the cryptic and much discussed claim that 'we do not possess metaphysical science.' See *Falsafah Aristutalis*, ed. M. Mahdi, Beirut, 1961, pp. 132-33; English translation in M. Mahdi, *Alfarabi's Philosophy of Plato and Aristotle*, p. 130.

⁵⁴ See *Talkhis kitab al-hiss wa-al-mahsus*, ed. H. Blumberg, Cambridge, Mass., 1972, pp. 89-90, where Averroes argues that knowledge by its very nature must come about according to the methods and processes detailed in logic. Knowledge that is received through revelation is not really knowledge at all, and the person who possesses such revelation, if indeed he exists, would be more like an angel and only equivocally (*bi-ishtirak al-ism*) human: 'it is part of human nature to perceive the speculative sciences through what one knows of the primary premises by nature from the outset.'

Farabi has now offered a general resolution of Meno's paradox, by affirming Aristotle's claim that all knowledge, both conceptualization and assent, depends upon prior knowledge for its acquisition. He has also established that a complete response to Meno's paradox requires that our antecedent knowledge fulfil more than the merely minimal conditions that he has outlined thus far. For both conceptualization and assent, there must be prior knowledge in the learner that is *causative* (*fa'il*) of the knowledge being sought; and the knowledge which it produces must truly *increase* our store of concepts and beliefs. In the case of conceptualization, there must be a necessary relation (*nisbah dhatiyah*)--short of complete identity--connecting the antecedent and consequent knowledge:

And it is clear that the most appropriate and most perfect of [relations] in this condition is for this object (*amr*) to be this thing (*shay'*) in some respect. For if it is one thing in all respects, and there is no otherness (*ghayriyah*) at all, one does not arrive at another knowledge, be it greater or more deficient.⁵⁵

To determine what sorts of conceptual relations are most able to cause new knowledge, **Farabi** refers the reader to the *Isagoge*. The predicables, then, provide the final resolution to Meno's paradox on the level of conceptualization.⁵⁶

Farabi takes much the same approach in his final determination of the nature of antecedent assent. An *intrinsic* causal relation that is both essential and necessary must hold between the assent being sought and the assent that produces it. This is designed to ensure that any assent produced by extrinsic and irrelevant beliefs--in particular those that relate to external matters, such as the state of the speaker himself, and any other instruction based on authority (*al-taqlidiyah*)--is eliminated from the realm of demonstration.⁵⁷ In the case of assent, however, the antecedent knowledge

⁵⁵ *Demonstration*, p. 82.

⁵⁶ *Ibid.*, p. 83: 'But if this course is followed concerning this object, and a close investigation is made, then one reaches the things which cause comprehension (*al-mufahhimat*) which we have enumerated in this book and in the *Isagoge*.'

⁵⁷ *Demonstration*, p. 83. On a textual note, in his edition of the *Burhan* Fakhry begins an entirely new section at this point in the text, no doubt because the discussion in this passage forms a segue to the more technical discussions of demonstrative principles that follow. Nonetheless, it is clearly the case that these

we require is not an understanding of the relations codified by the predicables, but rather, the ability to arrange what one already knows into premises according to valid inferential patterns. The antecedent objects of assent must therefore be *muqaddimat*: their knowledge must be prior to that of the conclusion, in the sense that they must be posited as *premises* in a valid syllogism.⁵⁸ And since a syllogism is a conjunction of propositions entailing a conclusion, the learner must also have antecedent understanding of the valid entailment relations between the premises, in accordance with the various moods (*wujuh*) of the syllogism.⁵⁹ Finally, **Farabi** draws attention to the function of the middle term of the syllogism as implicitly containing prior knowledge of the intended conclusion. If we know the middle term of the syllogism, then it is true that we already know the object sought in some way:

For the universal of the thing in some respect *is* the thing, and so too the rest of [the thing's] attributes. And for this reason whenever it is known that something existent which is suitable to be taken as a middle term belongs to an object, and the extreme term is made to fall under it, then the thing whose acquaintance is sought was in some respect already known.⁶⁰

Despite the different emphases in his two responses to the paradox of inquiry that I have examined, the common thread that unites the approaches of both the ‘platonic’

passages also form the conclusion to the preceding discussions of Meno’s paradox.

⁵⁸ *Demonstration*, p. 83: ‘And it is necessary that between this thing which causes assent to occur to us and the thing assented to there be an essential necessary relation (*nisbah dhaitiyah daruriyah*), and that it be part of its nature to cause unqualified assent to it to arise in us, so that by our assenting to it there occurs to us assent to the object of inquiry (*al-matlub*). So it is necessary that the thing be a premise (*muqaddimah*) as well.’ This condition reflects Aristotle’s stipulation that the premises of a syllogism must be prior to and better known than the conclusion, at least with respect to us (*Posterior Analytics* 1.2, 71b20-72a6).

⁵⁹ *Demonstration*, pp. 83-84: ‘And it is necessary that we understand the connections (*al-wusal*) between the premises and [that the] connections between them are in accordance with the [syllogistic] moods.’

⁶⁰ *Demonstration*, p. 84.

texts and the *Book of Demonstration* is **Farabi**'s conviction, articulated in his summary of the *Meno*, that no cognitive state truly worthy of the label 'knowledge' can come about either by nature or by chance. Appeals to recollection, innate knowledge, divine inspiration, and other mysterious sources of knowledge all fail for much the same reasons--either the knowledge that we end up with is neither truly new and ampliative of what have already learned; or it results in a form of conviction that falls short of the epistemic goals of necessity and certitude. Even if such solutions offer an attenuated account of how it is we might acquire new concepts and beliefs, they fail to motivate any targeted search for knowledge, and thus ultimately concede to *Meno* the futility of rational inquiry. In **Farabi**'s eyes, these are precisely the challenges that can only be met through the employment of formal logical methods which impose direction and structure in our epistemic quests. So it should come as no surprise to us that the final answer to the paradox of inquiry is, for **Farabi**, circumscribed by the canons of Aristotelian demonstrative science.