

Área de Filosofía

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AVERROE'S CRITIQUE OF AVICENNA'S APPROACH TO METAPHYSICS

CRÍTICA DE AVERROES AL ENFOQUE DE AVICENA SOBRE LA METAFÍSICA

Tesis Doctoral presentada por

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TITULO: AVERROE'S CRITIQUE OF AVICENNA'S APPROACH TO METAPHYSICS

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TÍTULO DE LA TESIS: Averroe's Critique of Avicenna's Approach to Metaphysics (Crítica de Averroes al enfoque de Avicena sobre la Metafísica)

DOCTORANDO: Vladimir Lasica

INFORME RAZONADO DE LOS DIRECTORES DE LA TESIS

El doctorando Vladimir Lasica ha completado con éxito todas las fases conducentes al depósito de una tesis doctoral preparada para ser defendida con una magnífica base. A lo largo de los años que han mediado desde su inscripción hasta este momento, el doctorando Vladimir Lasica ha cumplido con todas las tareas encomendadas: en la primeras fases del proceso, abordó el estudio de la numerosa bibliografía académica sobre el tema de su tesis, un acercamiento detallado a la metafísica de Avicena y su recepción en la obra de Averroes; al mismo tiempo completó su formación investigadora, mediante la participación en cursos metodológicos y congresos nacionales e internacionales. Fruto de todo ello han sido artículos publicados en revistas de reconocido prestigio internacional, especialmente su trabajo publicado en la prestigiosa *Revista Española de Filosofía Medieval*, así como sus colaboraciones con la revista internacional *Logos. Journal for Philosophy and Religion*.

Durante estos años, y a pesar de las dificultades de movilidad y búsqueda de material que la pandemia ha impuesto, no sólo supo compaginar su trabajo con la elaboración de la tesis, sino que además completó con éxito todos los requisitos para conseguir la mención de internacionalización de su tesis doctoral – al doctorando le resultó muy complicado poder acceder a ciertas referencias bibliográfica que le pedimos contrastase antes de cerrar nuestra última revisión.

En el análisis llevado a cabo, el doctorando expone de un modo preciso la diferencia entre el enfoque de Avicena y el de Averroes sobre la metafísica. El enfoque metodológico se basa principalmente en las secciones de las obras de Averroes en las que critica directamente a Avicena (fundamentalmente *La inconsistencia de la inconsistencia*, el *Gran comentario a la Metafísica de Aristóteles* y el *Gran comentario a la física de Aristóteles* y el *Gran comentario a la Física de Aristóteles*). El doctorando destaca aquellas secciones de las fuentes que se refieren de alguna manera a Avicena y algunas implicaciones de su doctrina metafísica. Finalmente, y puesto que la crítica de Averroes no es sistemática y sólo se presenta de forma fragmentaria, ha tratado de reconstruir el resto de su crítica por medio de las implicaciones de la doctrina definida en sus obras.

La tesis doctoral que defiende el doctorando Vladimir Lasica, se compone, con claridad, de los apartados clásicos de un trabajo de esta índole:

- Introducción: en la que se plantea el estado de la cuestión.
- Argumentación: se analiza el enfoque de Avicena y de Averroes en tres aspectos: la ontología, su enseñanza sobre la relación entre Dios y el mundo, y su comprensión de la metafísica como disciplina filosófica. Se inicia con el estudio de las doctrinas ontológicas, mostrando cómo sus filosofías discrepan fundamentalmente en este punto. Más adelante, se comparan sus enseñanzas sobre la relación entre Dios y el mundo, destacando los puntos clave de la crítica de Averroes, describiendo la concepción de la metafísica a la luz de las dos partes anteriores.
- Conclusiones: La crítica de Averroes no socava seriamente la posición metafísica de Avicena. La base de dicha crítica es su interpretación naturalista y nominalista de la filosofía de Aristóteles – matrices naturalistas que son parte esencial de su filosofía. Pero su crítica no supone una amenaza para el sistema metafísico de Avicena. De ahí que la visión naturalista de Averroes pueda ser una alternativa a la fundamentación metafísica de Avicena enteramente dependiente de la aceptación de su proyecto filosófico naturalista, su crítica es aceptable sólo desde la perspectiva de los requisitos establecidos por su interpretación de Aristóteles.
- Bibliografía: se ofrece un repertorio actualizado de los materiales de trabajo tenidos en consideración.

En definitiva, se trata de un trabajo novedoso, que profundiza en un campo de estudio muy poco analizado por las investigaciones académicas previas, y que servirá como una excelente herramienta para todos los que desean profundizar en el estudio de las relaciones intelectuales entre Avicena y Averroes, así como su crítica.

Por todo ello, se autoriza la presentación de la tesis doctoral.

Córdoba, 28 de Septiembre de 2021

Firma de los directores

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Resumen

Mi investigación explora la diferencia entre el enfoque de Avicena y el de Averroes en torno a la metafísica. Su enfoque abarca tres aspectos principales: la ontología, su enseñanza sobre la relación entre Dios y el mundo, y su comprensión de la metafísica. Investigo cómo la principal diferencia en sus ontologías determinó la visión nominalista y naturalista de Averroes,así como su crítica a Avicena. En mi tesis, muestro cómo el sistema filosófico de Avicena es fundacionalista, en el sentido de que la metafísica como ciencia de la existencia se erige como disciplina fundacional a partir de la cual se desarrolla esencialmente todo pensamiento científico – para Averroes la ciencia fundacional es la filosofía natural, que sirve de base a las especulaciones metafísicas.

Palabras clave: Avicena, Averroes, metafísica, existencia (*wujūd*), ontología, relación Diosmundo.

Abstract

In this research I intend to explain the difference between Avicenna and Averroes' approach to metaphysical science. Their approach to metaphysics encompasses three main aspects: ontology, their teaching on the relationship between God and the world, and their understanding of metaphysics. I wish to elaborate how the main difference starts from their ontological starting points, which determined Averroes' nominalistic and naturalistic view, as well as his criticism of Avicenna. According to my interpretation, Avicenna's philosophical system is foundationalist in the sense that metaphysics as science of existence stands as foundational discipline from which every scientific thought is essentially developed. For Averroes such science is natural philosophy.

Key words: Avicenna, Averroes, metaphysics, existence ($wuj\bar{u}d$), ontology, God-world relationship.

Introducción al tema de la tesis

El tema de la crítica de Averroes a la aproximación de Avicena a la metafísica y a los principales problemas metafísicos que tratamos en el presente trabajo es, en sí mismo, muy complejo y, como tal, no has sido suficientemente investigado. La razón principal es la escasez de fuentes y la falta de explicaciones extensas por parte de Averroes – al contrario de lo que tenemos en el caso de la crítica de Averroes a al-Ghazālī. Por ello, los estudiosos se han centrado hasta ahora principalmente en la respuesta de Averroes a la Tahāfut al-Falāsifa de al-Ghazālī, así como en su crítica a la teoría de la emanación de Avicena y en la comparación entre sus doctrinas de la causalidad: por ejemplo el estudio de Barry Kogan Averroes and the Metaphysics of Causation, (Albany: State University of New York Press, 1985) y Chance and Determinism in Avicenna and Averroes de Catarina Belo (Leiden Boston: Brill, 2007). Otro estudio que toca el tema es Metaphysics in Islamic Philosophy, de Fadlou Shehadi (Delmar, Nueva York: Caravan Books, 1982), que compara y analiza varias doctrinas metafísicas, aborda el tema de la crítica de Averroes a Avicena, pero de forma no suficientemente extensa. Un trabajo muy relevante que toca el tema es el de Amos Bertolacci, 'Avicena y Averroes sobre la prueba de la existencia de Dios y la materia de la metafísica' (Medioevo, 32, 2007), que analiza los puntos más importantes de las fuentes primarias sobre el tema. Además de éstas, por supuesto, contamos con una amplia literatura secundaria sobre la filosofía de Avicena y Averroes.

La falta de investigaciones que intenten abordar la crítica metafísica de Averroes no es una sorpresa si sabemos que el filósofo andalusí no escribió una crítica sistemática de Avicena, como sí ocurre con su relación con al-Ghazālī. Por esta razón, si queremos tener una imagen completa y cabal de este problema, tenemos que especular, seguir las implicaciones de las doctrinas de Avicena y Averroes y tratar de reconstruir la crítica del filósofo andalusí de manera sistemática – tenemos sus filosofías y algo de la crítica de Averroes, pero esto podría ser suficiente si tratamos de entender la lógica de sus razonamientos, las implicaciones de sus doctrinas y la manera de utilizar la terminología filosófica. Si tenemos esto en cuenta, la clave para la reconstrucción y comprensión de la crítica de Averroes. A partir de aquí podemos analizar los fundamentos ontológicos de sus filosofías, y luego destacar las observaciones críticas de Averroes en las fuentes, así como comparar sus doctrinas cosmológicas, las pruebas de la existencia de Dios y las enseñanzas sobre la ciencia metafísica.

Objectives

In this research I have explained the most important aspects of Averroes' criticism of Avicenna's metaphysical system. I see this critique as founded in Averroes' naturalistic interpretation of Aristotle: positive knowledge about the world can only be established by observing particular substances. According to my view, Averroes tried to show that Avicenna's tendency to derive all knowledge from intuitively grounded premises is unacceptable – in this research I intend to show and explain why this is the case.

The mentioned objectives dictate that this research is primarily concerned with crucial issues regarding Avicenna and Averroes' approach to metaphysics in order to highlight the main reasons for Andalusian philosopher's criticism. Research combines a particular interpretation of Avicenna and Averroes' philosophy, as well as an analysis and plausible reconstruction of Averroes' critique. As the thesis is divided in three parts, my aim is to show in every part that Avicenna's understanding of metaphysics represents essentially a foundationalist project: his entire philosophy is fundamentally established on the ontological teaching about existence *qua* existence. After elaboration of Avicenna's view, I intend to offer an explanation of Averroes regarding the same issue in order to find reasons for his criticism. My aim regarding Averroes is to show that his metaphysical project is essentially naturalistic: it is empirical science that offers the fundamental basis for metaphysical thinking, and not *vice versa*. The main objective is to show that we have to interpret both Avicenna and Averroes in the particular way in order to grasp Averroes' criticism. Once this is achieved, we can discover and properly reconstruct Averroes' reasons for criticism.

However, once this reconstruction is complete, in conclusion, I intend to argue that Averroes does not essentially undermine Avicenna's metaphysical system. This is so because, as I intend to show, naturalistic matrices are the fundamental part of Averroes' critique, thus the evaluation of his criticism of Avicenna depends entirely on acceptance of his naturalistic philosophical project. In short, Averroes' critique is acceptable only from the perspective of requirements set by his interpretation of Aristotle.

My objectives, as well as the thesis, are divided into three parts:

1) In the first part I intend to prove that Avicenna's metaphysical project is foundationalism in the sense that metaphysis as science of existent *qua* existent is the underlying science upon which every other science essentially depends. This view is

determined by Avicenna's understanding of the meaning of existence ($wuj\bar{u}d$), which determines his entire ontology. In this part I also intend to show that the main problem Averroes has with Avicenna's system is precisely his ontological presupposition about existence. Thus the most important part of Averroes' critique is that which is concerned with Avicenna's ontology. I argue that Averroes takes nominalist position regarding the meaning of 'existence', thus renders Avicenna's doctrine as meaningless.

- 2) In the second part I intend to show how Avicenna's metaphysical explanation of the relationship between God and the world is determined by his ontological starting point, and how the entire metaphysical understanding of the world, including the proof for God's existence, rests on his understading of 'existence' (*wujūd*) as the most general meaning. In comparison, I intend to show how Averroes' negative stance towards Avicenna's prrof for God's exsistence and his cosmology is based on the critique of his ontology. It is for this reason that Averroes turns toward 'naturalistic' ideal according to which every metaphysical explanation is essentially physical, i.e. rests on demonstrations established in natural philosophy.
- 3) In the third part I intend to describe Avicenna's and Averroes' view of metaphysics in the light of the previously explained doctrines and critiques. At the very beginning of my research I had a dilemma regarding whether I should put this part at the beginning of my research; after all, in his *al-Shifā' al-Ilāhiyyāt* Avicenna first talks about what metaphysics is, in order to explain his doctrine later on. This is also the path of Aristotle in his *Metaphysics*, as well as in Averroes' grand commentary on that Aristotle's work. However, I decided to start from the fundamental problem of existence (*wujūd*), as I think this would better highlight why Avicenna's understanding of metaphysics is foundational, and why Averroes' stance is naturalistic. These two great Muslim philosophers saw metaphysics in two radically different ways, and the reason for this are their ontological presuppositions.

Methodological aspects

My interpretation of Avicenna, at least to some degree, goes along with Averroes' critique: Avicenna attempts to establish a metaphysical system that, in one sense, is independent of any other science and represents a discursive *a priori* most universal knowledge about the relationship between necessary and contingent existence. This is to say, when dealing with specific issues regarding the relationship between God and the world, metaphysics represents a typical Aristotelian continuation of natural sciences. In other words, Avicenna's metaphysics as science whose subject-matter is existence *qua* existence and goal proof for the existence of God is independent standalone science, yet as science that provides the ultimate explanation of the world it uses certain principles proven by natural sciences - metaphysics is essentially independent and only accidentally uses demonstrations from the natural sciences.

Although Avicenna's frequent use of a particular terminology does not always help, I tried to base my interpretation on reliable textual sources, most importantly on his *al-llāhiyyāt*. The general problem is the shortage of source material regarding Averroes' criticism. Averroes did not write an extensive systematic work against Avicenna, as he did against al-Ghazālī in his *Tahāfut al-Tahāfut*. Yet he did criticise Avicenna openly, somethimes even mentioning his name and on some other occasion evidently aluding on his metaphysical theories, mostly so in *Tahāfut al-Tahāfut, Long Commentary on Aristotle's Metaphysics* and in *Long Commentary on Aristotle's Physics*. For this reason, our methodological approach consists of three segments of research:

1) to rely on fragmentary parts of Averroes' works in which he criticises Avicenna directly,

2) to highlight those part that are in some way concerned with Avicenna or with some implications of his metaphysical doctrine

3) to reconstruct, through implications of his evident critique and defined doctrine in his works, what would be the rest of his criticism if he would write a systematic work against Avicenna.

Structure of the research

Averroes is well aware of Avicenna's intention, he sees that Avicenna is influenced but not completely satisfied with Aristotle's philosophy. However, Averroes interprets this dissatisfaction as a consequence of 'the influence of theology'. This influence caused Avicenna to go astray from Aristotle's ideas in three most important aspects: his doctrine of existence, his understanding of the relationship between God and the world, and the place of metaphysics amongst other sciences. I divided this thesis into three parts in accordance with Averroes' critique:

Ontology: there cannot be science of existent *qua* existent in the way Avicenna hoped to establish it, but only science of being *qua* substance.¹ This is the point where 'Averroes' naturalism' - as we can interpret it in his later works - is established: substances have their existence in their own right.² Essence of every substance is in its power to act on its own – for him Avicenna's false Aristotelianism stands on presupposition that existence is not something essential to an existing substance.

Understanding of being, which primarily means 'substance'³ implies two strong and connected tendencies within Averroes' philosophy:

- Empirical tendency: all knowledge starts from observation contra Avicenna's apriorism.
- Nominalist tendency⁴: universals are not substances existing outside the soul.⁵ They denote substances. From this it follows there are two main meanings of 'necessity': logical necessity (what cannot be otherwise) and causality (what happened for the most part).

¹ Averroes, *Metaphysics (Tafsīr ma ba'd at-tabī'at, Lam)*: a translation with introduction of Ibn Rushd's commentary on Aristotle's metaphysics, book Lam, by Charles Genequand, (Leiden: Brill, 1984), t. 1, 1406; Abb. *Tafsīr*, LAM. Abb.: *Tafsīr*, LAM.

² Averroes, *Tafsīr ma ba'd at-tabī'at. Deuxième vol. Livres DAL, HE, ZAY, HHA', TTA'* (Bibliotheca arabica scholaslicorum. Série arabe VI) by M. Bouyges, DAL, t. 14, p. 557; YA', t. 8, pp. 1279-1280; Abb.: *Tafsīr, DAL, HE, ZAY, HHA', TTA'*.

³ *Ibid.*, LAM, t. 3, 1415

⁴ Ibid., LAM, t. 39, 1623 and Averroes, Aristotelis Stagiritae De physico auditu libri octo, cum Averrois Cordubensis variis in eosdem commentariis, in Aristotelis Opera cum Averrois Commentariis, (Long Commentary on Aristotle's Physics), Venice, 1562, II, t. 19, 55 C. Abb.: LC Physics. 5 Trefer LAM, 1402

⁵ Tafsīr, LAM, 1403.

 God's existence and its connection with the world can be divided into two main critiques: the critique of Avicenna's proof for God's existence and the critique of his theory of emanation.

According to Averroes, one cannot reach the notion of God's existence through analysis of the concept of 'existence', as proposed by Avicenna's metaphysical works.⁶ According to Aristotle, we acquire intelligibles from images we abstract from sensory experience; for Averroes the same goes for 'existence'. The proof for God's existence must be, therefore, connected with the observable world of substances that are subject to motion and change.⁷

Another problem is Avicenna's cosmology: his ontological presupposition on existence being an accidental and not essential to the existent led him towards the affirmation of efficient cause as the cause in the real metaphysical sense. The most important aspect is that the efficient cause bestows existence. For Averroes this is, again, a consequence of theological influences;⁸ existence is not bestowed, it belongs to the existing beings, and is maintained through eternal motion. Avicenna's theory of emanation represents, therefore, a sort of *creation ex nihilo* explanation, and is scientifically unacceptable.

The real relationship between God and the world is not through efficient but final causality⁹; in this sense there is no difference between metaphysical and physical causality, and motion plays the fundamental role for proving God's existence as well as for the explanation of the world.

3) Approach to metaphysics. Due the fact that we must start from observation of individual substances, and gradually develop the argument for the existence of God as a final goal of science, natural philosophy sets the foundation for all positive knowledge of the world.¹⁰ All knowledge is coming from observation and abstraction from what is material, or in other words what is subject to generation and corruption. This means that we establish the knowledge of eternal principles through what is subject to change, and not *vice versa* – this goes contra Avicenna's priority of

⁹ Tafsīr, LAM, t. 41, 1633; t. 44, 1650.

⁶ *LC Physics*, II, t. 22, f. 57B.

⁷ Tafsīr LAM, t. 5, 1422.

⁸ Averroes, *Tahāfut al-Tahāfut (The Incoherence of the Incoherence, Vol I and II)*, transl. by Simon Van den Bergh, EJW Gibb Memorial Trust (1954), p. 230; *Tahāfut al-Tahāfut*, ed. Dunya Arabic (1965), p. 145; Abb. *Tahāfut al-Tahāfut*.

¹⁰ *LC Physics*, I, t. 11; VIII, t. 22.

metaphysics. In fact, it is natural sciences, especially physics, which offer most certain knowledge, and which is also used in metaphysics.

Metaphysics is not, therefore, the highest science in the Avicenna's sense: it does not exclusively provide the proof for God's existence. It is 'the highest' in a sense that it serves as a sort of extension of physics. This is the only way to solve Ghazālī's problem of 'aporetic' metaphysics - the first philosophy must be founded on the philosophy of nature. Metaphysics, therefore, can be a demonstrative science only as a continuation of physics and psychology. Metaphysics have two roles:

- as continuation of the philosophy of nature; as synthesis of all final arguments
- *per se*, it represents the dialectical defence of demonstrative truths established in the philosophy of nature.¹¹

All these problems and solutions proposed by Averroes points that Avicenna's entire approach to metaphysics is wrong. Natural philosophy demonstrates scientific facts, among them the existence of the eternal substance, so metaphysics must be a continuation of physics, psychology and astronomy in order to contain any positive knowledge. This is the basis for doctrine of, what I call, 'Averroes' naturalism.' From this position Averroes' criticism of Avicenna is established.

¹¹ Ibid., I, t. 8.

Introduction

After two centuries of Abbasid rule, their foundation of Baghdad, the Bayt al-Hikma, and once the great translation movement reaches its peak, almost all Greek philosophy and science became available in Arabic.¹² In this context it was introduced the idea of metaphysics as science whose goal is to provide the proof for the existence of God on the basis of the principles of reason. Although this conception was influenced by Plato and Aristotle, it represents an original contribution by philosophers of Islamic civilisation as well as the most important ambition and guiding goal of all medieval philosophers. The first stage in the development of this idea starts with al-Kindī's explanation of metaphysics as al-falsafa al-ūlā, whose On First Philosophy ($F\bar{i}$ l-Falsafa al- $\bar{u}l\bar{a}$) represents a first systematic approach to metaphysical science in Islamic civilisation. Al-Kindī's conception equialises metaphysics with Islamic theology,¹³ yet his focus remains independent development of philosophical research. Metaphysics is here characterised as the quest for truth and wisdom that shows God's existence and explains the world by proving its ultimate cause¹⁴ This view was certainly inspired by Aristotle, but it is not really Aristotelian because - due to the fact that al-Kindī was not familiar with Aristotle's Organon - he saw metaphysics as analytical science whose method should imitate mathematics.¹⁵ Even more, he interpreted Aristotle's Unmoved Mover as a cause of existence by being 'the bestower of unity' of every existent, and not just an ultimate cause of motion.¹⁶

Al-Kindī's idea was only partly accepted by al-Fārābī. Metaphysics still deals with God's existence, but this project had to be redefined. According to al-Fārābī there are three major parts in the science of metaphysics: 1) ontology, or the study of 'existent *qua* existent'; 2) the study of the foundations of the particular sciences; and 3) theology, i.e. the study of the

¹² The systematic translation activity started in the multicultural environment of Umayyad Syria and served as a preparation for the great translation movemement of the Abbasid era (Vagelpohle, Uwe, *Aristotle's Rhetorc in the East: The Syriac and Arabic Translation and Commentary Tradition*, Leiden – Boston: Brill, 2008, pp. 25-26). After the year 750th the movement is organised as the main cultural project of the caliphate and the translation activity became not just more organised, but deliberately included Greek philosophical works (Gutas, Dimitri, *Greek Thought, Arabic Culture*, London: Routledge, 1998, pp. 22-27).

¹³ Gutas, Dimitri, Avicenna and the Aristotelian Tradition, Introduction to Reading Avicenna's Philosophical Works, (Leiden Boston: Brill, 2014), pp. 275-277. Abb.: Gutas, Avicenna.

¹⁴ Al-Kindī, *Fī al-Falsafa al-ūlā*; Al-Kindi's Metaphysics, A Translation of Yaqūb ibn Ishāq al-Kindi's treatise "On First Philosophy", transl. Alfred L. Ivry, (Albany: State University of New York Press, 1974), p. 98; 101. Abb. *Fī l-Falsafa al-ūlā*.

¹⁵ *Ibid.*, pp. 111-112.

¹⁶ *ibid.*, pp. 140-143.

Divine as foundational of the universe.¹⁷ This includes research of God, angels, heavenly bodies, sublunary world, the relationship between matter and form, general qualities on being of supra-lunar and sublunary world, the process of emanative causation, human being and its purpose, the relationship between the intellect and the intelligible, nature of Active Intellect, nature of soul, human happiness and arrangement of society.¹⁸ As we can see, although metaphysics is not yet strictly defined, al-Fārābī emphasises the importance of its implications, not just for scientific, but also for ethical and social development. Thus, metaphysics has "theological, natural and voluntary section".¹⁹ Its starting point is the most general notion of 'existent', while its goal is God's existence. In this sense we are dealing with the science of what comes after physics (ma -ba'd al-tabī'a) and whose main part is the 'divine science' (al-'ilm al-ilāhī). In contrast with al-Kindī's view, metaphysics is systematically divided into parts, but in a way closer to Aristotle's method as described in Secondary Analytics - which became a leading ideal to be incorporated into every science including first philosophy. Metaphysics remains a philosophical theology - its main concern is to provide the proof for the existence of God and to explain the absolute existence 20 - yet it also incorporates certain facts from natural philosophy, as well as from Neoplatonic teaching, in order to explain the relationship between the world and its ultimate cause.

Avicenna is heavily influenced by al-Fārābī in the sense of the distinction between the ontological and theological perspectives of metaphysics,²¹ yet his approach to metaphysics remains unique. The final purpose of metaphysics is to explain the absoluteness of existence. This is not possible through any sort of scientific inquiry that involves perception, because such approach is bond to matter and cannot go further than explanation of motion. Thus, according to my interpretation, Ibn Sīnā's approach of metaphysician is strictly speculative and analytical. A feasible approach based on the meaning of *existence* as the first principle of human knowledge as well as the absolute principle of everything that exist. Beside this, other notions like *necessary* and *thing* are also 'primarily impressed in the soul'.²²

¹⁷ Janssens, Jules, *Metaphysics of God*, in *The Routledge Companion to Islamic Philosophy*, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016, pp. 236-247), p. 236.

¹⁸ Abū Nașr al-Fārābī, *On the Perfect State (Mabādi' ārā' ahl al-madīna al-fādila)*, transl. Richard Walzer (Oxford: Clarendon Press, 1998), pp. 1-4. Abb.: *al-Madīna al-fādila*.

¹⁹ *Ibid.*, p. 4

²⁰ Abū Naṣr al-Fārābī, *fi -Aġrāḍ*, in *Classical Arabic Philosophy, an Anthology of Sources*, eds. Jon McGinnis and David Reisman, (Indianapolis/Cambridge: Hackett Publishing Company, 2007), p. 78, 36. Abb.: *fi -Aġrāḍ*.

²¹ Bertolacci, Amos, *Establishing the Science of Metaphysics*, in *The Routledge Companion to Islamic Philosophy*, eds. Richard C. Taylor i Luis Xavier Lopez-Farjeat, (London and New York: Routledge, 2016), pp.185-197, p. 190. Abb.: Bertolacci, *Establishing Metaphysics*. Also see Gutas, *Avicenna*, p. 285.

²² Ibn Sīnā, *Kitāb al-Shifā' al-Ilāhiyyāt*, (*The Metaphysics of The Healing*), transl. Michael E. Marmura, (Provo Utah: Bringham Young University Press, 2005), I, 5, (1). Abb.: *al-Ilāhiyyāt*.

I belive that this idea of 'impressed' (*tartasam*) notions is the basis of Ibn Sīnā's project for establishing metaphysics as a strict science that will be to some degree independent of any natural science. According to Ibn Sīnā, notions like *existence, necessary* and *thing* are the best-known things and hold *per se* evident meanings. *Existence* is a notion of the greatest possible extension and as such *necessarily* predicated to every-*thing*, i.e. it is predicated to everything that possessed any reality. *Existence* (*wujūd*, Per. *hastī*)²³ is the most general concept, it has no principle, and as such it is recognized by the reason itself. For this reason, Avicenna choses the notion of *existence*, or *existent qua existent* (*al-mawjūd bi -mā huwa mawjūd*) to be the *subject-matter* (*mawdū*) of metaphysics. The *goal* (*matlūba*), the main thing searched by this science is God's existence. By this stance, Avicenna makes a synthesis between al-Kindī's and al-Fārābī's view: metaphysics is the analytical and contemplative science that starts from the meaning of *existence* in order to provide the proof for the existence of God. As stated by al-Fārābī, it is both ontology and theology. It starts as ontology, and is concerned with existence, while as theology it establishes the existence of the First Principle, the Cause of all causes.

This 'foundational' view led Ibn Sīnā far from Aristotle's philosophy although he remained his follower mainly due to acceptance of the scientific method as it is described in *Organon*. Ibn Sīnā's intention is to establish science that will provide a systematic explanation of the world as something that is generated from God who is existence in the ultimate sense in the form of deductive apodictive knowledge. The goal of metaphysics is reached afte it is proven in the Book VIII and IX of *al-Ilāhiyyāt* that God exists in a way that his non-existence is not possible, that the existence is His very identity, His essence is His existence - He is the Necessary Existence (*wājib al-wujūd*). As such God bestows only existence, i.e. existence flows from Him and is in this sense God is the ultimate efficient cause of the world and the absolute perfection.²⁴

This doctrine represents Ibn Sīnā's further 'extension', or completion, of Aristotle's philosophy. For Ibn Sīnā Aristotle made a good start by recognising that true science does not only start from what is immediate and necessary, but it also develops towards what is beyond ($\mu\epsilon\tau\dot{\alpha}$) observable nature ($\varphi\nu\sigma\iota\kappa\dot{\alpha}$), but he failed to establish such science in proper way. Aristotle got 'stuck' with motion and failed to explain existence mainly due to his exclusively

²³ As Shehadi notices, Persian *hastī* stands for 'being' in the most general sense, while *wujūd* and *mawjūd* denotes existence (see Fadlou Shehadi, *Metaphysics in Islamic Philosophy*, Delmar, New York: Caravan Books, 1982, pp.71-72). Abb.: Shehadi, *Metaphysics*. This is why 'being' is the notion that can also stand for *wujūd*, as it is used by many authors.

²⁴ *al-Ilāhiyyāt*, VI, 1, (2); VIII, 4, (1); 6, (13)-(16); 7, (5)-(6), (15).

empiricist approach to reality (such view of Aristotle is evident from Ibn Sīnā's example of the relationship between builder and a house and between father and his son in *al-llāhiyyāt*.²⁵ Of course, Ibn Sīnā is not against empirical investigation, he almost completely accepts Aristotelian natural science as well as his notion of *substance (jawhar)* and *accident ('arad)*, together with the classification of reality into the ten categories, but he considers that empirical data cannot provide certainty about something non-empirical. In other words, any judgement about non-material if based on the observation of the material can be only analogous, not necessary. However, if subject is able to grasp certain meanings of the most universal extension independently of any observation, that is intuitively, these meanings could be the basis to make judgements and acquire certainty (not only an opinion) about transempirical. Those meanings are, according to Ibn Sīnā, *existent, necessary* and *thing*, and in this sense we could say that they are *a priori* notions of the intellect. They are *a priori* not only because they are 'impressed in the soul primarily', but also because they are evident conditions for any other conception. Thus, from here all existence can be divided into possible and necessary.

Ibn Sīnā's ontological presupposition leads him to further depart from Aristotle's philosophy. Aristotelian understanding of causality, that is his division of the four causes, is not sufficient to explain existence. Aristotle's understanding is simply too naturalistic, that cannot be used for explanation of anything above material world. In Aristotle's metaphysics all explanation ultimately leads to motion: 1) matter represents pure potentiality, it is what something is made out of, the aspect of the change or movement which is determined by the material that composes the moving things, 2) form is the principle of actuality, it makes one particular thing that thing, it is a movement caused by the arrangement, shape or appearance of the moving thing, 3) efficient cause or agent is the cause of motion, it is the cause of every change, 4) final cause, purpose, or end, is that for the sake of which a thing is moving or changing, it is the reason why the efficient and formal causes do what they do. But for Ibn Sīnā this is not enough. Motion remains within the category of perceptible, while the ultimate cause of existence represents something unmoved and unchangeable. One can, of course, reach the conclusion about an ultimate unmoved cause of motion, but this can never be the adequate explanation of existence because essence of this ultimate cause is not identified, hence its relationship with its cause, the world, cannot be adequately described. In Aristotle's

²⁵ *Ibid.*, VI, 2, (1) - (5).

philosophy the efficient cause is defined as 'the primary source of the change or rest'²⁶ and its effect is 'the fulfilment of what is potentially, as such'.²⁷ For Ibn Sīnā, this represents false understanding of the real nature of efficient causality.²⁸ The ultimate cause of the world has to be unique and therefore cannot fall into scope of Aristotle's conception. For this reason besides natural sciences another science is needed that will be the highest science in the real sense. This science, metaphysics, will not serve merely as a sort of addition or appendix to the natural sciences, as it seems to be Aristotle's idea, but is going to be independent science of existence qua existence. For this purpose new kind of causality has to be introduced: the metaphysical causality. This kind of causality does not avoid (nor it has to avoid) Aristotle's categorisation. It is efficient causality, yet in metaphysical context the efficient cause is not the cause of motion but the cause of existence. Ultimately this cause is only one, God, who is the bestower of existence by the means of the *flow* (sudūr), or emanation (fayd) from His own Self.²⁹

Everything other than God is the effect of God, directly or indirectly, and is as such contingent, i.e. possible in itself while necessary through its cause. The existence of the world is completely determined by the First. But to be determined by something eternal means that the world also must be eternal – in this way the eternity of the world is proven in metaphysics as well as in physics: physics shows that the world must be eternal because every motion precedes another motion, hence the beginning of motion cannot be find in efficient but eventually in final causality, which is further explained by metaphysician. The origin of motion is the desire to imitate what is good, which comes from the intellectual apprehension of what is the absolute goodness; in this way heavenly bodies affect everything what is beneath them, and all contingent being is set in motion which has purpose that is above the motion.³⁰

This specific metaphysical notion of 'efficient causality' thus represents a fundamental intuitive notion that serves as principle through which the meaning of 'the cause' is grasped and used in natural sciences. It is implied by the division of existence into possible and necessary. Beside this, Ibn Sīnā's insisting on the division of theoretical sciences into 'mixed

²⁶ Aristotle, *Physics*, II, 3, 194b, in *The Complete Works of Aristotle*, transl. Jonathan Barnes (Princeton, Princeton University Press: 1991). For other Aristotle's works from The Complete Works of Aristotle abb.: Categories; De Interpretatione; Prior Analytics; Posterior Analytics; Topics; Sophistics; Physics; De Anima; Metaphysics.

²⁷ *Ibid.*, II, 3, 194b; III, 1, 201a.

²⁸ al-Ilāhiyyāt, VI, 2, (1).

²⁹ Ibid., I. 2, (16); VIII, 6, (1); also Kitāb al-Ishārāt wa-t-Tanbīhāt (Remargs and Admonitions), transl. Shams Inati (New York, Columbia University Press: 2014), VI, c. 42, p. 165. Abb.: al-Ishārāt. ³⁰ al-Ilāhiyyāt, IX, 2, (18), (22).

with motion' and 'not mixed with motion' makes him depart from Aristotelianism even further. By stating that metaphysics is completely separate from material, Avicenna follows Aristotle's conception from *Metaphysics* E, 1, 1026a, yet by this statement Aristotle had something completely different in mind: metaphysics obviously serves as the continuation of physics, this is evident by the fact that the proof for God's existence in Aristotle rests upon his understanding of motion and change as described in *Physics* (especially Book VIII).

For Ibn Rushd, genuine Aristotelianism is a synonymous for the truth. Aristotle's philosophy is the perfect and the most complete scientific system that as such needs only clarifications, not reformation.³¹ He wrote various commentaries on Aristotle's works, sometimes even up to tree commentaries on one work.³² The most important sources used in this research are: *Tahāfut al-Tahāfut, Long Commentary on Aristotle's Metaphysics, Long Commentary on Aristotle's De Anima.*

It seems that al-Ghazālī was not the greatest threat to philosophy in the eyes of Ibn Rushd. Indeed, he dedicated his entire book to refutation of al-Ghazālī's *Tahāfut al-Falāsifa*, but *Tahāfut al-Tahāfut* is all about showing that al-Ghazali's arguments are in fact dialectical at their best. Besides, al-Ghazālī's *Tahāfut* would not exist if there was no al-Fārābī and Ibn Sīnā, for it is them who 'misused' Aristotle and turned philosophy on the wrong path. The real threat for Ibn Rushd is in fact Ibn Sīnā. His metaphysics represents a detailed conceptual philosophical analysis that is based on Aristotle's logic, and is as such a closed system that offers a systematic explanation of the world. However, this system is based on a fatal mistake due to which it threatens to collapse and bring all philosophical knowledge with it: the foundation of Ibn Sīnā's metaphysics rests upon his understanding of existence as necessity. Although logically precise, this metaphysics is fundamentally wrong. Its basic premise is that the necessity of predication of the notion of 'existence' to everything that *is*, is the basis of all knowledge of the world. According to Ibn Rushd, this is the fatal mistake, for what follows is that we can derive certain truths about the world based on the analysis of the relationship

³¹ In an interesting passage in *De substantia orbis* Ibn Rushd says: "Not everything we have said was found explained in those books of the sayings of Aristotle that have reached us, but some of these things were found explained in his writtings and some of them follow from what he has proved in the books that have reached us. However, it appears from his words that he has explained all of these matters in books of his that have not come down to us" (Hyman's translation, *De Substantia Orbis, Critical Edition of the Hebrew Text with English Translation and Commentary* (Cambridge, Massachusetts and Jerusalem: Medieval Academy of America, 1986), p. 73).

Obvioulsy Ibn Rushd sees his own philosophy as clarification of what Aristotle said and reconstruction of what is lost of his wisdom.

³² Karlığa, Bekir, Batıyı Aydınlatan İslam Düşünürü İbn Rüşd, (Istanbul: Mahya Yayıncılık, 2014), p. 43.

between concepts. It is this idea that sets Ibn $S\bar{n}\bar{a}$'s metaphysics on the wrong foundations, which eventually undermines whole knowledge.

FIRST PART: PROBLEMS OF ONTOLOGY

1.1 Ibn Sīnā's Ontological Foundation of Metaphysics

1.1.1 'Existence' as a Starting Point of Metaphysics

According to Ibn Sīnā, the ultimate goal of philosophy is not to explain motion, but to explain existence, and this task can be achieved only in metaphysics.³³ The meaning of 'existence' is the first principle of human knowledge, and it is for the same reason the first principle of metaphysics. Ibn Sīnā's metaphysics is founded on his formulation of the concepts of 'existent' (*mawjūd*), 'thing' (*shay'*) and 'necessary' (*darūrī*, *wājib*)³⁴ and his main idea is to build a metaphysical system based on these notions. 'Existent', 'thing' and 'necessary' represent the best-known things and *per se* evident principles of the soul.³⁵ This idea is probably inspired by Aristotle's teaching that the first principles of science cannot be demonstrated and are based on the self evidence of the principle of non-contradiction - for Ibn Sīnā, just as there are first principles in the sense of assent, as Aristotle showed, there are also meanings in the sense of conception that are conceived *per se* and do not require any prior conception.³⁶

Existence (*wujūd*, Per. *hastī*) for Ibn Sīnā has no principle, as there are no more general meaning; as such it is recognized by the reason itself and has no definition, description nor genus.³⁷ Subject matter (*mawdù*') of metaphysics lies in 'existent *qua* existent', or 'being *qua* being' (*al-mawjūd bi-mā huwa mawjūd*) and its goal, or the main thing that is searched³⁸ in it (*maţlūba*), is the proof for God's existence. Thus, metaphysics is a unique science, as ontology concerned with existence, and as theology establishes the existence of the First Principle. This means that metaphysics is based on a priori and self-evident (*awwalī*) concepts of human reason that cannot be reduced to the senses. The main difference between metaphysicians (*al-ilāhīyyūn*) and physicists (*al-ṭabī'iyyūn*) is that the latter are trying to

³³ This is Ibn Sīnā's most important objection against Aristotle, and the main reason why the Philosopher's ideas should be sustematically improved.

³⁴ *al-Ilāhiyyāt*, I, 5, (1).

³⁵ Ibid.

³⁶ Aertsen, Jan A., Avicenna's Doctrine Of The Primary Notions And Its Impact On Medieval Philosophy, in Islamic Thoughts in the Middle Ages, eds. Anna Akasoy and Wim Raven, (Leiden-Boston: Brill, 2008), p. 24.

³⁷ Ibn Sīnā's *Dānish Nāma*, (*The Metaphisica of Avicenna*), transl. Parviz Morwedge, (New York: Columbia University Press, 1973), t. 3, p. 15; Abb.: *Dānish Nāma*. Also in *al-Ilāhiyyāt*, I, 2. (15).

³⁸ In a strict Aristotelian context: what the first philosophy is *about*, see Owens, Joseph, *The Doctrine of Being in the Aristotelian Metaphysics* (Toronto, Canada: Pontifical Institute of Medieval Studies, 1978), p. 80. Abb.: Owens, *The Doctrine of Being*.

explain the world by focusing on motion, while the former are focused on existence as such. This is the starting point from which, using the means of deductive demonstration, metaphysics establishes a systematic explanation of the world as something that is generated from God, i.e. something that necessarily emanates from the Necessary Existence ($w\bar{a}jib$ al- $wuj\bar{u}d$). All this is clear from al- $ll\bar{a}hiyy\bar{a}t$ VI. 2., where Ibn Sīnā argues that only metaphysician makes difference between natural and metaphysical efficient cause, relating the natural cause with motion and the metaphysical cause with bestowing existence.

'Existence' ($wuj\bar{u}d$) means 'that which is real' in the most general sense, whether we talk about actually established existence or about something that can exist; it means 'reality', that is the 'very capacity for being existent, realized or actualized'.³⁹ As common to all objects 'existence' is meaning of absolute being (mawjūd al-mutlaq), thus corresponds with Latin esse and entis absolute.⁴⁰ It is something primarily intelligible, an immediate 'impressed' in the intellect, and as such it applies to everything that is or can be in the outside world.⁴¹ 'Existent' (mawjūd) on the other hand means 'what is established in reality'.⁴² The concept of 'existence' thus corresponds to the concept of being *qua* being, and it necessarily applies to all things due to its absolute extension - it is predicated to everything that has any reality. 'Existence' transcends all genera and species, and therefore all divisions of reality. Saying that "this impression ['existent', 'thing' and 'necessary'] does not require better known things to bring it about", Ibn Sīnā means that we know some-thing in the manner of these concepts before we know it as some definite kind of thing. 'Existence' is the most primitive notion, and there is nothing more familiar in terms of which it could be explained⁴³ so through it any other acquired concept is grasped.⁴⁴ The onto-logical relation between existence and necessity is such that necessary indicates certainty of existence, and only through existence non-existence can be postulated.⁴⁵ This is the exact reason why Ibn Sīnā sees the notion of 'existence' as the

³⁹ Lizzini, Olga, *Wuğūd-Mawğūd/Existence-Existent in Avicenna, A Key Ontological Notion of Arabic Philosophy*, Quaestio, 3 (2003, pp. 111-138), pp. 117–118. Abb.: Lizzini, *Existence-Existent in Avicenna*.

⁴⁰ De Haan, Daniel D., *The Doctrine of the Analogy of Being in Avicenna's Metaphysics of the Healing*, Review of Metaphysics, 69.2 (December 2015, pp. 261-286), pp. 264-266. Abb.: De Haan, *Analogy of Being in Avicenna*.

⁴¹ This idea is rooted in Aristotlelian tradition, while Ibn Sīnā read and developed his ideas using al-Kindī, al-Fārābī, Yahya Ibn Adī and Āmirī (for more details see Kaya, Cüneyt, *Varlık ve İmkan, Aristoteles'ten İbnSina'ya İmkanın Tarihi*, Istanbul: Klasik, 2011, pp. 75-128. Abb.: Kaya, *Varlık ve İmkan*).
⁴² al-Ilāhiyyāt I, 5, (8).

⁴³ Shehadi, *Metaphysics*, p. 72.

⁴⁴ Marmura, Michael, Avicenna on primary concepts in the Metaphysics of his al-Shifa, in Logos Islamikos: Studia Islamica, eds. Savory, Roger and Agius, Dionisius (Toronto: Pontifical Institute of Mediaeval Studies, 1984, pp. 219-239), pp. 149-150. Abb. Marmura, Avicenna on primary concepts.

⁴⁵ Türker, Ömer, *The Possibility of Thinking on Existence: An Analysis Following the Traditions of Islamic Metaphysics*, Nazariyat Journal for the History of Islamic Philosophy and Sciences 1/2 (Istanbul, Nazariyat, 2015, pp. 1-35), p. 25. Abb.: Türker. *The Possibility of Thinking on Existence*.

one on which the science of metaphysics should be established: if we talk about certain principles of existent, we have to derive them from the meaning of 'existence', otherwise we would not be able to talk in a proper metaphysical way about any thing, but only about the aspect of motion and change.

Amongst the principles implied by the meaning of 'existence' is the principle of identity: 'a thing is equal to itself', or 'whatever is *is*', which is evident from analysis of the relation between meaning of 'existence' and 'non-existence'.⁴⁶ Something either exists or it does not exist, it is realised as a particular thing with all its characteristic or it is not realised. Thus, through existence everything is realised both in the mind as well as a concrete; even the meaning of 'nonexistence' can be postulated only through 'existence' "because existence is known in itself, whereas nonexistence is, in some respect or another, known through existence".⁴⁷

From this the principle of contradiction is derived: it is impossible that a thing does exist and does not exist at the same time and in the same respect, or as Aristotle formulated – 'it is impossible that the same thing belong and not belong to the same thing at the same time and in the same respect'.⁴⁸ The principle of identity implies that there is no middle ground between being and non-being, everything either is or is not, a thing must either be or not be. In this way the principle of excluded middle is also implied. These principles are at the same time ontological and logical. They are ontological as the fundamentals of all reality, and logical because they are in the very foundation of all thought about reality. This is why 'existence' is the notion that stands for reality it its fullest sense, as a concept it represents an absolute object and therefore has the absolute objectivity. This means that conception of 'existence' is not only a result of an activity of the intellect as a sort of ultimate abstraction (*mujarrad*), as nominalists would suggest.⁴⁹ Instead, the logical unity of the concept of 'existence' reflects an ontological unity of all reality.

⁴⁶ Türker, Ömer, *Ibn Sina Felsefesinde Metafizik Bilginin İmkanı Sorunu*, (Istanbul: İSAM, 2010), p. 173.

⁴⁷ al-Ilāhiyyāt, I, 5, (24).

⁴⁸ Or as Eukasiewicz classifies the law of non-contradiction in Aristotle into three versions: 1) ontological, it is impossible that the same thing belong and not belong to the same thing at the same time and in the same respect, 2) psychological, no one can believe that the same thing can at the same time be and not be, and 3) logical, The most certain of all basic principles is that contradictory propositions are not true simultaneously (Łukasiewicz, Jan, *Über den Satz des Widerspruchs bei Aristoteles*, in *Bulletin International de l'Academie de Cracovie*, 1-2 (1910), pp. 15-38).

⁴⁹ Although it seems that Ibn Sīnā changed and modified his theory of abstraction throughout his philosophical writings (more details in Hasse, Dag Nikolaus, *Avicenna on Abstraction*, in *Aspects of Avicenna*, ed. Robert Wisnovsky, Princeton: Markus Wiener Publishers, 2001), I would strictly maintain that in every phase of his development it was absolutely crutial that the meaning of 'existence' cannot be grasped in this way. It rather

According to Ibn Sīnā, existence and one are attributes of a thing, and in this sense existence and one are coextensive, although not identical in meaning.⁵⁰ This does not mean that everything that exists is one or that it exists in the same way for all particular existent; it means that everything that *is* is due to the existence of ultimate principle whose sole activity is that it bestows existence to everything that exists – namely God. There is no other existence than existence itself and is situated within a web of particular relations within existence. This is why Ibn Sīnā's division into physical and metaphysical inquiry, and between corporeal and rational represents statements regarding the simplicity and complexity of existent.⁵¹ In this sense we can talk about the ontological unity of all reality which is reflected in the meaning of 'existence'. This opens the question: is 'existence' a univocal or equivocal concept for Ibn Sīnā?

In a very important paragraph in his Metaphysics Ibn Sīnā says:

"Although the existent, as you have known, is not a genus and is not predicated equally of what is beneath it, yet it has a meaning agreed on with respect to priority and posteriority. The first thing to which it belongs is the quiddity, which is substance, and then to what comes after it. Since it [has] one meaning, in the manner to which we alluded, accidental matters adhere to it that are proper to it, as we have shown earlier. For this reason, it is taken care of by one science in the same way that anything pertaining to health has one science." (*ibid.* I, 5, $(21)^{52}$

Regarding the notion of 'substance' (*jawhar*) and 'accident' (*'arad*), it is the most important division of existence as it is something that belongs to an 'existent'. Substance primarily represents an individual being that has a sort of independent existence, while accident is that type of existence that is completely dependent on substance, 'as existence of Zayd as white',⁵³ where Zayd is substance, and 'white' represents an accident. In accordance with the above quoted passage, when thinking about an existing substance and an existing accident we are using the concept of existence equivocally (*bi l-tashkīk*), or as a shared name (*bi-ittifāq al-ism*), as in this context there are two types of existence: substance subsists in itself, while the existence of an accident depends on the substance. Still, although both of these types of

represents the condition for the possibility of abstraction – in order to intellectually grasp any form at all, a form has to be pre-comprehended as existing.

⁵⁰ Wisnovsky, Robert, *Avicenna's Metaphysics in Context* (New York: Cornell University Press, 2003), pp. 158-160; also see Druart, Theresa Anne, *Shay' or Res as Concomitant of Being in Avicenna*, Documenti e Studi sulla Tradizione filosofica medievale, 12 (2001), pp. 125-142.

⁵¹ Türker, The Possibility of Thinking on Existence, p. 27.

⁵² وإن لم يكن الموجود، كما علمت، جنساً، ولا مقولاً بالتساوي على ما تحتهُ، فإنه معنى متفق فيَّه على التقديم والتأخير. وأول ما يكون، يكون للماهية التي هي الجوهر ثم يكون لما بعده. وإذ هو معنى واحد على النحو الذي أومانا إليه فتلحقه عوارض تخصه، كما قد بيّنا من قبل. فلذلك يكون له علم واحد يتكفل به. كما أن لجميع ما هو صحي علماً واحداً

existent are in a different manner, they still are – the reality of these things is existing reality. Indeed, existence of substance is not the same as the existence of accident, but due to the fact that there is no concept more general and prior to the concept of 'existence' this meaning is applied to both substance and accident in the same sense.⁵⁴ This indicates that 'existence' is equivocal in one sense but might be univocal in another. As Alexander Treiger stressed, although 'existence' is not a genus, "it is 'sufficiently' univocal to be able to serve as the subject-matter of a science. The univocity in question is 'modulated' univocity, since the meaning of existence is predicated of substance and accidents 'with respect to priority and posteriority".⁵⁵ By 'modulated univocity' Treiger has in mind Ibn Sīnā's explanation in al-Maqūlāt, I, 2, 10.3: 'That in which the intended meaning is the same but which becomes differentiated...' This further means that 'existence' is a non-constitutive concomitant (lāzim ghayr muqawwim), or an inseparable accident of every quiddity.⁵⁶ On the other hand, 'existence' is an equivocal concept in the sense that things exist differently; for example, substance and accidents, thing in the mind and thing outside of the mind, God and creation all these beings are, but not in the same manner, especially not regarding priority and posteriority; substance exists in itself, whereas accidents exist because of substance, God exists in the full sense, while creature exists only in a dependent sense. This is why it might be pricise to say that 'existence' is analogical notion.^{57 58} Therefore, in another sense existence is predicated equivocally of the ten categories, first of the substance and then of the nine accidents. In short, as Catarina Belo summarises it:

"Existence is said primarily of substance and as such it is then said of the accidents which inhere in a primary substance. Predication according to priority and posteriority means that it is said of the nine accidents through the

⁵⁴ Gilson, Etienne, Avicenna et le point de départ de Duns Scot, in Archives d'Histoire Doctrinale Et Littéraire du Moyen Age, 2 (1927, pp. 89-149), pp. 110-111.

⁵⁵ Treiger, Alexander, Avicenna's Notion of Transcendental Modulation of Existence (Taškīk al-Wuğūd, Analogia Entis) and its Greek and Arabic Sources, in Islamic Philosophy, Science, Culture, and Religion, Text and Studies, eds. by Hans Daiber, Anna Akasoy, Emilie Savage-Smith, Vol. LXXXIII, (Leiden, Boston: Brill, 2012, pp. 327-363), p. 359. Abb.: Treiger, Avicenna's Modulation of Existence.

⁵⁶ *Ibid.*, pp. 361-362.

⁵⁷ De Haan, Analogy of Being in Avicenna, pp. 268-272.

⁵⁸ Because of this it might be that interpretation of Henry of Ghent is the correct one. Henry makes a distinction between univocal, equivocal and analogical use of a term. According to Henry, the meaning of 'being' (*ens*) as the absolute meaning is analogous notion. Its form is shared by imitation, i. e. the form does not have the same intelligibility in the context of the relationship between God and creatures; in this sense the meaning of 'being' is neither univocal nor equivocal, but something in between (*Summa*, art. 21, q. 2, F). Therefore, the meaning of 'being' has certain unity that corresponds with everything that *is*, and this unity is sufficient for the unity of metaphysical knowledge (Pickave, Martin, *Henry of Ghent's Metaphysics*, in *A Companion to Henry of Ghent*, ed. Gordon A. Wilson, Leiden Boston: Brill, 2011, pp. 153-180; p. 153). It is important to add that Henry's interpretation of Ibn Sīnā's ontology is insufficiently investigated.

intermediary of substance, and of some accidents through the intermediary of others."⁵⁹

At the same time, 'existence' is univocal concept in a different sense: all things mentioned above (substance and accident) exist, they *are*, on the contrary to non-existence. Even with regard to the relationship between God and the world – they both exist.⁶⁰ Therefore, 'existence' is not just a shared name, because

"Whenever one asserts that there is a substance and that there is an accident, only one meaning is implied, in the same way that 'is' and 'is not' refer only to one meaning. Indeed, if a reference is made to being as a particular, then the being of each thing is unique as a particular substance is unique for each entity."⁶¹

As we can see, 'existence *qua* existence' is in one sense equivocal and in another univocal concept, it represents something that is 'one but common to all,' and as such it goes beyond the extension of all universals – in this sense it is a *transcendental* concept.⁶² Thus we can accept that the concept of 'existence' is 'modulated univocal' in the sense that it refers to all divisions of existents in reality, but also equivocal in the sense that it encompasses different realities that are 'more' or 'less' real regarding each other. Also, it is not wrong to talk about 'existence' as 'analogical concept'. As the problem of interpretation here becomes very complex⁶³ I believe that we could simplified it by keeping in mind that the meaning of 'existence' is the most universal, or the absolute meaning, so as such it behaves in different sense as univocal, equivocal as well as analogical. This is so because it is more general than any universal.

⁵⁹ Belo, Catarina, *Essence and Existence in Avicenna and Averroes*, Al-Qantara 30(2) (2009), p. 411. Abb.: Belo, *Essence and Existence*.

⁶⁰ Fazlur Rahman, *Ibn Sina's Theory of the God-World Relationship*, in *God and Creation: an Ecumenical Symposium*, eds. David Burrell and Bernard McGinn (Notre Dame: University of Notre Dame Press, 1990, pp. 38-56), p. 38

⁶¹ Dānish Nāma, ch. 11.

⁶² According to Alexander Treiger, "it is Avicenna who is to be credited with the earliest formulation of the medieval doctrine of *transcendental* modulation of existence, which was later to become known in Latin as *analogia enti*." (Treiger, *Avicenna's Modulation of Existence*, p. 329) - all this is due to Avicenna's shift from the predicamental to the transcendental level of the analysis of existence.

⁶³ al-Ilāhiyyāt, I, 5, (8). There are many studies and various ideas that address Ibn Sīnā's doctrine of univocity, equivocity, and analogy of 'existence'. For more details see Bertolacci, Amos, Bertolacci, *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifā': A Milestone of Western Metaphysical Thought*, Leiden – Boston: Brill, 2006, pp. 386–390; Wolfson, Harry A., *The Amphibolous Terms in Aristotle, Arabic Philosophy and Maimonides*, Harvard Theological Review 31, 1938, pp. 151–173; Eshots, J., *The Principle of the Systematic Ambiguity of Existence in the Philosophy of Ibn Sina and Mulla Sadra*, Afkar 6, 2005, pp. 161-170; Treiger, A., *Avicenna's Notion of Transcendental Modulation of Existence*, 2012; Druart, TA., *Ibn Sīnā and the Ambiguity of Being's Univocity*, in *Views on the Philosophy of Ibn Sīnā and Mullā Şadrā Shīrazī*, ed. M.A. Mensia 2014, pp. 15–24; De Haan, *Analogy of Being in Avicenna*, pp. 261-286.

At this point when we think about a thing (or when we predicate notion of 'thing' to an object - which is amongst three *a priori* notions for Ibn $S\bar{n}a\bar{a}$) we can see that our thought follows two main lines determined by questions: *what* that thing is, and *why* it is? This 'what' and 'why' indicates that there are two types of realities behind that thing. Both 'what?' and 'why?' are questions that require different answers. 'What' requires a definition and 'why' requires a causal explanation. To know what something *is* is, therefore, quite different from knowing why it is. Being aware of this, Ibn $S\bar{n}\bar{a}$ draws the distinction between existence and essence. Although connected in a real being (or existent), essence and existence are distinct in the sense that they represent different realities. In accordance to this, Ibn $S\bar{n}\bar{a}$ says: "The meaning of 'existence' and the meaning of 'thing' are conceived in the soul and are two meanings, whereas 'the existent,' 'the established,' and 'the realized' are synonyms,"⁶⁴ and regarding 'thing' (or its equivalent - essence) he continues:

"For, to everything there is a reality by virtue of which it is what it is... It is that which we should perhaps call 'proper existence' (*wujūd al-khāss*) not intending by this the meaning given to affirmative existence (*wujūd al-ithbātī*); for the expression 'existence' is also used to denote many meanings, one of which is the reality a thing happens to have. Thus, [the reality] a thing happens to have is, as it were, its proper existence."⁶⁵

Clearly, 'existence' here applies to two modes of reality: 1) a concrete 'established' existence, and 2) reality by virtue of which that existent is what it is – its essence, or whatness $(m\bar{a}hiyya)$. In other words, we could say that existence and essence distinction is in fact the distinction between an individual being and its identity; for the question 'why?' asks about concrete realized individual, but question 'what?' asks about identity (or quiddity) that belongs to that individual. Therefore, the distinction between essence and existence is actually the distinction between identity *per se* and established individuality. This is the reason why it is so important to approach to Ibn Sīnā's notion of 'existence' with extreme caution, for 'existence' in the most general sense means the most general concept that corresponds with being *qua* being and as such sometimes includes essence, and sometimes it denotes what is realized as existent and is as such distinct from essence.⁶⁶ So while existence as such

⁶⁴ *Ibid.*, I, 5, (9):

إن معنى الوجود ومعنى الشيء متصوران في الأنفس، وهما معنيان. فالموجود والمثبت والمحصل أسماء مترادفة على معنى واحد... 65 Ibid:

والشيء وما يقوم مقامه قد يدل به على معنى آخر في اللغات كلها، فإن لكل أمر حقيقة هو بها ما هو، فالمثلث حقيقة أنه مثلث، وللبياض حقيقة أنه بياض، وذلك هو الذي ربما سميناه الوجود الخاص، ولم نرد به معنى الوجود الإثباتي. فإن لفظ الوجود يدل به أيضاً على معاني كثيرة، منها الحقيقة التي عليها الشيء، فكأنه ما عليه يكون الوجود الخاص للشيء.

⁶⁶ This very idea led Bertolacci to advocate the distinction between existence1 as something that is established in reality and existence2 that is proper existence or essence (Bertolacci, Amos, *The Distinction of Essence and*

corresponds with being *qua* being, the manner of existing is a mode of being. Existence (*wujūd*, later in Scholastics *esse*) is the absolute meaning of being *qua* being or absolute being (*mawjūd al-mutlaq*, *entis absolute*) that is common to all possible objects of inquiry.

The meaning of 'existence' in Ibn Sīnā encompasses all things that exist, that have existed and can exist and for this reason I would say that this meaning correspond with the absoluteness of existence *per se*. 'Being' (*mawjūd*), on the other hand, means something that corresponds with 'existent' or 'realized', that has existence. This is so because essence can be realized as well as non-realized and as such it can be in a concrete thing as well as actualised as an idea in the mind. As non-realized it is essence *per se*, and as such it has potentiality for existence, i.e. for actualisation, i.e. for participation in the absoluteness of existence. As nonrealised, essence represents a capacity for existence. In this sense we can talk about essence in three main ways: essence *per se*, realised essence in an existent, and realised essence in the mind, or 'conceptualised essence'.⁶⁷ Ibn Sīnā's idea of three aspects of essence is the result of consideration that essences of things can exist in reality or in conception – there are three ways that they can be considered: a consideration of the essence inasmuch as it is that essence, without any relation to the two existents (conceptual and established), a consideration inasmuch as it is in external reality, and consideration inasmuch as it is conceptualised.⁶⁸

For Ibn Sīnā, existence manifests primarily in a concrete existing things, or Aristotelian substance ($o\dot{v}\sigma i\alpha$, *jawhar*). Ibn Sīnā is aware of Aristotle's doctrine that existence is not a genus,⁶⁹ and is not predicated equally to all things that exist, as well as that it is primarily predicated to substance. Still, for Ibn Sīnā existence is something that is *predicated to*, and therefore something accidental (*'aradī*). On the other hand, things, in order to be real, must have their own reality, which makes them the things they are. This is so due to their essence, or *māhiyya*. That a thing has its own essence is self-evident from the logical principle of identity. If a thing is what it is, it must have in itself that which makes it what it is – its quiddity, or whatness.⁷⁰ This indicates, Ibn Sīnā continues, "that the reality proper to each

Existence in Avicenna's Metaphysics, in *Islamic Philosophy*, *Science, Culture, and Religion, Text and Studies*, ed. Hans Daiber Anna Akasoy Emilie Savage-Smith, Vol. LXXXIII, Leiden, Boston: Brill, 2012, pp. 257-288, p. 268, also in Lizzini, Olga, *Ibn Sina's Metaphysics*, in *The Stanford Encyclopedia of Philosophy* (Fall 2016 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/ fall2016/entries/ibn-sina-metaphysics/, 3.2).

⁶⁷ Ibn Sīnā, *Mantığa Giriş (al-Madkhal)*, transl. Ömer Türker, Turkish-Arabic text (Istanbul, Litera Yayıncılık: 2013), I, 2, [15]. Abb. *al-Madkhal*.

⁶⁸ Ibid.

⁶⁹ al-Ilāhiyyāt, I, 5, (21); al-Makūlāt, II, 1, [100].

⁷⁰ al-Ilāhiyyāt, I, 5. (10).

thing is something other than the existence that corresponds to what is affirmed".⁷¹ Existence in concrete things is therefore predicated to their essence. This means that existence is an accident in things consideration of which indicates the distinction between essence and existence. In other word, existence is accidental (and not essential) to those actually existing beings whose essence does not automatically entail existence,⁷² and is not an accident in the sense of Aristotelian ten categories. Therefore, Ibn Sīnā's understanding of existence as accident has no specific, but rather broad sense; it simply means that it is possible to think an essence although this essence does not have to exist actually. However, this possibility of consideration of a meaning without a reference corresponds with the real contingency of every caused being – this will become clearer later.

1.1.2 Existence and essence

The question about essence asks about *what* a thing is, why that thing is exactly *that* thing and why it always and without exception *acts* in a certain determined way. It represents a thing's nature and reality, that which is essential for it to be that thing, or as Janos sums it:

"Quiddity or essence, for Avicenna, designates the 'whatness' or 'what-it-isness' of a thing, its essential structure and principle, as well as its meaning and intelligibility to the mind. As such, it is what makes conception or conceptualization (tasawwur) possible. Quiddity is what is referred to by the definition (*hadd*), according to which a thing is what it is and not something else, regardless of the mode in which it exists. In other words, the definition informs us about its thingness (shay'iyyah) in abstraction from that thing's existence, that is, whether it exists and how or in what mode it exists. Quiddity as such is apprehended as a unitary idea and meaning $(ma n \bar{a})$ in the mind. It is what represents a thing's essential or foundational nature $(tab\bar{t} a)$ and true reality $(haq\bar{t}qa)$. This is because quiddity contains, and is constituted by, a set of internal and essential components that determine its very nature and, thus, the nature of an existent thing as well. These are what Avicenna calls the constitutive elements or constituents (*muqawwimāt*) of quiddity, which are its inner, essential, and formal constituents. These are sharply distinguished from (a) the external concomitants (lawāzim), which, in contrast, are non-constitutive (ghayr *mugawwimah*) and hence do not enter into the quidditative core, although they necessarily accompany quiddity when a thing actually exists; and (b) the accidents proper $(a'r\bar{a}d)$, which are also external to guiddity, but do not necessarily attach to guiddity in existence and always remain separate from it."⁷³

⁷¹ Ibid.

⁷² Belo, *Essence and Existence*, p. 414.

⁷³ Janos, Damien, Avicenna on the Ontology of Pure Quiddity (Berlin, Boston: De Gruyter: 2020), pp. 19-20. Abb.: Janos, Avicenna on the Ontology of Pure Quiddity.

As being said, essence falls into three modes: as concrete being, as conceived idea and as essence per se.⁷⁴ As conceived idea it responds to the question 'what is it?' ($m\bar{a}$ huwa?). It is property per se of a thing that defines it as such and that without which that thing would not be identified as such. This means that "whether an essence refers to actual existent or not is logically external or incidental to the conceptual identification of that essence".⁷⁵ Essence per se is simple, indivisible, unchangeable, necessary, eternal and inconceivable. As such it neither precedes nor succeeds existence. It is not an independent entity like Platonic forms. It is the condition for the existence of an existent, while the existence of its cause is its 'reason why.' At this point the difference between essence and universal becomes clear; while in itself essence is neither particular nor universal, in the mind it is conceived as something to which a quality of universality (al-kulliyya) is added after the process of abstraction.⁷⁶ In this sense we could say that the universal is a combination of essence and universality in the mind, or "an abstraction of the essences' extramental relation of 'being common to many;" hence while universal has reality only in the mind, universality, like essence, has a foundation in external reality.⁷⁷ As conceived in the mind essence represents "intelligible form" (*al-sūra al-'aqliyya*) which as single form corresponds to multiple individuals. In this way essence is "associated with universality in terms of not constituting an obstacle to being predicated to multiplicity".⁷⁸

The distinction between essence and existence has an Aristotelian origin;⁷⁹ in *Posterior Analytics* (II B 92b) and *Metaphysics* (Δ , V.5, 1015a–b and 7, 1017a–b) the distinction is drawn between two questions: to ask 'if a thing exists' is different from 'what a thing is'. In this sense Legenhausen notices:

"Ibn Sina discovers a contradiction, or at least a tension, in Aristotle's system. Aristotle had distinguished two sorts of questions: questions about whether or not a thing is, existence questions, and questions about what a thing is, whatness or quiddity questions. Yet, when Aristotle turns to being qua being, he singles out substances as the primary existents. Being in the primary sense is said to be of substances. So, the science of being qua being, metaphysics, becomes the science of substances. However, all of the

⁷⁴ Marmura, Michael, *Quiddity and Universality in Avicenna*, in *Neoplatonism and Islamic Thought*, ed. Parviz Morewedge (New York: State University of New York Press: 1992, pp. 77-87), pp. 78-81; the thesis was popularised by Goichon, Amélie Marie, *La Distinction de l'Essence Et de l'Existence d'Après Ibn Sina*, Desclée de Brouwer, 1937.

⁷⁵ Shehadi, *Metaphysics*, p. 78.

⁷⁶ Ibn Sīnā, *Kitāb al-Shifā': al-Madkhal, Mantığa Giriş,* trans. Ömer Türker (Arabic-Turkish text), (Istanbul: Litera Yayıncılık, 2013), I, 2, [15]. Abb.: *al-Madkhal.*

⁷⁷ Marmura, Michael, *Avicenna's Chapter on Universals in the Isagoge of His Shifa*, in *Islam: Past Influence and Present Challenge*, eds. Welch, Alford T. and Cachia, Pierre, (Albany: State University of New York Press, 1979, pp. 34-56), pp. 34-35.

⁷⁸ Türker, Ömer, *Being and Meaning: Fakhr al-Dīn al-Rāzī and His Followers on Identity of Knowledge and Known*, Nazariyat Journal for the History of Islamic Philosophy and Sciences 1/1, (Istanbul: Nazariyat, 2014, pp. 41-60), p. 45.

⁷⁹ Charles, David, Aristotle on Meaning and Essence (Oxford: Clarendon Press, 2000), pp. 5-19.

categories answer questions of what a thing is. Insofar as a thing is considered a substance or an accident, it is considered in terms of what it is, not merely that it is. The science of being qua being, to the contrary, should concern itself with the existent insofar as it exists, without regard to it being of one category or another.³⁸⁰

Regarding the distinction between 'existence' ($wuj\bar{u}d$), 'being' or 'existent' ($mawj\bar{u}d$) and 'essence' ($m\bar{a}hiyya$) Ibn Sīnā states that 'existence' ($wuj\bar{u}d$) has two main meanings: 'proper existence' ($al-wuj\bar{u}d$ $al-h\bar{a}ss$) and 'affirmative' or 'realised existence' ($al-wuj\bar{u}d$ $al-ihb\bar{a}t\bar{i}$).⁸¹ Proper existence corresponds with 'essence' and affirmative existence corresponds with existent or being. The distinction is not, therefore, between essence ($m\bar{a}hiyya$) and existence in the absolute sense ($wuj\bar{u}d$), but between essence ($m\bar{a}hiyya$) and existence in the sense of the activity of existent ($mawj\bar{u}d$). In other word, the distinction is not between essence and existence in the sense of absolute reality, but between essence and existence in the sense of actuality or 'being acquired,' i.e. between essence of an actual existent and existence of an actual existent. This is supported by the following passage:

"To resume, we say: It is evident that each thing has a reality proper to it-namely, its quiddity. It is known that the reality proper to each thing is something other than the existence that corresponds to what is affirmed."⁸²

As Bertolacci commented upon this passage, Ibn Sīnā affirms a fundamental distinction within existence,⁸³ and so by distinguishing proper and affirmative existence. The distinction between existence and essence (or quiddity, thingness) is logical as well as ontological because it reflects the composition in existent. For this reason Lizzini states:

"Indeed, not only must the conceptual constituents that define the being of something be distinguished from the affirmation of its existence (as in gnoseology), but also the very essence of something must be metaphysically distinguished from its existence. Essence is not, so to speak, "ontologically neutral". The essence or thingness of which Avicenna speaks is not simply the essence of the thing considered as such, regardless of its existence, but the

⁸⁰ Legenhausen, Muhammad, *Necessity, Causation, and Determinism in Ibn Sina and His Critics*, The Imam Khomeini Education and Research Institute Qom, Iran (Spring 2009, pp. 1-45), p. 4. Abb.: Legenhausen, *Necessity, Causation, and Determinism in Ibn Sina*.

⁸¹ *al-Ilāhiyyāt*, I, 5, (9). ⁸² *Ibid*. I, 5, (10):

أنه من البين أن لكل شيء حقيقة خاصة هي ماهيته، ومعلوم أن حقيقة كل شيء الخاصة به غير الوجود الذي يرادف الإثبات. ⁸³ Bertolacci, Amos, *The Distinction of Essence and Existence in Avicenna's Metaphysics*, in *Islamic Philosophy, Science, Culture, and Religion, Text and Studies*, eds. Hans Daiber Anna Akasoy Emilie Savage-Smith, Vol. LXXXIII (Leiden, Boston: Brill, 2012), p. 268. Abb.: Bertolacci, *Essence and Existence in Avicenna*.

thingness and hence the thing that, considered as such and regardless of its existence, reveals exactly the character or modality that its own existence has."⁸⁴

Still, the compositeness of essence and existence must not be seen as a compositeness of two elements.⁸⁵ Essence ($m\bar{a}hiyya$) is that by which a thing is what it is, it is the very identity of a thing. If a thing is what it is, it must have in itself that what makes it what it is. This means no more than that a thing, in order to be something, must have some sort of reality that is proper to it. This reality defines it, makes it *that* instead of something else. This is why Ibn Sīnā refers to essence also as 'proper existence'. As such, essence reflects a 'what-ness' or 'quiddity' of thing. At this point it is important to note that by 'essence' here is meant something that corresponds with 'individual essence', or 'individual that-ness' (*annīya šahşīyya*). Metaphysics is concerned with essence that is discovered by recognising "those elements in the reality of an object that required to make the individual belong to a certain kind or species."⁸⁶ As such essence is unchangeable and eternal. Thus in Ibn Sīnā essence as considered in itself is eternal, not as an entity (as we would then fall into the problems of Platonic ideas), but as eternal essentiality - what is essential for a thing to be exactly that thing is eternally essential.

By stating that, essence is realised in two ways, that is in the concrete being and in the mind, as well as that there is a consideration of essence *per se*, Ibn Sīnā advocates that the distinction between essence and existence is not just mental, but real. This means that our mental separation between essence and existence can tell us something about thing as they are in themselves. For Ibn Sīnā essence and existence are distinct from each other, but also inseparably related to each other.⁸⁷ 'The existent' and 'the one' are indefinable concepts and necessary concomitants of a thing - if a thing is, it is one – still, to be a thing is different from existing and being one: in itself the quiddity, or whatness, of a thing is neither existent nor one.⁸⁸ It is for this reason that essence in itself is only postulated, but not known, as what is known must be grasped as existing and as one. As confirmed in *al-Ilāhiyyāt* I, 5, (19), the difference between essence and existence corresponds with the difference between 'the thing'

⁸⁴ Lizzini, Olga, *Ibn Sina's Metaphysics*, in *The Stanford Encyclopedia of Philosophy* (Fall 2016 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/ fall2016/entries/ibn-sina-metaphysics/, 3.3. Abb.: Lizzini, *Ibn Sina's Metaphysics*.

⁸⁵ Lizzini, Existence-Existent in Avicenna, p. 120.

⁸⁶ McCormick, *Scholastic Metaphysics* (Chicago, Illinois: LoyolaUniversity Press, 1940), p. 37. Abb.: McCormick, *Scholastic Metaphysics*.

⁸⁷ Bertolacci, Essence and Existence in Avicenna, p. 271; Lizzini, Ibn Sina's Metaphysics, 3.5

⁸⁸ Lizzini, *Ibn Sina's Metaphysics*, 3.5.

and 'the existent' or 'the realized'. If something exists actually than it is an actual existent, or established existence, if, on the other hand, it does not exist actually then it is essence, or possible existence. Therefore, the relation between essence and existence does not correspond only with the relation between thing and existent, but also with the relation between possible and actual.

Metaphysics distinguishes existence from essence in every concrete existent. Essence represents the thingness of a thing that "considered as such and regardless of its existence, reveals exactly the character or modality that its own existence has".⁸⁹ Everything in which we can make the distinction between its existence and its essence is contingent, or, in accordance with Ibn Sīnā's terminology, possible in itself (*mumkin bi-dhātihī*). This means that it can exists as well as not to exists -i.e. we can imagine its existence as well as its nonexistence without logical contradiction.⁹⁰ This is so because, as we already stated, its existence is only an accidental ('aradī) in the sense of being something added to (' $\bar{a}rid$) its essence. This addition is due to the thing's cause.⁹¹ This means that the thing taken in itself is non-existent, and can be existent only through another (i.e. its cause). In this sense 'existence' is 'necessity' for everything that 'is' is necessitated by its cause. As such, every contingent thing is possible in itself (i.e. non-existent that can exist) and necessary through another (existent through its cause) - but not all existence can be possible in itself, otherwise it would be non-existence, and therefore there must be a necessary existent.⁹² If existence is and nonexistence is not, an existent can come only from an existent and at some point it has to be something that is not just necessary through another, but necessary in itself (this is going to be, as we will see, the foundational point of Ibn Sīnā's proof for God's existence). This is, according to Ibn Sīnā, the only way to explain the existence of contingent things. From this point, once the necessary existent is admitted, it is up to metaphysician to prove that its existence indicates such attributes (sifa) such as 'being uncaused,' 'one,' 'unity,' 'perfection,' 'intellect,' 'goodness' etc. - meaning that this existent is God.⁹³

Therefore, in order to fully grasp the relationship between essence and existence we have to analyse Ibn Sīnā's notion of 'potentiality' ($q\bar{u}wa$) and 'actuality' (fi'l). Reality, or existence in

⁸⁹ *Ibid.*, 3.3.

⁹⁰ Afnan, Soheil M., Avicenna, His Life and Works (London: George Allen & Unwin Ltd: 1958), pp. 123-124.

⁹¹ al-Ilāhiyyāt, I, 6, (5); IV, 1, (9).

⁹² Alper, Ömer Mahir, *İbn Sīnā ve İbn Sīnā Okulu*, in *İslâm Felsefesi, Tarih ve Problemler*, ed. Cüneyt M. Kaya, (Istanbul: İSAM Yayınları, 2013), pp. 251-283; for historical context see also Kaya, Cüneyt, *Varlık ve İmkan*, *Aristoteles'ten İbnSina'ya İmkanın Tarihi* (Istanbul: Klasik, 2011), pp. 234-254.

⁹³ Adamson, Peter, *From the Necessary Existent to God*, in *Interpreting Avicenna: Critical Essays*, ed. Peter Adamson (Cambridge: Cambridge University Press, 2013) pp. 170-189. Abb.: Adamson, *From the Necessary Existent to God*.

the absolute sense, is not limited only to actually existing beings. When we talk about things, we talk about them in two manners: if they are – what they are and why they are and if they are not – what they are and can they be. Thus whether existence is established or not, we can still talk about what a being is and what does it mean to be that being. This is how the difference between potency and act occurred to Aristotle as the solution to Parmenides' problem that started from proposition: something either is, or it is not. Aristotle's resply is, in short, that the dilemma is over-simplified due to the univocal understanding of the notion of 'being'.⁹⁴ According to Aristotle, everything that *is* can evidently become something else, or as well not be. In this sense we have to distinguish between existence in *potential* and existence in *actu*. If this division is denied, and only actual being is affirmed as real - change, and therefore plurality is also denied. This leaves us with Eleatics' pantheism, which according to Aristotle represents the denial of reality and a primitive conception.⁹⁵

Ibn Sīnā is well aware of this critique, and after explaining the origin of the word 'potency', he claims that the philosophers then transferred the term 'potency' and applied the expression 'potency' to "every state existing in a thing, [that state] being a principle of change,"⁹⁶ and soon after 'potency' got the meaning of 'possibility', "so it can be related to existence in a more proper manner."⁹⁷ Thus, possibility indicates existence that is not-yet-realized, but can be realized. It means the capacity of a non-existing being to exist; actual, on the other hand, means 'the realization of existence',⁹⁸ it is the fulfilment of the capacity of the possible. Actual, or actuality, is, therefore, the established existence, the firm reality, something that is in itself, and as such it is in one sense a perfection -a being as a completeness, or a fulfilment of its potentiality. On the opposite side of possibility stands impossibility. In the metaphysical sense impossibility means the incapability for existence, "everything that does not exist and does not have the potentiality to exist cannot exist. And the thing that is possible to be is [also] possible not to be-otherwise, it would be necessary [for it] to be."99 When we talk about impossibility we talk about non-existence in the real sense - it is something that is not and cannot be. When we speak about actuality we speak about existence in the real sense - about something that is. But when we speak about possible, we neither speak about existence, nor about absolute non-existence - it is something for which we cannot say that exists because it is not actualised, but we cannot say that it is nothing, because it can be and from absolute

⁹⁴ Owens, *The Doctrine of Being*, pp. 269-270.

⁹⁵ *Ibid.*, p. 300.

⁹⁶ al-Ilāhiyyāt, IV, 2, (4).

⁹⁷ *Ibid.* (5).

⁹⁸ Ibid.

⁹⁹ Ibid. IV, 2, (16).

nothingness nothing can become. Therefore, even though potentiality is not, we can still refer to it as something that can be. That to which we refer in this case is essence. Essence in itself, therefore, represents the ultimate possibility for existence. It is that type of the reality that can be actualised as concrete existent. This is why existence represents the actuality of essence. It is plain now what is the relationship as well as the real distinction between essence and existence in Ibn Sīnā's metaphysical system.¹⁰⁰ We already said that essence can be manifested in two ways: as concrete existent and as something that is realised in the mind. Thus, essence *per se* is the pure possible, the ultimate condition for anything to become. As such, this pure possible has to be postulated, because all our thinking about existence indicates it, but it cannot be known, for only what is realised can be known.¹⁰¹ In receiving existence, essence passes from a state of pure possibility to a condition of actuality. This means that even God can create something only if something can be created,¹⁰² and as we are going to see, for Ibn Sīnā, God is the necessary existent that actualises possible essences through the process of eternal emanation.

Ibn Sīnā's theory of essence as pure possible indicates two aspects of modality, logical and physical; logical modality is concerned with the relations of quiddities as considered in themselves, apart from their existence in the world or in the mind, and physical modality is concerned with the relations between things that exist.¹⁰³ When actual being comes into exsitence, it becomes something that Ibn Sīnā calls 'subject' ($mawd\bar{u}$ '). In this sense the notion of 'essence' is related to the notion of 'thing', and 'existence' to the notion of 'existent' ($mawj\bar{u}d$): essence is 'reality proper to something', and existence is 'reality that is the affirmation of something'. Essence imposes question *what*, and existence imposes question *why* – these two questions reflect two interconnected but different realities; for example, from the definition of a horse we can infer neither the existence nor the non-

¹⁰⁰ It is this idea that influenced Aquinas and sparked a "revolution" in Western philosophical thought (Staley, Kevin M., *Avicenna, Aquinas and the Real Distinction: In Defense of Mere Possibilities or Why Existence Matters*, Saint Anselm Journal, 9.1, Fall 2013, pp. 1-20; pp.1-4).

¹⁰¹ It is for this reason essentially that I did not accept Janos' admirable attempt to explain "the pure quiddity" as a form of existence in *Avicenna on the Ontology of Pure Quidty*, yet due to the complexity of this work any attempt of detail refutation would lead us far from scope of this essay.

¹⁰² Bäck, Allan, Avicenna and Averroes: Modality and Theology, in Potentialitat und Possibilitat Modalaussagen in der Geschichte der Metaphysik, ed. Thomas Buchheim (Corneille Henri Kneepkens and Kuno Lorenz, frommann-holzboog: 2001), p. 129. Abb.: Bäck, Avicenna and Averroes: Modality and Theology.

¹⁰³ *Ibid.* It is important to underline that these are not two types of modality, but only two aspects – this is important because these aspects indicate another division between logical and causal necessity, which are in Ibn Sīnā only two aspects of necessity. For Ibn Rushd, as we are going to see, causal and logical necessities are of two types, as well as logical and physical modality.

existence of horses.¹⁰⁴ As being two modes of the reality in the ultimate sense, essence and existence are closely and inseparably connected in an existing being; existent has its proper existence that makes it what it is, and its acquired existence that makes it a subject. This is why according to Bertolacci's interpretation, the fact of being an existent is a very "peculiar inseparable concomitant" of essence, or the "fundamental ingredient" of a 'thing' that has the status of a constitutive element,¹⁰⁵ and also

"This means that, in Avicenna's opinion, the relationship of concomitance does not simply apply to 'existent' with respect to 'thing', but also to 'thing' with respect to 'existent'. The relationship between these two concepts emerges therefore as perfectly balanced, so that 'thing' (and essence) cannot reclaim, in this respect, any priority over 'existent' (and existence)."¹⁰⁶

But there is another important thing indicated in the quotation of Ibn Sīnā's al-Ilāhiyyāt IV, (2, (16): something "that is possible to be is [also] possible not to be-otherwise it would be necessary [for it] to be." Clearly, necessity for Ibn Sīnā is not just a logical notion, but something that is closely connected to existence qua existence. When stated that an object exits, the statement implies some form of necessity and possibility. As existing, an object is necessitated by something that imposed its existence upon its essence, namely its cause, but also due to the fact that its existence as well as non-existence can be presumed without undergoing any contradictions, the object as such is possible (or possible in itself, as Ibn Sīnā likes to say). This is so due to the fact that the object is composed in many ways, amongst which metaphysically the most important is that of essence and existence. In other word, this means that that an object, although real, is not real in the ultimate sense - it does not represent existence qua such, but only the existence of its own essence. Its identity is in its essence, and the fact of it being established is due to something other. If we keep in mind that essence as such is not actually existing, then the contingent being is in itself non-existence rather than existence,¹⁰⁷ as in itself the contingent being would be pure identity without actualisation – a non existing, but logically possible to exist. Its existence is, therefore, something added to its essence, something that does not belong to it essentially, and whatever does not belong to a thing essentially, it belongs to it accidentally – in this sense existence is accident. This is the

¹⁰⁴ Marmura, Michael, Avicenna on the Division of the Sciences in the Isagoge of his Shifa', Journal for the History of Arabic Science (1980, pp. 239-251), p. 250. Abb.: Marmura, Avicenna on the Division of the Sciences.

¹⁰⁵ Bertolacci, Essence and Existence in Avicenna, p. 271

¹⁰⁶ Ibid.

¹⁰⁷ al-Ilāhiyyāt, VI, 1, (7); VIII, 3, (6).

meaning of 'contingency'. Regarding the absolute meaning of 'existence', it indicates only necessity, this is so due to the fact that, as Türker stated,

"The necessity attributed to non-existence is a necessity that was conceived in comparison with existence and thus does not impute any extension, for it was in the necessity of existence. That is, whereas the necessity of existence is a meaning that can be thought of and comprehended, the necessity of non-existence comprises only the negation of that necessity. Therefore, necessity is a meaning related to existence."¹⁰⁸

It is through existence that being is comprehended, and only through existence that non existence can be considered, thus through existence an essence as actualised being and as actualisation in the mind is comprehended, and through this existence essence *per se* as the absolute eternal possibility is indicated.

Ultimately the distinction between essence and existence leads Ibn Sīnā to the distinction between God, i.e. what is "necessary existent in itself" or of what is "necessary as far as existence is concerned" (wājib al-wujūd) and the world, i.e. what is "possibly existent" or "possible as far as existence is concerned" (mumkin al-wuj $\overline{u}d$) – the distinction is based on consideration, and what is considered is the quiddity $(m\bar{a}hiyya)$ or essence $(dh\bar{a}t)$ of what exists; so the modality of existence does not depends on existence, but on essence.¹⁰⁹ God is the only existent that is in itself necessary, i.e. it has no composition at all, including first of all the composition of essence and existence; instead Divine essence is his existence, contingent being is both necessary and possible, but in different respects: it is possible in itself, because its identity is its essence (and *per se* essence does not exist), and it is necessary through another, meaning that its existence is due to something other than itself,¹¹⁰ i.e. its existence is added to what represents its identity. Contingent, therefore, means 'that which is composed' in one way or another. The ontological distinction between God and the contingent is in essence, Divine essence is existence, i.e. per se actual, while the essence of the contingent is per se possible, i.e. non-existence: "As a consequence, the existence of things that are in themselves possible is always conceived as *related to* a (possible) *essence*, while the being of the Principle is purely and necessarily existence".¹¹¹ In any case, as being it

¹⁰⁸ Türker, *The Possibility of Thinking on Existence*, p. 23.

¹⁰⁹ Lizzini, Ibn Sina's Metaphysics, 4.1

¹¹⁰ Kutluer, Ilhan, *Ibn Sina Ontolojisinde Zorunlu Varlık* (Istanbul, İZ Yayıncılık: 2013), pp. 117-123; Hourani, George F., *Ibn Sīnā on Necessary and Possible Existence*, Philosophical Forum, 4 (1972), pp. 79-81; Marmura, Michael, *Avicenna on Causal Priority*, in *Islamic Philosophy and Mysticism*, ed. Parviz Morewedge (Delmar, NY: Caravan Books, 1981, pp. 65-83), p. 69; Shehadi, *Metaphysics*, pp. 84-85.

¹¹¹ Lizzini, Ibn Sina's Metaphysics, 2.4.

is indefinable and as everything points to the notion of the existent, existence has the absolute priority, both as being acknowledged and outside of the mind.¹¹² Therefore, everything that *is*, other than God, is an existent composed of two ontological principles - quiddity and existence – and as such the existence of these composed beings is ontologically "other" than their quiddity.¹¹³ This further implies that every contingent existent exist by some external efficient cause giving it existence; on the other hand God is absolutely uncomposed and hence absolute oneness, uniqueness and actuality – His existence is not shared by any other existent, and this "pure" existence is His essence, He is therefore the absolute uncaused cause of every other existent.¹¹⁴

Thus, described metaphysical relations between essence and existence, potential and actual, and possible and necessary have further connotations for natural philosophy. This relation is fundamental for the explanation of the world not just in the light with its relationship to God, but also as something that is eternal subject to change. Change, or Aristotelian $\kappa i v \eta \sigma i \varsigma$, is something that is commonly described as state of shift between motion and rest, generation and corruption, or process of becoming. As process of becoming change represents the passing from potentiality to actuality, or from one condition of existence to another, as the absolute non-existence is impossible. As we have seen, there is only existence, realised as something concrete (in the mind or outside of the mind), or unrealised as essence.

1.1.3 Substance and change

In Aristotelian philosophy, 'change' means there was something in one state and is now in another, new state. This new state is not something that came from nothing, it is actualisation of potentially. Here it needs to be underlined that what we are primarily talking about is substantial change.¹¹⁵ Besides this type, Aristotle distinguishes accidental change that has three types: local change, change in quantity and change in quality.¹¹⁶ Ibn Sīnā was well aware of Aristotelian position: $o\dot{v}\sigma i\alpha$ primarily denotes an individual existent that represents the compound of matter and form, and therefore has certain potentiality besides the fact that it

¹¹² *Ibid.*, 3.1.

¹¹³ Houser, Rollen E., *Essence and Existence in Ibn Sīnā*, in *The Routledge Companion to Islamic Philosophy*, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016, pp. 212-224), p. 212 ¹¹⁴ *Ibid*.

¹¹⁵ Or more precisely the 'substantial way of coming to be' that Aristotle distincts from the 'accidental way of coming to be' in *Physics* I, 7, 190a-b.

¹¹⁶ For more details see Waterlow, Sarah, *Nature, Change and Agency in Aristotle's Physics* (Oxford: Clarendon Press, 1982), pp. 93-131.

is an actual concrete thing. Due to this potentiality, caused by matter, $o\dot{v}\sigma i\alpha$ is subject to change, by which this individual becomes something else. So, change in this sense is something that through one actual state of being becomes another actual state of being, and thi is possible due to matter. Therefore, change is something that happens only to an existing substance. This is also the reason why Islamic philosophical tradition by following Aristotle advocates that there cannot be creation and annihilation in the sense that represents the standpoint of theology. It is important to note that this works only for what Aristotle calls 'first substance' ($o\dot{v}\sigma i\alpha \pi \rho o\tau \eta$), that represents concrete individual being, second substance ($o\dot{v}\sigma i\alpha \delta \varepsilon v\tau\varepsilon \rho \alpha$) is the universal, and as such can be predicated of many.^{117 118}

Although metaphysics does not start from the notion of 'substance' (jawhar), but from the notion of 'existence', according to Ibn Sīnā substance is the most prior of the divisions of things to which we refer as 'existent'.¹¹⁹ Substance is an individual being that has existence in itself in a certain sense.¹²⁰ 'Having existence in itself' here means that after the acquirement of existence, that existence belongs to the substance, and as such it 'subsists' as concrete being whose existence is now manifestation of its essential identity. At this point substances are to be distinct from accidents, whose existence is always something dependent upon substance.¹²¹ As subsistent, substance is something that is not in a subject at all,¹²² but instead it is subject on which existence other existents such as accidents depend. Every contingent existence is either a substance or accident. It is important to underline 'contingent' because, as we are going to see, God is not a substance in a specific sense, yet He is not in a subject.¹²³ According to Ibn Sīnā. the realisation that something is not in a subject in some particular case is not a sufficient ground for the conclusion that it is a substance; we have to investigate if this thing is not in a subject in any case to find out whether it is a substance in the particular case.¹²⁴ In this sense, substance is prior in existence, but in another sense, as we will see, the ultimate priority belongs to God only. Substance is always something contingent, therefore

¹¹⁷ Chategories, 2a10-18.

¹¹⁸ In Ibn Sīnā's philosophy we can speak about universals in three ways: as meanings actually predicated of many, as what is permissible to say of many, even if it is not a condition that these many should exist in actuality, and as meaning that can be said of many, but some external cause prevents such attribution (for example the case of the sun and the earth), see Druart, Theresa Anne, *Avicennan Troubles: the Mysteries of the Heptagonal House and of the Phoneix*, Tópicos, no. 42 (México, July 2012, pp. 51-73), pp. 52-53.

¹¹⁹ al-Ilāhiyyāt, II, 1, (2); Dānish Nāma, 3, p. 15.

¹²⁰ al-Ilāhiyyāt, I, (1).

¹²¹ *Ibid*.

¹²² *Ibid.*

¹²³ Legenhausen, Muhammad, *Ibn Sina's Arguments Against God's Being a Substance*, in From ontos verlag: Publications of the Austrian Ludwig Wittgenstein Society - New Series, Vol. 5 (2007, pp. 117-143), p. 119. Abb.: Legenhausen, *Ibn Sina's Arguments Against God's Being a Substance*.

¹²⁴ Benevich, Fedor, *Fire and Heat: Yahyā B. 'Adī and Avicenna on the Essentiality of Being Substance or Accident,* in Arabic Sciences and Philosophy, vol. 27, Cambridge University Press (2017, pp. 237-267), p. 238.

something composed. As such substance is "either body or other than body."¹²⁵ If it is a body than, according to Ibn Sīnā, it is either form of matter, and if

"It is separable [and] not a part of a body, then either it has some administrative relation to bodies in terms of moving [them]-and this is called 'soul'- or it is free from material things in all respects and is called 'intellect".¹²⁶

In any case, being a substance involves some sort of composition, at least composition of essence and existence, and therefore all that is contingent is subject to change, one way or another. As subject of change, all substances are passing from one state to another due to potentiality that they contain. What actualizes potentiality in this process of change is always a being that is already actual, thus actuality always precedes potentiality because nothing can actualise itself – this is the fundamental principle of change: whatever changes is changed by something else.¹²⁷ Indeed, before a being becomes actual it has to be in itself possible, but if everything would be just in itself possible, existence would never be realised. Therefore, there has to be something that is in itself necessary, or absolute actuality. As we are going to see, this is very important part of Ibn Sīnā's argument for the existence of God.

Substance represents itself and is not a modification of something. Modification belongs to accidents. In fact, accident's reality is subject's modification and change of accidents involves change in substance. At this point Ibn Sīnā's philosophy is typically Aristotelian: any bodily substance is (besides the composition of essence and existence) composed of that which receives activity and is *per se* an absolute passivity - namely 'matter' ($m\bar{a}dda$) - and that which is received by that passive power, form ($s\bar{u}ra$), or active principle.¹²⁸ In short, Ibn Sīnā's obviously follows Aristotelian hylomorphism: every material substance represents unity composed of matter and form. Matter stands for passive powers of substance, and is the principle of substance's receptivity, and form as that which is received is the fulfilment of the potential capacity of matter, and its actuality and activity.¹²⁹ Therefore, the relationship between matter and form is a causal one; form is the cause of matter acting in the compound, but it is not the cause of the existence of matter, on the other hand matter is the cause of

¹²⁵ *al-Ilāhiyyāt*, II, 2, (9).

¹²⁶ *Ibid*.:

إن كل جو هر فإما أن يكون جسماً، وإما أن يكون غير جسم، فإن كان غير جسم فإما أن يكون جزء جسم، وإما أن لا يكون جزء جسم، بل يكون مفارقاً لي كل جو هر فإما أن يكون جزء جسم، بل يكون مفارقاً للجسام بالجملة. فإن كل جزء جسم فإما أن يكون صورته، وإما أن يكون مادته. وإن كان مفارقاً ليس جزء جسم فإما أن تكون له علاقة تصرف ما في الأجسام بالتحريك ويسمى نفساً، أو يكون متردناً عن المواد من كل جهة ويسمى عقلاً. ونحن نتكلم في إثبات كل واحد من هذه الأقسام. تصرف ما في الأجسام بالتحريك ويسمى نفساً، أو يكون متبرئاً عن المواد من كل جهة ويسمى عقلاً. ونحن نتكلم في إثبات كل واحد من هذه الأقسام. ¹²⁷ For general insight into Ibn Sīnā's natural philosophy see McGinnis, *Jon, Ibn Sina's Natural Philosophy*, in *The Stanford Encyclopedia of Philosophy* (Winter 2018 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/win2018/entries/ibn-sina-antural/.

¹²⁸ al-Ilāhiyyāt, II, 2, (19); Dānish Nāma, 3, p. 16.

¹²⁹ Macit, Muhittin, Ibn Sina'da Metafizik ve Meşşai Gelenek, (Istanbul: Litera Yayıncılık, 2012), pp. 189-191.

change. Form has ontological priority over matter, because it is the cause of matter being something specific, i.e. actually existing as a part of an individual material existent.¹³⁰ In addition, privation ('adam) is the ultimate condition required for any change to occur, because of which change becomes intelligible.¹³¹ Because form is the principle of actuality of substance, and substance is substance because it is an *actual* individual, form is also in a sense a substance. Matter is just something that can become any material thing, but it is due to the form that substance is what it is. This is why Ibn Sīnā's stresses that there is no true nature belonging to matter and that the true nature actually depends on a form,¹³² and that in the most general sense we could say that the nature of every thing is its form.¹³³ This is not just the way to explain the existence of material substances, but also the existence of non-material substances; for instance, to explain the substantiality of human soul as non-material independent substance is possible due to the fact that substantiality is what it is due to form, and not due to matter. As for the corporeal, it cannot actually exist devoid of form.¹³⁴ If form is the principle of actuality in substance then obviously no substance can exist actually without form. Therefore, something that we might call 'prime matter', as matter devoid of form, can be only postulated by the mind, but in fact such existence is not possible in actuality. Matter, therefore, can never remain separated from form.¹³⁵ Because all composed being is partly made up of what is potential and partly from what is actual, its reality is never completely fulfilled. From all this follows that when change happens to material, it is the form that is being succeeded by another form, while matter itself does not cease to exist.¹³⁶ Because actuality must be prior to potentiality, otherwise there would be no existence, form must be prior to matter. Matter, as pure possibility for the existence of corporal being, cannot be cause of form. Instead, only actual existence can be a cause, i.e. being that already has form. Only through form essence can exist in actuality, per se essence cannot be a cause of something that is established actually.¹³⁷ Although metaphysics is not dealing with movement and change in things, metaphysical analysis of change qua such reveals one very important truth about existence: in the sense that form has the absolute priority over matter, existence has the

¹³⁰ Lopez, Luis Xavier, *Causality in Islamic Philosophy*, in *The Routledge Companion to Islamic Philosophy*, eds. R. C. Taylor, L. X. López Farjeat, (London-New York: Routledge, 2016, pp. 131-140), p. 132.

 ¹³¹ Lammer, Andreas, *The Elements of Avicenna's Physics* (Berlin Boston: De Gruyter, 2018), p. 210. Abb.:
 Lammer, *The Elements of Avicenna's Physics*.

¹³² *al-Ilāhiyyāt*, II, 2, (22).

¹³³ Ibn Sīnā, Kitāb al-Shifā' al-Samā' al-Tabī'ī (Physics), transl. Jon McGinnis, Bringham Young University Press, Provo Utah, 2009, I, 6, (3). Abb.: al-Samā' al-Tabī'ī.

¹³⁴ *Ibid.*, 3, (1).

¹³⁵ *Ibid.*, (6), (13), (16).

¹³⁶ *Ibid.*, II, 4, (11).

¹³⁷ *Ibid.*, (7).

absolute priority over essence. For what is pure potentiality cannot be a cause in the real sense. There always has to be something existent in order for existence to continue, so existence itself must be eternal.

We see that whole **Ibn** $S\bar{n}\bar{a}$'s metaphysical system depends on the distinction between essence and existence. Essence refers to possibility of a thing to be and represents potentiality of a thing. 'Existence' refers to an actual thing, and therefore represents the necessity of that thing; every existence is in some way necessary, either in itself or through another. This is the basis on which metaphysics obtain its goal within **Ibn** $S\bar{n}\bar{a}$'s system, i.e. on which the proof for the existence of God is established. All existence is, therefore, understood within the difference that is at the same time ontological and logical: there is the kind of existence that can not to exist, and the existence that cannot not to exist. The former is the world in its totality of all things – the existence that is in itself only possible, and whose essence is something other than its existence. The latter is God, the Necessary Existence, whose essence is identical with its existence.¹³⁸ God is pure actuality and therefore the Pure Existence. Contingent being is something that came into existence, and its existence is therefore accidental to its essence.

1.2 Ibn Rushd's Ontology and Critique of Ibn Sīnā

The way Ibn Rushd sees it we should strictly hold on to Aristotle's understanding of 'existence' as 'substance.' This is the starting point of Aristotle's ontology, and therefore it should be the starting point of any ontology. As we are going to see, according to Ibn Rushd this is the starting point where Ibn Sīnā misinterpreted Aristotle. For Ibn Rushd, Aristotle's philosophy is the synonym for the truth,¹³⁹ so this is the main reason for his attack on Ibn Sīnā: his metaphysics has nothing to do with the real Aristotelianism. Yet it seems that in the eyes of Ibn Rushd, although not being established on Aristotelian premises, Ibn Sīnā's metaphysics represents a very precise deduction founded on Aristotele's logic. It is Ibn Sīnā's firm knowledge and use of Aristotelian system. The way Ibn Rushd sees it, this case represents the real danger for scientific knowledge: we have the false Aristotelian so famous

¹³⁸ This is the exact reason why in the case of God there is no difference between its existence and its being, and why **Ibn Sīnā's** concept of $w\bar{a}jib$ al-wujūd can be translated as "the Necessary Existence" as well as "the Necessary Being" or "Necessary Existent."

¹³⁹ Fakhry, Majid, A History of Islamic Philosophy (New York: Columbia University Press, 2004), pp. 280-301.

in the Islamic world and his rigid metaphysical system that explains the world in a way that has nothing to do with the truth. Certainly, someone has to deal with the issue.

1.2.1 The Problem of Thinking 'Existence qua Existence'

For Ibn Rushd, Ibn Sīnā's doctrine implies many problems. Ibn Sīnā says that existence is an accident, and from Aristotelian position this is incorrect.¹⁴⁰ Aristotle already named nine accidents within his ten categories, amongst which the first category is reserved for substance, and the rest are: quality, quantity, relation, place, time, position, state, action and affection. Clearly, existence does not belong here, and since it is something that happened to substance (or to an existing individual being) it is not a substance either.¹⁴¹ Regarding Aristotle's ten categories, for Ibn Rushd they cover everything that can be said about things and if existence answers none of the questions concerning reality that make sense, then, as Gilson puts it, "existence does not make sense, it is unthinkable, it is nothing".¹⁴² Moreover, when we are adding accident to a substance, we are adding something specific, and existence is not something specific.¹⁴³

The theory that existence is an addition to the quiddity and that the existent in its essence does not subsist by itself is, according to Ibn Rushd, "a most erroneous theory".¹⁴⁴ It is simply unacceptable that 'existence' signify an accident outside the soul common to the ten categories. In that case this accident, i.e. existence, would be something existing and therefore would have existence as accident and so on *ad infinitum*.¹⁴⁵ If existence is an accident in the sense of the ten categories, and for Ibn Rushd that is the only option for that is the meaning of 'accident', then an infinite regress ensues. Accident is something specific, and whatever is specific has existence, but if existence is accident then we are talking about accidents of accidents *ad infinitum*, as well as of existences of existences... Thus, we could speculate that

¹⁴⁰ Shehadi, *Metaphysics*, p. 90.

¹⁴¹ Ibn Rushd, *On Aristotle's 'Metaphysics', An Annotated Translation of the So-called "Epitome"*, ed. Rüdiger Arnzen, (Berlin/New York: De Gruyter, 2010), I, p.29, a10. Abb.: *Epitome Met.*

¹⁴² Gilson, Etienne, *Being and Some Philosophers*, Pontificial Institute of Medieval Studies, Toronto, Canada, 1952, p. 54. Abb: Gilson, *Being and Some Philosophers*.

¹⁴³ Interestingly, although this interpretation of Ibn Sīnā by Ibn Rushd is up to this point clearly wrong, it became very influential amongst medieval Latin thinkers (Janssens, Jules L., *Henry of Ghent and Avicenna*, in *A Companion to Henry of Ghent*, ed. Gordon A. Wilson, Leiden Boston, Brill: 2011, p. 69). As we have seen, Ibn Sīnā's idea of existence is not that it is an accident in the sense of Aristotle's ten categories, but that it is not something that essentially belong to a contingent being. Obviously, the purpose of Ibn Sīnā's novelty is to develop Aristotle's metaphysical ideas into a real soundly-established metaphysical system.

¹⁴⁵ *Ibid*.:

ان الوجود امر زاءد على الماهية وليس يتقوم به الموجود في جوهره فقل مغلط - وفي نسخت غلط - جدا لان هذا يلزمه ان يكون اسم الموجود يدل على عرض مشترك المقولات العشر خارج النفس وهومذهب ابن سينا.

this is the reason why for Ibn Rushd existence *qua* existence cannot be an object of knowledge, as such concept has no meaning at all. In order to have a meaning, a notion must signify something specific. 'Existence' in its ultimate extension doesn't mean anything, and if we try to establish a science on such a notion, or more specifically – science of metaphysics as in Ibn $S\bar{n}\bar{a}$ - we have a meaningless system that cannot represent any sort of positive knowledge about reality.

For Ibn Rushd, as he stated in his *Tahāfut*, the term 'existence' has two meanings: the first signifies the true, and the second "the opposite of nonexistence".¹⁴⁶ In the sense of the 'true', existence participates in all the categories in the same way.¹⁴⁷ At this point Ibn Rushd is putting accent on Aristotle's theory of truth: truth represents the correspondence between thoughts and things. This means that the things of which we have sensory experience depend on the existence of particular concrete objects, or, in other words, there is a correspondence between the way in which the world exists and the way in which its existence is represented in our mind. This also means that the knowledge of a particular existent is prior to the knowledge of its quiddity and that we cannot look for the essence of a thing unless it is the essence of concrete existent.¹⁴⁸ Therefore, if we have concept of a thing already in our mind prior to our knowledge of existence of that thing, we cannot say that we grasped its essence, but only nominal definition,¹⁴⁹ which is not something Aristotle refers in *Topics* I, 5 101b stating that "definitiona is a statement pointing to a thing's essence". In this sense we cannot talk about existence per se, because it is obviously a logical or mental concept "which affirms the conformity of a thing outside the soul with what is inside the soul".¹⁵⁰ The meaning of 'existence' is therefore simply that 'is' in a categorical judgement like, for example, in statements: 'that animal is horse'. In this sense 'is' itself does not add anything new to our knowledge, it connects concepts in the categorical statement about something concrete, and if that concrete corresponds with the statement, then the statement is true. In other word, according to Ibn Rushd, copula serves to connect subject and predicate and not to make an assertion of existence.¹⁵¹ Word 'existence' signifies nothing else than 'is' and its meaning can be only 'that which is.' And the question is always 'what?' Therefore, 'that which is' always

¹⁴⁶ *ibid.*, p. 250; 162.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

¹⁴⁹ *Ibid*.

¹⁵⁰ *Ibid.*, p. 249; 161.

¹⁵¹ Bäck, Allan, Avicenna and Averroes: Modality and Theology, in Potentialitat und Possibilitat Modalaussagen in der Geschichte der Metaphysik, ed. Thomas Buchheim, Corneille Henri Kneepkens and Kuno Lorenz, frommann-holzboog: 2001, pp. 136-137; Dunlop, Douglas M., Averroes on the Modality Propositions, in Islamic Studies Vol. 1 (1962, pp. 23-34), pp. 32-34.

requires something concrete in order to have a meaning at all. The way Ibn Rushd sees it, for Ibn Sīnā 'is' has meaning that signifies something which, when added to an essence, turns it into a concrete existent, but this is absurd.

In the second sense 'existence', something that 'is' as opposite of something that 'is not', is further divided into the ten categories and regarding this division it acts "like their genus".¹⁵² As such, 'existence' refers to things that have a concrete or actual existence outside of the soul. By having such wide extension, 'existence' cannot be predicate to things that can be subsumed under ten categories univocally, but only equivocally.¹⁵³ As equivocal concept 'existence' is predicate differently to substance and to accident, and by analysis of their relationship we can state that substance is that which exists in itself, and accident is that which exists through substance. In any case, 'existence' in this sense is about something concrete, and as such it can be attributed analogically to things and essentially only to God.¹⁵⁴

Whether we are considering the notion of 'existence' in the first or the second sense, we cannot talk about existence *qua* existence, because such a notion is simply meaningless. For the same reason every attempt to establish a science on the pure analysis of the notion of 'existence' is bound to failure. Existence cannot be an addition to the thing, and that is Ibn $S\bar{n}\bar{n}$'s great mistake,¹⁵⁵ because every addition is something specific, and existence is the most general notion – that is quite the opposite. Accident is an addition to a substance and as such represents something new that when predicated adds a new meaning to the description of a concrete being. Existence *qua* such does not add anything new to the meaning of a thing, it is simply part of the statement that affirms that the thing is. Without a concrete being existence is inconceivable.

Ibn Sīnā's mistake regarding understanding of existence led him towards his distinction between essence and existence. For Ibn Rushd the question about *what* a thing is by no means indicates that whatness is something separate from that things existence in any way except mentally. For him "there is a great difference between things which are conceptually and ontologically distinct, and those which are conceptually distinct, but not ontologically...",¹⁵⁶ and "that which is separable in reality is also separable in thought but not the other way around"¹⁵⁷ and the distinction between essence and existence is purely nominal. So, according

¹⁵² Tahāfut al-Tahāfut, pp. 249-250; 161-162.

¹⁵³ Tafsīr, LAM, 1401, p. 62.

¹⁵⁴ Tahāfut al-Tahāfut, p. 250; 161.

¹⁵⁵ *Ibid.*, p. 178; 108.

¹⁵⁶ Tafsīr, LAM, t. 39, 1623.

¹⁵⁷ *LC Physics*, II, t. 19, 55 C.

to Ibn Rushd, Ibn Sīnā confused the logical and the ontological order of things; as a consequence he swiched a purely intellectual distinction into a distinction in real existence. If Ibn Sīnā is right, then every concrete being have to be conceived as a compound of its essence and existence. Essence, then, is either something existing, or something non-existing, if it is existing then there is no distinction between essence and existence, but if it is something non-existing then what a thing is, is non-existence rather than existence and as such no existing being contains in itself the reason for its existence. For Ibn Rushd this view, in order to be consistent, has to indicate creation out of nothing. This is the reason why Ibn Rushd believes that Ibn Sīnā took his idea of distinction between essence and existence from theologians.¹⁵⁸ This is the result of thinking existence as accident of essence.

As we have seen, for Ibn Sīnā, essence per se means pure possible, so before coming into existence the thing is not existing, but merely can be. It requires something already actual in order to become actual itself. But for Ibn Rushd there is no 'itself,' apart from what is. The identity of a thing is in its existence and not separate from it. To say that something exists means simply to state that something is the case, or that a thing has a certain property, therefore "quiddity and existence go hand in hand and cannot be separated".¹⁵⁹ To state that there is essence before existence would mean that there is a sort of existence before existence, but this is a strange claim, because what exists is something that is actual, and as such it denies pure potentiality. These problems result from Ibn Sīnā's identification of existence with necessity. For Ibn Rushd, nothing can be found in the world of such nature that it would be possible in a certain way, yet necessary in another way. Whatever is necessary is in no way possible, and this is evident through the law of non-contradiction. Necessity and possibility can exist in one being only from completely different points of view, or in different respects. All these problems culminate because of Ibn Sīnā's approach to the distinction between essence and existence as something that has reality outside of the mind, as well as because of his misunderstanding of relation between possible and necessary, as well as between potentiality and actuality, which is based on Aristotelian notion of 'substance'.

Talking about an actual being as something that is composed of essence and existence, Ibn Sīnā is making a further mistake regarding his understanding of the notion of 'composition'. Composition is not something that exists due to the relationship between essence and existence because they are something inseparable in an existing being. Instead, composition is an addition to the essence of thing which receives composition, whereas "existence is a

¹⁵⁸ Gilson, Being and Some Philosophers, p. 52, 60.

¹⁵⁹ Belo, Essence and Existence, p. 420.

quality which is the essence itself" and "compound cannot be divided into that which is compound by itself and that which is compound through another".¹⁶⁰ Composition is, therefore, something that can be analysed only with respect to motion or change. Once again, the crucial notion from which such analysis has to start is Aristotelian 'substance'.

1.2.2 Existence qua Substance

Thus, the entire Ibn Sīnā's approach to metaphysics is, according to Ibn Rushd, fallacious in many ways. First of all, for Ibn Rushd Aristotle is the Philosopher whose teaching represents the scientifically demonstrated truth, and Ibn Sīnā's doctrine is far away from Aristotelian philosophy. Ibn Sīnā's mistake mainly rests on his misunderstanding of Aristotle's notion of 'substance' (gr. $o\dot{v}\sigma i\alpha$, ar, *jawhar*), the relationship between potentiality (gr. $\delta va\mu c$, ar. *quwwa*) and actuality (gr. $\dot{e}v \dot{e}\rho\gamma \epsilon i\alpha$, ar. *fi'l*), and between matter (gr. $\ddot{v}\lambda\eta$, ar. $m\bar{a}dde$) and form (gr. $\mu o\rho \varphi \dot{\eta} / \epsilon \tilde{i} \delta o \varsigma$, ar. $s \bar{u} r a$). All this caused Ibn Sīnā's misunderstanding of the entire Aristotelian project of metaphysics and for this reason whenever al-Ghazālī's criticism of the philosophers is valid, it is only so because these philosophers are al-Fārābī and Ibn Sīnā's miss-conception.

Science of metaphysics begins with Aristotle's question about $o\dot{v}\sigma i\alpha$; that which is. Before Aristotle, this was the main question of his great master, but what he had in mind was something quite different from a Platonic Idea. Until this day, it is the matter of great debate what Aristotle meant by 'reality' and 'first philosophy', or the science of ' $\tau o \tau i \tilde{\eta} v e \tilde{i} v a i$ ', that is usually translated as 'what is being', or 'what does it mean 'to be''.¹⁶¹ One thing is certain from most of his remaining works, in order to explain what reality is, Aristotle had to explain the phenomenon of change. Change is something that *is*, it is a part of reality. This is what Ibn Rushd, as we will see in more details later, has in mind during his process of reconstruction of Aristotle's philosophy within his own system of thought.

In his *Categories* Aristotle is talking about primary and secondary $o\dot{v}\sigma i\alpha$. Primary $o\dot{v}\sigma i\alpha$ is a particular thing, and all other beings exist as *species* and *genus* of primary $o\dot{v}\sigma i\alpha$ or by being 'in' (or 'on'), i.e. by being attributes of primary $o\dot{v}\sigma i\alpha$. $O\dot{v}\sigma i\alpha$ has here, therefore, an ontological priority as being. In the central books of *Metaphysics*, for which are considered to be written after the *Categories*, Aristotle claims that $o\dot{v}\sigma i\alpha$ has to be also an epistemologically

¹⁶⁰ Tahāfut al-Tahāfut, pp. 274-275; 179.

¹⁶¹ Patzig, Günther, *Theologie und Ontologie in der Metaphysik des Aristoteles*, in *Kant-Studien*, 52 (1960/1961, pp. 185-205), pp. 185-186. Abb.: Patzig, *Theologie und Ontologie*.

primary being.¹⁶² Knowledge of $o\dot{v}\sigma\dot{a}$ is not depending on any other knowledge, but knowledge of any other type of being is depending on $o\dot{v}\sigma\dot{a}$. However, particular being is something composed of matter and form, and everything composed is subject of change.

In *Physics* III.1, Aristotle defines change as the " $\dot{c}v\dot{c}p\gamma\epsilon\iota\alpha$ of that which is as $\delta\dot{v}\alpha\mu\iota\varsigma$, qua such".¹⁶³ Change is evident, things are in motion and subjects to change, so and there is no reason to argue about this fact.¹⁶⁴ In order to explain change one must understand the relationship between what is called ' $\dot{c}v\dot{c}p\gamma\epsilon\iota\alpha$ ', that is usually translated as 'actuality' and what is called ' $\dot{c}v\dot{c}p\gamma\epsilon\iota\alpha$ ', that is usually translated as 'actuality' and what is called ' $\delta\dot{v}\alpha\mu\iota\varsigma$ ', that is usually translated as 'potentiality'. These concepts are the main focus of Aristotle's book H. They have a particular importance in explaining the relation between matter and form (as in *Metaphysics*, H.2), as well as the phenomenon of unity of material substance (*Metaphysics*, H.6). Problem of unity of a substance can be solved only when we realized that the relationship between matter and form reflects the relationship between potentiality and actuality in that substance.¹⁶⁵ Also, the discussion about substance is going to provide an answer for the question that was of particular interest to Medieval philosophers, both Muslim and Christian: is there anything else except material substances?

In *Metaphysics* Δ .12 and Θ .1, Aristotle explains what is $\delta i v \alpha \mu \iota \varsigma$; it is "a principle of movement or change in something else, or qua other." From this comes the notion of a passive power: "the principle in the very thing that is being acted on for passive change by the agency of something else, or qua other." But before his famous discussion on $i v i \rho \gamma \epsilon \iota a$, and $\delta i v \alpha \mu \iota \varsigma$ (Book Θ), in Z and H Aristotle explains his view on $o v \sigma i a$, in which the individual $o v \sigma i a$ is a compound of form and matter, the matter is a potential $o v \sigma i a$, and the form is the primary $o v \sigma i a$ and "the substance of each thing and the cause of its being." Form is also "substance as actuality".¹⁶⁶ In *Physics* II, and in the *Metaphysics* Z.17, H.2, he establishes that it is the form of a thing that, above all, determines its nature, and that the form is 'the cause of being' and 'the cause of being one' for the thing. It is clear that form is the principle of substantiality, matter without a form is not something specific, it is something that neither belongs to a species, nor something that possesses any attributes. $O v \sigma i a$ is not, therefore, just something that 'lies under everything else'; it is the cause of existence of a particular thing.

¹⁶² This is the central viewpoint of *Metaphysics*, Z.1.

¹⁶³ *Physics* III.1 201a10–11.

¹⁶⁴ Cohen, Marc S., Alteration and Persistence: Form and Matter in the Physics and De Generatione et Corruptione, in The Oxford Handbook of Aristotle, ed. Christopher Shields (Oxford: Oxford University Press, 2012), pp. 205-206.

¹⁶⁵ Metaphysics H.6, 1045a23-25.

¹⁶⁶ *Ibid.*, H.2 1042b10–11.

As such $o\dot{v}\sigma\dot{a}$ can be interpreted as *morphe*, because it is something specific ($\tau \dot{o}\delta \varepsilon \tau \dot{i}$), and the existence of a particular thing depends on it.

Interpretation according to which form represents something universal, common to one group of individual beings, and that matter is the principle of individuation, is one of the leading ideas for Ibn Rushd. It is based on the famous stance of Aristotle in *Metaphysics* B.6, 1003a5-17 and *Analytica Post*. I.31, 87b28-88a17 according to which knowledge in the real sense is universal, not particular and if $o\dot{v}\sigma i\alpha$ is the basic principle of knowledge, and also form, then forms are universal. Knowledge is grasped by intellect that acquires universals from intelligibles, which are forms in particular things.¹⁶⁷

His promise about the existence of the non-material substance Aristotle fulfils in the XII book of his *Metaphysics* – book Λ . We could say that Book Λ represents the final goal of Philosopher's metaphysical quest: it should explain principles and causes of substances.¹⁶⁸ In Λ .6 - 8 he argues that the world has to be in motion infinitely, and that the ultimate cause of this motion is the ultimately actual being, that is as such pure form, or the form of all forms – the First Unmoved Mover; or God.¹⁶⁹ As such, this ultimate being is alive, and represents the perfect intellect ($vo\tilde{v}\varsigma$) and the eternal thought. In any case this interpretation of the book Λ is the one that medieval philosophers, more or less, stand for. Yet there is a problem; can Aristotle's First Unmoved Mover be interpreted as God in a theistic sense, or is it more like the principle of the world in a deistic sense? After all, God moves the world as the final cause and the ultimate principle of desire.¹⁷⁰ This question is closely linked with another: how and what God knows? For Aristotle, God knows and can know only himself, and the meaning of 'the Divine knowledge' is, beside other things, "unableness to think anything else except own self".¹⁷¹

¹⁶⁷ This interpretation is also one among plausible today, but not the only one. For example, according to Michael Frede and Günther Pazig, forms in Aristotle are individual in the sense that every particular thing has its form proper to that thing, and does not share it with any other existent. As the matter of fact, there are parts of *Metaphysics* that support this interpretation, for example Λ . 5, 1071a 28-29 (see Frede and Pazig, *Aristoteles 'Metaphysik Z'*, Text, Übersetzung und Kommentar, 2 sv, München (1988, sv. I, 37-57); I used Croatian translation in *Aristotelova Metafizika, zbirka rasprava*, eds. Pavel Gregorić i Filip Grgić, Zagreb, Kruzak: 2003, pp. 199-217).

pp. 199-217). ¹⁶⁸ *Metaphysics*, А.2, 982b7-10; А.3, 983a24-b1; Г.2, 1003b16-19; Е.1 1025b3; Z.1, 1028b2-7; К.8, 1065a23-24).

¹⁶⁹ *ibid.*, Λ.8.

¹⁷⁰ For details see DeFilippo, Joseph G., *Aristotle's Identification of the Prime Mover as God*, in *The Classical Quarterly* vol. 44, Issue 2 (December 1994), pp. 393-409.

¹⁷¹ More on this topic in Ohler, Klaus, *Der unbewegte Beweger als sich selbst denkendes Denken*, in K. Ohler, *Der unbewegte Beweger des Aristoteles*, Frankfurt a. M., 1984, p. 64-94; I used Croatian translation in *Aristotelova Metafizika, zbirka rasprava*, eds. Pavel Gregorić i Filip Grgić (Zagreb: Kruzak, 2003), pp. 371-395.

At the beginning of the book LAM of his *Long Commentary on Aristotle's Metaphysics*, Ibn Rushd points out that Aristotle "distinguishes existence by accident and existence in the soul from real existence",¹⁷² and soon after that the principle of the real existence is substance.¹⁷³ Ibn Rushd is quite aware of all Aristotle's conception and notions of substance and he certainly tries to follow the Philosopher consistently. For Ibn Rushd substance can be divided into two kinds: sensible and intelligible. Sensible substance is the one that subsists by itself and cannot be devoid of accidents, instead it receives accidents. Intelligible substance also subsists by itself, but devoid of all accidents.¹⁷⁴

In his interpretation of Aristotle, Ibn Rushd puts an accent on the statement from *Met.* Z.1. His interpretation is that existence (*wujūd*) and substance (*jawhar*) are one. Substance is identical with its actual reality, to 'be' primary means to be substance. Substances are the particular objects of our ordinary perceptual experience, which are presented in *Organon* with the first category.¹⁷⁵ 'Existence *qua* existence' cannot be subject matter of any scientific knowledge for very simple reason: it has no meaning *per se*, its primary meaning is 'substance.'

Metaphysical inquiry must be about substance, as Aristotle said, for what is sought in this science "are the causes and principles of substance",¹⁷⁶ therefore, Ibn Rushd concludes, "substance is the true being and the cause of all others".¹⁷⁷ 'Existence' primary means 'substance' and it is primarily something individual, a particular existent.¹⁷⁸ Existence is, therefore, something that belongs to a substance essentially, and not something that belongs to it accidentally – as it is the opinion of Ibn Sīnā.¹⁷⁹ This is why Aristotle says in his *Metaphysics* that *ovo*^{σ}(α signifies that what exists in a way that it makes all other things existent,¹⁸⁰ but also that it signifies a 'what' of a thing.¹⁸¹ Beside this, it is both the principle

¹⁷² *Tafsīr*, LAM, 1401, p. 62.

¹⁷³ *ibid.* p. 63.

¹⁷⁴ *ibid*, t.25, 1533-1534, p. 124.

¹⁷⁵ Galluzzo, Gabriele, Averroes and Aquinas on Aristoteles Criterion of Substantiality, Arabic Sciences and Philosophy, vol. 19 (2009, pp. 157–187), p. 168. Abb.: Galluzzo, Averroes and Aquinas.

¹⁷⁶ Metaphysics, 1069a18.

¹⁷⁷ *Tafsīr*, LAM, t. 1, 1406. Clearly Ibn Rushd is under the influence of Alexander of Aphrodisias' interpretation here, as he openly agrees with him while paraphrasing his words:

اما كان غرضه في هذه الصناعة التكلم في الموجود بما هو موجود و في مبادءه وعلله اذ كان قد تبتن ان الحكمة و الفلسفة الاولى انما تنظر في هذين و كان قد تبين في المقالة المتقدمة ان الجوهر هو الموجود على الحقيقة و هو علة ساءر الباقية شرع في اول هذه المقالة يطلب اواءل الموجود الذي هو الجوهر.

¹⁷⁸ *Epitome Met.*, I, p.30, a11.

¹⁷⁹ Tafsīr, DAL, t. 14, 557; YA', t. 8, 1279-1280.

¹⁸⁰ Metaphysics 1028a18-20.

¹⁸¹ *ibid.*, 1028a11-12.

of being as well as the principle of knowledge.¹⁸² Substance thus represents the ultimate foundation of the whole realm of the existence. What truly exists is individual in its own right. In other words, actual being is a subject, i.e. that by which accidents are. This is the meaning of something that 'stands under' accidents, that which neither is predicable of a subject, nor is present in a subject; it is, for instance, "a particular horse or a particular man."¹⁸³ Substances represent natures that act, move and change. Therefore, existence is to be understood as existing thing, which in the context of Aristotelian philosophy means something that is subject to change, or the compound of matter and form.

Therefore, the starting point of Ibn Rushd's philosophy, "existence' primarily means substance, and then other nine categories".¹⁸⁴ Upon real individual substances all accidents depend - "they are those actual individual substances concerning whose nature it is clear that they are composed of forms and of a subject existing in potentiality".¹⁸⁵ Substance is either the synonymous for 'truth', and denotes the correspondence between thoughts and things, or it denotes "that which exists outside the soul".¹⁸⁶ As such substance is something that has absolute ontological priority, or in Ibn Rushd's own words: "apart from substance, none of the other things exists absolutely, but they exist only through substance".¹⁸⁷ Substance is 'reality' in the real sense of that word, it has existence in itself and everything else exists only through its existence.¹⁸⁸ Of course, Ibn Sīnā was not just aware of Aristotelian notion of substance, but, as we saw, he fully accepted it, while adding an additional, strictly metaphysical perspective. Ibn Rushd on the other side knows this, and that is why he has nothing to add regarding Ibn Sīnā's understanding of substance. Instead, the disagreement lies in approach to the relationship between substance and existence. For Ibn Rushd, the notion of 'substance' is the fundamental notion of any science and therefore the basis of all knowledge. The meaning of 'existence' is either 'substance' or other nine categories, and it is substance only that "exists in reality absolutely; the other categories exist relatively".¹⁸⁹ Every substance is naturally endowed with the unity and with the existence that belong to it essentially. No distinction whatsoever should then be made between the substance, its unity and its existence,

¹⁸⁶ *Epitome Met.*, I, p.27, a9.

¹⁸² *ibid.*, Z.17, 1041a9-10; Z.13, 1038b7.

¹⁸³ *Categories*, I, 5, 2 a 11.

¹⁸⁴ Tafsīr, LAM, t.2, 1409-1410; Epitome Met., I, p.27, a8.

¹⁸⁵ Ibn Rushd, *De Substantia Orbis; Averroes' De Substantia Orbis, Critical Edition of the Hebrew Text with English Translation and Commentary* by Arthur Hyman (Massachusetts and Jerusalem, Cambridge: 1986) p. 54. Abb. *De substantia orbis.*

¹⁸⁷ *Tafsīr*, LAM, t.3, 1414:

ان ما عدى الجوحور من الامور الناقية ليس شيء منها موجودا على الاطلاق و انما هي موجودة الجوحر.

¹⁸⁸ Tahāfut al-Tahāfut, V, p. 250; 162.

¹⁸⁹ *Tafsīr*, LAM, t. 3, 1415.

as well as, as we saw, between its existence and its essence, except purely nominal distinction that can be drawn in the mind. Such substance represents the whole of reality. In substance essence and existence are one,¹⁹⁰ but the same goes for 'unity'¹⁹¹ – this is important to be underlined by Ibn Rushd, because, as he sees it, Ibn Sīnā considers unity as accidental addition to a thing the same way as he sees existence.¹⁹² 'Existence' means to be one substance in its actuality and unity, that has its existence in its own right and that acts according to its own nature, or identity. If we have this in mind it becomes clear in what sense essence can be "called the substance of each thing";¹⁹³ if essence and existence are indistinguishable in real substance, and if existence belong to a substance essentially, essence considered in itself is substance.

As a starting point of every science, substance is known primarily by observation, and amongst first things observed, besides its very existence, is that it has something that can be distinct as matter and form. Therefore, first thing observed is that substance represents a sort of a compound, and as Di Giovanni argues, this relationship between matter and form as compound is fundamental for Ibn Rushd's substance;¹⁹⁴ that includes his natural philosophy and metaphysics as well as his epistemology.

Form is prior in substance because it is through form that compound is a substance, i.e. form is a cause of the compound,¹⁹⁵ but when we define an existing thing we define it as something that has matter as well as form.¹⁹⁶ As existence is divided into substances and accidents, the former is prior to the latter to the extent that it is a necessary condition for it.¹⁹⁷ Priority regarding substance, according to Ibn Rushd, can be distinct in two senses: ontological and epistemological. Form certainly has ontological priority, for the substantiality of a substance

¹⁹⁰ Epitome Met., I, pp.28-29, a9-a10.

¹⁹¹ *ibid.*, p.88, a71.

¹⁹² Ibn Rushd offers a detailed account on how the meaning of 'unity' should be understood as well as his critique of Ibn Sīnā's understanding of this notion in his *On Aristotle's Metaphysics* also known as *Epitome* (see Nájera, 2008). Although this part of his critique is confusing and strangely formulated, one can understand that the aim of the critique is the supposed doctrine of unity being an accident of an existent in the same way as existence is the accident. In his later works, however, Ibn Rushd does not provide any detail argument against Ibn Sīnā regarding his understanding of unity. It seems that Ibn Rushd modified his approach in his later works so his critique of Ibn Sīnā regarding the understanding of 'existence' becomes central topic, while in his eyes every argument regarding existence can be also used against Ibn Sīnā's understanding of 'unity'.

¹⁹⁴ The argument is established in Di Giovanni, Matteo, *The Commentator: Averroes's Reading of the Metaphysics*, in *A Companion to the Latin Medieval Commentaries on Aristotle's Metaphysics* (Brill: 2013), pp. 59-94. Abb. Di Giovanni, *The Commentator*.

¹⁹⁵ *Tafsīr*, ZAY, t. 1, 761.

¹⁹⁶ *ibid*, t. 4, 800.

¹⁹⁷ *ibid*, t. 11, 827.

rest upon it. In this sense form can be considered as primary substance in Ibn Rushd.¹⁹⁸ Still, from the perspective of priority in knowledge, sensible substance, as something that is consisted of matter and form, is something that is primary recognised as substance from which form is grasped as a result of scientific inquiry.¹⁹⁹ Therefore, only in this sense we should understand Aristotle's notion of form as substance. Sensible substance as the compound of matter and form depends upon form, and this is why form can be understood as primary substance.

This is what makes definition possible; form, due to its priority in sensible substance, is something that can be separated in thought and can become the object of definition of a sensible substance. For this reason, Ibn Rushd's forms are in themselves substances as realised from the point of view of their definitions.²⁰⁰ Actually at one place Aristotle himself says that there are three types of substances: matter, form and the compound of these two,²⁰¹ and for Ibn Rushd this declares the Philosophers' intention to define the difference between the nature of matter in being and the nature of general form, in particular the form that is genus.²⁰² In any case, form is a primary substance because it is by virtue of form that the compound itself exists as a substance.²⁰³ Therefore, we can say that the form has certain priority over the compound itself, at least in the same sense as a principle is prior the principled thing.²⁰⁴ Substance, as compound of matter and form, exists as substance primarily because of the form. Matter is not perceptible by itself but only through the form and "it exists only from the point of view of the thing through which it is seen and perceived."²⁰⁵

As separable in thought and as the final cause of matter, form is also somehow separable in being. The existence of form does not depend on anything else that is a really distinct from, and existentially independent of, form itself. On this basis, form qualifies as a primary substance and it does so to a higher degree than the compound. Indeed, both form and the compound are primary substances, but form is a principle of the sensible substance and its ultimate cause on which it depends.

As we have seen, for Ibn Rushd, as well as for Ibn Sīnā, substance is composed of passive principle, matter, and active principle, form. The difference is that Ibn Rushd insists that only

¹⁹⁸ Galluzzo, Averroes and Aquinas, pp. 168-174.

¹⁹⁹ Tafsīr, ZAY, t. 1, 761.

²⁰⁰ Tafsīr, LAM, 1402.

²⁰¹ Metaphysics, 1070a.

²⁰² Tafsīr, LAM, t. 14, 1472.

²⁰³ *ibid.*, ZAY, t. 3.

²⁰⁴ Di Giovanni, *The Commentator*, p. 59.

²⁰⁵ Tafsīr, LAM, t. 14, 1475.

substance can be called 'real existence', and in it essence and existence are undividable. For this reason the division between essence and existence is purely nominal, and it does not represent real composition. So far it seems that **Ibn Rushd** would accept Ibn Sīnā's view regarding substance, but he would claim that this view is not consistent with the rest of his metaphysical system, because his approach to metaphysics is not from the proper notion of 'substance'. Metaphysics cannot be established as science separated from the consideration of the material in the way Ibn Sīnā intended. If to understand the world means to understand Aristotelian substance, then it is unavoidable that metaphysics includes the analysis of the compound *qua* compound i.e. that what is subject to generation and corruption.

1.2.3 The Reality of Change

By attempting to make his metaphysics independent of other sciences, it seems that according to Ibn Rushd, Ibn Sīnā neglects the importance of change for understanding of reality. As we saw, this is due the fact that Ibn Sīnā tries to establish first philosophy on the foundations that will not involve analysis of anything that is connected with matter. For Ibn Rushd, the inquiry into material being is the fundamental starting point of scientific thinking, without which no science, including metaphysics, can be established. Change is something that happens to an existing thing due to its potentiality and materiality, which is all together subject to the universal law of causality. It is divided into four species: substantial change, change in quality, quantity and in place.²⁰⁶ To investigate reality means to investigate the reality of change in order to find out what is beyond change. In short, in order to reach and understand the ultimate eternal principle of reality, we must start from what is in front of us – what we perceive.

In a very short but important paragraph of *Metaphysics* Aristotle explains what change is: "Everything that changes changes from something into something. That because of which it changes is the mover and that which changes is the matter; that into which it changes is the form."²⁰⁷ For Ibn Rushd this means that *creation ex nihilo* is out of the question. Something always is, and this something is matter and form. Ultimately matter and form do not come into being. This is why for Ibn Rushd what is generated is only the compound of matter and form, and never just forms:

²⁰⁶ Montada, Josep Puig, *Aristotle and Averroes on Coming-to-be and Passing-away*, Oriens, 35 (1996, pp. 1-34), p. 16. Abb. Montada, *Aristotle and Averroes*.

²⁰⁷ Metaphysics, 1069b.

"He [Aristotle] then says that form and matter are not generated; what is generated is only the compound resulting from them; for every changeable thing changes from something and into something and because of something. That because of which it changes is the mover; that from which it is moved is the matter; that to which it is moved is the form; if the form were generated, it would be composed of a matter and a form because it would change from something, into something and because of something; and the form would have a form, and the form of the form..."²⁰⁸

For this reason, it is absurd to uphold a belief that there is "the bestower of forms", as it is the role of Ibn Sīnā's Agent Intellect.

When it comes to the physical constitution of natural beings both matter and form are principles of equal importance; concrete objects cannot exist without matter as well as without form. Substance which comes into being and corrupts is generated by another substance which comes into being and corrupts similar to it in species and genus. That which comes into being and corrupts is composed of matter and form. Forms neither come into being nor corrupt, except by accident and therefore the platonic forms, even if they exist, are useless to explain generation.²⁰⁹ However, although matter is a necessary condition for the instantiation of form, the existence of matter itself is ultimately explained by the existence of form. For this reason for Ibn Rushd, when it comes to Ibn Sīnā, the main problem regarding the explanation of corporeal world as constituent of matter and form starts with his notion of potentiality and with the idea of generation of forms. A substance is what it is by the way it is in act, which means by the way of its form and "the distinctive character of a truly Aristotelian metaphysics of being and one might feel tempted to call it its specific form lies in the fact that it knows of no act superior to the form, not even existence".²¹⁰ If the meaning of existence is primarily 'substance' and if substance is primarily what it is due to its form, i.e. if a form of corporeal being is always a form of a matter, then matter also has to be included into that thing's definition.

Ibn Sīnā's understanding of potentiality brings him very close to the creation out of nothing doctrine, thus Ibn Rushd sees his metaphysical understanding of potentiality as non-existence

²⁰⁸ Tafsīr, LAM, t. 12, 1454:

ثم قال ان الصورة ليس تتكون ولا المادة وانما الذى يتكون المجموع منها وذلك ان كل متغير فانما يتغير من شىء والى شىء وعن شىء فاما الذى عنه يتغير فمو المحرك و اماما منه يتحرك فهو الهيولى واماما اليه يتحرك فهو الصورة فلو كانت الصورة تتكون لكانت هر كبة من مادة و صورة لا نما كانت تتغير من شىء والى شىء وعن ثم قال ان الصورة ليس تتكون ولا المادة وانما الذى يتكون المجموع منها وذلك ان كل متغير فانما يتغير من شىء والى شىء وعن شىء فاما الذى عنه يتغير فمو المحرك و اماما منه يتحرك فهو المادة وانما الذى يتكون المجموع منها وذلك ان كل متغير فانما المحرة شىء والى شىء وعن شىء فاما الذى عنه يتغير فمو المحرك و اماما منه يتحرك فهو الهيولى واماما اليه يتحرك فهو الصورة فلو كانت الصورة تتكون لكانت مركبة من مادة و صورة لا نما كانت تتغير من شىء والى شىء و كانت الصورة لها صورة و كان يلزم في الصورة تتكون الكانت مركبة من مادة و صورة لا نما كانت منهي من شىء والى شىء والى شىء و الماما اليه يتحرك فهو الصورة فلو كانت

as inconsistent. Ibn Sīnā claims that from existence only existence emerges and the act of the agent is in bestowing existence. However, according to the principle of excluded middle Ibn Sīnā should either accept the doctrine of the theologians regarding creation, or Aristotle's conception of potentiality. Thus, Ibn Rushd sees Ibn Sīnā's argumentation as sophistical.²¹¹ As he sees it, for Ibn Sīnā possibility is a quality of a thing, different from the thing in which the possibility is.²¹² This is false theory, established on the analysis of the notion of 'existence' per se followed by understanding of efficient cause as a cause that bestows existence, which altogether represent an influence of Ash'arism. In this sense to misunderstand what 'potentiality' means also undermines the understanding of prime matter, motion, generation and corruption which might be the reason that leads Ibn Sīnā to postulate such a sharp distinction between physics and metaphysics. Understanding of *prime matter* here has particular importance as it is the basis of all potentiality; prime matter has no proper form, nor actual nature, thus it can receive all forms – "its essence is to be only potential".²¹³ Such pure potentiality cannot be comprehended as it is in itself because it has no actualised essence but can only be postulated in the sense of relation to something actual. In any case, the proper conception of prime matter is essential for the explanation of change, and with it for the explanation of entire reality.

Therefore, the real problem that led Ibn Sīnā astray in his metaphysical approach is that he connects potentiality with logical possibility and therefore with essence. But for Ibn Rushd potentiality and possibility are not the same, for possibility is purely logical notion, and essence is not potentiality but actuality. As we saw, the division between essence and existence does not exist *per se*, it is purely nominal. In real being existence is essence and *vice versa*. Potentiality, on the other hand, is to be connected exclusively with matter. This is clear from Ibn Rushd's own words inspired by Aristotle's *Metaphysics* 1071a:

"He [Aristotle] means: potentiality comes down to matter; it is that which can become something composed of matter and form, I mean the compound, because the potentiality which is in matter is potentiality to become the individual compound of matter and form"²¹⁴

²¹⁴ Tafsīr, LAM, t.26, 1539-1540:

²¹¹ Tahāfut al-Tahāfut, p. 153; 90-91.

²¹² *ibid.*, p.178; 108.

²¹³ De substantia orbis, I, p. 51.

ثم قال: وبالقوة الهيولي وهذا شيء يمكن ان يكون كليهما والقوة ترجع الى وهي التي يمكن ان تصير المجموع منها ومن الصورة العني المركب وذلك ان القوة التي فيالهيولي انما هي على الشخص المر كن منها م من الصورةز .

It seems that for Ibn Rushd, matter is not only the principle of potentiality, but also the principle of individuality, for "everything which is without matter is the same".²¹⁵

The notion of 'potentiality' and its relation to what is in act is, therefore, fundamental for understanding change. That is clear from Aristotle's *Physics* (191a 23 ff), where the Philosopher says that generation occurs from being in potentiality, as well as from his statement in *Metaphysics*:

"...everything that changes changes from what is potentially to what is actually... ...so that it can arise not only accidentally from non-being, but also from being, that is to say everything that exists arises from that which is existent in potentiality and non-existent in actuality."²¹⁶

For Ibn Rushd the notion of 'non-being' here means simply 'matter', so generation takes place accidentally from matter as potential existence.²¹⁷ This also indicates that actuality is prior to potentiality because something must always exist in order for something else to exist, for "nothing passes from potentiality into actuality but by the action of something actual".²¹⁸ If existence is eternal, and this is evident *per se*, as from non-existence nothing proceeds, then "actuality precedes potentiality because the eternal circular motion must have a mover absolutely free from potentiality".²¹⁹ However, in another sense we can say that potentiality is chronologically prior to the generated individual,²²⁰ because in order to be something actual, being has to be in potentiality.²²¹ Still, actuality has absolute ontological, and with it, if we consider it in totality, absolute temporal priority over potentiality.

For Ibn Rushd, as well as for Ibn Sīnā, nothing can emerge from non-being. This is the exact point where Ibn Sīnā's metaphysics becomes inconsistent according to Ibn Rushd. Ibn Sīnā accepts this Aristotelian principle and as a result of it stands for the doctrine of eternity of the world, but at the same time claims that the agency of an agent is about bringing a potential being (which in Ibn Sīnā's context means 'non-being') into existence. In other word, for Ibn Sīnā, agent is a bestower of existence (as we are going to see in the following chapter, this is

²¹⁵ *ibid*, t. 50, 1703.

²¹⁶ Metaphysics, 1069b15.

²¹⁷ *Tafsīr*, LAM, t. 8, 1442.

²¹⁸ *Ibid.*, t. 32, 1576.

²¹⁹ *Ibid*.

²²⁰ *Ibid*.

²²¹ *Ibid.:*

انه اما كان قدنين ان الفعل اقدم من القوة من قبل ان الحركة المستديرة الازلية حيبب ان يكون حر كها لا يشوبه قوة اصلا وشك فى ذلك عاد فى هذا الموضع يذكر بما قاله في حل ذل الشك في مقالة . فقال: "اما الظن ان القوة اقدم من الفعل فقد يوجد على جهة ما و في جهة ما لا فقد قبل يف ذلك"انه قد تقدم فقال الوجه الذى به يصح ان يقال ان القوة متقدمة على الفعل و الوجه الذى نه لا يصر وذلك انه قد تبين في غير ما موضع ان القوة متقدمة بالز من على الشخص المتكون و الفعل يتقدم باطلاق على القوة اذكان لا خيرج شىء من القوة الى الفعل الم من قل

its most important designation) and this is for Ibn Rushd the same as creation out of nothing. If the world has been created, the very first thing that happened to it at the very time when it was created is that it becomes, it gets being. As Ibn Sīnā thought that since to exist is something that happens to beings, that existence itself is an accident, the doctrine of creation out of nothing would fit better into his system. In this case, however, Ibn Sīnā would fall into absurdity in another sense, just as theologians did.

Therefore, the only way to solve the problem of creation is to understand potentiality as a form of existence, without drawing the strict division between physical and metaphysical aspect of this meaning. In that case agent does not 'bestow', but 'draws' existent from lower into higher form. Agent's action is therefore not connected with some possibility per se, but with the possibility within an existing being. Only in this sense we can be certain that from nothing, nothing can emerge, that agency is about creating existence from something that already exist in an imperfect form.²²² As Aristotle showed, an agent does not create form, otherwise something would come out of nothing; form cannot be subject to generation and corruption in the sense of the substantial compound (of matter and form).²²³ To 'be' means 'to be substance', and to be substance means to have attributes, possibilities and necessity in its own way. Agents, or efficient causes, do not produce existence as such, but initiate transition from potency to act, which applies to all cases of motion or change, and only in this context we can talk about the transition from non-being into being, and as such cause is always actual substance.²²⁴ This transition from potentiality to actuality within Aristotelian terminology is called 'generation and corruption'. Therefore, an agent in the strict sense produces change, or motion, and not existence. Change is, for Ibn Rushd, the principle of the world.²²⁵ Generation and corruption is a form of motion, so in order to explain the existence of being one must explain motion as its main principle; for this reason no metaphysical explanation can be devoid from the scientific inquiry of natural philosophy.²²⁶

But this is the conclusion that Ibn Sīnā wants to avoid and precisely at this point he steps away from Aristotelianism. Philosophy for Ibn Sīnā aims to explain existence, and that task falls upon metaphysics. Motion and change belong to the realm of natural sciences. Of course, Ibn Sīnā did not deny that agent also causes motion and change, and Ibn Rushd is deeply aware of this. Still, Ibn Sīnā stands for the strict division between agency that is examined in

²²² Tahāfut al-Tahāfut, p. 154-155; 91.

²²³ Tafsīr, LAM, t. 18, 1503.

²²⁴ *Ibid.*, 1499-1500.

²²⁵ *Ibid.*, DAL, t. 1.

²²⁶ Montada, Aristotle and Averroes, p. 33.

metaphysics and the type that is the subject matter of physics.²²⁷ For Ibn Rushd, Ibn Sīnā is right that 'existence' is the starting point at which the philosophical inquiry must begin. But in order for philosophical inquiry to start, 'existence' must be some sort of a principle, but to be a principle at all it must be a principle of an existing thing, or substance. As we saw, substance is to be understood as compound of matter and form that is subject to change, or generation and corruption. Matter is the principle of potentiality, and something that changes, form as the principle of actuality is the result of change. The right approach to metaphysics is, therefore, one that starts from observation and definition of substance and its stages of existence, hence metaphysical science can only be a sort of continuation of the philosophy of nature.

1.3 Problem of Causality

If reality comprises the possible and actual, matter and form, or essence per se and acquired existence, then the question which is imposed is how and why one state of affair becomes another: how possibility becomes actualised, how essence can have existence, how a being is formed? This quest for the reason is the quest for causal explanation. Cause is the reason for existence of being which is found outside that being. The priority of actuality over potentiality that is advocated by Aristotle is accepted by both Ibn Sīnā and Ibn Rushd. There must always be something actual in order for something else to exist – this is per se evident claim, just like saying that something must exist in order for something else to come into existence. This implies an ontological dependence between two meanings 'actuality' and 'cause'. Obviously, cause must be something actual in order to produce effect, and effect must be something that is able to be produced in order for the cause to actualise it. Therefore, cause has priority of nature to its effect in the same manner that actuality is prior to potentiality; 'priority' here means 'ontological priority' - cause does not have to have temporal priority over its effect, it can precede or coexist with its effects in time. Causes ontologically precede and accompany their effects and produce them. This happens through the inherent power, or nature, of the cause. This also means that the effect produced must conform to this specific nature of its cause.

Cause of being is something prior to that being, it is its antecedent, however, not every antecedent of being is the cause of being. Other types of antecedent that needs to be differed

²²⁷ al-Ilāhiyyāt, VI, 2, (1)-(8).

from cause are condition and occasion.²²⁸ This is the distinction that was generally made by philosophers of medieval era. Condition is a circumstance required for the cause to be able to produce its effect. It is something that influences the cause by removing possible impediments so that the cause can act in accordance to its nature. Occasion is a circumstance that favours the operation of a cause. It is not necessary as condition, but it 'helps' the cause to manifest its nature.²²⁹

Aristotle's classification of causes was closely followed by Islamic philosophers. As Aristotle explains in *Physics* 2.3 and *Metaphysics* 5.2., there are four types of causes: material, formal, final and efficient. Through these principles we grasp "both coming to be and passing away and every kind of natural change".²³⁰ Material cause is "that out of which a thing comes to be," another is the form of the thing, which Aristotle identifies with the definition of its essence, the third is a cause "in the sense of end or that for the sake of which a thing is done", or the final cause, and the fourth is the "the primary source of the change or rest" – the efficient cause.²³¹

The material and formal cause, or simply matter and form, are closely connected with the Aristotelian theory of the constitution of bodies, or material substances. The efficient cause is the one that produces an effect, i.e. generates a thing or sets it in motion. Final cause represents the purpose or goal, that 'because of which' certain being exists. As a dynamic entity which nature reflects in its activity that influences things a cause is called 'agent'. Agent is, therefore, a particular entity or substance that, when recognised as such, explains the occurrence of its effect. Clearly, as particular being, agent can act as efficient or final cause. This is, as we are going to see, of particular importance for the distinction between Ibn Sīnā and Ibn Rushd's understanding.

Regarding the relationship between agent and act, all Islamic philosophers of Aristotelian tradition²³² maintain that nothing can begin to exist after its absolute non-existence. That is simply impossible according to the logical principles: thing is equal to itself and something cannot be and not to be in the same sense. This implies that the temporal relation between agent and its act is one of simultaneity: if the agent is temporal, its act is temporal and if the

²²⁸ McCormick, *Scholastic Metaphysics*, p. 144.

²²⁹ Ibid.

²³⁰ *Physics* 2.3 194b 21.

²³¹ *ibid.*, 2.3 194b 24-32.

²³² By "philosophers of Aristotelian tradition" I mean all philosophers that accepted Aristotle's idea of science and his *Organon* as fundamental tool for establishing the science.

agent is eternal, its act is also eternal. Up to this point philosophies of Ibn Sīnā and Ibn Rushd agree.

Ibn Sīnā's specific understanding of 'existence' leads him towards onto-logical notion of 'necessity' from which the notion of 'causality' is deduced by metaphysician. Ibn Sīnā holds that relations between ideas in the mind and things outside of the mind represent one and the same kind of necessity, which has logical and ontological manifestations. In this sense our experience of the relation between causes and effects represents an empirical confirmation of the metaphysical notion of necessity. This is why Ibn Sīnā asserts that in search for causal explanation sensation "leads only to concomitance".²³³ The notion of causality, therefore, does not have its origin in empirical investigation, but is indicated by being qua such. The empirical basis for the notion of necessary connection between cause and effect exists in the world and can be observed in regular events in nature. Still, that does not mean that we perceive necessary connections as such. The apprehension of necessity is not a matter of perceiving, but of making judgments about what we repeatedly perceive and these judgments are possible due to the notion of 'existence' with all its implications. This is how metaphysics is 'saved' from material or empirical notions altogether, thus it can be called 'the science of all sciences'. The meaning of 'necessity' implies that what cannot be otherwise for the intellect works the same for the world outside of the intellect because this meaning is implied by the absolute meaning of 'existence'. This is why for Ibn Sīnā when the proper causal conditions obtain and no impediment intervenes, an agent not only produces its proper effect, but the two are logically coexistent with one another. This relationship between cause and effect may be interrupted by the intervention of various impediments, nevertheless for Ibn Sīnā such exceptions to the unique and invariable character of causal necessity are largely restricted to the realm of generation and corruption.²³⁴ Thus, necessity as 'something that cannot be otherwise' has the absolute meaning that unites all principles of the mind and the world.

Only by being established in this way metaphysics can be an independent science of being *qua* being. If notion of 'causality' is not implied by 'existence'/'necessity', then metaphysics can be only a sort of extension of physics. Metaphysician does not depend on any science essentially. Instead, every science depends on metaphysics precisely because the meaning of 'causality' depends on the meaning of 'existence'. The focus of metaphysical inquiry

²³³ al-Ilāhiyyāt, I, 1, (16).

²³⁴ Kogan, Barry S., *Averroes and the Metaphysics of Causation* (Albany, State University of New York Press: 1985), p. 30. Abb. Kogan, *Metaphysics of Causation*.

existence, as something that is 'added to' an existing being by the bestower of existence. Whatever exists is necessary in this state due to its cause; whatever is possible in itself, or by its own essence, does not exist unless rendered necessary with respect to its cause.²³⁵ Existence and nonexistence are states or occurrences of being and change from one state to another cannot be due to that being, but only through another. Therefore, contingent being considered in itself deserves only nonexistence, but once established as actual it *is* and continues to exist only by its cause. But if the cause is the reason for its existence, then absence of the cause is the reason for its nonexistence. Therefore, existence as well as non-existence of contingent being are both due to its cause.²³⁶ The type of the cause that Ibn Sīnā is talking about here is the efficient cause.

After the notion of 'causality' is introduced in metaphysics, it becomes evident in what sense existence is an accident in Ibn Sīnā's philosophy – it is something that befalls the essence or thing,²³⁷ due to something other than that essence or thing. The possible is *per se* the non-existent, and everything that actually exists is made necessary by its cause.

1.3.1 The Primacy of Efficient Cause in Ibn Sīnā's Metaphysics

As already stated, as for every Aristotelian, for Ibn Sīnā in the ultimate sense causes are four: matter, form, efficient and final cause.²³⁸ Matter represents the principle of potentiality that is part of the subsistence of the thing; form is the principle of actuality, or that by which a thing is a concrete existent. Matter is pure receptivity²³⁹ and it always needs form in order to participate in concrete being. Form exists only in matter, but not due to the matter.²⁴⁰ Form is, therefore, that by which something is a concrete actual being, or that by which matter is

²³⁵ *al-Ilāhiyyāt*, I, 1, (6).

²³⁶ *Ibid.*, I, 6, (4):

وأيضاً أن كل ما هو ممكن الوجود باعتبار ذاته، فوجوده وعدمه كلاهما بعلة، لأنه غذا وجد فقد حصل له الوجود متميزاً من العدم، وإذا عدم حصل له العدم متميزاً من الوجود. فلا يخلو إما أن يكون كل واحد من الأمرين يحصل له عن غيره أو لا عن غيره، فإن كان عن غيره فالغير هو العلة؛ وإن كان لا يحصل عن غيره، ومن البين أن كل ما لم يوجد ثم وجد فقد تخصص بأمر جائز غيره. وكذلك في العدم، وذلك لأن هذا التخصيص إما تكفّي فيه ماهية الأمر أو لا تكفي فيه ماهيته، فإن كانت. ماهيته تكفي لأي الأمرين كان، حتى يكون حاصلاً، فيكون ذلك الأمر واجب الماهية لذاته، وقد فرض غير واجب، هذا خلف. وإن كان لا يكفي فيه وجود ماهيته، بل أمر يضاف إليه وجود ذاته، فيكون وجوده لوجود شيء آخر غير ذاته لا بد منه فهو علته، فله علة. وبالجملة فإنما يصير أحد الأمرين واجباً له، لا لذاته، بل لعلة. أما المعنى الوجودي فيعاة ورا كان لا يكفي فيه ماهيته، بل أمر يضاف إليه وجود ذاته، فيكون وجوده لوجود شيء آخر غير ذاته لا بد منه فهو علته، فله علة. وبالجملة فإنما يصير أحد الأمرين واجباً له، لا لذاته، بل لعلة. أما المعنى الوجودي في علة وجود شيء آخر غير ذاته لا بد منه فهو علته، فله علة. وبالجملة فإنما يصير أحد الأمرين واجباً له، لا لذاته، بل لعلة. أما المعنى الوجودي في علة وجود شيء آخر غير ذاته لا عند وجود العلة وبالقياس إليها ممكناً أيضاً، فكان يجوز أن يوجد وأن لا يوجد غير متخصص باحد الأمرين، وهذا محتاج من رأس إلى وجود شيء غذ وجود العلة وبالقياس إليها ممكناً أيضاً، فكان يجوز أن يوجد وأن لا يوجد غير متخصص باحد الأمرين، وهذا محتاج من رأس إلى وجود شيء تالث يتعين له به الوجود من العدم، أو العدم عن الوجود عند وجود العلة، فيكون ذلك علة أخرى، ويتمادى الكلم إلى غير النهاية. وإذا تمادى إلى غير النهاية لم يكن، مع ذلك، من العدم أو العدم عن الوجود وهذا حدا لا لأنه ذاهب الى غير النهاية في الألم إلى الم غير النهاية لم يكن، مع ذلك، هذ الموجود، وهذا محال. لا لأنه ذاهب إلى غير النهاية في العلم فإن هذا في هذا الموضع بعد مشكوك في إحالته، بل لأنه لم يوجد بعد مل يتخصص له وقد فرض موجرةً فقد صح أن كل ما هو ممكن الوجود لا يوجد بالقياس إلى علته.

²³⁷ Belo, *Essence and Existence*, p. 413.

²³⁸ al-Ilāhiyyāt, VI, 1, (2).

²³⁹ *Ibid.*, VI, 4, (8).

²⁴⁰ *Ibid.*, II, 4, (22).

actualised and perfected.²⁴¹ The common thing of matter and form is that they are included into existence of an existing being, whereas efficient and final causes are not.²⁴² For this reason, as Lammer notices, Ibn Sīnā prefers to use the term *'illa* for matter and form as internal causes, while using *sabab* for efficient and final causes.²⁴³

Ibn Sīnā also adopts Aristotle's account of potentiality and actuality. For Ibn Sīnā any generated thing must be material, since such a thing needs a bearer of the potentiality of its existence which is matter.²⁴⁴ Also, actual existence is always prior to potentiality, because potential requires for its actualization something in act. This relationship between actuality and potentiality proves that existence must be eternal. Something must be in some way in order to receive some other form of existence, absolute non-existence cannot receive anything.²⁴⁵ This sort of relationship also implies motion²⁴⁶ because motion always involves matter,²⁴⁷ as well as notions of 'active' and 'passive' powers in things.²⁴⁸ Yet all these relations that involve motion belong to the realm of natural philosophy. If all causes can be divided into causes that are part of the existence of caused beings, and causes that are not part of the existence of caused beings, then as being part of the existence of a contingent being, matter and form are participating in its composition, they represent the fundamental principles of change and as such are as well subject of philosophy of nature, more than of metaphysics.

Final cause, or purpose, is that for whose sake something exists. The final cause can be divided into the cause that belongs to the realm of generated being and the cause that not within the realm of generated being.²⁴⁹ In the former case the final cause is a sort of the cause of other causes to exist in actuality, because they all exist for a purpose, and in another sense, from the perspective of its own existence, the final cause is caused by the existence of the other causes,²⁵⁰ and in this sense the existence of the final cause depends on being whose purpose that cause is. The final cause that belongs to the realm of generated being is, therefore, is part of that being, and as such is also subject to natural philosophy. However, if the final cause does not belong within the realm of generated being, then it existence is

²⁴⁶ *Ibid.*, (29).

²⁴¹ *Ibid.*, VI, 4, (9). In the secondary sense form for Ibn Sīnā, as well as for Aristotle, represents a thing's species, or "the universality of the universal" (*ibid.*)

²⁴² *al-Ilāhiyyāt*, VI, 1, (3).

²⁴³ Lammer, *The Elements of Avicenna's Physics*, p. 162.

 $^{^{244}}$ al-Ilāhiyyāt, IV, 2, (24).

²⁴⁵ *Ibid.*, IV, 2, (28).

²⁴⁷ *Ibid.*, 1, (6)

²⁴⁸ *Ibid.*, 2, (10)-(12).

²⁴⁹ *Ibid.*, VI, 5, (31).

²⁵⁰ *Ibid.*, (28).

considered higher and is not part of generation and corruption. In such case the final cause is not caused by other causes, and as such can be subject of metaphysics.²⁵¹

By having existent *qua* existent as its subject matter, Ibn Sīnā's metaphysics is concerned primarily with the relation between what exists as concrete being and its existence and therefore, in the context of causal relations, with that which bestows existence – i.e. with the efficient cause, or agent. For Ibn Sīnā to be an agent means to be able to produce the existence of its effect as such and not merely one of the forms of motion or change studied by natural scientists. At this point Ibn Sīnā again insists on the distinction between natural philosopher and metaphysician: the former is concerned with the causes operative in a specific kind of matter and the latter with causality as such as well as with causality as one of the concomitants of the existence and what relates to them.²⁵² Efficient causality is, therefore, in the very focus of metaphysics. Efficient cause, or agent, is by definition "the cause which bestows existence that is other than itself".²⁵³ If the efficient cause is the initiator and principle of motion, the inquiry into this type belongs to natural philosopher. Metaphysician is strictly concerned with the 'real' efficient cause: "the principle and giver of existence, as in the case of God with respect to the world".²⁵⁴

The primary ontological composition, or the distinction between essence and existence in all contingent beings reflects in Ibn Sīnā's metaphysical modalities of the possible and the necessary. In one sense, all that exists is necessary and both existence and necessity are primary intelligibles. Necessity means simply, in general terms, certainty or affirmation of existence.²⁵⁵ Eventually this will lead Ibn Sīnā towards the presented division of all existents into possible in itself and necessary through another, or contingent, and necessary in itself – which is God.²⁵⁶ Thus, everything that exists can be divided into that which considered in itself to be necessary and things which as considered in themselves are possible. Thing in itself is either necessary or contingent, there is no second alternative, nor it is possible for a thing to be both because one excludes the other:

²⁵¹ *Ibid.*, (58).

²⁵² *Ibid.*, I, 1, (7).

²⁵³ *Ibid.*, VI, 1, (2).

²⁵⁴ *Ibid*.:

وبالفاعل، العلة التي تفيد وجوداً مبايناً لذاتها، أي لا تكون ذاتها بالقصد الأول محلاً لما يستفيد منها وجود شيء يتصور بها، حتى يكون في ذاتها قوة وجوده إلا بالعرض، ومع ذلك فيجب ألا يكون ذلك الوجود من أجله من جهة ما هو فاعل، بل إن كان ولا بد فباعتبار آخر، وذلك لأن الفلاسفة الإلهيين ليسوا يعنون بالفاعل مبدأ التحريك فقط، كما يعنيه الطبيعيون، بل مبدأ الوجود ومفيده، مثل الباري للعالم؛ وأما العلة الفاعلية الطبيعية فلا تفيد وجوداً غير التحريك بأحد أنحاء التحريكات؛ فيكون مفيد الوجود في الطبيعيات مبدأ حركة؛ ونعني بالغاية، العلم ال مباين لهو.

²⁵⁵ Belo, Essence and Existence, p. 416.

²⁵⁶ Kaya, Varlık ve İmkan, pp. 205-208.

"...if in His existence the Necessary Existent were to have a cause, His existence would be by [that cause]. But whatever exists by something [else], if considered in itself, apart from another, existence for it would not be necessary. And every[thing] for which existence is not [found to be] necessary-if [the thing is] considered in itself, apart from another-is not a necessary existent in itself. It is thus evident that if what is in itself a necessary existent were to have a cause, it would not be in itself a necessary existent."²⁵⁷

What this means is that in itself a thing either can or cannot be otherwise and this is the only alternative. If something can be otherwise it implies the need for a cause, if something cannot be otherwise it implies the lack of the need for a cause. Hence all metaphysical conceptualisation of necessary-possible relations as well as the notion of causality is implied by 'existence' alone. This implication indicates that as the notion of 'existence' and 'necessity' represents the condition for intellectual thought, the same goes for the notion of 'causality'. When we think about something we think about it as existent, i.e. something that either can or cannot be otherwise, i.e. something that is either caused or uncaused. This is possible due to insight into that thing's essence.²⁵⁸ This insight is possible by simple reduction: if it is not *per se* evident that an essence is necessary in itself, then that essence is not necessary in itself, which means that it must be in itself possible. Existence as well as non-existence is something that "occurs" to an existing contingent being due to its cause:

"Moreover, whatever is possible in existence when considered in itself, its existence and non-existence are both due to a cause. [This is] because, if it comes into existence, then existence, as distinct from nonexistence, would have occurred to it. [Similarly,] if it ceases to exist, then nonexistence, as distinct from existence, would have occurred to it. Hence, in each of the two cases, what occurs to the thing must either occur through another or not. If [it occurs] through another, then [this] other is the cause. And if it did not exist through another, [then the nonexistence of the other is the cause of its nonexistence]."²⁵⁹

Due to the fact that the efficient cause is for Ibn Sīnā that what bestows existence other than itself, this particular type of cause plays fundamental role in his metaphysical explanation of

²⁵⁷ al-Ilāhiyyāt, I, 6, (3):

أما الواجب الوجود لا علة له، فظاهر. لأنه إن كان لواجب الوجود علة في وجوده، كان وجوده بها. وكل ما وجوده بشيء، فإذا اعتبر بذاته دون غيره لم يجب له وجود، وكل ما إذا اعتبر بذاته دون غيره، ولم يجب له وجود، فليس واجب الوجود بذاته. فبين أنه إن كان لواجب الوجود بذاته علة لم يكن واجب الوجود بذاته.

²⁵⁸ Ibid., I, 6, (5).

²⁵⁹ *Ibid.*, I, 6, (4):

وأيضاً أن كل ما هو ممكن الوجود باعتبار ذاته، فوجوده وعدمه كلاهما بعلة، لأنه غذا وجد فقد حصل له الوجود متميزاً من العدم، وإذا عدم حصل له العدم متميزاً من الوجود. فلا يخلو إما أن يكون كل واحد من الأمرين يحصل له عن غيره أو لا عن غيره، فإن كان عن غيره فالغير هو العلة؛ وإن كان لا يحصل عن غيره.

reality. On the other hand, if we would consider things from the perspective of perfection, we could agree with Wisnovsky that final cause has the ultimate priority, as God is the absolute existence that in the Aristotelian sense moves everything towards himself by the means of his own self-existing perfection.²⁶⁰ However, from the perspective of metaphysical research (i.e. from human being's perspective), God is primarily understood in Ibn Sīnā as the ultimate efficient cause. This explanation can be established only if all beings have a cause that is the bestower of existence. On the other hand, in God the division between final and efficient causality, like the division between essence and existence, cannot exist, as his absolute perfection is in his absolute unity.

Due to existence of the efficient cause, the existence of every effect is necessary; the existence of its cause necessitates the existence of the effect.²⁶¹ This further implies that the two exist together in time but are not together with respect to the attainment of existence; the existence of the cause did not come about from the existence of the effect, but *vice versa*, and in that sense cause is prior with respect to the attainment of existence.²⁶² But for Ibn Sīnā the same applies with respect to removing cause and effect. If the cause ceases to exist, its effect also ceases to exist because of it, but if the effect ceases to exist that does not mean that the cause ceases to exist - instead it means that from that fact that the effect is no more, we can deduce that the cause ceased to exist as well, or that it is overpowered by an impediment. Therefore, this bond is, according to Ibn Sīnā, necessary bond, that corresponds with the logical notion of necessity and has universal meaning set by Aristotle: 'what cannot be otherwise'.²⁶³ This logical/causal necessity is what makes it possible to establish metaphysics as strict science of being, as well as to provide certain knowledge about reality.

In sum, the relation between the efficient cause and its effect is such that

"...the effect in itself is such that existence is not necessary for it; otherwise, it would be necessary without its cause, if supposed to be necessary in itself and inasmuch as existence is not prevented from [being for] it. But, since it came to exist by a cause, its essence in itself - without the condition of there being a cause

²⁶⁰ Wisnovsky, Robert, *Avicenna's Metaphysics in Context* (New York, Cornell University Press: 2003), pp. 170-180. Abb. Wisnovsky, *Avicenna's Metaphysics*. See also Wisnovsky, Robert, *Avicenna on Final Causality* (Ph.D. Dissertation), Princeton University (1994). According to Wisnovsky's main thesis, Ibn Sīnā did not depart from Aristotelian understanding of causality and for this reason, beside other things, final causality should have priority in his metaphysical system. The way I see it, for Ibn Sīnā, Aristotel's view on efficient causality is too narrow, and represents a false understanding of the real nature of efficient causality, as stated at the beginning of *al-Ilāhiyyāt*, VI, 2. It is this departion from Aristotle's view which led Ibn Sīnā towards putting accent of the efficient causality in his metaphysics.

²⁶² *Ibid*.

²⁶³ *Metaphysics*, 71a-71b).

for it or there not being a cause for it - is possible of existence: It is inescapably the case that it is rendered necessary only by the cause."²⁶⁴

The effect is, therefore, by the definition always something possible in itself and necessary only through another; the same goes for the cause only if the cause is at the same time also the effect of some other cause - if not, the cause is something necessary in itself.²⁶⁵ In any case, cause as such represents something that 'have an exclusive claim to necessity', or in other word, cause is that which necessitates things, while what is necessary in the mind is also necessary in the established existence by the manner of the cause. The main goal of metaphysics is to prove that 'in itself necessary cause', or 'the uncaused cause', exists, i.e. to prove the existence of one such thing that is only the cause and not in the same time an effect. Therefore, as Kogan confirms, Ibn Sīnā's idea is to distinguish metaphysical agency from that of the natural science which identifies agents exclusively with the principles of motion; "while he does not deny that agents cause motions, his main point is that in metaphysics, what agents properly cause is existence."²⁶⁶

As we already stated, the effect, or act, derives its existence only from its agent, not its identity. Thus, although the existence of the act came to be after nonbeing,²⁶⁷ its essence in itself is eternal potentiality for specific being. A caused being, therefore, does not have its own existence essentially,²⁶⁸ it only, conditionally speaking, possesses its own self, its whateness, which is *per se* a specific type of nonexistence; a 'specific type' because it represents the potentiality for specific existence and for the same reason it is not the absolute nonexistence, because as we saw, absolute nonexistence is impossibility for existence – that which is impossible has no cause and can never have a cause. As only potential in itself, every potential effect needs something already actual in order to become an existent.²⁶⁹ As only actual being can be a cause, there must always be some form of actuality prior to potentiality, some sort of existence prior to the actualisation of essence. No essence can be actualised by itself and only by becoming actual, essence can be a cause for something else.²⁷⁰ Therefore, in reality act is always prior to potency and it is this priority that gives it right to be called 'more

²⁶⁸ *Ibid.*, (8).

²⁶⁴ *al-Ilāhiyyāt*, VI, 3, (28):

هو أن المعلول هو في ذاته بحيث لا يجب له وجود، وإلا لوجب من دون علته إذا فرض واجباً لذاته وبحيث لا يمتنع له وجود؛ وإلا لما وجد بالعلة فذاته بذاته بلا شرط كون علة له أو لا كون علة له ممكنة الوجود، وإنما يجب لا محالة بالعلة.

²⁶⁵ *Ibid.*, (29).

²⁶⁶ Kogan, *Metaphysics of Causation*, pp. 35-36.

²⁶⁷ al-Īlāhiyyāt, VI, 1, (7).

²⁶⁹ *Ibid.*, IV, 3, (33).

²⁷⁰ *Ibid.*, II, 4, (7).

noble and perfect'.²⁷¹ This means that if metaphysics would accomplish its main goal, that is proving the existence of the uncaused cause, it would also prove that all existence is due to some ultimate perfection. This ultimate perfection is indeed, as Wisnovsky defended in his dissertation (1994), the Aristotelian final cause. However, the way to establish the proof about it is through the analysis of the relationship between the meaning of 'existence' and the meaning of metaphysical 'efficient causality.' Only later it will become evident that the identity of the ultimate efficient cause implies the absolute perfection because of which God is the ultimate final cause of the world as well.

But there is another important dimension within Ibn Sīnā's doctrine: agent is not only needed for its effect's essence to get its existence, but also for maintaining the effect's existence.²⁷² After a caused being is originated, it still needs ontological 'presence' of its agent's activity in order to remain existent. This is, according to Ibn Sīnā, evident from the fact that the particular being does not have its existence due to its own essence, so such existence cannot as well be maintained due to its essence. Therefore, the existence of the contingent being is caused 'so long as it exists' and "the effect needs that which bestows existence on it always, permanently, as long as [the effect] exists."²⁷³ So, when the cause is removed, the effect will cease to exist, but if the effect is removed, that means that the cause is also removed. The removal of the cause is not due to the removal of the effect, but certainly something that we can conclude if we witness the removal of the effect.²⁷⁴ This sort of relationship and dependence between the cause and the effect can be investigated only in metaphysics.

Thus, Ibn Sīnā's efficient cause in the metaphysical context is a giver of existence. This means that the agent, the activity of bringing something into existence, as well as the effect brought into being, all exist at the same time.²⁷⁵ There is only an ontological priority of the efficient cause, never temporal priority – the effect proceeds from the essence of the cause. At this point Ibn Sīnā's distinct between essential and accidental efficient cause. Only the essential agents produce existence and only the essential cause simultaneously exist with their effects and necessitate them in the real sense. As such, the successive chain of essential causeality must be finite (we will see later why), which eventually leads towards the uncaused cause. As for accidental efficient causes, they can temporally precede their effects, and are

²⁷¹ *Ibid.*, IV, 3, (34).

²⁷² *al-Ilāhiyyāt*, VI, 1, (11)-(12).

²⁷³ *Ibid.*, (17).

²⁷⁴ *Ibid.*, IV, 1, (18); VI, 2, (9).

²⁷⁵ Kogan, Metaphysics of Causation, p. 54.

sort of 'supporting and preparatory' causes.²⁷⁶ As such, accidental efficient causes can be infinite in number, and moreover, they are always connected with matter upon which they act. They act by the way of movement and do not bestow existence. Motion is the process by which something passes from one state to another and it does not occur anew. In this process the essence of the cause does not necessitate the existence of the effect but only necessitates it by being in a certain relation.²⁷⁷ The example of the accidental efficient cause in Ibn Sīnā's Metaphysics is the father with the relation to his son, and the builder of a house to that house.²⁷⁸ Neither of them actually bestows the existence of their effects. The real agent bestows existence from itself upon another thing which this thing did not possess, while each of the two essences, that of the agent and that of its act, remains separate and external to the other.²⁷⁹ Therefore, the main distinction between the real efficient cause and accidental efficient cause is that the former coexist with its effect and produces it by the means of its own essence, while the latter is temporally prior to its effect and act only as 'mediator' or 'helper'. Accidental causes are always causing certain combinations of form and matter, but the essential efficient cause is causing existence. What distinguishes the essential efficient cause is its necessity and sufficiency for the existence of the effect.²⁸⁰ The real agency is in activity that reflects agent's essence and necessitates its effect. If efficient cause is not at every moment of its existence active, then its activity is not due to its existence alone. This would imply that something else, in addition to the existence of that cause, is required in order for it to become active and such cause cannot be considered the real efficient cause. In short, an agent which is inactive at one time and active at a later time is not sufficient for the production of its effects.

The dependence between the cause and the effect is such that if the cause is permanent, the effect must also be permanent, and consequently, if we observe the permanency of the effect, we can conclude to the permanency of the cause. In this sense every effect of the essential efficient cause represents the existence after nonexistence, so in this context we can talk about 'creation' - not *ex nihilo*, because there must always be something actual prior to actualisation of potentiality - but from the perspective of the contingent thing such as it is in itself. This is so because every effect is ontologically posterior, i.e. originated.²⁸¹ Therefore, according to Ibn Sīnā the world is not created in time, but it is eternally ontologically dependent upon its

²⁷⁹ *ibid.*, 1, (6).

²⁷⁶ *Ibid.*, p. 55.

²⁷⁷ al-Ilāĥiyyāt, VI, 2, (8).

²⁷⁸ *Ibid.*, (1) - (5).

²⁸⁰ *ibid.*, (16).

²⁸¹ *ibid.*, 2, (9); (11).

ultimate efficient cause – God.²⁸² Creation in Ibn Sīnā's sense is, therefore, the ontological dependence of the caused being upon its cause in which its very existence is not its own, or, in other word, that dependence in which the absolute nonexistence of the caused being is prevented by its cause.

1.3.2 Metaphysical Causality

According to Ibn Sīnā cause and effect, like substance and accident, are studied in metaphysics as things that attach to the existent *qua* existent:

"We have discoursed on the matter of substances and accidents, on considering the priority and posteriority pertaining to them, and on knowing the correspondence between definitions and the universal and particular things defined. It behooves us now to discuss cause and effect, because these two are also among the things that attach to the existent inasmuch as it is an existent."²⁸³

In order to found metaphysics as science that will explain existence *qua* existence, Ibn Sīnā first departs from Aristotelian naturalistic conception of causation, as no Aristotelian cause explains existence. In Aristotle the efficient cause explains "both coming to be and passing away and every kind of natural change".²⁸⁴ For Aristotle, the efficient cause of the statue is the sculptor.²⁸⁵

Ibn Sīnā not just departs from Aristotle, but also criticise his naturalistic position. In the eyes of Ibn Sīnā, Aristotle's conception of causality is not in the proper sense metaphysical, but physical, just like his notion of 'existence'. Certainly, from the naturalistic perspective the efficient cause is a "principle of motion in another insofar as it is other" and motion is "every excursion from potency to act in matter."²⁸⁶ However, if the notion of 'efficient cause' is considered "not in terms of natural things, but in terms of existence itself, then it is a concept

²⁸² See Mayer, Toby, Avicenna Against Time Beginning: The Debate Between the Commentators on the Ishârât, in Classical Arabic Philosophy: An Anthology of Sources (Indianapolis/Cambridge: Hackett Publishing Company, Inc. 2007), pp. 125- 149; Rahman, Fazlur, Ibn Sina's Theory of the God-World Relationship, in God and Creation, an ecumenical Symposium, eds. David B. Burrell and Bernard Mc Ginn (Indiana: Notre Dame, University of Notre Dame: 1990), pp. 38-56; Acar, Rahim, Talking about God and Talking about Creation, Avicenna's and Thomas Aquinas' Positions (Leiden-Boston: Brill, 2005), pp. 169-193; Acar, Rahim, Creation: Avicenna's metaphysical account, in Creation and the God of Abraham, eds. David B. Burrell, Carlo Cogliati, Janet M. Soskice and William R. Stoeger (Cambridge, Cambridge University Press: 2010), pp. 77-90.

قد تكلمنا في أمر الجوهر والأعراض، وفي اعتبار التقدم والتأخر فيها، وفي معرفة مطابقة الحدود للمحدودات الكُليةُ والجُزئيةُ. فبالُحَري أن نتكلم الآن في العلة والمعلول، فإنهما أيضاً من اللواحق التي تلحق الموجود بما هو موجود.

more general than this and everything which is a cause of existence distinct from itself...is an efficient cause."²⁸⁷

If 'existence' is something that we have to predicate to all objects of our thought in order to think at all, and if we have no choice but to predicate existence to all existing things, then we also have to predicate necessity/possibility to them. Further on, if we have to predicate necessity/possibility to all things, then we also have to predicate causality to them. In this way 'that every effect requires a cause' is necessarily and intuitively known; that which does not have existence in itself is always in need of a connection to something else that is ontologically prior and external to it. Metaphysician analyses the concept of 'existence' and through that analysis he acquires the first principles of science, thought and all existing things. This is possible because 'existence' is a necessary, simple and all-encompassing meaning, as well as a perceiving subject at the same time.²⁸⁸ As something implied by the meaning of' existence', the notion of causality does not have its origin in anything observable. For this reason, the apprehension of necessity is not a matter of perceiving, but of making judgments about what we repeatedly perceive, and these judgments are possible due to the notion of existence with all its implications. Through this it becomes evident that all actually existent beings are necessary through their causes. In this case a determining principle is required for the effect to follow from the cause. It could be the cause itself or an auxiliary. That which happens for the most part is the opposite of what happens rarely. However, rare events, according to Ibn Sīnā, also have a necessary cause. If all conditions being equal, and in the absence of obstacles, the same cause will always, and necessarily, produce the same effect.²⁸⁹ Therefore, deterministic nature of Ibn Sīnā's metaphysics is clear from his doctrine that everything that is, as well as everything that is not, is due to a cause. As Belo rightly stated:

"the determining factors are thus the efficient cause, together with a subsidiary cause if need be, and the absence of obstacles. Given the right conditions, the efficient cause will produce its proper effect; nowhere is it suggested that causes may fail or that something can come about without a cause."²⁹⁰

Therefore, there is a necessary cause for every phenomenon. Whatever is in itself possible becomes necessary the moment it comes to exist – in this sense the first implication of existence is necessity. Thus, according to Ibn Sīnā, every thing or event in the world has a

²⁸⁷ *Ibid.*, p. 49.

²⁸⁸ Türker, *The Possibility of Thinking on Existence*, p. 28.

²⁸⁹ Belo, Catarina, *Chance and Determinism in Avicenna and Averroes* (Leiden Boston, Brill: 2007), p. 26. Abb. Belo, *Chance and Determinism*.

²⁹⁰ *Ibid.*, p. 27.

definite and necessary cause such that it could not have been otherwise. This makes Ibn $S\bar{n}\bar{a}$'s metaphysical system strictly deterministic;²⁹¹ everything is necessarily conditioned by its cause, which can be said potentially to 'contain' their effect and produce it under determinate conditions.

Taking all this into consideration, there is little space in Ibn Sīnā's metaphysics for chance – it merely has an accidental role.²⁹² This is so especially if we view chance as the occurrence of random events which have no definite cause but come to be spontaneously, or as the coincidence or coming together of two independent causal chains, or even as an event that issues 'loosely' from its cause – that is if we assume that a cause or a set of causes may have many possible effects. When talking about chance, Ibn Sīnā insists that it happens in the situation where the agent acts with a view to a specific outcome and the outcome of the action is other than what he or expected. A chance happening is thus an action or event which has a goal and which leads to an unexpected result other than the purposed goal.²⁹³ This means that chance is the matter of subjective expectancies, and relationship between voluntary being and the final cause of its action. It represents a non-expected end. Chance is, therefore, attached to the final cause, not to the efficient cause. This is the only sense in which we can talk about the chance in Ibn Sīnā's metaphysics. In sum, the occurrence of random events which have no definite cause but come to be spontaneously have no place in Ibn Sīnā's metaphysical system.

From what is said above we could conclude that the notion of 'causality' in metaphysics is different from what is investigated in natural philosophy. Natural philosopher is concerned with the operative causes in a specific kind of matter, while the metaphysician is concerned with causality as such and with causality as one of the concomitants of 'existent considered as such.' This is exactly why natural philosophy is subordinated to metaphysics. Thus, Ibn Sīnā's account of efficient causation encompasses both types of cause, cause that bestows existence as well as the cause that bestows motion.²⁹⁴ The former is investigated in metaphysics, whereas the latter belongs to natural philosophy. This distinction proves that Ibn Sīnā considers Aristotle's account of causation somehow narrow, too narrow for any sort of metaphysical explanation of the world. Despite this difference Ibn Sīnā attempts to establish its metaphysics on Aristotelian foundation. In fact, he wants to prove within his metaphysics

²⁹¹ It seems that this is the most plausible interpretation, although it could be argued that Ibn Sīnā's system allows certain freedom in God, as well as in nature, like in Legenhausen, *Necessity, Causation, and Determinism in Ibn Sina*, pp. 30-38.

²⁹² Belo, Chance and Determinism, p. 52.

²⁹³ *Ibid.*, p. 32

²⁹⁴ Bertolacci, *The Reception*, p. 284.

that a contingent thing needs an efficient cause of its existence itself, not just a cause of its coming to be. This is of outmost importance for his final phase: to establish a philosophical theology that will be demonstrated on the principles of metaphysical ontology. On the basis of what is stated above we could say that Ibn Sīnā strives to develop a sort of hierarchy of efficient causes that will correspond with the hierarchy of sciences. The agent of all agents, or the efficient cause in the highest sense, is the one that bestows existence and gives meaning to lesser beings in the similar sense in which metaphysics stands as highest science and ultimate wisdom that provides meanings and principles for lesser sciences. An agent in a lesser sense is intermittently active or actual and so its existence is not sufficient for the production of its effects, instead it produces only motion and change. On the top of this hierarchy of agents is the most simple, actual and active cause whose existence is sufficient for the production of its effects and who prevents the absolute non-existence.²⁹⁵ An agent in a lesser sense is an agent whose existence is not sufficient for the production of its effects. This is clear from the following words:

"...if something by virtue of its essence is a cause for the existence of something else that is permanent, then it is its permanent cause as long as its essence exists. If [the cause] exists permanently, then its effect exists permanently. Such a thing among causes would then have the higher claim to causality because it prevents the absolute nonexistence of the thing. It is the one that gives complete existence to the thing. This, then, is the meaning that, for the philosophers, is termed "creation." It is the giving of existence to a thing after absolute nonexistence. For it belongs to the effect in itself to be non-existent and [then] to be, by its cause, existing."²⁹⁶

Causality in metaphysics is implied in the modality of existence, which represents the very basis for any sort of knowledge and rational judgment about the world. Indeed, in order to establish knowledge of the absolute causes, one must first acknowledge types of causes between things. Still, this acknowledgment is not due to sensation, but through rational judgment²⁹⁷ that is, as I argue, implied by the notion of 'existence' which is first in knowledge. Regarding sensation, Ibn Sīnā would agree with al-Ghazālī's assertion that it leads only to concomitance.²⁹⁸ Due to the implications of the meaning of 'existence' we can derive the modality of things in general, as well as of every individual object of our thought.

²⁹⁷ *ibid.*, I, 1, (16)

²⁹⁸ *ibid.*, VI, 2, (11).

²⁹⁵ al-Ilāhiyyāt, VI, 2, (11).

²⁹⁶ *ibid.*, (9):

فإذا كان شيء من الأشياء لذاته سبباً لوجود شيء آخر دائماً كان سبباً له دائماً ما دامت ذاته موجودة. فإن كان دائم الوجود كان معلوله دائم الوجود، فيكون ميل هذا من العلل أولى بالعلية لأنه يمنع مطلق العدم للشيء فهو الذي يعطي الوجود التام للشيء. فهذا هو المعنى الذي يسمى إبداعاً عند الحكماء وهو تأييس الشيء بعد ليس مطلق، فإن للمعلول في نفسه أن يكون "ليس" ويكون له عن علته أن يكون" أيس".

That a being is necessary, or 'that it cannot be otherwise', means that it is necessitated through its cause. Therefore, the essence of a thing does not determine whether that thing exists or not, that determination entirely depends on its efficient cause. Eventually, this will lead Ibn Sīnā to establish the division between primary and secondary causality in *al-Ilāhiyyāt*, where the primary cause is God, or the Necessary Existent, who originates all things and bestows existence by emanative creation (*ibdā*').²⁹⁹As God is the goal of metaphysics, this type of efficient causality that can be called *ibdā*' is the metaphysical causality in the real sense, upon which the most general scientific explanation of the world rests.

1.3.3 Al-Ghazālī's Critique

In order to continue and to properly understand Ibn Rushd's interpretation of Ibn Sīnā, it is important at this point to explain, in short, the core of al-Ghazālī's critique in *Tahāfut al-Falāsifa* - the critique that, I would argue, influenced Ibn Rushd more than he himself would be willing to admit.

In his *Tahāfut al-Falāsifa* al-Ghazālī criticise twenty teachings of the philosophers and describes his work as a 'refutation' or 'reply' (*radd*) to the philosophical metaphysical doctrines.³⁰⁰ His goal is to show that the metaphysics of al-Fārābī and Ibn Sīnā cannot be backed by demonstration and that metaphysics cannot be founded as a strict science. His main point in is that if metaphysics is a demonstrative science, then why so many metaphysical theories exists, why philosophers have so many different opinions and answers on the same questions and problems, why metaphysics is not more like mathematics? The only answer to this question is that there is no demonstration in philosophy and that philosophers cannot establish metaphysics on the foundations of Aristotle's *Organon*.

Al-Ghazālī's fundamental point is that possibility, necessity and impossibility belongs to rational judgments. This is why there cannot be demonstration about outside world in the philosophical sense. This is the main absurdity in philosophical doctrines; they accept that universals exist only in the mind, not in the concrete, that what exist in the concrete are only individual particulars that are perceived by the senses, yet they claim that there is necessity in the world also. For al-Ghazālī, modality belongs to a judgment of the mind, as well as

²⁹⁹ Taylor, Richard C., *Primary and Secondary Causality*, in *The Routledge Companion to Islamic Philosophy*, eds. R. C. Taylor, L. X. López Farjeat (London-New York, Routledge: 2016, pp. 225-235), pp. 230-231.

³⁰⁰ Muhammad al-Ghazālī, *The Incoherence of the Philosophers (Tahāfut al-Falāsifa)*, transl. Michael E. Marmura, Provo, Utah, Brigham Young University Press: 2000, pp. 3-7. Abb.: al-Ghazālī, *Tahāfut*.

whiteness, animality, and other universals.³⁰¹ But the same also goes for 'existence'. 'Existence' is a general thing, so according to al-Ghazālī, "if the differentia in one of the two divisions is additional to the general [meaning], the same applies to the second differentia. There is no difference [between the two]".³⁰² The division of existence into necessary and contingent is causing only confusion. This is why al-Ghazālī calls the expressions 'the possible' and 'the necessary' a "vague expressions" unless – he continues – "by 'the necessary' is intended that whose existence has no cause and by 'the possible' that whose existence has a cause."³⁰³

In the next phase of his critique al-Ghazālī attempts to show that philosophical method cannot provide certainty for the existence of causal connection in the world. If we cannot deduce causality from necessity, then we cannot talk about 'necessary causality'. Necessity belongs to the judgment of the mind, while causality, if there is such a relationship between beings, is something that we have to observe in order to make conclusions about it. This means that there cannot be such thing as necessary causal connection. In Ibn Sīnā's philosophy, as we saw, necessity and causality represent the universal law of mind as well as of the outside world. This assumption is the basis for his argument for God's existence, or the existence of the Necessary Existent, as well as for the structure of his entire metaphysical system. Yet according to al-Ghazālī, this assumption is the cause of numerous confusions as absurdities, as necessity belongs to the mind and causality could belong to the world outside of the mind.

Further on, in the seventeenth discussion of his *Tahāfut* al-Ghazālī expands his view by developing new kind of argumentation against philosopher's view on causality. His viewpoint is that the connection between what is generally accepted as the idea of 'the cause' and 'the effect' is not a necessary one. His intention is twofold; he is further developing his idea that 'necessity' can exist only in the mind, as well as showing that miracles can exist - which is according to al-Ghazālī essential if one wants to represent the idea of God's omnipotence. With this in mind he sates:

"The connection between what is habitually believed to be a cause and what is habitually believed to be an effect is not necessary, according to us. But [with] any two things, where 'this' is not 'that' and 'that' is not 'this' and where neither the affirmation of the one entails the affirmation of the other nor the negation of the one entails negation of the other, it is not a necessity of the existence of the one that the other should exist, and it is not a necessity of the nonexistence of the one that the other should not exist (...) Their connection is due to the prior decree

³⁰¹ al-Ghazālī, *Tahāfut* I, 127.

³⁰² *ibid.*, III, 50.

³⁰³ *ibid.*, IV, 18.

of God, who creates them side by side, not to its being necessary in itself, incapable of separation." 304

We can see here that the origin of the concept of 'causality' is for al-Ghazālī psychological, it is a result of habit³⁰⁵ rather than philosophical deduction or induction. It has nothing to do with the logical concept of 'necessity'. This means that, according to al-Ghazālī's *Tahāfut*, there is no inner reality to the causal relationship as such, but only between beaings as they appear in our experience, i.e. as mental entity.³⁰⁶ We perceive certain kinds of change and action, but what we conclude to be 'a cause' and its 'effect' is due to the repeated association, which makes our conclusion by analogy and not by necessity. Thus, the causal relation between agent and act is not evident through direct perception. A simple observation of one thing following another cannot be the proof in a stdct logical sense that the causal connection exists. All that we directly perceive is repeated existence between what we refer as 'the cause' and 'the effect'. This repeated change in nature is causing regular associations in our mind. But there is no proof whatsoever that there is a necessary causal connection in the world that exists by virtue of specific natures in things. In other words, when a thing exists together with another thing, it does not mean that it exists because of it. Therefore, sense perception provides no knowledge of causal dependences, it only provides habitual opinion.

This view was, as it is well known, criticised by Ibn Rushd. Yet, interestingly, al-Ghazālī's nominalist basis for the criticism is accepted by the Andalusian philosopher. Al-Ghazālī's fundamental position is that abstract concepts such as 'possible', 'impossible', and 'necessary' have no independent existence on their own:

"The possibility which they mention reverts to a judgment of the mind. Anything whose existence the mind supposes, [nothing] preventing its supposing it possible, we call 'possible,' and if it is prevented we call it 'impossible.' If [the mind] is unable to suppose its nonexistence, we name it 'necessary.' For these are rational propositions that do not require an existent so as to be rendered a description thereof."³⁰⁷

³⁰⁴ *Tahāfut*, XVII, 1:

الاقتران بين ما يعتقد في العادة سبباً وما يعتقد مسبباً ليس ضرورياً عندنا بل كل شيئين ليس هذا ذاك ولا ذاك هذا، ولا إثبات أحدهما مُتَضَمَّنُ لإثبات الأخر ولا نفيه متضمن لنفي الأخر، فليس من ضرورة وجود أحدهما وجود الأخر ولا من ضرورة عدم أحدهما عدم الأخر مثل الري والشرب والشبع والأكل والاحتراق ولقاء النار والنور وطلوع الشمس والموت وجز الرقبة والشفاء وشرب الدواء وإسهال البطن واستعمال المسهل وهلم جرا إلى كل المشاهدات من المقترنات في الطب والنجوم والصناعات والحرف، وإن اقترانها لما سبق من تقرير الله سبحانه يخلقها على التساوق لا لكونه ضرورياً في نفسه غير قابل للفرق بل في المقدور خلق الشبع دون الأكل وخلق الموت دون جز الرقبة والرقبة وإرامة مرا ال

³⁰⁵ It is difficult to arrive at definitive conclusion whether or not al-Ghazālī uphold this doctrine or he merely use it to show that metaphysical theories have an alternative, which is his key goal in *Tahāfut*.

 ³⁰⁶ Lizzini, Olga, *Causality as Relation: Avicenna (and al-Ghazālī)*, Questio 13, Brepols (2013), pp. 166-168.
 ³⁰⁷ Tahāfut I, 116:

It is clear, therefore, that al-Ghazālī takes a nominalist position with regard to the modalities.³⁰⁸ Any predication of 'necessity' to things as they are in themselves is misleading. Modal judgments are abstract notions that our minds develop on the basis of sense perception and predicates 'possible,' 'impossible,' and 'necessary' do not apply to objects outside of our mind: "What exist in the outside world are individual particulars that are perceptible in our senses and not in our mind".³⁰⁹ As we are going to see this is also Ibn Rushd's view, although for him this does not mean that we cannot grasp causal relations between outside beings with the absolute certainty.

1.3.4 Causality in Ibn Rushd

For Ibn Rushd, as well as for Ibn Sīnā, relationship between cause and its effect represents the universal law. Still, Ibn Sīnā's ontology dictates that this relationship is strictly necessary in the logical sense. This is so, as we saw, because the meaning of 'existence' represents not just a necessary meaning of the mind, but also the all-encompassing meaning of everything that *is*. But for Ibn Rushd there is no 'existence *qua* existence' and therefore we cannot speak of the ontological bond between cause and effect in Ibn Sīnā's sense. As the matter of fact, causes and their effects are for Ibn Rushd detachable from one another; this is a very important point for his critique.

As we saw, for Ibn Rushd Ibn Sīnā's main mistake is his understanding of existence; from here he erred in his entire approach to metaphysics, so his view on causality is not an exception. First of all, if reality cannot be divided into existence and non-existence (at least not in the sense Parmenides thought), we have to realise substance as existing in one sense and in the same time (but not in the same manner) non-existing in another sense. An existence of a substance reflects in its actuality and its non-existence is in its potentiality. There is no such thing as absolute non-existence, but only an incomplete existence. Therefore, agent's activity is only connected with potential existence. Nothing can be connected with non-existence qua non-existence, but it can be connected with non-existence qua potentiality. This is the only way to solve the Parmenidean paradox.³¹⁰ An agent is not connected with non-

الإمكان الذي ذكروه يرجع إلى قضاء العقل. فكل ما قدر العقل وجوده فلم يمتنع عليه تقديره سميناه ممكناً، وإن امتنع سميناه مستحيلاً، وإن لم يقدر على تقدير عدمه سميناه واجباً. فهذه قضايا عقلية لا تحتاج إلى موجود حتى تجعل وصفاً له.

 ³⁰⁸ Griffel, Frank, *Al-Ghazālī's Philosophical Theology* (Oxford, Oxford University Press: 2009), p. 166. Abb.:
 Griffel, *Al-Ghazālī*.
 ³⁰⁹ Tahāfut, I, 127.

³¹⁰ As it is clear from the explanation of Ibn Sīnā's metaphysical stance so far, this is not part of his doctrine, at least not in the sense Ibn Rushd presents it. Ibn Sīnā strictly follows Aristotle's account on the relationship

existence *qua* such, nor with the actual existence; there cannot be connection with nonexistence *qua* such and the actual existence does not need a cause. Thus, as we saw, potentiality is, therefore, existence conjoined with non-existence. This is the case with the substance that is connected with privation due to its matter and due to its matter it is always subject to change - corruption, change of place etc.³¹¹

Philosopher's task is not to understand existence *qua* existence, but the world *qua* totality of substances that are in the state of motion and rest and generation and corruption. For anything to be or to exist, it must be actual, and this means to be a thing of a specific kind. Such thing as an actual substance acts, interact, or at least have the power to act in some specific way.³¹² Actual being has this power to act³¹³ and different being differs by its different abilities to act and interact with other beings. Different kinds of being act in different ways, whereas the same species produces the same kind of acts.³¹⁴ This is the core of Ibn Rushd's Aristotelianism. In accordance with this view, causal efficacy is based on the actuality of being. Substances are differentiated by their acts. As Kogan stated,

"for things to be what they are, they must act as things of that sort do, always or for the most part. Actuality thus becomes the counterpart of activity. It is not only that we know what a thing is by virtue of its activity, but that it exists and is what it is by virtue of that activity".³¹⁵

For Ibn Rushd this is clear from Aristotle's own words: "There is absolutely nothing whatever that does not have its own power"³¹⁶ This means that if existing beings do not have acts that specify them, they also do not have essences proper to themselves, because acts differ only through the diversity of essences. This would imply the non-existence of essences, or natures, of things, which would mean that definitions and names are impossible, and we would end up in pantheistic doctrine.³¹⁷ This is fundamental if we want to understand the totality of things as something that is subject to movement and change. In order to have change, we must have

between potential and actual, underlining that what is potential is in itself is non-existent merely from the perspective of metaphysical considerations.

³¹¹ Tafsīr, LAM, t. 8, 1442; t. 26, 1539-1540.

³¹² Kogan, *Metaphysics of Causation*, p. 113

³¹³ At this point I accept Barry Kogan's understanding of Ibn Rushd's substance as "powerful individual", that he advocates in his book *Averroes, and the Metaphysics of Causation*, he summarises his idea: "whether we speak of a thing's nature or its act, both depend for their very existence and identity on at least two factors: (a) the particular range or selection of powers which the thing has, and (b) the particular arrangement they have in relation to one another. Together they make up the bare minimum of what we may call Averroian substances" (p. 123).

³¹⁴ *Ibid*.

³¹⁵ *Ibid.*, pp. 114-115.

³¹⁶ Metaphysics, 1047a.

³¹⁷ Tafsīr, TTA, t. 7, 1135.

something that by itself has power to impose change on other thing and something that is able to change; the same works for the relationship between mover and moved, as well as between cause and effect. Nature of things is reflected in its power to produce certain action and when it is said of a thing that 'it does not exist' or 'it does not bring something else into existence', the meaning of such statement is that the thing does not have the power to exist or to bring something into existence.³¹⁸

Agent is not something that bestows existence for Ibn Rushd, but something actual that acts upon something potential and draws its potentiality into actuality. This action is the result of the very nature of an agent that as such has its existence in its own respect. Its existence is not an accident added to its essence, but its determined nature. Its act is the necessary result of that nature and this causal relation represents the necessity of the natures of substances. This nature is its essence that is not different from its existence. By upholding the distinction between being and non-being Ibn Sīnā sees the world consisting of things which, while being necessary through their cause, still remain within themselves pure possible: an actualized possible is an essence to which it happens that it exists - although a contingent being is, it still *qua its* essence is not. But for Ibn Rushd this is absurd as essences that in every concrete particular thing its essence is its existence.³¹⁹

If we understand that potential existence is a kind of existence which is conjoined with nonexistence in the sense of privation, potentiality comes down to matter (as is the meaning of Aristotle's passage of *Metaphysics* 1071a4) due to which every changeable substance is the compound, "...because the potentiality which is in matter is potentiality to become the individual compound of matter and form".³²⁰ Process of becoming is, therefore, always process of becoming actual or more perfect. Efficient cause acts upon potential existence, which represents a potential substance, and substance is, as we saw, a definite individual being that has existence in its own right. Only in this way we can avoid Ibn Sīnā's misconception that started with his idea of essence. But if existence is only a name that primarily denotes substance (like it is for al-Ghazālī), then there is no real distinction between essence and existence, the distinction is just nominal and we can talk only about substance in potentiality and about actual substance. Ibn Sīnā's problem is that he assumes that the reality in the mind completely reflects the reality outside of the mind, but for Ibn Rushd this is a

³¹⁸ *ibid.*, 1136.

³¹⁹ Tafsīr, LAM, t. 3, 1414; t. 27, 1543; t. 39, 1623; Tahāfut al-Tahāfut, p. 250; 162.

³²⁰ *ibid.*, t. 26, 1539-1540.

mistake, "for not all the different dispositions which can be imagined in a thing need determine additional qualities in its essence outside the soul..."³²¹ Therefore, as Ibn Sīnā's possible is not understood as the incompleteness of an existent, it is not 'true possible'.³²² Ibn Sīnā's proclamation of potentiality as essence is for Ibn Rushd the denial of the proper use of this term, and "those who deny potency, deny prime matter, and all motions, generation, and corruption".³²³Although this critique is primarily used by Ibn Rushd against Ash'arite theologians and Megarian school, it is as well indicative for his understanding of Ibn Sīnā; if potency is understood as non-existence and if every contingent being is in itself non-existent, then only God actually exists, i.e. all beings are actually one - then again we have the Parmenidean paradox.

The correct view is that the act of an agent is connected with existence that is not fully actualised, for that is the true meaning of 'potential existence', 'something that is, but is not complete' instead of 'something that is not, but can be' – therefore, the division between two aspects of potentiality, physical and metaphysical, only causes confusion. Agent brings about non-perfect existence into a state of some sort of perfection. An existing thing is imperfect due to the non-existence that resides in it, which is caused by matter. The act of the agent cannot be connected with non-existence, as the non-existence has nothing actual, nor it is connected with fully actual existence, as such being is perfect and needs no cause.³²⁴

If we keep in mind Ibn Rushd's understandings of 'existence' as Aristotelian substance, it becomes clear why we cannot allow the idea that agents or efficient causes produce existence. It is more appropriate to consider them as something that produces the transition from potency to act, which applies to all cases of motion or change in an Aristotelian sense. This is the only way that we can talk about the transition from non-existence into existence. In other word, the transition from non-existence into existence is for Ibn Rushd process of generation. Therefore, what all agents produce is motion or change, whether this effect is manifest in change of place, quality, or quantity, or in new substances.³²⁵ Because the act of an agent is connected with uncomplete, or non-perfect existence, its existence is only effected through a conjunction of parts, like the conjunction of matter and form, or the conjunction of the elements of the world, which receives its existence as a consequence of this conjunction – only in this sense

³²¹ Tahāfut al-Tahāfut, III, p. 178; 108.

³²² *ibid.*, p. 178-179; 108-109.

³²³ Tafsīr, TTA', t. 6, 1131-1132.

³²⁴ Tahāfut al-Tahāfut, pp. 153; 90-91.

³²⁵ Kogan, *Metaphysics of Causation*, p. 35.

the bestower of such conjunction could be called 'the bestower of existence'.³²⁶ Therefore, the act of the efficient cause is only connected with the effect in so far as it is moved and what we call 'becoming' is always the movement from potential to actual being.³²⁷ Proper understanding of Aristotel's 'potentiality' is, therefore, fundamental for proper understanding of the process of becoming and the way in which causes and effects are connected.

In order to completely incorporate Aristotle's notions of 'potentiality' and 'actuality', as well as to explain causal connection between things, Ibn Rushd distinguishes between active and passive power in concrete beings. The basic principle of action is that nothing acts on itself and that nothing is acted upon by itself. Also, it is empirically evident that change exists. Therefore, there must be some active power which is a principle of change in another thing as well as some passive power which receives change in itself from another thing. Ibn Rushd is here very consistent in his Aristotelianism: active power of a substance exists by the means of form, while passive power exists by the means of matter. This is, according to Ibn Rushd, the true Aristotelian doctrine:

"He [Aristotle] means that when one has reflected on those powers in each genus one sees that they are related to the primary power. For in every passive power, the definition of the power of prime matter is included, and similarly, in the definition of every active power the definition of the act of the First Form is included, which is the definition of the First Form separate from matter".³²⁸

Another issue is the simultaneity and dependence of the effect upon its cause. For Ibn Rushd, although Ibn Sīnā is right regarding simultaneity between the efficient cause and its effect, he is not right regarding dependence of the effect on its cause. According to Ibn Rushd, the effect's existence is not bound to its agent with its very existence, because existence is not an accident, but something that essentially belongs to it. If Ibn Sīnā is right, then everything that exists belongs to the category of relation and not to the category of substance, except perhaps the Firs Cause. Again, this would mean that all things are one. The effect is not something that simply passes from non-existence into existence neither the cause is something that simply bestows existence upon its essence. Instead becoming is always a process of passing from one form of existence into another – the process of actualization. No existent that is composed of matter and form is never fully actualised. Thus, only in this sense we can talk

³²⁶ *Tahāfut al-Tahāfut* p. 166; 303.

³²⁷ *ibid.*, p. 156; 92.

³²⁸ Tafsīr, TTA', t. 2, 1110-1111:

بالقوة الصورة يريد ان الصورة لا تنفعل نما هي صورة من مبدا مغير بالذات و انما تنفعل بالعرض و لذلك يكون التفير لها ليس تفيرا اولابل من جهة ما هي صورة في منفعل و هي المادة ولذلك الصور التي ليست في مو ادفليس تنفعل اصلا لا با لذات و لا بالعرض.

about its constant need of a cause that will inflict this process of actualization upon it. This process represents a succession of forms as principle of actuality upon matter.

However, if existence does not belong to being essentially but only accidentally, then we can talk about existence *per se* that is shared by all beings. In that case only existence 'is', nothing else, and there are no differences and hence no particulars. Everything is 'one', but without specific difference that 'one' is nothingness. For this reason Ibn Sīnā's understanding of existence and causality has no scientific purpose. It does not include notions of 'potentiality' and 'actuality' in adequate or scientifically relevant way. Potency and act are in fact used for the purpose of supporting the idea that existence is an accident, the purpose which is pseudo-scientific. To this Ibn Rushd says:

"Therefore it is not correct to say that there is something contingent by itself and eternal and necessary by something else, as Ibn Sīnā says that the necessary is partly necessary by itself and partly necessary by something else, except for the motion of the heaven only. It is not possible that there should be something contingent by its essence but necessary on the account of something else, because the same thing cannot have a contingent existence on account of its essence and receive a necessary existence from something else, unless it were possible for its nature to be completely reversed. But motion can be necessary by something else and contingent by itself, the reason being that its existence comes from something else, namely the mover; if motion is eternal, it must be so on account of an immovable mover, either by essence or by accident, so that motion possesses permanence on account of something else, but substance on account of itself. Therefore, there cannot be a substance contingent by itself but necessary by something else, but this is possible in the case of motion. Every moving power which is in a body is necessarily moved by accident and everything moved by accident and imparting motion by itself can come to a standstill by itself and be moved by something else. If there is a power in a body which can never cease to impart motion, it will necessarily be moved by a mover in which there is no potentiality at all, either by essence or by accident. This is the state of the celestial body."³²⁹

This passage has two very important indications for our present discussion: firstly, logical necessity is not the same as ontological necessity and Ibn Sīnā confuses purely intellectual notions with reality outside of the mind. We could say that Ibn Sīnā's mistake about the

³²⁹ *Tafsīr, LAM,* t. 41, 1632:

ولذلك لا يصح ان يقال ان هاهنا ثىء ممكن من ذاته ازلى و ضرورى من غيره كما يقول ابن سينا ان الواجب منه ما هو واجب بذاته و واجب بغيره الا في حركة السماء فقط و اما ان يوجد شىء هو في جو هره ممكن و هو من قبل غير ه ضرورى الوجود فلا يمكن ذلك لا نالشىء الواحد لا يمكن ان يكون من قبل جو هره ممكن الوجود ويقبل من غيره الوجود الضرورى الالو امكن فيه ان ينقلب طبعه و اما الحركة فيمكن فيها ان تكون واجبة من غير ها ممكنة من ذاتها والسبب في ذاك ان الوجود لها من غيره الوهود الضرورى لالو امكن فيه ان ينقلب طبعه و اما الحركة فيمكن فيها ان تكون واجبة من و لا بالعرض فالبقاء الصبب في ذاك ان الوجود لها من غيرها وهو المحرك فان وجدت سرمدية فواجب انيكون من قبل حرك لا يتحرك لا بالذات و لا بالعرض فالبقاء الحركة من قبل خبل غيرها و اما الجوهرفمن قبل ذاته ولذلك لم يمكن ان يوجد جو هر ممكن من ذاته ضرورى من غيره و امكن ذلك في الحركة من قلل قبل غيرها و اما الجوهرفمن قبل ذاته ولذلك لم يمكن ان يوجد جوهر ممكن من ذاته ضرورى من غيره و امكن ذلك في الحركة من قلب عبرها و اما الجوهرفمن قبل ذاته ولذلك لم يمكن ان يوجد جوهر ممكن من ذاته ضرورى من غيره و ماكن ذلك في الحركة فكل قوم محركة هى في جسم و ما الجوهرفمن قبل ذاته ولذلك لم يمكن ان يوجد جوهر ممكن من ذاته ضرورى من غيره و منهد ذلك في الحركة فكل قوم محركة هى في جسم في ضرورة متحركة بالعرض و كل متحرك بالعرض حرك بالذت فهو ممكن السكون من ذاته مندرك من غيره في كانت هاهنا قوة في جسم ليس يمكن فيها ان تقف عن التحريك في وقت من الاوقات فهى ضرورة متحركة عن محرك ليس فيه قوة اصلا لا بالذات و لا بالعرض و هذه هى حال الجرم السماوى.

nature of necessity consists in fact that "the truth of a categorical predication is subject to various contingencies, but a statement's necessity is not subject to any contingency".³³⁰ Secondly, there is no distinction between efficient causality that is investigated in natural sciences from the one investigated in metaphysics. There cannot be such a thing as "bestower of existence" which is distinct from motion. Efficient cause is strictly the cause of motion, exactly like Aristotle established it in his natural philosophy. Yet according to Ibn Rushd, we can distinct between essential and accidental mover; the essential mover is the type of an efficient cause that is necessary for the existence of the effect, so in this sense the causal links can also be divided into essential and accidental.³³¹

As Kogan notices, in contrast to Ibn Sīnā, Ibn Rushd does not assume that every particular being will necessarily produce its characteristic effect, because "particulars may retain their specific natures but at the same time lack the requisite strength or sufficiency of power to perform their specific acts in virtue of some constitutional defect. Because of this intrinsic deficiency, virtually any impediment can overpower the cause".³³² This is clear from Ibn Rushd's own words in $Tafs\bar{u}^{333}$: when the agent approaches that which is acted upon and there is no external impediment present, it is absolutely necessary that the agent act and the patient undergo the action. But this also means that it is possible that something prevents the agent to cause its effect and this is exactly why it is somehow imprecise to define 'necessity' in this context as 'something that cannot be otherwise'. Instead, what we call 'necessary' in nature is 'something that happens for the most part'. Still, Ibn Rushd persists in calling this link 'necessary' and he certainly has good reasons for it: necessity in the world can be called 'necessity' because it reflects the identity, essence or nature of a substance, and as long as this substance is what it is, it must behave the way it behaves. This also means that certain substances have certain strengths and weaknesses according to which they can or cannot be prevented to accomplish their causal role. According to Ibn Rushd, it is exactly these characteristics that are overlooked by Ibn Sīnā, and exactly so because of his doctrine about existence being something added to a substance instead of being the substance itself.

³³⁰ Thom, Paul, *Averroes' Logic*, in *Interpreting Averros, Critical Essays*, eds. Peter Adamson and Matteo Di Giovanni (Cambridge, Cambridge University Press: 2019, pp. 81-95), p. 89. Abb.: Thom, *Averroes' Logic*.

³³¹ Tahāfut al-Tahāfut, p. 46; 65.

³³² Kogan, *Metaphysics of Causation*, pp. 131-132.

³³³ Tafsīr, TTA, t.2, 1113; t.10, 1152.

By stating that in a thing *per se* its essence is its existence³³⁴, or that "…existence is a quality which is the essence itself, and whoever says otherwise is mistaken indeed",³³⁵ Ibn Rushd accepts al-Ghazālī's critique regarding Ibn Sīnā's relationship between necessary and possible. In things outside of the mind 'necessary in itself' can only mean 'that which do not have a cause' and 'possible in itself' consequently means 'that which has a cause'. In order to consequently proceed with his theory, Ibn Rushd has to distinguished natural or causal necessity from logical necessity. This important step is also probably under the influence of al-Ghazālī's critique.³³⁶ For Ibn Rushd, as for al-Ghazālī, logical necessity represents the relationship between universal concepts in a judgement, or relations and principles of the mind. However, causal necessity - and here Ibn Rushd goes against al-Ghazālī's doctrine, or at least against the doctrine of causality that al- Ghazālī elaborates in his *Tahāfut* - is the principle within very natures of concrete beings, by which they behave in particular way, and by which they are some determent species. It is these things within the concrete substance that we successively observe when we attempt to realise its essence.

Therefore, all substances exist and change according to their essences, or natures. These natures consist of active and passive powers or abilities to impose and accept change. As Kogan concludes,

"it is the distinctive selection and arrangement of these powers, included in the structure of an entity that allows us to explain why different individuals belong to the same or different natural kinds. And this in turn facilitates further classifications of natural kinds themselves into more encompassing hierarchies of genera and species,"³³⁷

and further that

"the essential natures of things impose relatively stable patterns and limits upon the processes of change themselves. For we observe that changes occur in certain ways and not others, upon the fulfilment of certain conditions and not in their absence."³³⁸

³³⁴ This idea in Ibn Rushd in what Van den Bergh notices as the identification of essence and existence in *The Incoherence of the Incoherence*, Vol. II, p.137, n. 237.4

³³⁵ Tahafut al-Tahāfut, p. 274; 179.

³³⁶ On al-Ghazālī's impact on Ibn Rushd see Frank Griffel, *The Relationship Between Averroes and al-Ghazālī*, in Medieval Philosophy and the Classical Tradition in Islam, Judaism, and Christianity". Edited by John Inglis. Richmond: Curzon Press, 2002. 51–63.

³³⁷ Kogan, *Metaphysics of Causation*, p. 166.

³³⁸ *Ibid*.

This means that the activity of change and motion occurs only insofar as the efficient cause exists in a state of actuality and its effect is in the state of possibility. Potency and act cannot, therefore, be taken outside of the context of motion and rest. According to Ibn Rushd, the existence of a thing as moved occurs only when there is a moving power, therefore every moved thing therefore needs a mover and if existent does not exist sometimes in potency and sometimes in act it is an existent by itself.³³⁹ Cause is always in some sense prior to its effects, ontologically prior as something that imposes change and produce the effect, as well as something that is in itself already fully actualised.

In sum, according to Ibn Rushd, because Ibn Sīnā placed his metaphysics on wrong foundations, his entire system is wrong. Ibn Sīnā's mistake about existence culminates in his metaphysical view on causality. His view that the efficient cause is "the bestower of existence" as well as his distinction between causation investigated in metaphysics from causation investigated in physics represents a mistake. This will eventually lead Ibn Sīnā towards the idea that agent is the one who creates form and brings it into being and implants into matter - that is the "Giver of Forms".³⁴⁰ For Ibn Rushd, "if one assumes that the forms are created, one is led to accept the theory of forms and of the Giver of Forms," and this leads to creation ex nihilo doctrine, because if form can be created from nothing, the whole can be created.³⁴¹ Aristotelian form cannot be something that is simply 'given' to another thing, as this would imply its existence before the existence of a thing to which this form belongs, hence we would have Platonic doctrine. Therefore, Ibn Sīnā must accept either Platonism or creationism, both views that can be easily disputed from the perspective of the real Aristotelianism.

1.4 Causality and Experience

Both Ibn Sīnā and Ibn Rushd were very well familiar with the importance of experience in Aristotle's corpus. In *Metaphysics* I, 1, 980b Aristotle says:

"Now from memory experience is produced in man; for several memories of the same thing produce finally the capacity for a single experience. And experience seems pretty much like science and art, but really science and art come to men through experience... Now art arises when from many notions gained by experience one universal judgment about a class of objects is produced. For to

³³⁹ Tahāfut al-Tahāfut, p. 275; 179-180.

³⁴⁰ Tafsīr, LAM, t. 18, 1498.

³⁴¹ *Ibid.*, 1503.

have judgment that when Callias was ill of this disease this did him good, and similarly in the case of Socrates and in many individual cases, is a matter of experience; but to judge that it has done good to all persons of a certain constitution, marked off in one class, when they were ill of this disease, e.g., to phlegmatic or bilious people when burning with fever-this is a matter of art. ...experience is knowledge of individuals, art of universals."

Aristotle is the first who analysed systematically scientific knowledge, defined it, described its essential features, and established strict methods on how to reach the real (or ideal) knowledge. According to Aristotle, scientific knowledge is the knowledge in the real sense it is knowledge of universal, immutable and necessary, the knowledge that shows that something is the case and cannot be otherwise, it is necessarily true and cannot be false; as such scientific knowledge depends on first principles ($\dot{\alpha}\rho\chi\dot{\eta}$) and first causes of existent.³⁴² (Posterior Analytics, B, 19; Weisheipl, 1958). Knowledge is passing from unknown towards known and in order for it to be possible the unknown must represent the potentiality for knowledge – it is something that is potentially known; in order for the process of knowing to begin one must know what he/she is looking for. Beside this, things known prior to any scientific inquiry are the very principles of thought (i.e. principles of logic: the law of noncontradiction, the law of excluded middle and the law of identity), as well as the nominal definition of a thing sought.³⁴³ The principle of non-contradiction, the principle that one thing cannot belong and not to belong to that same thing at the same time and in the same respect, is according to Aristotle the highest law that represents the principle of all axioms. Whatever is contradictory cannot exist, hence this law is both logical as well as ontological – it is exactly due to this unity that logical formulations are equivalent to ontological.³⁴⁴ In this way Aristotle's system tends to be a deductive system which is based on axioms, i.e. starting point of scientific knowledge in the form of immediate premises and first principles, and definitions, i.e. formulations of essences of things which we get by the process of abstraction through induction $(\dot{\epsilon}\pi \ddot{\alpha}\gamma \omega\gamma \dot{\eta})$.³⁴⁵ These logical standards have a special role in Aristotle's Secondary Analytics, where the Philosopher describes his rigorous method which must be applied in every science. Every science must fulfil four basic requirements: (1) it must deal

³⁴² Posterior Analytics, B, 19; for commentary on Posterior Analytics check Weisheipl, Athanasius J., Aristotelian Methodology, A Commentary on the Posterior Analytics of Aristotle, Pontifical Institute of Philosophy Dominican House of Studies-River Forest, Illinois (1958).

³⁴³ Posterior Analytics, II, 19, 99b.

 ³⁴⁴ Łukasiewich, Ian, Über den Satz des Widerspruches bei Aristoteles, in Bulletin International de l'Academie de Cracovie 1.2 (1910), pp. 15-38. I also used Croatian translation by Filip Grgić: O aristotelovskom pojmu aporije, in P. Gegorić i F. Grgić, Aristotelova Metafizika, Zbirka rasprava, Kruzak, Zagreb, 2003, pp. 129-148.
 ³⁴⁵ Bäck, Allan, Aristotle's Theory of Abstraction (Springer Science+Business Media, Springer International

Publishing Switzerland: 2014), pp. 172-175.

with a well-defined genus of things that functions as its subject-matter, which is its scope of investigation, (2) it must be precisely organised in accordance with the relationship between its subject-matter, properties and principles - it proves certain properties of its subject-matter by relying ultimately on some undisputable proper principles and common axioms, (3) its arguments must have demonstrative character, assured by their syllogistic form and the certainty of the premises of these syllogisms, (4) it must entertain a certain relation of subordination, parity, or superiority with the other sciences.³⁴⁶ Besides the analysis of the relationship between these scientific requirements, *Secondary Analytics* sets another problem which may be qualified as epistemological in the real sense: how one acquires first principles of science?³⁴⁷ Aristotle's answer to this question indicates a strong empirical tendency within his philosophical system – emphasis of perception and experience throughout all of his works evidently influenced philosophical thought after him, including the philosophers of Islamic civilisation. In his *Posterior Analytics* Aristotle is explicit on this point: it is necessary that we become aware of the first principles by the means of induction because this is the way by which we grasp universal through perception.³⁴⁸

In Aristotle, all universal knowledge is grasped by perception of particular things. Induction is a method of grasping the universal natures of existent through perception, and according to Aristotle this is the only way to grasp universals³⁴⁹ - universals are gathered by the mind from the particulars.³⁵⁰ So the rights method of scientific investigation is to combine the first principles with inductive method: one observes similarities in individual things and realise their common features, until all common elements within a species are established, this action is repeated many times until a formula or a definition of a thing is obtained - in this sense induction represents a path from particular to universal³⁵¹ The synthesis between inductive and intuitive results in the best form of knowledge - scientific demonstration; demonstrative understanding must proceed from things which are true, primitive and immediate as well as more familiar, prior and explanatory of the conclusions.³⁵² Therefore, not every deduction is demonstration; deduction can be established even if some demonstrative conditions are missing, however this deduction "will not bring about understanding".³⁵³ In sum, the first

³⁴⁶ Bertolacci, *Establishing Metaphysics*, pp. 187-188.

³⁴⁷ Posterior Analytics, II, 19, 99b, 18.

³⁴⁸ *Ibid.*, II, 19, 100b.

³⁴⁹ *Ibid.*, I, 18.

³⁵⁰ *Ibid.*, 99b-100b.

³⁵¹ *Topics*, I, 12.

³⁵² Posterior Analytics, I, 2, 71b.

³⁵³ Ibid.

principles of demonstration are axioms, hypotheses, and definitions³⁵⁴ and demonstration must include all the above as well as the inductive method in order to fulfil its role. In this sense Aristotle's philosophy is both intuitive and empirical – the fact that did not pass unnoticed by both Ibn Sīnā and Ibn Rushd.

There are different interpretations regarding Aristotle's understanding of induction. According to David Ross, Aristotle did not have a unique definition of induction. In a most general sense induction means 'a process of conclusion which goes from particular towards universal,³⁵⁵ which is in fact Aristotle's definition in Topics 105a. Ross underlines tree meanings of the word: 1) dialectical induction, which is the universal conclusion that proceeds from particular and forms an opinion, 2) intuitive induction, which represents knowledge about particular from which universal knowledge is formed, and 3) perfect induction, which is the valid universal argument based on particular. According to Harari epagoge is used in two mains senses in Aristotle. The first is the "argumentative sense", mainly described in Topics. The second is 'cognitive sense' of First Analytics II, 21 as well as of Secondary Analytics I, 1. Argumentative induction argumentative induction establishes a conviction, while cognitive induction leads to a qualitative modification of certain content; more specifically it leads from an acquaintance with matter to an acquaintance with forms.³⁵⁶ In Metaphysics I.1 Aristotle states that a universal judgment is formed through experience and in Posterior Analytics II.19 the principle of knowledge emerges from experience. According to Harari this indicates that grasping the form of a particular object is, according to Aristotle, an intellective act; intellect is the faculty of grasping forms, while induction is the means of grasping them.³⁵⁷ This means that induction is not identical with the process that starts with sense perception and ends with experience; instead, it is an immediate apprehension of essences or forms, occurring at the first stage of the path from sense perception to experience.³⁵⁸ According to this interpretation induction is not a mean of establishing knowledge, but is introduced by Aristotle in order to solve a Greek problem, put forward in Plato's Meno (i.e. so called 'Meno's puzzle') and concerns explaining learning as a process, and not establishing solid foundations for knowledge.³⁵⁹ In this sense, induction is a mediator between two cognitive states: sensation and perception, and leads from the sensual inquiry

³⁵⁴ Harari, Orna, *Knowledge and Demonstration, Aristotle's Posterior Analytics* (Springer-Science+Business Media, 2004), p. 4. Abb.: Harari, *Knowledge and Demonstration*.

³⁵⁵ Ross, David, *Aristotle's Prior and Posterior Analytics* (Oxford: Oxford at the Clarendon Press 1949), p. 48. ³⁵⁶ Harari, *Knowledge and Demonstration*, p. 5.

³⁵⁷ *ibid.*, p. 35.

³⁵⁸ Ibid.

³⁵⁹ ibid., p. 36.

into the material towards an apprehension of the form, i.e. the essence.³⁶⁰ Eventually this process results in a conceptualization; induction leads from sensation to an apprehension of the essence, while demonstration leads from perceptual understanding to conceptual understanding.³⁶¹

Aristotle's influence reflects differently in the two Islamic philosophers: while Ibn Sīnā emphases empirical approach in his natural philosophy, his metaphysics, as we saw, departs from Aristotelian foundations. Ibn Rushd, on the other hand, maintains empirical basis for all branches of knowledge, including metaphysics. In this chapter I will not analyse in detail nor compare Ibn Sīnā and Ibn Rushd's epistemology - such an inquiry would lead deeply into analysis of their understanding of human soul³⁶² - but only signify some parts that are important for their view of metaphysics.

At one point Aristotle says:

"Now of the thinking states by which we grasp truth, some are unfailingly true, others admit of error – opinion, for instance, and calculation, whereas scientific knowing and intuition are always true: further, no other kind of thought except intuition is more accurate than scientific knowledge, whereas primary premises are more knowable than demonstrations, and all scientific knowledge is discursive. From these considerations it follows that there will be no scientific knowledge of the primary premises, and since except intuition nothing can be truer than scientific knowledge, it will be intuition that apprehends the primary premises".³⁶³

This passage indicates that all scientific knowledge must start from the *per se* evident truths and induction can be used only to extend knowledge. The right method of investigation would be observation of similarities in individuals and consideration of what elements they have in common. When the common elements are realised the definition of a thing is also realised.³⁶⁴ In short, Aristotle's system of scientific knowledge is an axiomatic system that includes

³⁶⁰ *ibid.*, p. 144.

³⁶¹ *ibid.*, p. 145.

³⁶² For Ibn Sīnā see Ali Durusoy, *İbn Sinâ Felsefesinde İnsan ve Alemdeki Yeri*, İFAV, Istanbul, 2012 as well as Fazlur Rahman, *Ibn Sina's Psychology, Introduction*, Hyperion Press, 1981 and *Prophecy in Islam, Phylosophy and* Orthodoxy, George Allen and UNWIN LTD, London, 1958, pp. 14-20; Jari Kaukua, Avicenna on Subjectivity, A Philosophical Study (Jyväskylä: University of Jyväskylä, 2007). For Ibn Rushd see Afred L. Ivry, The Ontological Entailments of Averroes' Understanding of Perception, in Theories of Perception in Medieval and Early Modern Philosophy, Vol. 6, ed. Simo Knuuttila and Pekka Kärkkäinen (Springer Science + Business Media B.V, 2008). Also, a comparative analysis is presented in Davidson, Herbert A., *Alfarabi, Avicenna and Averroes, on Intellect* (Oxford and New York: Oxford University Press, 1992), as well as in Atilla Arkan, *Psikoloji, Nefis ve Akul*, in *İslam Felsefesi, Tarih ve Problemler* (Istanbul: İSAM Yayınları, 2013), pp. 569-598.

³⁶³ Posterior Analytics, II, 19.

³⁶⁴ *ibid.*, II, 13.

deduction as well as induction. The base of the system consists of axioms, or immediate premises such as knowledge of the first principles, which are grasped by intuition, and definitions, or realisations of essences of things which are grasped through the induction. However, the question about priority of approach within a scientific discipline still remains open: is science primarily axiomatic or inductive, and what approach belongs to metaphysics? Certainly, there must be difference in the approach between sciences, for example mathematics is evidently axiomatic science, while physics relies primarily on the observation of motion. However, the method of the first philosophy in Aristotle remains unclear. This unclearness leads Ibn Sīnā and Ibn Rushd in completely opposite directions. As we can see so far, Ibn Sīnā favours more axiomatic approach for metaphysics, while Ibn Rushd claims that metaphysician relies on observation inasmuch as it relies on principles established in natural sciences.

1.4.1 Experience and induction in Ibn Sīnā

It seems that Ibn Sīnā's epistemology, like Descartes', starts with the thought experiment. In his *Shifā': al-Nafs* (I, 1, 16) Ibn Sīnā says:

"One of us must imagine himself so that he is created instantaneously and perfect but with his sight veiled from seeing external [things], [...] floating in air or in a void so that the resistance of the air does not impact him - an impact he would have to sense – and with his limbs separated from each other so that they neither meet nor touch each other. [He must] then consider whether he affirms the existence of his self. He will not hesitate with affirming that his self exists, but he will not thereby affirm any of his limbs, any of his internal organs, the heart or the brain, or any external thing. Instead, he will affirm his self without affirming for it length, breadth or depth. If it were possible for him in that state to imagine a hand or some other limb, he would not imagine it as part of his self or a condition to his self. You know that what is affirmed is different from what is not affirmed and that what is confirmed is different from what is not confirmed. Hence, the self whose existence he has affirmed is exclusive to him in that it is he himself, different from his body and limbs which he has not affirmed. Thus, he who takes heed has the means to take heed of the existence of the soul as something different from the body – indeed, as different from any body at all – and to know and be aware of it".³⁶⁵

³⁶⁵ al-Nafs I, 1, 16. The quotation is taken from Jari Kaukua, *Ibn Sina and His Heritage*, academia.edu, and *Self-Awareness in Islamic Philosophy*, 2015, p. 35; in the original Bakos, v. 1, 1956, pp. 18-19:

يجب ان يتوهم الواحد منا كانه خلق دفعةً وُخلق كاملا لكنه حجب بصره عن مشاهدة الخارجات وخلق يهوى في هواء هويا لا يصدمه فيه قوام الهواء صدما ما يحوج الى ان يحس وفرق بين اعضاءه فلم تتلاق ولم تتماس ثم يتامل انه هل يشبت وجود ذاته ولا يشك في اثباته لذاته موجودا ولا يشبت مع ذلك طرفا من اعضساءه ولا باطنا من احشاءه ولا قلبا ولا دماغا ولا شيا من الاشياء من خارج بل كان يثبت ذانه ولا يثبت لها طولا ولا عرضا ولا عمقا ولو انه امكنه في تلك الحالة ان يتخيل يدا او عضوا اخرلم يتخيله جزء من ذاته ولا شرطا في ذانت وانت تعلم ان المثبت غير الذي

This paragraph represents much more than a starting point of science of psychology. In fact, I would argue, we can see that one cannot conceptually grasp his own existence without previous knowledge about the meaning of 'existence', because even if he would be instantaneously created as self-ness only, "he will not hesitate with affirming that his self exists..."³⁶⁶ Therefore, the meaning of 'existence', as something primarily impressed in the soul³⁶⁷ is the condition for every knowledge including the acknowledgment of the self. One could argue that the knowledge of the self and the process of grasping the meaning of 'existence' are both intuitive and instant, hence we cannot talk about priority of knowledge of existence. This is the valid point, however, the priority that I am talking about is ontological rather than temporal: although acknowledgment of the self and of existence are two temporally undividable instances, the affirmation of self-existence is impossible without the knowledge of the meaning of 'existence'; in this sense all knowledge ontologically depend on the meaning of 'existence' and this is, I believe, the starting point of Ibn Sīnā's ontology as well as of his epistemology. Ibn Sīnā, however, is not using his 'thought experiment' to speculate in this direction. He rather points towards the substance dualism that is going to be demonstrated further on.³⁶⁸

In his *Secondary Analytics* of *al-Shifā'*, or *Kitāb al-Burhān*, Ibn Sīnā examines ways by which one may grasp the starting premises for use in demonstrative arguments. Here he draw an important distinction between induction (*al-istiqra'*) and experience (*al-tajriba*). Ibn Sīnā understands that for Aristotle induction is the way to grasp universals.³⁶⁹ According to him, Aristotle's definition is acceptable: induction is a method of learning and understanding scientific knowledge with the help of perception, it is a method that concludes from particular cases towards the universal truths, or "…a passage from individuals to universals…"³⁷⁰ Yet this acceptance is not without critique; for Ibn Sīnā even the complete induction is not sufficient for grasping the universal and necessary truths. In his *Kitāb al-Burhān* he criticise Aristotelian foundation of induction stating that this method is not sufficient on its own.³⁷¹

لم يثبت والمقربه غير الذي لم يقربه فاذن للذات التي اثبت وجودها خاصية على انها هو بعينة غير جسمه واعضاءه التي لم تثبت فاذن المثبت له سبيل الي ان يثبته على وجود النفس شيءا غير الجسم بل غير جسم وانه عارف به مستشعر له.

³⁶⁶ Emphasis added.

³⁶⁷ *al-Īlāhiyyāt*, I, 5, (1).

³⁶⁸ Kaukua, Jari, *Self-Awareness in Islamic Philosophy, Avicenna and Beyond*, Cambridge University Press (2015), p. 38. Abb.: Kaukua, *Self-Awareness*.

³⁶⁹ Posterior Analytics, I, 18.

³⁷⁰ Topics, I, 12.

³⁷¹ Akasoy Anna A. and Fidora Alexander, *The Structure and Methods of the Sciences*, in *The Routledge Companion to Islamic Philosophy*, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016, pp. 105-114), p. 111.

It is a matter of interpretation and debate whether Ibn Sīnā excludes induction from metaphysical knowledge, i.e. can metaphysics achieve its goal, proving Gods existence, without any help from natural sciences. Detailed insight into this problem requires study on its own.³⁷² However, I already argued that the most plausible interpretation is that there is the distinction between methods of grasping metaphysical knowledge and that of natural sciences in Ibn Sīnā. In short, I believe that Ibn Sīnā's 'empiricism' in his Kitāb al-Burhān and his approach to metaphysics as it is described in Kitāb al-Shifā' al-Ilāhiyyāt and in Kitāb al-Ishārāt wa-l-Tanbīhāt are connected in a very special way, so that metaphysical science can use certain empirical notions and yet remain independent. My idea is that even if the notions of 'induction' and 'experience' play a very important role in Ibn Sīnā's philosophical system, these notions have no significance within metaphysics as science of existent qua existent in the sense of achieving the ultimate goal of this science: proving God's existence. Metaphysical principles are established on the consideration of existence and as such secure empiricism in natural sciences from any sort of sceptical doubt. Amongst these principles the most important for natural sciences is the principle of causation, which is implied by the a priori notion of 'existence' and by its most general division between necessary and contingent. 'A priori' here means that the meaning of 'existence' represents a primary intuition of the soul and is known without the mediation of any principle or concept - this stands also for 'necessary' and 'possible' as well as for 'thing'.³⁷³ In this sense metaphysics is not in a need for natural sciences in order to achieve its ultimate goal. Still, in another sense where metaphysics cooperates with natural sciences in order to explain the relationship between the world and its ultimate cause, metaphysician uses certain empirical notions. Natural sciences, on the other hand, are in need of metaphysics to secure their subjectmatter.³⁷⁴ In any case, both metaphysics and natural sciences must rely on each other in order to provide the complete scientific picture of the world, but metaphysics remains independent in the sense of proving God's existence. This will be explained in the following chapters.

As Ibn Sīnā sees it, the development of logic does not end with Aristotle. Although Aristotle was indeed the first who established the basic of modal logic,³⁷⁵ for Ibn Sīnā there is an entire

³⁷² I already argued that the most plausible interpretation is that there is the distinction between methods of grasping metaphysical knowledge and that of natural sciences in Ibn Sīnā in *Empiricism and Metaphysics; A Fundamental Relation for Founding Philosophy as Science in Avicenna*, in Logos, Journal of Philosophy and Religion, Vol. 5, No. 1-2 (Tuzla, January-July, 2017).

³⁷³ Shehadi, *Metaphysics*, p. 72.

³⁷⁴ Bertolacci, *Establishing Metaphysics*, pp. 192-193.

³⁷⁵ Makin, Stephen, *Energeia and Dunamis*, in *The Oxford Handbook of Aristotle*, ed. Christopher Shields (Oxford: Oxford University Press, 2012), p. 401.

realm of modal syllogistic to be researched and incorporated into scientific knowledge.³⁷⁶ Indeed, Ibn Sīnā's *al-Shifā*' can be considered a kind of commentary on Aristotle's works, but one has to take into account that it contains many doubts regarding the Philosopher's main ideas; in this sense Ibn Sīnā's 'comments' on various subject-matters of Aristotelian discussions while following the form of his main works,³⁷⁷ starting from *Organon* and ending with Metaphysics. One of most notable segment where Ibn Sīnā partly follows Aristotle, while criticise him at the same time is in Kitāb al-Burhān, especially in the part I.9. Ibn Sīnā accepts Aristotle's idea of demonstration (burhān); it is the method by which one reaches certain and necessary knowledge.³⁷⁸ It establishes the fact and explains that fact in a universal way by showing the necessary connection between subject and predicate within the judgement. This necessary relationship between subject and predicate is connected with a middle term which is the medium of demonstration. Demonstration is the main method of science that justifies the validity and necessity of scientific explanations.³⁷⁹ Premises of demonstration have to be universal, eternal and necessary, while the ideal example of syllogistic form is the first modus of the first figure (also known in the West as 'Barbara'). Further on, demonstration can be of two types: propter quid (burhān lima), which provides a cause of thing being proved and quia (burhān inna), which establishes that something is the case from its effect as proven fact.

In a very important paragraph of his *al-llāhiyyāt* Ibn Sīnā says:

"Again, knowledge of the absolute causes comes about after the science establishing the existence of causes for those things that have causes. For, as long as we have not established the existence of causes for those things that are effects (by establishing that the existence of [the latter] has a relation to what precedes them in existence), it does not become a rational necessity that there is an absolute cause and that there is here some cause. As for sensation, it leads only to concomitance. And it is not the case that, if two things are concomitants, it then follows necessarily that one of them is the cause of the other. The persuaded belief that occurs to the soul due to the multiplicity [of things] conveyed by sensation and empirical test does not become assured, as you have known, except through the knowledge that the things that exist are, for the most part, either natural or voluntary. And this, in reality, depends on the affirmation of underlying reasons and the acknowledgment of the existence of reasons and causes. This is not a primary [self]-evident [knowledge] but is something commonly held... ...the

³⁷⁶ Street, Tony, *Arabic Logic*, in *Handbook of the History of Logic*, ed. Dov M. Gabbay, John Woods & Akihiro Kanamori (Amsterdam, Boston: Elsevier, 2004, pp. 534-596), pp. 547-552. Abb.: Street, *Arabic Logic*.

³⁷⁷ Bäck, Allan, *Avicenna the Commentator*, in *Medieval Commentaries on Aristotle's Categories*, ed. Lloyd A. Newton (Leiden, Boston, Brill: 2008, pp.31-73), p. 46.

³⁷⁸ al-Burhān, I.7, 31; 78.

³⁷⁹ *ibid.*, I.7 30–31; 76.

demonstrative proof of the above does not belong to the other sciences. Hence, it must belong to this science."³⁸⁰

Ibn Sīnā underlines that the knowledge of absolute causes can be established only after causal relationship is grasped between 'caused things', but also states, like al-Ghazālī, that "sensation leads only to concomitance" and concomitance leads only to habit, or something that is not evident but only "commonly held", i.e. to something that represents an opinion. In order to establish ultimate causes we must primarily recognise all things as caused. This is not possible by any sort of empirical research. The only way to know this is by metaphysical inquiry into distinction between necessary as something whose non-existence cannot be postulate without contradiction, and possible as something whose non-existence can be postulate without contradiction. As we already stated, the meaning of 'existence' implies the division of necessary and contingent, while contingent implies causality; because whatever is per se such that its non-existence can be imagined without contradiction must be caused by something else. Causality is, therefore, a metaphysical notion that is only recognised in observable nature, but has its conceptual origin in the consideration of existence. If the origin of knowledge of causality is not in natural sciences, which is clear from the fact that perception $(idr\bar{a}k)$ leads only to opinion, it must have its origin in metaphysical inquiry. This means that the consideration of existence which implies the division between necessary and possible in itself is prior to the notion of 'causality' and implies it and not vice versa (that from the notion of 'causality' we grasp the division between 'necessary' and 'possible'). This is why all natural sciences depend on metaphysics. Their main principle, namely 'causal relationship', is demonstrated in first philosophy. That every observable thing has a cause is intuitively known because of 'awake-ness' of the human soul through knowledge of existence (primarily self-existence) and further recognised through perception. This is why natural scientist does not question causal relationship between things, but postulates it. However, what is intuitively known needs to be proven and the only science that can provide such proof is metaphysics. The proof in metaphysics is based, like everything else, on the notions of 'the existent', 'the necessary' and 'the thing' through which it is realised that existence implies

³⁸⁰ *al-Ilāhiyyāt*, I, 1, (16):

وايضاً فأن العلم بالأسباب المطلقة حاصل بعد العلم بإثبات الأسباب للأمور ذوات الأسباب. فإنا ما لم نثبت وجود الأسباب للمسبّبات من الأمور بإثبات أن لوجودها تعلقاً بما يتقدمها في الوجود، لم يلزم عند العقل وجود السبب المطلق، وأن ههنا سبباً ما. وأما الحس فلا يؤدي إلاً إلى الموافاة. وليس إذا توافى شيئان، وجب أن يكون أحدهما سبباً للآخر. والإقناع الذي يقع للنفس لكثرة ما يورده الحس والتجربة فغير متأكد، على ما علمت، إلا بمعرفة أن الأمور التي هي موجودة في الأكثر هي طبيعية واختيارية. وهذا في الحقيقة مستند إلى إثبات العلل، والإقرار بوجود العال والأسباب. وهذا ليس بيّناً أولياً بل هو مشهود، وقد علمت الفرق بينهما. وليس إذا كان قريباً من العقل، من البين بنفسه أن الحار بنفسه مثل كثير من الأمور الهندسية المبرهن عليها في كتاب أوقليدس. ثم البيان البرهاني لنك ليس في الحادي ما يحون في هذا العلم.

necessity. Whatever is possible needs something else in order to exist and to persist with its existence - its cause. I believe that this is overlooked by McGinnis in his interpretation of 'Ibn Sīnā's naturalised epistemology'. However, this does not mean that we cannot talk about Ibn Sīnā's naturalized epistemology in some sense that McGinnis does so,³⁸¹ as well as about Ibn Sīnā's 'empiricism,'³⁸² at least to some degree.

According to McGinnis, for Ibn Sīnā the methods and tools of good science in the case of demonstrative knowledge are predominately logical, but the purpose of logic is not for any sort of 'foundationalist' reconstruction of the world that should begin with *a priori* knowledge.³⁸³ Instead, all science is based on observation through which one grasps causal relations. According to this view, there are no concepts of causal relations through *a priori* reasoning, but only through abstraction or 'methodic experience' (as McGinnis translates Ibn Sīnā's term '*tajriba'*).³⁸⁴ Therefore,

"Avicenna takes the reality of causal relations for granted as part of his naturalism; for to deny causal relations would make the events in the world matters of mere happenstance and so would leave unexplained the manifest regular and orderly occurrence of events. In effect, to deny causal relations would undermine the very possibility of science understood as an investigation and explanation of the world's order, a position that Avicenna simply will not countenance".³⁸⁵

Similar idea is introduced by Barry Kogan, who translates Ibn Sīnā's *tajriba* as "tested experience":

³⁸¹ In McGinnis, Jon, *Avicenna's Naturalized Epistemology and Scientific Method*, in *The Unity of Science in the Arabic Tradition*, eds. Shahid Rahman, Tony Street, Hassan Tahiri (Springer, 2008) pp. 129-152. Abb.: McGinnis, *Avicenna's Naturalized Epistemology*.

³⁸² As in Gutas' *The Empiricism of Avicenna* (2012, pp. 391-436), where he argues that all knowledge in Ibn Sīnā is grasped through sense perception. In order to prove this supposition Gutas firstly underlines Ibn Sīnā's classification of means through we grasp certain "data," and so we have: imaginative data, sense-data, data of reflection, tested and proven data, data provided by finding the middle term of a syllogism based on experience, data provided by sequential and multiple reports, estimative data, primary data, data with built-in-syllogisms, equivocal data, conceded or admitted data, absolute endoxic data, limited endoxic data, data approved by authority, initially endoxic but unexamined data, and suppositional data (Gutas, 2012, pp. 396-397). However, I would argue that the meaning of 'existence' is not some sort of 'data' as it is the absolute meaning, and any form of data must always be something specific, either as specific particular, species or genus. Instead, the meaning of 'existence' is the condition for making sense of any data, it is the condition for knowledge and is as such *a priori*. Hence the idea that in Ibn Sīnā cognition starts as *tabula rasa* is very doubtful, as in that case the meaning of 'existence' would be inferred (this way or another) which would further indicate that it can be categorised. ³⁸³ McGinnis, *Avicenna's Naturalized Epistemology*, p. 147.

³⁸⁴ *Ibid.*, p. 134. In the initial phase of the development of his theory, in *Scientific Methodologies in Medieval Islam* (in *Journal of the History of Philosophy*, 41, No. 3, The Johns Hopkins University Press: July 2003, pp. 307-327), McGinnis translates Ibn Sīnā's *tajriba* as 'examination' and 'experimentation'. Later on he altered the translation into 'methodic experience'.

"the empirical basis for the notion of necessary connection is here attributed to the observation of regular association of things and (or) events in nature. But it is important to note that Avicenna does not claim that we perceive necessary connections as such. The apprehension of necessity is not a matter of perceiving, but of making judgments about what we repeatedly perceive".³⁸⁶

According to Kogan, this judgement is possible due to tested experience which represents an observation of regular repetition of an entity or event that is accompanied by another; "what these cases of regular association do represent is a kind of demonstration that such a uniformity is the result of a necessity inherent in specific natures. Ibn Sīnā illustrates his point by explaining the purgative powers of scammony".³⁸⁷

In any case Ibn Sīnā sees experience as a sort of combination of inductive and syllogistic reasoning,³⁸⁸ hence it is undeniable that his scientific approach is in some sense 'naturalistic', as it is clear from his favourite medical example of the phenomenon that Convolvulus scammonia purges bile, but this is not all there is to his epistemology. I would argue that Ibn Sīnā's 'naturalism' or 'empiricism' should be strictly limited to his philosophy of nature. Sensation leads only to concomitance, as it is stated in *al-Ilāhiyyāt* I, 1, (16), and without some a priori concepts it would be impossible to pass from induction to 'methodic' or 'tested' experience - it would be impossible for the soul to grasp any meaning without some prior meaning. This works the same as Aristotelian relationship between potentiality and actuality: in order for something to pass from the state of potency into the state of actuality it needs something that is already actual – thus for Ibn Sīnā in order for any conception about things to be grasped by our intellect it needs an actual conception prior to it. This conception, or grasped meaning, requires another conception and so on *ad infinitum*, but this would make any conception impossible. Therefore, there must be a conception that is 1) impressed in the soul, i.e. a priori, 2) known intuitively as something best known and 3) represent something most universal, so it can be a medium of intellect in grasping other meanings - for Ibn Sīnā such is the meaning of 'existence', together with 'necessity' and 'thing'.

Causality is metaphysical notion that is only recognised in observable nature and acquired as something that exists in things as fundamental principle of that nature through tested experience. That every observable thing must have a cause is intuitively known due to the intuitive knowledge of existence, and because of this the kinds of causes are realisable and

³⁸⁶ Kogan, *Metaphysics of Causation*, p. 88.

³⁸⁷ *Ibid.*, p. 87.

³⁸⁸ Janssens, Jules L., *"Experience" (tajriba) in Classical Arabic Philosophy (al-Fārābī – Avicenna*, Questio, IV, (2004, pp. 45-62), p. 61.

classifiable by the means of abstraction $(tajr\bar{\iota}d)$ and experience (tajriba). In this sense metaphysics relies on natural sciences to some degree, because without experience it would be impossible to have a metaphysical analysis and classification of causes into material, formal, efficient and final. Without these conceptual distinctions we would know only one type of causality, that is the proper metaphysical, or the efficient causality. Although this would be sufficient to prove God's existence, it would not be sufficient to explain the world in a complete way.

Therefore, although strong in his empiricism, Ibn Sīnā's philosophy implies some sort of foundationalism because all knowledge rests upon primitive metaphysical notions that cannot be grasped by experience. By these notions it is possible to found certainty in the world, and because of this conviction it may be that Ibn Sīnā did not uphold any sort of systematic refutation of scepticism – this is not needed as it is impossible to doubt in existence. The way he sees it, there was no need for scepticism, because "the meanings of 'the existent,' 'the thing,' and 'the necessary' are impressed in the soul in a primary way [and] this impression does not require better known things to bring it about."³⁸⁹ This means that although concept and assent are form in the theoretical faculty that cooperates with both external and internal senses,³⁹⁰ the ultimate meaning of 'existence' remains as the *a priori* condition for making sense out of acquired data.

There is another passage in Ibn Sīnā's *Metaphysics* that would support this interpretation; in *al-Ilāhiyyāt* he says:

"Concerning the order [in which] this science [is studied], it should be learned after the natural and mathematical sciences. As regards the natural [sciences], this is because many of the things admitted in this science are among the things made evident in the natural sciences as [for example] generation and corruption, change, place, time, the connection of every moved thing by a mover, the termination of [all] moved things with a first mover, and other than these."³⁹¹

Interestingly, among things that are admitted in metaphysics and become evident in natural sciences there is no causality. Someone might say that causality might go under "...and other

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<sup>391</sup> al-Ilāhiyyāt, I, 3, (6):
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³⁸⁹ al-Ilāhiyyāt, I, 5, (1).

³⁹⁰ The explanation of the external and internal senses is offered by Ibn Sīnā's in *an-Nafs*, I, 5; external senses (*hawāss zāhira*) are: sight, hearing, smell, taste and touch; internal (*hawāss bāțina*) are: common sense, imagery faculty, cogitative faculty, estimation and memory (more in Durusoy, 2012, pp. 114-219, Strobino, 2015c, also Kaukua, *Self-Awareness*, pp. 25-29).

وأما مرتبة هذا العلم فهي أن يتعلم بعد العلوم الطبيعية والرياضية. أما الطبيعية، فلأن كثيراً من الأمور المسلّمة في هُذا مُما تبين في علم الطبيعي مثل: الكون، والفساد، والتغير، والمكان، والزمان وتعلق كل متحرك بمحرك، وانتهاء المتحركات إلى محرك أول، وغير ذلك.

than these", but I would like to underline that this problem is too important not to be explicitly mentioned at this place. That is unless causality is something that becomes evident in metaphysics and only admitted in natural sciences. This, I believe, further supports the idea of Ibn Sīnā's foundationalism: there is no need to refute scepticism due to *a priori* notions that are "impressed" in the soul and that represent an ultimate foundation for all scientific knowledge.

Regarding Aristotle's conception of demonstration, Ibn Sīnā completely adopts it the relationship between subject and predicate in scientific research is not evident. In this case one has to reach for experience which then becomes the foundation of demonstration. However, when the the relationship between subject and predicate belongs to the very being of the subject, the connection is necessary and the knowledge is certain,³⁹² so in this case we do not need empirical data. The metaphysical knowledge is exactly of this latter kind; it represents the complex analysis of existence *qua* such until God's existence is established through series of deductive syllogism. Because of this characteristic metaphysical knowledge is not demonstrative (*burhān*) in a typical Aristotelian sense, but evident through clear implications - *al-dalā'il al-wādiḥa*.³⁹³

1.4.2 Ibn Rushd's Naturalistic Nominalism

Ibn Rushd does not criticise the above mentioned ideas directly, but he is aware of them, at least to some degree due to al- Ghazālī's *Tahāfut*. Still it is not difficult to reconstruct what might be his critique of Ibn Sīnā from his own epistemological perspective. Ibn Rushd tries to find a middle ground between Ibn Sīnā's foundationalism and al-Ghazālī's scepticism. The result is exactly what McGinnis attributes to Ibn Sīnā: a real naturalised epistemology.

For Ibn Rushd, all our insight about the world is founded on observation of substances that behave in particular way and by conceptualisation and categorization of their essences³⁹⁴ that are distinct from their existence only in the mind, but never in themselves. All observed being is grasped by intellectual faculties as imagined forms which are further processed and various concepts are formed.³⁹⁵ What we identify in observation through time is a continuous activity

³⁹² al-Burhān, I, 9, [43].

³⁹³ al-Ilāhiyyāt, VIII, 5, (14).

³⁹⁴ Taylor, Richard C., Averroes' Epistemology and its Critique by Aquinas, in Medieval Masters: Essays in Memory of Msgr. E. A. Synan (Houston, TX: University of St. Tomas: 1999, pp.147-177), pp. 153-158.

³⁹⁵ Montada, Josep Puig, Averroes on the Cognitive Process, in Intellect et imagination dans la philosophie médiévale / Intellect and Imagination in Medieval Philosophy / Intelecto e imaginação na Filosofia Medieval:

of one thing on another³⁹⁶ - "what exists in reality and absolutely is substance; the other categories exist relatively".³⁹⁷ And although in his earlier work it seems that Ibn Rushd accepted positions that are closer to Ibn Sīnā regarding the innate knowledge of primary intelligibles (al-ma'qūlāt al-awwal), later he definitely upholds the opinion that all natural primaries must have a sensory origin, even if we are sometimes not aware of it³⁹⁸ and that no principle whatsoever, including the first principles common to all sciences, is established through a sort of a priori knowledge.³⁹⁹ Therefore, instead some metaphysical analysis that is detached from everything that is material, repetitive observation leads to certainty. Each thing is determined by its specific nature, which further determines its behaviour and its accidental properties, as well conceptions and definition that we have about them. These specific natures are things identity, its essence as well as its existence; in substance *per se* there is there is no distinction between these two. What we observe is, therefore, what happens in the majority of cases, thus in scientific quest we search for the reason why this happens so often and in accordance to the same pattern. Whatever happens within the relationship between the efficient cause and its effect, happens because of both active power of the cause as well as because of passive power of the effect⁴⁰⁰ - it is up to philosopher to explain their natures in accordance with their natural behaviour.

Because the essential nature of things is as evident as the logical law of identity, there is no justification for doubt in experience; observation informs us about specific natures of things as well as about causal links between them. This corresponds with the logical principles of non-contradiction and excluded middle; affirmation and negation cannot be united in the same time and in the same respect - this is the principle of every theoretical research, "anyone who rejects this principle cannot argue soundly, nor can he put forward any positive or negative argument".⁴⁰¹ This simply means that the one who denies causal relations cannot make sense of the observed reality.⁴⁰² We can grasp certain knowledge if we are familiar with a very difficult process of demonstrative reasoning which includes the fundamental principles of

Actes du XIe Congrès International de Philosophie Médiévale de la Société Internationale pour l'Étude, ed. Maria Candida Pacheco and Jose Francisco Meirinhos (Brepols: 2006, pp. 583-594), p. 589. ³⁹⁶ Kogan, *Metaphysics of Causation*, p. 94.

³⁹⁷ *Tafsīr*, LAM, t. 3, 1415.

³⁹⁸ Black, Deborah L., *Constructing Averroes' Epistemology*, in *Interpreting Averroes, Critical Essays*, eds. Peter Adamson and Matteo Di Giovanni (Cambridge: Cambridge University Press, 2019), pp. 97-98. Abb.: Black, *Averroes' Epistemology*.

³⁹⁹ Cerami, Cristina, Averroes' Natural Philosophy as Science of Nature, in Interpreting Averroes, Critical Essays, eds. Peter Adamson and Matteo Di Giovanni (Cambridge: Cambridge University Press, 2019, pp. 177-197), p. 179. Abb.: Cerami Averroes' Natural Philosophy.

⁴⁰⁰ *LC Physics* II, t. 48. ⁴⁰¹ *Tafsīr*, LAM, 1400.

⁴⁰² Fakhry, Majid, Averroes (Ibn Rushd) His Life, Works and Influence (Oxford: Oneworld 2008), p. 26

logic as well as the observation of the outside phenomenon. Everything else is sophistry, whether in the form of sceptical doubt of al-Ghazālī, or metaphysical foundationalism of Ibn Sīnā. Sceptical doubt is an insult for intelligence, because intelligence is nothing but the perception of things with their causes, that distinguishes itself from all the other faculties of apprehension and therefore the denial of causal relations means the denial of intellect.⁴⁰³ This is obvious from Aristotelian perspective: intellect is the perception of intelligibles, and "…what is intelligible in things is their innermost reality".⁴⁰⁴ In fact, according to Ibn Rushd, intellect is nothing but the perception of the intelligibles in which there is no real difference between the intellect and the intelligible once the intelligible is abstracted.⁴⁰⁵

Aristotelianism interpreted in this way is the condition for scientific certainty because the most important implication of logical principles is the existence of causes and effects. Causality is the basis for all knowledge, as things are known and explained through their causes - to deny this means that nothing can be known, i.e. that no proof nor definition can be established.⁴⁰⁶ Therefore, if knowledge about the world depends on the acknowledgment of substance as well as of acknowledgment of causal connection, the substance is in this sense a cause⁴⁰⁷ inasmuch as it interacts in accordance with its nature and produces motion and change.

As for metaphysical foundationalism of Ibn Sīnā, it overlooks the distinction between conceptual and ontological: "there is a great difference between things which are conceptually and ontologically distinct, and those which are conceptually distinct, but not ontologically...".⁴⁰⁸ The foundation of Ibn Sīnā's metaphysics, and with it the foundation of his whole scientific corpus, is that essential conceptual distinction corresponds with the ontological distinction within things themselves. However, if scientific knowledge must start from observation of the particular, then the particular have absolute epistemological priority over the universal. This is the only adequate approach because "universals are not substances existing outside the soul. They denote substances".⁴⁰⁹ This is the key point in Ibn Rushd's interpretation of Aristotle: "for Aristotle, the universals are gathered by the mind from the particulars, that is to say it takes the resemblance between them and makes it into one

⁴⁰³ *Tahāfut al-Tahāfut*, p. 425; 291.

⁴⁰⁴ *ibid.*, p.280; 183.

⁴⁰⁵ *ibid*.

⁴⁰⁶ *ibid.*, p. 426; 292.

⁴⁰⁷ *Tafsīr*, LAM, 1533.

⁴⁰⁸ *ibid.*, t. 39, 1623.

⁴⁰⁹ *ibid.*, 1403.

concept, as it is said in the Book of Demonstration".⁴¹⁰ This means that the true knowledge must be based on this knowledge of the particular. However, knowledge is about universal and "...universals are intelligibles which are consequent on and posterior to existents...",⁴¹¹ "for the knowledge created in us is always in conformity with the nature of the real thing, since the definition of truth is that a thing is believed to be such as it is in reality".⁴¹² The predication of existence, like any other predication, does not imply the real existence of a thing which any meaning is predicated to. The necessary universal predications do not reveal any positive truth about the world.⁴¹³

Ibn Rushd's interpretation of Aristotle, hence the starting point for discovering the truth, is clear: universals do not have existence outside the soul and are only abstracted from the particulars by discursive thought.⁴¹⁴ As Catarina Belo pointed out, for Ibn Rushd "to say that something exists is simply to say that something is the case, or that a thing has a certain property; his interpretation of Aristotle is also noteworthy in that quiddity and existence go hand in hand and cannot be separated".⁴¹⁵ To compare it with Ibn Sīnā, we could say that in Ibn Rushd's philosophy beings have a greater degree of autonomy.⁴¹⁶ Substance cannot just depend on its external cause, it is necessary for an individual to have its own nature and powers in order to be possible to explain its behaviour and coming to be and passing away.

As intellect naturally reaches universal certitude when presented with the appropriate sensory information, it does not need to grasp any hidden syllogism; maybe it is for this reason that there is no need for the distinction between induction and experience in Ibn Rushd.⁴¹⁷ The only distinction here is between complete and incomplete induction: only the complete induction can be considered as scientific; however, this does not mean that all individuals of one class have to be examined, but only that one must verify that the statement is true of all species belonging to the class under examination.⁴¹⁸ Causal necessity is not an abstract phenomenon, but something that we observe in nature as the result of particular substances that have power of doing specific things, "regardless of whether these effects appear as

⁴¹⁰ *ibid.*, t. 4, 1417.

⁴¹¹ Tahāfut al-Tahāfut, p. 281; 184.

⁴¹² *ibid.*, XVII, 1, p. 433; 296.

⁴¹³ Thom, Averroes' Logic, p. 88.

⁴¹⁴ *Tafsīr*, LAM, t. 27, 1543. It seems that Aristotle would not support this view, for him forms are also present in the individual being. Regarding this interpretation, Ibn Rushd's is seemingly more under influence of Alexander of Aphrodisias, hence it cannot be said that Ibn Rushd's naturalism is based strictly on Aristotle's works.

⁴¹⁵ Belo, *Essence and Existence*, p. 420.

⁴¹⁶ *Ibid.*, p. 421.

⁴¹⁷ Black, Averroes' Epistemology, pp. 101-103.

⁴¹⁸ As Cerami notices, this idea Ibn Rushd's owes to al-Fārābī: Cerami Averroes' Natural Philosophy, p. 188.

substantive, qualitative, quantitative, or local changes."⁴¹⁹ This is why Kogan states that Ibn Rushd's "empirical defence of necessary causal connection is bound to ontology of substances and accidents, with the distinctive feature that he conceives of substances as dynamic entities possessed of powers and dispositions."⁴²⁰ We could add that this "ontology of substances" is also bound to the logical law of identity, which is intuitively known as the ultimate law of all reality, and therefore if anything exist this law cannot be broken. The law of identity and the nature of substance guarantees certainty if one approach them in the proper (i.e. Aristotelian) way.

This is why for Ibn Rushd causal relationship between the efficient cause and its effect cannot be consistently denied and hence represents a sophistical doubt; it is something that goes against common sense.⁴²¹ That every act must have an agent is *per se* evident claim. However, to answer the question whether causes by themselves are sufficient to perform their acts, requires for Ibn Rushd much investigation and research.⁴²² Science is, therefore, about establishing the laws and causal explanation about reality and all this is based on the self-evident premise that 'every act must have an agent'. Still, this self-evidence is not some *a priori* knowledge, or knowledge based on some *a priori* concepts that are "impressed in the soul" by 'Active Intellect' or Divine act, but something that must be admitted in order to make sense of the observable world.

Intellect is the same with conceived intelligible, it is "nothing but the perception of the order and arrangement of existing things".⁴²³ It is ordered according the laws of logic and is able to recognise the order in the world, hence to adequately fulfil the demands of the natures of existing things in respect of their order and arrangement.⁴²⁴ Still, intelligible is not the particular, but the universal, and this knowledge cannot grasp the essence/existence of a thing as it is in itself⁴²⁵ - universals are intelligibles which are consequent on and posterior to existents, thus our knowledge of things represents exactly this 'posteriority'. Yet it is evident that the intellect in itself is the harmony and order and as such it seeks explanations that will correspond with that order. Due to the fact that this sort of explanation can be achieved about the world it becomes plain for Ibn Rushd that the world is the effect of the intellect whose knowledge is not the effect of the object, but causes all objects. Every concrete being

⁴¹⁹ Kogan, Metaphysics of Causation, p. 95

⁴²⁰ *Ibid*.

⁴²¹ Tahāfut al-Tahāfut, XVII, 1, p. 423; 290.

⁴²² *ibid.* p. 423; 291.

⁴²³ *ibid.*, p. 280; 183.

⁴²⁴ *ibid.*, p. 281; 184.

⁴²⁵ *ibid*.

represents a substance that acts in accordance of the order of the intellect, "and this cannot happen by accident, nor can it happen through an intellect which resembles our intellect; no, this can only occur through an intellect more exalted than all beings, and this intellect is neither a universal nor an individual".⁴²⁶ Without this 'order of the intellect' there would be no logical laws, and even if we would be able to postulate any kind of existence that existence would be a subject to every kind of possibility and no certainty or permanent knowledge would be possible.⁴²⁷ To know thing as they are in themselves, therefore, means to know them universally in a way that this knowledge reflects their true common nature, and not to know them as they are in themselves qua individuals. This knowledge is possible only due to the Supreme (or Divine) Intellect, that represents the highest order, that establishes the order in the world of substances as well as in the human intellect, and so by actualising human material intellect.⁴²⁸ This order represents the logic of the world, according to which all things have their attributes that determine them as opposites and correlates - things that cannot be united and things that cannot be separated; this represents the determination of the Divine intellect, and this order cannot be otherwise.⁴²⁹ In fact, from this order in nature we intuitively grasp logical principles, according to which intellect is able to behave as intellect.⁴³⁰

As we can see, the Aristotelian starting point that existence primarily means substance implies a tendency in philosophy that is in a sense empirical and nominalist: all knowledge starts from observation, there is nothing 'impressed' in the soul and universals are not substances existing outside the soul, they only denote the specific natures of substances. From this follows that there are two main types of necessity: logical necessity (what cannot be otherwise) and causal necessity (what happens for the most part) - these two types of necessity correspond with each other due to the fact that all existence is maintained by the motion caused by the Divine intellection.

⁴²⁶ *ibid*.

⁴²⁷ *ibid.*, p. 432; 296.

 ⁴²⁸ Davidson, Herbert A., Alfarabi, Avicenna and Averroes, on Intellect, Oxford and New York: Oxford University Press, (1992), pp. 316-321. Abb.: Davidson, Alfarabi, Avicenna and Averroes, on Intellect.
 ⁴²⁹ Tahāfut al-Tahāfut, p. 443; 303.

⁴³⁰ ibid.

SECOND PART: GOD AND THE WORLD

2.1 Ibn Sīnā and Ibn Rushd on proving God's existence

2.1.1 Ibn Sīnā's metaphysical proof for the existence of God

At the beginning of his *al-Ilāhiyyāt* Ibn Sīnā draws the conclusion that the demonstration for God's existence cannot be sought after in any other science except metaphysics and that God's existence as something that is not evident *per se* represents the ultimate goal of this science:

"You ought to know that, within [this subject] *itself* there is a way to show that the purpose in this science is to attain a principle without [requiring first] another science. For it will become clear to you anon, through an intimation, that we have a way for proving the First Principle, not through inference from sensible things, but through universal, rational premises [(a)] that necessitate [the conclusion] that there must be for existence a principle that is necessary in its existence; [(b)] that renders [it] impossible for [the latter] to be in [any] respect multiple or changing; and [(c)] that necessitate [the conclusion] that [this principle] is the principle of the whole [of the other existents] and that [this] whole is necessitated [by the principle] according to the order [possessed by] the whole. Due to our impotence, however, we are unable to adopt this demonstrative method which is a method of arriving at the secondary [existents] from the [primary] principles and from the cause to the effect-except in [the case of] some aggregates of the orders of existence, [and even then] not in detail."⁴³¹

Ibn Sīnā intentionally narrows his options; there is a proof for God's existence, but it can be provided only by this 'special' science in a rather particular way according to which: 1) no other kind of scientific inquiry is needed, 2) any sort of inference from sensible things is excluded and 3) only universal premises are acceptable. The first point indicates that Ibn Sīnā has in mind to establish something that we might call 'a standalone metaphysical proof'. The second point narrows things down even further: the rpoof cannot be based on any concept that originates from abstraction - there must be a sort of *a priori* conception. Therefore, these three points imply that the proof represents knowledge that is discursive *a priori*. This sort of

⁴³¹ *al-Ilāhiyyāt*, (I, 3, (11):

ويجب أن تعلم أن في نفس الأمر طريقاً إلى أن يكون الغرض من هذا العلم تحصيل مبدأ إلاّ بعد علم آخر. فإنه سيتضح لك فيماً بعد إشارة إلى أن لنا سبيلاً إلى إثبات المبدأ الأول لا من طريق الإستدلال من الأمور المحسوسة، بل من طريق مقدمات كلية عقلية توجب للوجود مبدأ واجب الوجود وتمنع أن يكون متغيراً أو متكثراً في جهة، وتوجب أن يكون هو مبدأ للكل، وأن يكون الكل يجب عنه على ترتيب الكل. لكن لعجز أنفسنا لا نقوى على سلوك ذلك الطريق البرهاني الذي هو سلوك عن المبادئ إلى الثواني، وعن العلة إلى المعلول، إلاّ في بعض جمل مراتب الموجودات منها دون تقصبل.

knowledge is the exact ambition for the science that tends to represent "the best" and "the most correct and perfect knowledge."⁴³²

I would argue that in Ibn Sīnā metaphysics is the science whose goal is to provide the proof for God's existence through the analysis of the notion of 'existence' and other primary concepts that cannot be defined, as well as to provide the general explanation of the world by showing the manner in which it proceeds from God. It is a standalone science that does not require any other scientific method or content except its own. Yet although its deductive method is completely independent of any other scientific approach and content, metaphysics alone can provide only limited knowledge of the world because it is based on a pure analysis (which is, I believe, indicated at the end of above quotation from *al-Ilāhiyyāt* I, 3, (11). This is why metaphysics cannot stand alone as science about the world - only as science that proves the existence of God. In order to explain the world in proper manner metaphysics needs natural sciences to complete its general theories with particular principles. Metaphysics offers only standalone proof for the existence of God, as well as proofs for the most universal principles of other sciences. As we saw, the basis of metaphysics is ontology. Due to the fact that realisation of existence and self is the basis of all knowledge, perception and conception, metaphysics in essence represents the discursive a priori knowledge and the only way that can provide the proof for the existence of God.

Ibn Sīnā's metaphysical proof is specific in several ways. There is a good reason why it is categorised as ontological, cosmological, metaphysical, or proof from contingency. I will argue that the proof is essentially ontological, but not in the sense that it starts from the nominal definition of God, nor from the notion of 'perfection'. Instead, it is based on the ontological division of existence into necessary and possible as well as on consideration of meanings of this division and its implications. If Ibn Sīnā's main idea is to establish the science of metaphysics that starts from the most general notion of 'existence', metaphysical proof must be based on the very specific method that is strictly axiomatic and deductive and does not involve any *a posteriori* knowledge.

The above quoted words from *al-Ilāhiyyāt* are compatible with the concluding remarks of the final chapter (29) of the forth part of *al-Ishārāt*, which is entitled: "Proof for the Existence of That Which Is Necessary in Itself by Means of Reflection on Existence Itself", where Ibn Sīnā states that from previous analysis (in his *Remarks*) it becomes clear that demonstration of the

⁴³² *ibid.*, I, 1, (9); I, 2, (18).

First's existence does not require reflection on anything other than existence itself.⁴³³ Also, this way of demonstration is "more solid and nobler" than any other way, and it consists in the consideration of the state of existence, which "attests to the First inasmuch as it is existence, after that the First attests to all the things that follow it in existence..."⁴³⁴ This means that metaphysical method 1) "does not require reflection on anything other than existence itself", 2) it is more solid and nobler than the one that starts from consideration of what is observable, and 3) that it is strictly deductive due to the attesting or implication of the notion of 'God'.

It might be argued that there are several proofs provided by Ibn Sīnā on God's existence and that the specificum of the one in Metaphysics VIII differs from others by being "a proper Aristotelian proof' due to the fact that "it is based on showing the termination of efficient causal chain".⁴³⁵ Indeed, the most systematic version of the proof is established in his al-Ilāhiyyāt and it is as well the most 'Aristotelian' version, because it is not only established in accordance with the principles of Aristotle's logic, but it indeed involves proving the termination of causal chain (as we are going to see in detail in the next part of this chapter). Still, I would argue that the proof itself is not essentially Aristotelian and it does not simply stands on showing the termination of efficient causal chain - this is only the middle part of the proof. The proof stands on the ontological division between 'necessary' and 'possible' existence and on the considerations and implications that follows from it, hence the proof is derived from the entire metaphysical foundation and does not belong exclusively to the Book VIII.⁴³⁶ In fact, Aristotle's proof from motion attempts to show that the incorporeal first cause exists as the cause of motion of the world whose existence in the terms of efficient causality is self-sufficient. This is important because Ibn Sīnā's idea is to provide the proof for the ultimate cause of existence and to avoid mixing it with the ultimate cause of motion. Due to this Ibn Sīnā departs from Aristotle's approach (while being aware, as Davidson pointed out, that in Aristotle's philosophy the cause of motion is still in a way the cause of existence⁴³⁷). However, it seems to me that if we compare various parts from *al-Ilāhiyyāt* and *al-Ishārāt*,

⁴³³ al-Ishārāt, 29, p. 130.

⁴³⁴ *ibid*.

⁴³⁵ Bertolacci, Amos, Avicenna and Averroes on the proof of God's Existence and the Subject Matter of Metaphysics, Medioevo, 32 (2007, pp.61-97), p. 62. Abb.: Bertolacci, Avicenna and Averroes on the proof of God.

⁴³⁶ That Ibn Sīnā's proof belong exclusively to the Book VIII of *al-Ilāhiyyāt* is advocated by Daniel De Haan (2016, pp. 97-128).

⁴³⁷ Davidson, Herbert A., *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy*, Oxford University Press (1987), p. 283. Abb.: Davidson, *Proofs for Eternity*.

even with *al-Najāt*, it becomes clear that there is only one proof in Ibn Sīnā and the only difference is that other versions are significantly shorter.

I follow Marmura's line of argument in that Ibn Sīnā's proof is 'metaphysical' and does not involve observation of external world.⁴³⁸ By being metaphysical and *a priori*, it can also be characterised as 'ontological' in a sense that a) it is based purely on the analysis of certain notions and b) amongst these notions the analysis starts from the meaning of 'being' or 'existent'. So what Ibn Sīnā intends is to provide a sort of demonstration that does not involve observation of things that are in motion. Instead, the proof relies on the consideration of the division of existence into necessary and contingent, and is as such ontological.⁴³⁹ The conception of motion is strictly physical, hence investigated in natural sciences. As Marmura stated, regarding all version of Ibn Sīnā's proof: "they all begin with an intellectual intuition of existence and through an analysis of the concept of existence they arrive at the existence of 'necessary existent', God".⁴⁴⁰ The initial idea for this approach in Ibn Sīnā might have come from al-Fārābī,⁴⁴¹ combined with certain neo-platonic element according to which the soul, as an intelligible, knows all things in its essence, amongst which is primarily the knowledge of existence - the meaning that encompasses all meanings. Through the meaning of existence, the Active Intellect actualizes the soul's nature as an intellect. From here a distinction can be made in Ibn Sīnā's epistemology between what the soul knows through its essence and what it knows though the sensory perception. Metaphysics deals primarily with the former type of knowledge.

According to Ibn Sīnā if something is not self-evident, it might become evident through experience as well as trough analysis (depending of a problem). God's existence is not self-evident,⁴⁴² yet whatever we need to deduce God's existence – the innate meanings of the existent, the thing and the necessary – is self-evident. This is the starting premise of Ibn Sīnā's metaphysical proof. As we are going to see, his approach is not cosmological, because cosmological argument refers to the world outside of definitions and analysis of concepts. Ibn Sīnā's proof certainly has something in common with the ontological argument because it is based on the analysis of certain notions - it is essentially ontological, yet not in the sense of

⁴³⁸ Marmura, Michael, Avicenna's Proof from Contingency for God's Existence in the Metaphysics of the Shifa in Probing in Islamic Philosophy: Studies in the Philosophies of Ibn Sina, al-Ghazali and Other Major Muslim Thinkers, (Global Academic Publishing, Binghamton University, State University of New York at Binghamton, 2005, pp. 131-149), p. 132. Abb.: Marmura, Avicenna's Proof from Contingency.

⁴³⁹ Legenhausen, *Ibn Sina's Arguments Against God's Being a Substance*, pp. 121-122.

⁴⁴⁰ Marmura, Avicenna's Proof from Contingency, p. 132.

⁴⁴¹ Fakhry, Majid, *The Ontological Argument in the Arabic Tradition: The Case of al-Fārābi*, Studia Islamica, No. 64 (1986, pp. 5-17), pp. 13-15. Abb.: Fakhry *The Ontological Argument*.

⁴⁴² al-Ilāhiyyāt, I, 1, (11).

Anselm or Descartes. Ibn Sīnā's proof is much more complex than any version of ontological argument and involves a very important segment - the notion of 'causality'. However, in order for the proof to have an additional use for the explanation of the world and to connect metaphysical knowledge with the knowledge established in other sciences, the metaphysical proof also involves some empirical element taken from natural sciences such as the notions of 'motion', 'change', 'matter', 'body' etc. This becomes more evident in those parts of Ibn Sīnā's *Metaphysics* that deals with the relation between God and the world. In this sense, although essentially ontological, Ibn Sīnā's metaphysical proof has the central role in his philosophical system that could be called 'the onto-cosmological' system of arguments, proofs and explanations.

2.1.1.1 Proving the Necessary Existent

Ibn Sīnā's proof starts at the beginning of *al-Ilāhiyyāt* I, 5 with the statement:

"The ideas of 'the existent,' 'the thing,' and 'the necessary' are impressed in the soul in a primary way. This impression does not require better known things to bring it about. [This is similar] to what obtains in the category of assent, where there are primary principles, found to be true in themselves, causing [in turn] assent to the truths of other [propositions]."⁴⁴³

After this Ibn Sīnā continues: "Similarly, in conceptual matters, there are things which are principles for conception that are conceived in themselves," and "if, then, such a sign is used, the soul is awakened [to the fact] that such a meaning is being brought to mind..."⁴⁴⁴

This is the foundation of the proof, from where Ibn Sīnā uses the meaning of 'existence' altogether with its implications to show the necessity of God's existence. Due the fact that not every conception requires another conception to precedes it, otherwise an infinite regress would occur,⁴⁴⁵ all conception must start from the universal notion of 'existence'. This is the first presupposition that is both epistemologically and ontologically fundamental; the knowing self is 'awaken' by the notion of 'existence' encompasses all reality, ad corresponds with the absoluteness of everything that *is*. The second presupposition is that each thing has the reality

⁴⁴³*al-Ilāhiyyāt*, I, 5, (1):

إن الموجود، والشيء، والضروري، معانيها ترتسم في النفس ارتساماً أولياً، ليس ذلك الارتسام مما يُحتاج إلى أن يُجلب بإشياء أعرف منها. فأنه كما أن في باب التصديق مبادئ أولية، يقع التصديق لها لذاتها، ويكون التصديق بغير ها.

⁴⁴⁴ *ibid.*, (2)-(3).

⁴⁴⁵ *ibid.*, I, 5, (4).

proper to it that is different from its existence.⁴⁴⁶ For Ibn Sīnā, as we saw, this is evident through the fact that we can grasp the meaning without knowledge of the existence of the concrete thing, or the distinction between conception and reality; we can understand what a thing is and in the same time doubt in its concrete existence⁴⁴⁷ and the meaning, or the quiddity of a thing, can be grasped even if that thing does not exist in reality.⁴⁴⁸ This means that essence and existence do not include each other, thus separately correspond with the two different questions: why and what?

After establishing the division between essence and existence, Ibn Sīnā throughout his metaphysical writings draws another one between necessary in itself and possible in itself. As we saw, 'necessary in itself' means to have existence essentially, while 'possible in itself,' or contingent, means to have existence accidentally. Necessary also means an existent whose very consideration implies its existence, and negation of its existence results in contradiction, and contingent further means an existent that has existence as something superadded to it (to its essence), as well as that its non-existence can be considered without contradiction - in this way the division between necessary and contingent and the consideration of this division, implies causality; necessary in itself has no cause, and what is only possible in itself has a cause.⁴⁴⁹ This is important as 'causality' is going to play the crucial part of the proof.

When talking about relationship between 'necessity' ($wuj\bar{u}b$), 'possibility'($imk\bar{a}n$) and 'impossibility' ($imtin\bar{a}$ ') Ibn Sīnā underlines that it is "of these three, the one with the highest claim to be first conceived is the necessary" as it "points to the assuredness of existence, existence being better known than nonexistence."⁴⁵⁰ The notion of 'necessity' is more primitive then the other two, which are derivable from it. In this sense all of them are *a priori*.⁴⁵¹

After these premises are established everything is set for Ibn Sīnā's metaphysical proof. The proof is set as ontological, or as "the proof from the ontological considerations": the existence of the Necessary Existent is at the beginning just postulated on the division between necessary and contingent, or on consideration of these two meanings - if the quiddity of a thing is sufficient for its specification that thing is in itself necessary, if not we are talking about

⁴⁴⁶ *ibid.*, I, 5, (10).

⁴⁴⁷ al-Ishārāt, IV, 6, p. 121).

⁴⁴⁸ al-Ilāhiyyāt, I, 5, (12).

⁴⁴⁹ *ibid.*, I, 6, (2).

⁴⁵⁰ *ibid.*, I, 5, (24).

⁴⁵¹ Marmura, Avicenna's Proof from Contingency, p. 136.

contingent.⁴⁵² The quiddity of the Necessary Existent is indeed sufficient for its specification - that it is existent - and therefore it must exist. But this is not enough, as such assertion only clarifies what it is that we are searching for. The metaphysical proof continues in the book VIII of *al-Ilāhiyyāt* by establishing the finitude of the efficient and the receptive causes. This is something that, according to Ibn Sīnā, must be done first in order to prove the existence of God.⁴⁵³ The fact that it is impossible for every cause to have a cause *ad infinitum* must be established.

Thus, Ibn Sīnā's al-Ilāhiyyāt represent a conceptual preparation for the proof, which come to its full actualisation in the book VIII. In al-Ilāhiyyāt 1, (4)-(6) Ibn Sīnā argues that if we take into consideration the relation between the effect, its cause, and the cause of that cause we will see that each has specific characterisation: the first cause is only the cause, the last effect is only the effect, and the middle is both the cause and the effect. So we have the (a) uncaused cause, (b) caused cause and (c) the effect. (a) and (c) are kind of extremes, and (b) is the intermedium. Now we can assume that this chain is finite or infinite. If the chain is finite, it is evident that there is a first uncaused cause. If we, on the other hand, assume that the chain is infinite, the situation is not so obvious. The infinite chain can never be realised, so if considering this option we should consider that the extremes either do not exist, or that they are just not yet realised. In both cases however the particular aggregate within the chain can be realised, the aggregate of (a), (b) and (c) (no matter how many (b) we have in this aggregate). But in this case it will be also realised that the entire aggregate is in fact (b) something that is caused and a cause. The whole aggregate is depending on what is in itself caused, and the infinite chain that would consist of infinite number of such aggregates would be also caused. "Hence, it is impossible for an aggregate of causes to exist without including an uncaused cause and a first cause. For [otherwise] all of what is infinite would be an intermediary, yet without an extreme, and this is impossible."454

At this point one could say that the infinity means the infinite number of causes and effect and therefore an infinite number of possible aggregates. The fact that we can extract one of this aggregate and consider it in itself as finite does not mean that the infinite chain of causes is impossible. One could, of course, attack this argument in this way, but only outside of its context. The context, however, is ontological. This is further on clarified in Ibn Sīnā's *al-Ishārāt* IV, 9:

⁴⁵² *al-Ilāhiyyāt*, I, 6, (4), (5).

⁴⁵³ *ibid.*, VIII, 1, (2).

⁴⁵⁴ *ibid.*, VIII, 1, (6).

"Every being, if considered from the point of view of its essence and without consideration of other things, is found to be such that either existence necessarily belongs to it in itself or it does not. If existence belongs to it necessarily, then it is the truth in itself and that whose existence is necessary from itself. This is the Independent Reality. If, on the other hand, existence does not belong to it necessarily, it is not permissible to say that it is impossible in itself after it was supposed existing. But if, in relation to its essence, a condition is linked to it, such as the condition of the nonexistence of its cause, it becomes impossible or, such as the condition of the existence of its cause, it becomes necessary. If no condition is linked to its essence, neither existence nor nonexistence of a cause, then there remains for it in itself the third option, that is, possibility. Thus, with respect to its essence, it would be a thing that is neither necessary nor impossible. Therefore every existent either has necessary existence in essence or has possible existence in essence."

This is the foundation of the proof. Everything that exists cannot be possible in itself because the possibility in itself means non-existence. The meaning of 'existence' is such that it implies something that is necessary in itself, and whatever is necessary in itself, its quiddity does not have a meaning other than its reality – in short, the meaning of 'necessary existent' must have a reality because it is *per se* the principle of every reality.⁴⁵⁶

So the proper way to understand the *ad infinitum* argument from *al-Ilāhiyyāt* VIII, 1, (4)-(6) is that the totality of contingent things can never be a totality and there is clearly something more 'total'. Ibn Sīnā is not satisfied by the simple statement that causal chain cannot go *ad infinitum*, because that is a) not *per se* evident and b) it depends in which context we are talking about causal chain. Ibn Sīnā's context is the relation between totality and its parts; if everything is caused, then the totality of such things is also caused by its parts, but "totality having every one of its units as caused requires a cause external to its units..." and therefore the totality of contingent beings "...requires a cause external to all its units,"⁴⁵⁷ due to the fact that possible existence is in itself non-existence, no existence can occur. Only this sort of infinite regress is not acceptable, and therefore there must be the existent that exists by itself.

After establishing the foundations of metaphysics as science that advances from *a priori* notions that cannot be better known than they already are, Ibn Sīnā advances towards the ultimate goal of the First philosophy. It involves the discussion on the modality of existence:

⁴⁵⁵ al-Ishārāt IV, 9, p. 122, Ar p. 19:

كل موجود إذا التفت إليه من حيث ذاته من غير التفات إلى غيره فإما أن يكون بحيث يجب له الوجود في نفسه أو لا يكون. فإن وجب فهو الحق بذاته الواجب وجوده من ذاته وهو القيوم وإن لم يجب لم يجز أن يقال: إنه ممتنع بذاته بعد ما فرض موجوداً بل إن قرن باعتبار ذاته شرط مثل شرط عدم علته صار ممتنعاً أو مثل شرط وجود علته صار واجباً. وإن لم يقرن بها شرط لا حصول علة ولا عدمها بقي له في ذاته الأمر الثالث وهو الإمكان. فيكون باعتبار ذاته الشيء الذي لا يجب ولا يمتنع فكل موجود إما واجب الوجود بذاته أو ممكن الوجود في نفسه أو

⁴⁵⁶ *al-Ilāhiyyāt*, VIII, 4, (7).

⁴⁵⁷ al-Ishārāt, IV, 12, p. 123.

everything that is, is either by itself or through another. There is no third option, hence this disjunction is necessary. Once again we need to keep in mind that this necessity is implied in the notion of 'existence' and due to this implication ontological modality is deduced and represents necessary judgement of the mind of any thing considered in itself. A thing can either be possible in itself, which means that one can imagine its non-existence without any contradiction, or necessary in itself, which means quite the opposite, that one cannot imagine its non-existence without contradiction. Ibn Sīnā summarises this doctrine in his *al-Ishārāt*:

"That to which possibility belongs in essence does not come into existence by its essence, for, inasmuch as it is possible, existence by its essence is not more appropriate than nonexistence. Thus, if its existence or nonexistence becomes more appropriate [than the other], that is because of the presence or absence of a certain thing [respectively]. It follows that the existence of every possible thing is from another".⁴⁵⁸

Within the process of the proof this ontological division is conjoined with another: the division between existence and essence. As already explained, for everything it is necessary to maintain the distinction of what it is and that it is. Conjoined, these two divisions result in perhaps the very important statement for Ibn Sīnā's proof: the existence of a thing whose nonexistence can be imagined without contradiction is distinct from its essence. This also means that the existence of a thing whose non-existence cannot be imagined without contradiction is not distinct from its essence; its essence is its existence. Therefore, if there is such existent that is in itself necessary, its essence is its existence. Otherwise, everything that is is contingent, but this is impossible: "If that [other] goes on to infinity, every one of the units of the chain will be possible in essence. [But] the whole chain depends on these units. Thus the chain too will not be necessary and becomes necessary through another.⁴⁵⁹ The chain of causes that Ibn Sīnā talks about here is the same chain he talks about in his al-Ilāhiyyāt VIII. In both cases the context is ontological: the totality of things presented by the 'chain' is either in itself possible or necessary; clearly it is not necessary because it exist due to its parts, which are caused at least by the fact that they are 'parts' - the totality is therefore possible, which means that its non-existence can be considered and that its existence does not belong to it essentially. But in this case in order for existence to be, there must be something above this totality, something essentially existent - necessary in itself. Hence the metaphysical proof

⁴⁵⁸ *ibid.* IV, 10, p. 123; AR p. 20:

ما حقه في نفسه الإمكان فليس يصير موجوداً من ذاته فإنه ليس وجوده من ذاته أولى من عدمه من حيث هو ممكن. فإنّ صار أحدهما أولى فلحضور شيء أو غيبته. فوجود كل ممكن الوجود هو من غيره.

rests on Ibn Sīnā ontological presuppositions, and in his *al-Ilāhiyyāt* VIII is only 'Aristotelisied.'

This distinction of everything that is as something that is by itself or not by itself, or as something that cannot be otherwise or can be otherwise, conjoined with the essence-existence distinction implies, as we saw, the notion of causality. Causal premise within the proof, as well as within metaphysics as science of being qua being, is derived from the division between two modes of existence. If existence does not belong essentially to a contingent being, then it belongs to it accidentally and whatever provides that existence is the cause. In this context, everything that is in itself possible must have a cause, and what is necessary in itself has no cause. Everything that is contingent, therefore, must have a cause and if everything that is is contingent, then everything that is must have a cause. This sort of infinitive regress is impossible; although the causal chain seems at first imaginable, if we consider totality of things as contingent only, we fall into absurdity: if everything is contingent, then in itself it deserves only non-existence, but this would mean that existence is non-existence. Therefore, there must be something that is by itself necessary, i.e. uncaused. For this reason Ibn Sīnā states: "It has [also] become evident that everything other than Him, if considered in itself, [is found to be] possible in its existence and hence caused, and it is seen that, [in the chain of things] being caused, [the caused existents] necessarily terminate with Him"⁴⁶⁰ - the basis of the proof is the consideration of things in themselves from which follows that not everything can be in itself possible. It is the consideration of meanings. The argument for the finitude of causal chain is based on this; "everything that has a quiddity other than existence is caused."461

In this sense everything that is possible in itself, if actually existent, is necessitated/caused by another. All existence is therefore necessary one way or another, either as something uncaused, in which case it is necessary by itself, or due to something else, in which case is necessary due to its cause. Furthermore, whatever is first cause "it is a cause of every existence and of the cause of the reality of every concrete existence".⁴⁶² Existence implies necessity and this implication is so general that it surpasses all division and hence must be applicable to things as they are in themselves. All this needs to be taken into consideration in order to prove the necessary existence. The demonstration rests upon two proven postulations: (1) everything that *is* cannot be contingent and (2) existence implies necessity. Both of these

⁴⁶⁰ *al-Ilāhiyyat*, VIII, 3, (6).

⁴⁶¹ *ibid.*, 4, (11).

⁴⁶² al-Ishārāt, IV, 8, p. 122; AR p. 18.

premises further imply that there must be an existent which is necessary in itself - an existent which exists by itself and has no cause. By being necessary in itself it must be existing and cannot not to exist. This means that if someone would postulate its non-existence, he would have to encounter an absurdity sooner or later.

To this Ibn Sīnā adds:

"Therefore, everything, with the exception of the One who in His essence is one and the existent who in His essence is an existent, acquires existence from another, becoming through it an existent, being in itself a non-existent. This is the meaning of a thing's being created-that is, attaining existence from another. It has absolute nonexistence which it deserves in terms of itself; it is deserving of nonexistence not only in terms of its form without its matter, or in terms of its matter without its form, but in its entirety..."⁴⁶³

The ontological foundation of Ibn Sīnā's proof is evident: when considered in itself thing is in fact non-existent, due to this, as we saw, it is necessary that there must be something necessary in itself that bestows, or guarantees, existence. Possible being has no existence essentially but only accidentally, and its existence must be 'attained', otherwise it will remain what it in itself 'deserves' – a non-existence. On this foundation Ibn Sīnā's argument on causal chain has more sense: it has to be finite because every part of it is finite, i.e. caused, i.e. ontologically dependent, i.e. deserving in itself only non-existence. Indeed, as Steve Johnson notices, Ibn Sīnā's proof moves from the knowledge of things as finite and contingent to that which is infinite and necessary,⁴⁶⁴ but prior to this it starts from the consideration of the necessary division of existence into 'what is by itself' and 'what is not by itself, i.e. the division between necessary and contingent. This has nothing to do with the experience, but with intuitive knowledge that is awaken within the mind after it becomes aware of existence and self.

As existent whose essence is its existence, nothing can be on its rank: "He is the principle of necessitation of the existence of everything, necessitating either in primary manner or through an intermediary."⁴⁶⁵ As something whose essence is its existence, the necessary existent

⁴⁶³ *al-Ilāhiyyāt*, VIII, 3, (6):

فإذن كل شيء إلا الواحد الذي هو لذاته واحد، والموجود الذي هو لذاته موجود؛ فإنه مستفيد الوجود عن غيره، وهو أيس به، وليس في ذاته، وهذا معنى كون الشيء مبدعا أي نائل الوجود عن غيره، وله عدم يستحقه في ذاته مطلق، ليس إنما يستحق العدم بصورته دون مادته، أو بمادته دون صورته، بل بكليته، فكليته إذا لم تقترن بايجاب الموجد له، واحتسب أنه منقطع عنه وجب عدمه بكليته.

⁴⁶⁴ Johnson, A. Steve, *Ibn Sina's Fourth Ontological Argument for God's Existence*, in *The Muslim World*, vol 74, issue 3-4 (1984, pp. 161-171), p. 164.

⁴⁶⁵ *al-Ilāhiyyāt*, VIII, 4, (1).

cannot be composed in any way,466 and in this sense the necessary existent is "pure existence".⁴⁶⁷ As such, the necessary existent has no genus, nor differentia, and hence no definition, it cannot be asked 'what is it?' regarding Him⁴⁶⁸- this means that there cannot be propter quid or burhan lima demonstration of God's existence, because there cannot be 'why' regarding it, nor 'why' regarding its act.⁴⁶⁹

In al-Najāt Ibn Sīnā presents a shorter version of his proof. Nevertheless, here the proof is also based on the meaning of 'existence,' its divisions and implications. The starting point of the proof is the intuitively evident fact that "there is existence".⁴⁷⁰ Once this is realised, we can start the search for being that necessitates the absoluteness of existence, revealing that "the possible terminates in a necessarily existent being".⁴⁷¹ If the totality of all existing things is contingent and if there is no in itself necessary being outside of this totality, then the totality "necessary subsists by means of things that exist possibly, which is absurd".⁴⁷² Because the necessary existent must necessitate itself prior to the totality, it cannot be an internal cause, because as internal it would participate in the absoluteness of existence instead of necessitating it; it would be "a cause of the totality as primarily a cause of the existence of its members, of which it is one".⁴⁷³ Thus, what gives existence to the totality must be external to the totality, hence it cannot be possible cause as it would be a part of the totality -therefore, there must be the cause of all contingent existence necessary in itself and external to the contingent totality.474

Obviously, Ibn Sīnā's proof does not represent quia or burhān inna demonstration for the existence of the Necessary Existent in the typical Aristotelian sense. Otherwise, the proof for the existence of God would not be the privilege of metaphysics, but it could be also provided by physics. The proof simply goes from the consideration of the division between necessity and possibility of existence, and from the consideration of the meaning of 'possible in itself.' The proof is hence both, ontological and from contingency, and this is the reason it can be qualified as 'ontological, 'metaphysical', as well as 'a priori proof'. It does not fit into Aristotle's division in Secondary Analytics and the only Aristotelian element is the argument for the finitude of causal chain. But as we saw, this argument is not sufficient for the proof for

⁴⁶⁶ *ibid.*, (7).

⁴⁶⁷ *ibid.*, (13).

⁴⁶⁸ *ibid.*, (14).

⁴⁶⁹ *ibid.*, (16).

⁴⁷⁰ al-Najāt II, 12, [566]. ⁴⁷¹ *ibid.*, [567].

⁴⁷² *ibid*.

⁴⁷³ *ibid.*, [568]; translation is slightly modified.

⁴⁷⁴ ibid.

the existence of God if taken outside of the context of the necessary-possible division of existence. Due to the fact that the Necessary Existent "has no quiddity, no quality, no quantity, no where, no when, no equal, no partner and no contrary..." there is "...no definition and no demonstration..." for His existence, except "the clear implications".475 Therefore, there is no demonstration for the existence of God that corresponds to Aristotle's Posterior Analytics. The proof is by the means of 'clear implications', or "al-dalā'il alwādiha" - the notion which I believe stands for 'logical implications,' which is in fact means 'logical implications of the notion of 'existence.'' These implications form the unconditional necessary propositions about God. Another supportive statement for this interpretation we can find in Ibn Sīnā's al-Ishārāt, IV, 27: "The First has no alike, no contrary, no genus, and no difference. Thus, it has no definition and cannot be indicated except by pure intellectual knowledge".⁴⁷⁶ This shows that Morewedge is right by claiming that in Ibn Sīnā "the knowledge of the Necessary Existent is discursive a priori",⁴⁷⁷ but it is not such in the sense of consideration of the notion of 'the Necessary Existent'. It is based on logical implications of the meaning of 'existence' that must correspond with the absoluteness of reality due to its extension of which nothing more general can be conceived. In short, the proof for the existence of God proceeds from syllogistic necessity (or substantial necessity), instead of demonstrative necessity (or descriptive necessity).⁴⁷⁸

If we take into consideration all main clues that Ibn Sīnā stressed in his metaphysical works, we can clearly see that metaphysics must be able to provide the proof for the existence of God. Yet if we assume God's existence His nature is such that He has no alike, no cause and transcend all genus and species. If there is no whatness for God and if He is not an Aristotelian substance, then one cannot argue from the Divine whatness to the Divine existence; also, if existent *qua* existent is considered, we see that it must be either necessary in

⁴⁷⁵ *al-Ilāhiyyāt*, VIII, 5, (14). At this point I slightly modified Marmura's translation, according to which the term *al-dalā'il al-wādiha* is translated as "clear evidential proofs", which seems to me misleading because the notion 'evidential proof' could stand for *burhān inna*, or *quia* demonstration in the typical Aristotelian sense. However, Ibn Sīnā does not talk about this. Instead he talks about the implication of the notion of 'existence', the same way he talks about this in his *Isharāt* IV, to which Marmura rightly refers in the footnote 5 in his translation of Ibn Sīnā's *Metaphysics*, VIII, chapter 5.

⁴⁷⁶ al-Ishārāt, IV, 27, p. 130.

⁴⁷⁷ Morewedge, Parviz, A Third Version of the Ontological Argument in Ibn Sinian Metaphysics, in Islamic Philosophical Theology, ed. P. Morewedge, State University of New York Press (New York, 1979, pp. 182-222), p. 214.

⁴⁷⁸ For relation between these two types of necessities see Strobino, *Time and Necessity in Avicenna's Theory of Demonstration*, Oriens 43 (Brill, 2015), pp. 338-367.

its existence or contingent, and if contingent, something necessarily existing is needed to avoid a regress.⁴⁷⁹

According to this interpretation Ibn Sīnā's argument can stand alone as the metaphysical establishment of the existence of something in itself necessary and it can be further developed by purely analytical method of deduction of all main divine attributes in order to prove that the Necessary existent is in fact God. However, Ibn Sīnā's intention in al-Ilāhiyyāt is to develop this argumentation into a complete explanation of the world. So far metaphysics still does not explain the world as totality of all things, except in the most general sense - all we could say is that the world is contingent and its existence is somehow due to the Necessary Existent. But if metaphysics aims to give an ultimate meaning to other sciences by providing them with the proofs of their subject-matters, it has to involve certain concepts on which it will develop the proof for the existence of God further on so it can be connected to natural sciences. These concepts are taken from natural sciences and serve as a preparation for metaphysics. In this sense metaphysics is to be learned after natural sciences, although natural sciences essentially depend on metaphysics. These concepts are matter, form, composition and above all the general classification of causes (although the very notion of 'causality' does not originate in natural sciences, but is implied by the ultimate division of 'existence'). In other words, although the very existence of God is not proved with Aristotelian demonstration, in order to be of any significance for the whole Ibn Sīnā's scientific corpus it need a kind of expansion, as well as borrowing certain concepts from other sciences. In the process, the proof itself is connected with some cosmological elements of typical quia demonstration and due to it, I believe, very often mistaken for the cosmological proof.⁴⁸⁰

2.1.1.2 The Necessary Existent as God

In order to complete his proof, Ibn Sīnā now has to show that the meaning of 'the Necessary Existent' implies all the essential attributes because of which we could refer to it is 'God'. However, due the fact that the Necessary Existent is not a substance in no other sense than that 'He is not in a subject',⁴⁸¹ He cannot have any attributes in the classical Aristotelian sense. In fact, attributes as something that depends on a substance would mean that the Necessary Existent is composed, i.e. caused, which is absurd. God cannot be the subject of

⁴⁷⁹ Legenhausen, *Ibn Sina's Arguments Against God's Being a Substance*, pp. 121-122.

 ⁴⁸⁰ Like in Craig, William Lane, *The Cosmological Argument from Plato to Leibniz* (Houndmills, Basingstoke, Hampshire and London: Macmillan Press, 1986), pp. 86-98; also in Davidson, Davidson, *Proofs for Eternity*.
 ⁴⁸¹ al-Ilāhiyyāt, VIII, 4, (18).

suitable predication so as to be considered a substance - God is beyond considerations of matter or form which is necessary for the designation of Aristotelian substances and accidents.⁴⁸² Also, the meaning of the Aristotelian substance is not the same as the meaning of its attributes, so the Necessary Existent can be a substance only in the wides sense of that word: as not being in a subject.⁴⁸³ Therefore, when we talk about the Divine attributes we talk only about the implications of the meaning of 'the Necessary Existent'. These meanings reflect in positive and negative relations which are necessary concomitants of Divine essence.⁴⁸⁴ So in order to accomplish the goal of metaphysics, Ibn Sīnā intends to continue his long deduction until he shows that 'the Necessary Existent' implies all attributes that reveals it as God, hence He has to be worshiped and submitted to. In this respect Ibn Sīnā firstly sates that "...the primary attribute of the Necessary Existent consists in His being a 'that [He is]' and an 'existent'.⁴⁸⁵ From this all the attributes are going to be deduced, while "not one of [the attributes] necessitates at all either multiplicity or difference in His essence.³⁴⁸⁶

The Necessary Existent is an existent and hence something specific. But its specification cannot be anything else other than existence, otherwise it would not be necessary and if the necessity of existence is its *specificum*, then there is nothing else whose existence is necessary⁴⁸⁷ and therefore the necessary existent must be one: "The conclusion of this is that that whose existence is necessary is one in accordance with the specification of its essence and in no way can it be stated of many."⁴⁸⁸ But that is not all, the Necessary Existent must be not only one, but also unity, or indivisibility, otherwise it would be caused by its parts, and they would be in some respect prior to it, but then it would not be necessary in itself.⁴⁸⁹

The next implication is that due to the uniqueness of the Necessary Existent it cannot have genus or species, as it is unique as necessary in itself. It is the only one, does not share the quiddity with anything and its quiddity means existence; "it does not need to be distinguished from anything by a differential or an accidental idea. Rather, it is distinguished by its essence. Hence its essence has no definition, since this essence has neither a genus nor a difference".⁴⁹⁰

⁴⁸² Legenhausen, *Ibn Sina's Arguments Against God's Being a Substance*, p. 122.

⁴⁸³ Shehadi, *Metaphysics*, p. 85.

⁴⁸⁴ *al-Ilāhiyyāt*, VIII, 4, (2).

⁴⁸⁵ *ibid.*, 7, (12).

⁴⁸⁶ ibid.

⁴⁸⁷ al-Ishārāt, IV, 18, pp. 125-126.

⁴⁸⁸ *ibid.*, 20, p. 127.

⁴⁸⁹ *ibid.*, 21, p. 127.

⁴⁹⁰ *ibid*. 24, p. 128; Ar p. 49.

As such the Necessary Existent cannot be a relative (*al-mudāf*), as relative always depends on a cause.⁴⁹¹

Depending on the aspect, attributes can be divided into positive and negative. Ibn Sīnā's deduction is from here developed in several directions. As Peter Adamson stated while describing Ibn Sīnā's method: "Avicenna's rule is meant to accommodate divine simplicity – such that there is no multiplicity of real attributes in God, and no quiddity that would be predicated of Him – while also allowing for substantive theological predications."⁴⁹² The specificity of the Necessary Existent is that He is one with His essence that is His existence. As such, there is nothing like Him, and there is not thing that could share the meaning of his essence.⁴⁹³

First negative group of characteristics that are implied by the necessity of existence is that such existent no genus, no quiddity, no quality, no quantity, no 'where,' no 'when,' no equal, no partner, no contrary-may, and no similar.⁴⁹⁴ In fact, as being necessary in itself whose essence is His existence, the Necessary Existent is "nothing but existence".⁴⁹⁵

The main positive attributes of the Necessary Existent is that it is 'one' and 'uncaused cause', thus the principle of all things. It is one because its specification is existence, and it is uncaused cause because it bestows existence and the causal chain terminates with it. As such, the Necessary Existent is the ultimate cause of all things, He is the bestower of existence – His essence is existence and He provides only existence by the act of emanation from Him.⁴⁹⁶ This implies that He is the pure good, hence something that everything desires, i.e. He is the reason why existence is desired rather than non-existence.⁴⁹⁷ From everything mentioned above follows that the Necessary Existent as the ultimate perfection is the Truth in the real sense and the ultimate reality.⁴⁹⁸

Next qualification of necessary existent is extremely important, it is the in fact 'the bridge' that connects two meanings, 'the Necessary Existent' and 'God'; according to Ibn Sīnā it is clear that the Necessary Existent is something intellectual due to the fact that He cannot be

⁴⁹¹ Strobino, Riccardo, Avicenna on Knowledge ('ILM), Certainty (Yaqīn), Cause ('Illa/Sabab) and the Relative (Mudāf), British Journal for the History of Philosophy, 24, No. 3 (2015), pp. 14-15.

⁴⁹² Adamson, *From the Necessary Existent to God*, p. 174.

⁴⁹³ *al-Ilāhiyyāt*, VIII, 5, (2)-(3).

⁴⁹⁴ *ibid.*, 4, (14).

⁴⁹⁵ *ibid.*, (12).

⁴⁹⁶ *ibid.*, 6, (1)).

⁴⁹⁷ *ibid.*, (2).

⁴⁹⁸ *al-Ilāhiyyāt*, VIII, 6, (5); also see De Haan, Daniel D., *Avicenna's Healing and the Metaphysics of Truth*, Journal of the History of Philosophy, 56, No. 1 (January 2018, pp. 17-44), pp. 37-38.

composed and yet He has to be a single entity. A very short reasoning in *al-Ishārāt* goes as follows: the essence of God is intelligible and independent; thus God is self-subsistent, free from attachments, defects, matter, and other things that make the essence in a state additional to itself; "that of which this statement is true intellects its essence and is intellected by its essence".⁴⁹⁹ Still, this is not the truth demonstrated in psychology as science, but something that is evident from Ibn Sīnā's famous 'flying man' experiment in Shifā': al-Nafs I. 1, (16), which is equally applicable to psychological as well as metaphysical science. In fact, the 'flying man' argument is the metaphysical starting point of psychology, an experiment that leads to demonstration of human soul as an independent substance. In short, the Necessary Existent must be a 'self' that affirms His own existence, otherwise He would not be a single uncomposed entity, and because He cannot be composed it would follow that He is not an entity which makes him non-existent. Therefore, in order to be existent the Necessary Existent must be an intellect (at least in the equivocal sense of the word). This fact is admitted in metaphysics as well as in psychology as self-evident, the difference is that in psychology it is further investigated and represents the very starting point on which whole science of psychology is built upon, whereas in metaphysics it serves as an important part of the proof that the Necessary Existent is in fact God.

The Necessary Existent is not an intellectual being in the ordinary sense of that word, otherwise He would have genus and differentia. What Ibn Sīnā wants to say is that intellect as we know it from the meditation on the self is the closes thing to that whose essence is its existence. If anything more, it would be an inconsistency within his metaphysical system. In this sense one should understand Ibn Sīnā words: "Hence, that which is free of matter and [its] attachments [and is] realized through existence separate [from matter] is an intelligible for itself. Because it is in itself an intellect, being also intellectually apprehended by itself, it [itself] is the intelligible [belonging] to itself".⁵⁰⁰ Therefore, when we say that the Necessary Existent is an intellect, it is so because He knows and apprehends Himself and all being that emanates from Him. By being 'intellect' here does not mean 'to be affected by intelligible'. Instead, He is an intellect in the same sense as He is a substance; not something that can be categorised, but something that is not in a subject at all and something devoid from matter. In this sense His essence is His existence, which is intellect, intellectual and intelligible.⁵⁰¹ As such, the Necessary Existent knows all things through apprehension of His essence, because

⁴⁹⁹ *al-Ishārāt*, IV, 28, p.130; Ar p. 53.

⁵⁰⁰ al-Ilāhiyyāt, VIII, 6, (7).

⁵⁰¹ *ibid*.

He is the principle of all existence and hence apprehends His effect as it is the effect⁵⁰² and not as something that changes.⁵⁰³ This specific Intellect knows all things in a very specific way: "the Necessary Existent apprehends intellectually all things in a universal way; yet, despite this, no individual thing escapes His knowledge. Not [even] the weight of an atom in the heavens and the earth escapes Him."⁵⁰⁴ Also, the knowledge of the Necessary Existent is such that He apprehends all things at once in a way that does not cause any multiplicity in Him and through His essence He knows essences of all things.⁵⁰⁵ In fact, the Necessary Existent's apprehension is the cause of all things that His essence necessitates in the form of emanative creation.⁵⁰⁶

As being intellectually aware of Himself, the Necessary Existent is alive and willing.⁵⁰⁷ Still, as with the other attributes, life and will here have an equivocal meaning and represent something that cannot be compared with anything to which these words are used in ordinary language. Life and will here are, again, only meaning implied by Him being intellectual, which is eventually implied by His essence/existence. Same goes for other attributes like: 'the good', 'the powerful' and 'the munificent'.⁵⁰⁸

With all these and other attributes that are implied by His essence, it is proven that the Necessary Existence is God, that He is in the relationship with His creation as God and that He should be worshiped as God. By being the ultimate perfection, God is worshiped and desired by every intelligent being, hence by being the ultimate efficient cause of the world He is also the ultimate final cause of all creation,⁵⁰⁹ but in the sense that this is implied by his being the ultimate efficient cause; as such God inspires first intelligence to set the world in balanced motion towards its ultimate purpose.⁵¹⁰ Therefore, God is the cause in every respect; He is the Prime Unmoved Mover that sets in motion the first caused Intelligence and with it the entire world, as well as the bestower of existence by being the existent essentially.⁵¹¹

⁵⁰² *ibid.*, (13).

⁵⁰³ *ibid.* (14).

⁵⁰⁴ *ibid.*, (15). ⁵⁰⁵ *ibid.*, 7, (1).

⁵⁰⁶ *ibid.*, (4).

⁵⁰⁷ *ibid.*, (10)-(12).

⁵⁰⁸ *ibid.*, (13).

⁵⁰⁹ Wisnovsky, Robert, *Avicenna's Metaphysics in Context* (New York: Cornell University Press, 2003), pp. 180-195.

⁵¹⁰ Kutluer, Ilhan, *Ibn Sina Ontolojisinde Zorunlu Varlık* (Istanbul: İZ Yayıncılık, 2013), pp. 201-222. Abb.: Kutluer, *Ibn Sina Ontolojisinde Zorunlu Varlık*.

⁵¹¹ al-Samā ^c al-tabī ^cī IV, 15, (3); also see McGinnis, Jon, *Great Medieval Thinkers, Avicenna*, (Oxford: Oxford University Press, 2010), p. 151.

Ibn Rushd's critique of Ibn Sīnā's proof is based on his nominal position regarding understanding of existence. Due to this fact, again, his critique to some degree relies on al-Ghazāli's *Tahafut*. Because of this it is important to shortly elaborate al-Ghazāli's critique of Ibn Sīnā's proof for the existence of God before continuing with Ibn Rushd.

2.1.2 Al-Ghazālī on 'the Necessary Existent'

After establishing his idea that modality, as well as universals, belongs to a judgment of the mind,⁵¹² al-Ghazālī equalizes the meaning of 'the Necessary Existent' with 'the uncaused cause'.⁵¹³ According to al-Ghazālī 'the Necessary Existent' is not just the term whose meaning is unclear, but also something about what we cannot argue that it exists, unless we replace its meaning by "something that has no cause".⁵¹⁴ If the existence of the Necessary Existent is same as its essence, this statement can mean only that in order for an essence to be an existing thing there must be a cause, but because the Necessary Existent is the Uncaused Cause, its essence is its existence. In accordance to this al-Ghazālī says:

"Naming the receptive essence a receptive cause is an idiom of yours. The proof [you offer] does not prove the existence of a necessary existent in terms of the idiom you adopt, proving only a limit with which the chain of causes and effects terminates. It proves only this much. The termination of the regress is possible with one [existent] that has eternal attributes that have no agent in the same way that there is no agent for His essence. These, however, are established in His essence. Let, then, the term 'necessary existent' be cast aside, for one can be misled by it. Demonstration only shows the termination of regress, proving nothing else at all. To claim for it other than this is [sheer] arbitrariness". ⁵¹⁵

What al-Ghazālī aims to show is that such concepts as 'the Necessary Existent', 'essence that is its existence', 'necessary in itself' etc. are in fact concepts with tautological meanings that do not explain anything. 'Being caused' and 'being uncaused cause' are, on the other hand, clear meanings that can be assumed to denote certain entities outside of the mind. Such assumptions can be leading notions of scientific inquiry. But in this case one must also accept that it is impossible to establish any proof for the existence of being in which there is no

⁵¹² Tahāfut, I, (127); III, (50).

⁵¹³ *ibid.*, V, (7); VI, (12).

⁵¹⁴ *ibid*.

⁵¹⁵ *ibid.*, VI, (10):

تسمية ال ذاة القابلة علة قابلية من اصطلا حكم. والدليل لم يدل على ثبوت واجب وجود بحكم اصطلا حكم و انمادل على اتُباتُ طُرف ينقطع به تسلسل العلل و المعلولات. و لم يدل الا على هذا القدر. وقطع التسلسل ممكن بواحد له صفات قديمة لا فاعل لها كما لا فاعل لذاته و لكنها تكون متقررة فى ذاته. فليطرح لفظ واجب الوجود فانه ممكن التلبس فيه. فان البر هان لم يدل الا على قطع التسلسل و لم يدل على غيره البتة. فدعوى غيره تحكم.

multiplicity, or that is necessary in itself – a proof could only show the termination of the causal regress,⁵¹⁶ because an universal nature of thing can be known only through sense perception. The expression 'the Necessary Existent' and the expression 'possible existent' are incomprehensible, according to al-Ghazālī. These expressions are the reason of all philosophical obfuscations.⁵¹⁷ This is why they have to be replaced with something more 'comprehensible' - the negation or affirmation of the existence of the cause. In sum, what al-Ghazālī wants to show is that there cannot be any attempt for the proof of 'the Necessary Existent' other than the termination of the causal chain,⁵¹⁸ and that the whole problem lies exactly in the predication of necessity to existent:

"The source of the obfuscation in all this lies in the expression 'the Necessary Existent.' Let [the expression] be cast aside. For we do not admit that proof proves 'the Necessary Existent' unless what is meant by it is an existent that has no agent [and is] eternal. If this is what is intended, then let the expression 'the Necessary Existent' be abandoned and let it be shown that it is impossible for an existent that has no cause or agent to have in it multiplicity and differentiation. But there is no proof for this".⁵¹⁹

The next phase in al-Ghazālī's *Tahāfut*, is to show that philosophical method cannot provide certainty for the existence of causal connection in the world. However, it is important to underline that al-Ghazālī does not want to take a position of a sceptic who doubts the existence of the causal connection in the world. This is clear from the fact that, as Muslim scholar, al-Ghazālī needs the connection of cause and effect in order to argue the existence of the Creator. All natural order is subjected to the Creator who made it. What al-Ghazālī wants is to show that the causal connection cannot be proved by the means of philosophical demonstration, or, in other words, that there is no such thing as necessary causation - instead causation is something completely dependent on the will of God.

Therefore, the only type of causality al-Ghazālī denies is necessary causality. There cannot be such a thing as necessary causal connection. In Ibn Sīnā's metaphysical system, as we saw, necessity and causality represent the universal law of mind as well as of the outside world. In fact, causal connections outside of the mind are recognized through notion of 'existence' which implies the ultimate division of reality into necessary and possible. This ontological

⁵¹⁶ *ibid.*, VII, (10).

⁵¹⁷ *ibid.*, X, (6).

⁵¹⁸ *ibid.*, *Tahāfut*, XIII, (26); X, (4).

⁵¹⁹ *ibid.*, VII, (15). The translation is slightly modified. In the original:

ومنشا التلبيس في جميع ذلك في لفظ واجب الوجود. فليطرح فانا لا نسلم ان الدليل يدل علّى واجب الوجود أن لم يكن المر أدبه موجود لا فاعل له قديم. و ان كان المراد هذا فليترك لفظ واجب الوجود و ليبين ان موجودا لا علة له و لا فاعل يستحيل فيه التعدد و التباين. و لا يقوم عليه دليل.

presupposition, of which nothing more fundamental cannot be conceived, is the basis for his proof for God's existence, as well as for the structure of his entire metaphysical system. According to al-Ghazālī, as we can see, this assumption is the cause of many 'obfuscation' $(talb\bar{ts})$, as necessity belongs strictly to the mind. This idea is not only the argument in itself, but it also represents a preparation for al-Ghazālī's Seventeenth Discussion, where he intends to show that philosophical method cannot provide any proof for God's existence at all, which means that metaphysics cannot be established as a strict science which eventually actualises as philosophical theology.

In the seventeenth discussion of his *Inchoherence* al-Ghazālī developed his famous argumentation against philosopher's view on causality. His viewpoint is that the connection between what is generally accepted as the idea of "the cause" and "the effect" is not a necessary one. The relationship between the cause and the effect in its entirety depends on God's will and our observation of causal connection is the observation of the Divine repetitive action, which produces in us a habit⁵²⁰ on which we can establish probable scientific knowledge. This means that, although we can still establish sound science, scientific necessity is unachievable in the strict Aristotelian sense.

If by 'the Necessary Existent' we mean 'the Uncaused Cause', also if our conception of causality depends on sense perception and observation only shows the occurrence of an effect at the time of the contact with what is considering to be its cause, but it does not show the occurrence of the effect by what is considered to be its cause,⁵²¹ then it is clear that philosophers cannot provide any proof for the existence of God. How one acquires certainty for God's existence is the question that requires analysis of the entire al-Ghazālī's thought, thus cannot be subject of the present inquiry. Yet it is clear so far that for him agent is always a willing being which freely choses its act, and therefore has knowledge of what is willed. This means that the being with the absolute will would be the absolute agent and because God's will is the ultimate force that gives all creation, only God is the agent in the real sense. The connection between a cause and its effect according to al-Ghazālī is not the necessary one, but it is God who creates the effect and its usual cause concomitantly and only He is the real agent. Therefore, the basis for truth lies in our perception of God's usual way of creating things and not of causal connections between objects, and this habit is confirmed by our trust in God who creates knowledge in us that corresponds with the world outside of the mind.⁵²²

⁵²⁰ *ibid.*, XVII, (10).

⁵²¹ *ibid.*, (5).

⁵²² *ibid.*, (17).

Therefore, the epistemological foundation for a scientific knowledge lies in our trust in God who habitually⁵²³ creates our knowledge to accord with reality, and therefore "we can rely on our senses and our judgment and confidently pursue the natural sciences".⁵²⁴ So al-Ghazālī accepts that truth is the correspondence of human knowledge with the outside world, or, as Aristotle stated, correspondence between thoughts and things. The one very important difference is that, for al-Ghazālī thoughts as well as things own their existence to God, and so does the correspondence between them. Therefore, al-Ghazālī believes that we can have true knowledge of things, and that this knowledge is knowledge of their causes, but this causal connection is not something that exists *per se*, and it can be known through reason that is guided by the true faith.

Again, it is the line of argument regarding modalities that Ibn Rushd is going to follow in his attack on Ibn Sīnā regarding God's existence, although he will discard the second phase of al-Ghazālī's critique: the perception of causal connection provides us with certainty, hence with the real philosophical proof for God.

2.1.3 Ibn Rushd's view on God's Existence

2.1.3.1 Ibn Rushd's rejection of Ibn Sīnā's proof

For Ibn Rushd, all Ibn Sīnā's arguments are dialectical, which allows al-Ghazālī to counter them with his dialectics and sophistic,⁵²⁵ thus establishing many alternatives to his metaphysics. Beside this, the fact that Ibn Sīnā's proof rests on his ontology makes it unacceptable for Ibn Rushd. The main problem is that for Ibn Sīnā "existence represents something additional to the essence outside the soul and is like an accident of the essence".⁵²⁶ For Ibn Sīnā if every existent would be contingent, there would be no existence at all. Even the meaning of the relationship between agent and its act is deduced from this premise. Thus the first problem is that all this metaphysical structure is built on the doctrine of existence as an addition to the essence, and saying that the existent in its essence does not subsist by itself "is the most erroneous theory".⁵²⁷ Another problem is, as we saw, that for Ibn Sīnā possibility is a quality in a thing "different from the thing in which the possibility is, and from this it

⁵²³ Note that according to al-Ghazālī when we talk about God's 'habit', 'will' and 'knowledge' these notions have equivocal meanings which are *per se* incomprehensible for human mind.

⁵²⁴ Griffel, *Al-Ghazālī*, p. 162.

⁵²⁵ *Epitome Met.*, I, p.24, a4.

⁵²⁶ *Tahāfut al-Tahāfut*, p. 250; 161.

⁵²⁷ *ibid.*, p. 251; 162.

seems to follow that what is under the First is composed of two things, one to which possibility is attributed, the other to which necessity is attributed; but this is a mistaken theory".⁵²⁸

Therefore, for Ibn Rushd any attempt to prove God's existence based on the consideration of the contingency of the world is wrong. According to him, Ibn Sīnā misconceived the nature of the universe which is in fact necessary and not contingent, as it is clear from the causal interdependence of the world's parts.⁵²⁹ Once again, the falseness of Ibn Sīnā doctrine is caused by the influence of theologians.⁵³⁰

Ibn Rushd agrees with al-Ghazālī regarding the meaning of 'the Necessary Existent', it is the same as 'the Uncaused Cause' or "the existence that does not have an agent".⁵³¹ Same goes for the division between necessary and contingent, or more precisely between 'necessary existence by itself' and 'necessary existence through another' - this in fact can only mean that every existent is either uncaused or caused. But, according to Ibn Rushd, this division is not precise. The precise way is to speak of 'the Necessary Existent' in the sense of "a negative condition which is the consequence of its existence," which means that its existence is necessary through itself, i.e. uncaused, while possible in itself, is not existence superadded to the essence "but merely that the essence determines that existence can become necessary only through a cause".⁵³²

As Ibn Rushd states, when Ibn Sīnā says that the necessary existent has no cause, and due to this fact it is unique, this implication is acceptable.⁵³³ This further means that another important implication in Ibn Sīnā's deduction must also be correct: that the necessary existent must be only one through its own special characteristic that by the fact that it is uncaused it also cannot be composed in any way,⁵³⁴ and therefore it cannot have a genus nor species that would share with another existent. Therefore, it is evident that "a compound existing by itself cannot exist"⁵³⁵ Ibn Rushd's suggestion up to this point that Ibn Sīnā is partly on the right trail in order to prove the Uncaused Cause, but his proof about the necessary existent must be completed as follows:

⁵²⁸ *ibid.*, p. 178; 108.

⁵²⁹ Fakhry *The Ontological Argument*, pp. 8-9.

⁵³⁰ *ibid*.

⁵³¹ *Tahāfut al-Tahāfut*, p. 98; 50.

⁵³² *ibid.*, p. 177; 107.

⁵³³ *ibid.*, p. 241; 153.

⁵³⁴ *ibid.*, p. 242; 156.

⁵³⁵ *ibid.*, p. 261; 169. Translation slightly modified.

"If there were two necessary existents, the difference between them must consist either in a numerical difference, or in a specific difference, or in rank. In the first case they would agree in species; in the second case in genus, and in both cases the necessary existent would have to be composite. In the third case, however, the necessary existent will have to be one, and will be the cause of all the separate existents. And this is the truth, and the necessary existent is therefore one. For there is only this tripartite disjunction, two members of which are false, and therefore the third case, which necessitates the absolute uniqueness of the necessary existent, is the true one".⁵³⁶

Everything that has a genus or species is composite and thus caused. The meaning of 'the Necessary Existent' is 'being uncaused', so it cannot be composed. Only this necessitates the absolute uniqueness of 'the Necessary Existent.'

Due to the fact that Ibn Sīnā considers the division between essence and existence to be real, the nominal distinction between them implies composition. For Ibn Rushd this is unacceptable because nominal divisions do not necessitate divisions in existents as they are in themselves.⁵³⁷ The division between essence and existence is strictly a nominal one, whereas the meaning of 'composition' is 'what consists of matter and form.' Because of this Ibn Sīnā's division of the necessary existent from the possible existent does not lead to the denial of an eternal compound, but it only leads through the impossibility of an infinite regress to a necessary existence which has no efficient cause.⁵³⁸ In other words, someone can assume, based on Ibn Sīnā reasoning, that the totality of existence is uncaused, in the sense of not having the efficient cause, even though it is composed of matter and form. The Necessary Existent could be, therefore, the world itself, as long as it is the eternal compound. Ibn Sīnā's proof only shows the impossibility of an infinite regress to a necessary existence which has no efficient cause and not to an existent which has no cause at all. For Ibn Rushd, this reasoning has the same problem as Ash'arites: the fact that every temporal occurrence needs a cause does not lead to an eternal First Principle which is not composite, but only to a First Principle which is not temporal.⁵³⁹ The assumption that every compound of matter and form must have an external cause needs a real demonstrative proof, which must be based on the real

⁵³⁷ Tafsīr, LAM, t. 39, 1623. ⁵³⁸ Tahāfut al-Tahāfut, p. 261; 170. ⁵³⁹ *ibid*.

⁵³⁶ *ibid.*, p. 242-243; 156:

واجب الوجود إب كان اثنين فلا يخاو. أن تكون المغايرة التي بيهما بالعدد أو بالنوع أو بالتقديم والتأخر - وفي نسخة بالتقدم وألتأخر - فان كانت المغايرة التي بينهما - وفي نسخة بينها - بالعدد كانا متفقين بالنوع و إن كان التغاير بالنوع كانا متغقين بالجنس. و على هنين النوعين يلزم أن يكون واجب الوجود مركباً. و إن كان التغاير - وفي نسخة بدون عبارة بالنوع :انا متفقين. و إن كان التغاير - الذي بيهما بالتقديم والتأخر - وفي نسخة بالتقدم والتأخر - وجب أن يكون واجب الوجود واحدا و هو العلة لجميعها وهذا هو الصحيح. فواجب الوجود إذن واحد إذ - وفي نسخة إذا - لم يكن ههنا غير هذه الثلاثة الاقسم الذي يوجب انفراد الوجود بالوحدا نية - وفي نسخة وصح القسم الثالث.

Aristotelian starting point and method – which consists, as we are going to see, on principles grasped and developed through physical inquires.

It seems that within Ibn Sīnā's division between metaphysical and physical knowledge, as well as in his proof for God's existence Ibn Rushd saw *kalām* influence.⁵⁴⁰ It is Ash'arite theologians who divide knowledge into 'necessary' and 'reflective and state that the reflective knowledge must be based on the necessary knowledge, which has its origin in God's action of 'impressing' it into human minds.⁵⁴¹ This sort of knowledge includes self-evident logical truths and knowledge of our self-existence, through which we get to know the world around us.⁵⁴² This is indeed strikingly similar with Ibn Sīnā's starting point of metaphysics: that the meanings of 'existent', 'necessary' and 'thing' are impressed in the soul. For Ibn Rushd there is nothing 'impressed' in the soul; all knowledge represents abstraction from particulars, thus any sort of proving God's existence by the means of purely concept analysis is out of the question.

The other issue is Ibn Sīnā's analytical method that is based on the universal predication of notions 'necessary' and 'possible' to the things outside of the mind. Ibn Rushd is well aware that Ibn Sīnā intention is to provide "the superior proof to those given by the ancients, since he claimed it to be based on the essence of the existent" but as this approach is taken from the theologians, "who regarded the dichotomy of existence into possible and necessary as self-evident, and assumed that the possible needs an agent and that the world in its totality, as being possible, needs an agent of a necessary existence",⁵⁴³ thus for all the so far mention reasons this way simply cannot work. According to Ibn Rushd, Ibn Sīnā's theory represents the influence of the Mu'tazila school, who claimed that possibility in itself means non-existence, and that therefore the world as totality of everything that is caused deserves as well only non-existence. As we saw, this idea is indeed fundamental for Ibn Sīnā's proof.⁵⁴⁴

However, if we follow al-Ghzālī and convert the meaning of 'necessary' and 'possible' into 'what does not have a cause' and 'what has a cause' we will see that Ibn Sīnā's division of

543 Tahāfut al-Tahāfut, p. 230; 145.

⁵⁴⁰ *LC Physics*, II, t. 22.

⁵⁴¹ Marmura, Michael, *Ghazali's Attitude to the Secular Sciences and Logic,* in *Essays on Islamic Philosophy and Science,* ed. G.F. Hourani (Albany: Sate University of New York press, 1975, pp. 100-111), pp. 104-105.

⁵⁴² Marmura, Michael, *The Fortuna of the Posterior Analytics in Arabic Middle Ages*, in Knowledge and the sciences in medieval philosophy: Proceedings of the eighth International congress of Medieval Philosophy (S.I.E.P.M.), Helsinki 24-29 August 1987 (Vol. 1-3), Törinoja, Reijo, Inkeri Lehtinen, Anja, Follesdal, Dagfinn [Publ.]. - Helsinki (1990, pp. 85-103), p. 94.

⁵⁴⁴ Yet this is only the case from the perspective of the proof itself, as the doctrine of eternity of the world clearly points that possible being is not pure nothing, but the capacity for the real being. Possible is in itself nothing only in the sense of consideration of its absolute ontological dependence on the First Cause – if we would postulate non-existence of the Necessary Existent all being would be pure nothing, i.e. it would be no existence.

existence is not self-evident.⁵⁴⁵ And even though Ibn Sīnā's reasoning can prove that the efficient causal chain cannot go *ad infinitum*, there is no reason to prevent someone to uphold the belief that the world is an eternal compound of matter and form. Also, if we take under consideration Ibn Rushd's doctrine of substance, no being can be possible in itself and in the same time necessary by another – this is like saying that something is partly necessary and partly contingent – which according to Ibn Rushd can be true only for motion (and as we are going to see, only for the motion of the heavens):

"It is not possible that there should be something contingent by its essence but necessary on account of something else, because the same thing cannot have a contingent existence on account of its essence and receive a necessary existence from something else, unless it were possible for its nature to be completely reversed. But motion can be necessary by something else and contingent by itself, the reason being that its existence comes from something else, namely the mover; if motion is eternal, it must be so on account of an immovable mover, either by essence or by accident, so that motion possesses permanence on account of something else, but substance on account of itself. Therefore, there cannot be a substance contingent by itself but necessary by something else, but this is possible in the case of motion.⁵⁴⁶

Science, in order to fulfil this basis requirement, must be based on the fundamental Aristotelian division between substances and accidents, which always represents specific beings. Accident is an addition to a substance, it is something new, which when predicated add a new meaning to the description of a concrete existent. This is why Ibn Rushd sees that al-Ghazālī is at least partly right: when insisting that 'necessary' and 'possible' outside of the mind should be replaced with 'uncaused' and 'caused' – this is the only way such notions can have meanings. In this sense Ibn Sīnā's argument should be changed and modified: firstly the meaning of 'possible' as something that must have a cause is acknowledged; this implies that "if these causes again are possible it follows that they have causes and that there is an infinite regress; and if there is an infinite regress there is no cause, and the possible will exist without a cause, and this is impossible".⁵⁴⁷ Therefore, the series must end with the uncaused cause (or in the necessary cause), which is necessary by itself, and only in this sense can be called 'the

⁵⁴⁵ Tahāfut al-Tahāfut, p. 232; 147.

⁵⁴⁶ Tafsīr, LAM, t. 41, 1632:

واما ان يوجد شىء هو فى جوحره ممكن و هو من قبل غيره ضرورى الوجود فلا يمكن ذلك لان الشىء الواحد لا يمكن ان يمكن من قبل جُوحوره ممكن الوجود و يقبل من غيره الوجود الضرورى الا لو امكن فيه ان ينقلب طبعه واما الحر كة فيمكن فيها ان تكون واجبة من غيرها ممكنة منذاتها والسبب فى ذلك ان الوجود لها من غيرها و هو المحرك فان وجدت سرمدية فواجب ان يكون من قبل محرك لا يتحرك لا بالذات و لا بالعرض فالبقاء الحر كة من قبل غير ها واما للجوهر فمن قبل ذاته ولذلك لم يمكن ان يوجد جوهور ممكن من ذاته ضرورى من غيره وامكن ذلك فى الحركة.

necessary existent'.⁵⁴⁸ In this way the notion of 'possible' is not equivocal anymore, but has a precise meaning - 'what has a cause' can be divided into 'what is actualised by its cause' and 'what is not actualised.' Therefore, what is possible with respect to its essence and substance becomes necessary by action of its cause only when its possible nature has been changed into a necessary nature.⁵⁴⁹ Only in this sense we can speak of the necessary-possible relation outside of the mind, in which case no substance can be in the same time possible and necessary. In other word, when a thing has already come into existence by some cause, it has thereby changed its nature and lost the possibility which it had previously possessed,⁵⁵⁰ so what is actually established is not possible any more in the same sense, and what is possible is not actual by the law of excluded middle. In this sense Ibn Sīnā's idea that a being can be possible in itself while at the same time necessary through another goes against basic logical principles.

It is in fact Ibn Sīnā's desire to establish metaphysics as independent science that has the privilege of providing an ultimate proof for the existence of God that led him astray. For Ibn Rushd this whole approach is wrong because the only way to reach God is through his effect, i.e. the observation of the world. Every other approach, including Ibn Sīnā's, is essentially theological approach, hence non-demonstrative.⁵⁵¹ Therefore, first we need is to understand Aristotelian substance, as it is explained in the science of physics - in order to understand the substance we need to analyse it as something that is composed of form and matter as well as subject to generation and corruption. This is why Ibn Rushd constantly advocates throughout his works that the proof of the existence of God depends upon certain physical considerations.⁵⁵² This means that no metaphysical proof can be established other than which will be based on the cosmological proof from motion, i.e. that which will be based on the principles of philosophy of nature. This is so, Ibn Rushd confirms, because beings separated from matter can be demonstrated only in physics. These separate beings are subject and not goals of metaphysics.⁵⁵³ Metaphysics, on the other hand, deals with God's existence, as well as with other separable beings, in the sense of analysis of their dispositions.⁵⁵⁴ More so, Ibn

⁵⁴⁸ *ibid*.

⁵⁴⁹ Ibn Rushd, *Kitāb al-Kashf 'an manāhij al-adillah fi 'aqā 'id al-millah (Book Revealing the Methods of Proving the Tenets of Faith)*, in *Philosophie und Theologie von Averroes*, e.d. M. J. Müller, Munich, 1859, p. 39. Abb.: *al-Kashf.*

⁵⁵⁰ Wolfson, Harry A., *Averroes' Lost Treatise on the Prime Mover*, Hebrew Union College Annual Vol. 23, No. 1 (1950-1951, pp. 683-710), p. 701. Abb.: Wolfson, *Averroes on the Prime Mover*.

⁵⁵¹ Regarding the question to what degree and in which sense Avicenna's proof was influenced by theologians see Alper 2004, pp. 129-141.

⁵⁵² Wolfson, Averroes on the Prime Mover, p. 691.

⁵⁵³ *LC Physics*, I, t. 26, f. 59 BC; I, t. 83, f. 47FG.

⁵⁵⁴ *ibid.*, t. 26, f. 59 BC.

Rushd even invites those interested in this particular topic to investigate the works of al-Ghazāli in order to understand all difficulties within Ibn Sīnā's argument; "for many things which he [al-Ghazālī] write against others are true".⁵⁵⁵

2.1.3.2 The "proper" way

Besides al-Ghazālī's dialectics, that merely shows that something is wrong with Ibn Sīnā's account, the true Aristotelian demonstration offers the proper scientific response to the challenge set both by Ibn Sīnā and al-Ghazālī. This demonstration must be based on the foundations established in natural philosophy, not in metaphysics alone, because the proof for the existence of God can be established only on the notion of 'the first mover' taken from physics.⁵⁵⁶ Therefore, any sort of proof that does not take into account the facts of physics represents only persuasion and dialectics. Thus, Ibn Rushd's proof is not just inseparable from his ontology, but also from his philosophy of nature. For this reason, Ibn Rushd's proof is scattered throughout his works and is quite difficult to be precisely reconstructed.

Throughout his works Ibn Rushd favours two types of argument for God's existence; teleological and cosmological argument from motion. Teleological argument (or argument from providence, *dalīl al-'ināya*) is widely advocated by Ibn Rushd in *Kitāb al-Kashf*, although he also mentions the argument "from creation" (*dalīl al-ikhtirā*').⁵⁵⁷ However, when he expresses approval for the teleological argument the subject-matter is clearly not scientific. Instead, teleological argument represents the proper method of teaching and explaining the existence and unity of God to non-philosophers.⁵⁵⁸ Therefore, the teleological argument of Ibn Rushd is not demonstrative. Within Ibn Rushd's system this means that the argument is just convincing, or dialectical, and as such should be used by theologian while they are addressing the wider audience. This is the general place for the dialectical method within his scientific corpus. ⁵⁵⁹ The argument is, according to Ibn Rushd hermeneutics, used in Qur'an together with the simplify version of cosmological argument, ⁵⁶⁰ to which he refers as 'from creation.' Teleological argument is looking for the evidence that everything in the world is tuned perfectly for the needs of the human species and hence reveals providence and wisdom of

⁵⁵⁵ *ibid.*, VIII, t. 3, f. 340EF.

⁵⁵⁶ Epitome Met., I, p.24, a4.

⁵⁵⁷ al-Kashf, p. 43, 46.

⁵⁵⁸ Davidson, *Proofs for Eternity*, p. 229.

⁵⁵⁹ Ibn Rushd, *Faşl al-Maqāl*, *The Book of the Decisive Treatise* (English-Arabic text), transl. Charles E. Butterworth (Provo, Utah: Brigham Young University Press, 2001), pp. 40-43.

⁵⁶⁰ *al-Kashf*, p. 47.

Creator. The dialectical form of the argument is built on a claim that the clear evidence in the observable world is overwhelming - it is plain that everywhere we look we can see signs of balance and purposive behaviour. In any case, the teleological argument cannot be a real proof because it is established on incomplete induction. According to Ibn Rushd, there is always a problem with induction when this method is incomplete (when induction does not cover all cases of a species), which very often causes the flaw in kalām argument.⁵⁶¹ Therefore, in the case of proving God's existence by the way of induction, it can never be complete because it has to take into account the totality of all existents.

Although these arguments do not represent the proper proof, or the demonstration for God's existence, they do represent simplify versions of procedures that philosophers are using in their scientific inquiry. These two methods, philosophical and Qur'anic, differ only in degree and detailing;⁵⁶² while Qur'anic way is adjusted to every human being and offers sufficient basis for belief, philosophical method is reserved only for those who seek absolute certainty. Teleological argument represents theological and natural method of explaining the acknowledgement of the absolute.⁵⁶³ However, there is another use of teleological argument, as we are going to see; the argument also stands at the end of Ibn Rushd's cosmological proof as the conclusion of his proof from motion. In this sense, when we talk about teleological argument in Ibn Rushd, we should distinct the argument that is independent of philosophical demonstration. The former is the teleological argument in the real independent sense, while the latter is the part of Ibn Rushd's proof from motion.

The way for proving God's existence, according to Ibn Rushd, starts with the proper interpretation of Aristotelian substance. For Ibn Rushd this means that existence and substance are one. Substance is the principle of the real existence⁵⁶⁴ - it is identical with its actual reality. Substance is further divided into sensible and intelligible. Substance is what always subsists by itself, but sensible substance cannot be devoid of its accidents like intelligible substance.⁵⁶⁵ In this sense only substance exists absolutely, it has existence essentially, not accidentally, and everything else exist through substance.⁵⁶⁶

⁵⁶⁴ Tafsīr, LAM, 1401.

⁵⁶¹ Ibn Rushd, *Middle Commentary on Aristotle's Prior Analytics*, in Averrois Cordumensis Epitome in Libros Logicae Aristotelis Abramode Balmes Interprete, Venice (1574), AaAc, vol I, 2b and 3, fo. 50M.

⁵⁶² *al-Kashf*, p. 48.

⁵⁶³ *ibid.*, pp. 45-46.

⁵⁶⁵ *Ibid.*, t. 25, 1533-1534.

⁵⁶⁶ Tahāfut al- Tahāfut, p.250; 162; Tafsīr, LAM, 3, 1414.

At this point it is important to remember that from epistemological point of view sensible substances are prior in knowledge; they are something that is primary recognised as substance from which form is grasped as a result of scientific inquiry.⁵⁶⁷ Sensible substance represents a particular existent which is the ultimate foundation of the entire realm of the existence. First things that we witness are observable substances which represents natures that act, move and change, and in order to understand eternal and unmovable principles we have to start from observable existing beings that are compound of matter and forms. These individual substances are the basis of all knowledge, it is them that we seek to categorise and define, and when we define an existing thing we define it as something that has matter as well as form.⁵⁶⁸ Still, although a compound, substance exists primarily because of the form, and through it we are able to perceive and know matter.⁵⁶⁹ Form gives purpose to matter, hence acts as its final cause and due to this it is the principle of the sensible substance and its ultimate cause on which sensible substance depends. While form represents an active principle of a substance, matter is its passive or 'receptive' principle. This makes notions of 'actuality' and 'potentiality' fundamental for explaining the world and its ultimate cause.

The phenomenon of change must be studied in its relation to substance. This realisation is the fundamental starting point of scientific thinking. To understand the world means to investigate the reality of change in order to find out what is beyond change. As we saw, following Aristotle's *Metaphysics* 1069b32 Ibn Rushd explains that in order to be change, there must be something that changes, something into which it changes, and something because of which thing changes. The first is matter, the second is form and the latter is the cause.⁵⁷⁰ This needs to be understood before the proof is established.

Ibn Rushd's proof goes from the analysis of the creation from which God's existence is deduced. In order to provide the proper proof, it is necessary to show that the world is eternal. But this proof is based on the proof of the eternity of motion, which is according to Aristotle's definition "the actuality of the movable as such"⁵⁷¹ - hence the whole proof for God's existence must be based on truths established in physics prior to any metaphysical inquiry. Interestingly, this is not the case with later Ibn Rushd only, but in his earlier works (where he even upholds the theory of emanation) he defends the doctrine that the proof for God's

⁵⁶⁷ Tafsīr, ZAY, t. 1, 761.

⁵⁶⁸ *Ibid.*, t. 14, 800.

⁵⁶⁹ Tafsīr, LAM, t. 14, 1475.

⁵⁷⁰ *Ibid.*, t. 12, 1454.

⁵⁷¹ *Physics*, III, 1, 201a10; VIII, 1, 251a8.

existence cannot be a goal of metaphysics.⁵⁷² As Ibn Rushd wants to show, in contrast to Ibn Sīnā, that natural philosophy, rather than metaphysics, proves God's existence,⁵⁷³ he has to base it on his understanding of the physical reality.

The next thing is the understanding of motion. For Aristotle motion is eternal, "there was not, nor ever will be a time when there was not, or when there will not be, motion",⁵⁷⁴ and if motion cannot have beginning nor end, it is not possible that all existents are generated from non-existence; "for motion cannot be conceived as having originated in time after nothing at all was moved, nor that it will be destroyed so that nothing at all should remain in motion".⁵⁷⁵ Similarly to Aristotle, Ibn Rushd's *Long Commentary on Physics* offers within the book VIII two proofs of eternal motion: the proof from time, in the chapter 1 and the proof from what moves itself, chapters 3-6. In any case, Ibn Rushd considers his contribution to be merely an explanation of Aristotle's doctrine, which already provided all proofs that motion is eternal.⁵⁷⁶

The proof for the eternity of motion in Ibn Rushd is based on Aristotle's *Physics* VIII: every motion is preceded by previous motion, which is the foundational argument for the thesis on the eternity of the world. Ibn Rushd focuses on proving the eternity of motion in place, which must be prior to the motion of coming into existence. In fact, whole existence depends on motion in place.⁵⁷⁷ It is clear that, if 'to exist' primarily means 'to exist as substance,' existence depends on change, or on the process of generation from potentiality into the perfection of actual being. This implies that in order for existence to be maintained, there must always be a prior motion and therefore motion cannot have temporal beginning - something capable of undergoing motion must exist eternally. The eternity of motion is also implied by the nature of time:

"from the fact that time is continuous, eternal and one, it follows necessarily that motion is also eternal, continuous and one, either because time and motion are one and the same thing, or because it is one of the attributes of motion and one of its effects. For it is impossible to imagine time without motion".⁵⁷⁸

⁵⁷² Epit. Physics, 2, p. 26.

⁵⁷³ Bertolacci, Avicenna and Averroes on the proof of God, p. 85.

⁵⁷⁴ *Physics*, VIII, 1, 251b - 252b.

⁵⁷⁵ Tafsīr, t. 29, 1560.

⁵⁷⁶ LC Physics, VIII, 4, t. 27, f. 364F; Tafsīr, LAM, t. 29, 1561.

⁵⁷⁷ Davidson, *Proofs for Eternity*, p. 21.

⁵⁷⁸ Tafsīr, LAM, t. 29, 1561:

ويلزم من كون الزمن متصلا وازليا و واحدا ان تكون ايضا الحركة الازلية متصلة وواحدة وذلك انه اما من يكون الزمن والحركة شيءا ّواحدا بعينه واما ان يكون عارضا من عوارض الحركة وانفعالا من انفعالاتها و ذلك انه ليس يمكن ان يتوهم زمن ما لم يتوهم الحركة.

Time has to be continuous, eternal and one, as it is showed by Aristotle; every 'before' time is also time. The term 'before' is signifying priority in time, so there cannot be anything before time - therefore time cannot have the beginning. Every motion is happening in time, and there is no time without motion – this also means that whatever undergoes motion must also be eternal.⁵⁷⁹

For understanding Ibn Rushd's we also have to keep in mind three fundamental principles of Aristotle's *Physics*: 1) everything that is moved must be divisible,⁵⁸⁰ 2) everything that is moved must be moved by something,⁵⁸¹ and before any motion there must have been a previous motion or change.⁵⁸² The eternal motion must be moved by eternal mover, and the series of essential (or real) movers cannot go *ad infinitum*; as Aristotle showed, the true cause of the causal chain is the first cause, without which the series would not exist. For Ibn Rushd, this is so only if we consider real, or genuine causation, not accidental causation.⁵⁸³ Only the essential causal series lead to an eternal first cause. Causal regress can be also accidental and circular, as many kind of motion within the world of generation and corruption; however, in essential causal chain there must be the First Mover.⁵⁸⁴

As the world consists of substances that are real beings, if all substances are subject to generation and corruption, then all existence is subject to generation and corruption. In this case a serious of problems would arise; all existence would have its origin from non-existence, motion and time would have a beginning and all this is already proven as impossible according to Aristotelian doctrine. Obviously, if motion cannot have a beginning nor and end, it is not possible that all existents are generated. This implies that not all substances are subject to generation and corruption. Because motion is eternal and every particular motion is caused by a mover, it is necessary that the totality of motion is caused by a mover that is not set in motion, but represents the pure actuality.⁵⁸⁵

Clearly, this First Unmoved Mover cannot subsist in matter, but has to be something that subsists by itself⁵⁸⁶ and by being unmoved is also uncaused, and therefore it cannot be a body,

⁵⁷⁹ *Physics* VIII, I, 251b; *LC Physics*. VIII, 10. This argument was also accepted by Ibn Sīnā, and further developed as well as used to support the claim that the world is eternal. However, as has been shown, this reasoning is not de facto relevant for his proof for God's existence.

⁵⁸⁰ *Physics* VI, 4.

⁵⁸¹ *Ibid.*, VII, 1.

⁵⁸² *Ibid.*, VIII, 1.

⁵⁸³ Davidson, *Proofs for Eternity*, p. 123.

⁵⁸⁴ Tahāfut al-Tahāfut, IV, p. 224.

⁵⁸⁵ Tafsīr, LAM, t. 30, 1565.

⁵⁸⁶ *LC Physics*, VIII, 10, t. 78, f. 4231.

divisible, and cannot have part.⁵⁸⁷ With this, Aristotle's doctrine as formulated in *Metaphysics* is explained:

"It is clear from what has been said is that there is a substance which is eternal, immovable and separate from sensible things. It has been explained that this substance cannot have any magnitude at all; on the contrary it has neither parts, nor divisions because it moves eternally and no finite thing can have an infinite power".⁵⁸⁸

In his *Long Commentary on Physics* Ibn Rushd's proof is based on two presuppositions that are proven in other parts of the book as well as in his other works: 1) every motion has a mover and 2) there must be a first mover which is moved by itself.⁵⁸⁹ The fact of motion and the nature of substances that are moving indicate that there must be an ultimate mover. Entire science of physics points to this conclusion. But, as Twetten showed, the fact that the chain of essential movers and moved things cannot go ad infinitum does not lead Ibn Rushd immediately towards the conclusion that there is a first unmoved mover, but a first thing moved by itself: "the series end in a mover within a self-moving whole instead of in something completely separate".⁵⁹⁰ Everything that is moved by another is necessarily moved by a moved mover that represents a first thing moved by itself; if there cannot be an infinite regress of moved movers, then there must be a first thing moved only by itself.⁵⁹¹ But if we take under the consideration that things that are in local motion terminate with the first moved mover, then it follows that this mover is eternally moving and that whatever is moved by it is also moved eternally. The first mover could not start its action at some temporal point, otherwise another motion would have preceded it ad infinitum, hence there would be no first mover. However, this first moved thing, although eternal, must be composite by the fact that it is moved, thus there must be a composite self-mover,⁵⁹² and whatever is composite and moved must have a mover distinct from itself.⁵⁹³ It follows that 'above' everything that is in motion must be the First Unmoved Mover. This Unmoved Mover is the infinitely powerful cause of eternal motion which moves the body of the world without being in matter⁵⁹⁴ and as such represents the pure actuality, i.e. pure form, that is moving everything that exist through

⁵⁸⁷ Tafsīr, LAM, t. 41, 1627.

⁵⁸⁸ *Metaphysics*, Λ, 1073a.

⁵⁸⁹ LC Physics, VII, 1, t. 1, f. 306B; t. 9, f. 311L; VIII, 4, t. 27, f. 364G; t. 33, f. 372F.

⁵⁹⁰ Twetten, David B., *Averroes on the Prime Mover Proved in the "Physics"*, Viator 26 (1995, p.107-135), p. 115. Abb.: Twetten, *Averroes on the Prime Mover*.

⁵⁹¹ *LC Physics*, 2, t. 19, f. 354G.

⁵⁹² *Ibid.*, 6, t. 45, f. 385H.

⁵⁹³ *Ibid.*, 4, t. 34, f. 373A.

⁵⁹⁴ Ibid., 10, t. 79, f. 427AB.

the first moved mover (i.e. the world of celestial bodies) as the immaterial prime mover.⁵⁹⁵ This conclusion from Ibn Rushd's *Long Commentary on Physics* is also confirmed in his most important metaphysical treatise:

"Aristotle basis his argument on two premises: firstly, that every potentiality in matter is finite, and secondly that the infinite act does not come from finite potentiality. The necessary conclusion of that is that the mover which imparts an infinite motion is a power which is not in matter. He sets out to prove these two premises in the eighth book of Physics".⁵⁹⁶

This means that the relationship between the first mover and the world of generation and corruption requires a sort of 'mediator.' This mediator is found by Ibn Rushd in the world of celestial bodies, or supra-lunar world, which 'the first thing moved by itself.' This idea is obviously influenced by Aristotle's *De Caelo* II. These celestial bodies are in a state of such motion that they cannot corrupt⁵⁹⁷ while they are moved by the First Cause, not directly, but through desire within them. In fact, the celestial bodies are moved by themselves willingly⁵⁹⁸ and they are eternal by their local movement that is coming from the eternal final cause which they obey.⁵⁹⁹ As such, celestial bodies are pure reasons and can be considered as souls only ambiguously.⁶⁰⁰ This truth about supra-lunar world is empirically evident for Ibn Rushd, as we can observe that heavenly bodies move in a simple natural movement, and from this we can deduce their natures.⁶⁰¹ In accordance with Ibn Rushd's Aristotelianism, this is the only way for the First to impart motion without being moved.⁶⁰²

This idea represents Ibn Rushd's response to the problem of the relationship between eternal and perishable, which also implies another critique of Ibn Sīnā; it is evident that the observable world is constantly changing and yet the principle of motion must be eternal. This difficulty can be solved only by the fact established in the physical science: it is the celestial body which is the cause of generation and corruption and this body, athough eternal, is in a state of some sort of change, that is the change of position that occur in its parts.⁶⁰³ If we

⁵⁹⁵ *Ibid.*, 10, t. 78, f. 424IK.

⁵⁹⁶ Tafsīr, LAM, t. 41, 1634:

وارسطو يتمسك فى هذا بمقدمتين احد اهما ان كل قوة فى هيولى فهى متناهية و الشانية ان الفعل الغير متناه ليس يكون عن قوة متناهية فيلزّم عنها ان المحرك الحركة الغير متناهية هى قوة ليست فى هيولى و هو يتكلف بيان هاتين المقدمتين فى الثامنة من السماع. ⁵⁹⁷ Tafsīr, LAM, t. 41, 1631.

⁵⁹⁸ LC Physics, VIII, 2, t. 17, f. 353H.

⁵⁹⁹ Tafsīr, LAM, t. 41, 1633.

⁶⁰⁰ Endress, Gerhard, Averroes' De Caelo, Ibn Rushd's Cosmology in his Commentaries on Aristotle's On the Heavens, Arabic Science and Philosophy, 5 (1995, pp. 9-49), p. 30. Abb.: Endress, Averroes' De Caelo.

⁶⁰¹ Cerami *Averroes' Natural Philosophy*, pp. 195-196.

⁶⁰² *Tafsīr*, LAM, t. 36, 1592; *Metaphysics*, Λ, 1072a.

⁶⁰³ Wolfson, Averroes on the Prime Mover, p. 689.

consider passing into existence (i.e. passing from potentiality into actuality) from Ibn Rushd's standpoint, the act of the efficient cause is not needed any more after the existent is established - the efficient cause is needed only for the transition from the state of potency into the state of actuality, as actual being no longer depends on its cause. In this sense if God would be exclusively the efficient cause, his effect would not need his action after becoming existent; hence Divine action would be finite. But no finite action can be ascribed to eternal being, because eternal being must exist forever in the same state of its absolute perfection and cannot be active at one time and not active at another - therefore, the First cannot be the efficient cause, ⁶⁰⁴ but only the final cause, or the ultimate form of all existence.

Therefore, all generation and corruption and all change had to be referred ultimately to the heavenly spheres and through them to God. In his way, through eternal motion as well as by eternity of matter, all beings derive their existence ultimately from God through the system of intelligent living heavenly bodies. Only for the motion of these celestial bodies we can use Ibn Sīnā's notion of 'possible in itself while necessary by another' because:

"...motion can be necessary by something else and contingent by itself, the reason being that its existence comes from something else, namely the mover; if motion is eternal, it must be so on account of an immovable mover, either by essence or by accident, so that motion possesses permanence on account of something else, but substance on account of itself. Therefore, there cannot be a substance contingent by itself but necessary by something else, but this is possible in the case of motion. Every moving power which is in a body is necessarily moved by accident and everything moved by accident and imparting motion by itself can come to a standastill by itself and be moved by something else. If there is a power in a body which can never cease to impart motion, it will necessarily be moved by a mover in which there is no potentiality at all, either by essence or by accident. This is the state of the celestial body".⁶⁰⁵

The First, as being the uncaused cause, must be simple, one, unique and absolute actuality. He cannot be composed in any way, cannot be a body and cannot be linked to matter in any way except through the mediation of the celestial spheres. In short, on the basis of the principles established in Aristotle's *Physics* VIII and *De Anima*, the First mover is realised as immaterial and separate form that as such represents intellect which affects celestial bodies that set in

⁶⁰⁴ *Ibid.*, p. 702.

⁶⁰⁵ Tafsīr, LAM, t. 41, 1632:

الحركة فيمكن فيها ان تكون واجبة من غير ها ممكنة من ذاتها و السبب في ذلك ان الوجود لها من غير ها و هو المحرك فان وجدت سر مدية فواجب ان يكون من قبل محرك لا يتحرك لا بالذات و لا بالعرض فالبقاء الحركة من قبل غير ها واما الجو هر فمن قبل ذاته ولذلك لم يمكن ان يوجد جو هر ممكن من ذاته ضرورى من غيره و امكن ذلك في الحركة فكل قوة محركة هي في جسم فهي ضرورة متحركة بالعرض و كل متحرك بالعرض محرك بالذات فهو ممكن السكون من ذاته متحرك من غيره فان كانت هاهنا قوة في جسم فهي ضرورة متحركة بالعرض و كل متحرك بالعرض فهي ضرورة متحركة عن محرك ليس فيه قوة اصلا لا بالذات و لا بالعرض و هذه هي على حس ليم يمكن فيها ان تقف عن التحريك

motion the sublunary world of generation and corruption. With this, the essential attribute of God is deduced: "this mover is an intellect and it is a mover insofar as it is the agent of motion and the end of motion"⁶⁰⁶ that moves all being only as perfection.⁶⁰⁷ In Aristotle's system intellect implies life⁶⁰⁸ and as someone who is intellect by his essence, God's life and knowledge are his "most distinctive attributes".⁶⁰⁹ As both living and eternal, He is the most perfect being.

In order to 'save' God from any sort of composition, Ibn Rushd advocates the equivocity of meanings that stand for God's attributes: "one must understand that what we have said about Him, namely that He is living and that He possesses life is one single concept with regard to the subject, but two with the regard to the point of view..."⁶¹⁰ and when we say that God is "living, eternal and most perfect," these are just meanings implied in the concept of 'God',⁶¹¹ because "...it is a condition of the First Agent that it should not receive an attribute, because reception indicates matter...".⁶¹² Therefore, all attributes of God are just names, distinctions that we make in our minds. The same goes for the distinction between being an efficient and final cause, which does not exist in the First Mover; "it exists only in us - we are moved by the soul as efficient cause and moved by something outside of the soul as final cause of motion".⁶¹³ Because in God all attributes are one, including being the final and the efficient cause, he is the unique being, like no other, and as such transcends all entities.⁶¹⁴ Therefore, when talks about God being primarily the ultimate final cause, while denying its role in efficient causation, Ibn Rushd clearly has in mind the priority in our understanding.

To sum up, Ibn Rushd's doctrine maintains that God, as the mover of the first sphere, or as the mover of 'the first thing moved,' acts as the final cause of motion and through this action he causes the existence of all things as the ultimate efficient cause. Principles established in natural sciences indicate that every moving object has a cause sustaining it in motion as well as that the series of such causes cannot regress indefinitely. This implies that the totality of motion must be sustained by the first cause which is unmoved. This first cause, however, is

⁶⁰⁶ Tafsīr, LAM, t. 36, 1594.

⁶⁰⁷ *Ibid.*, t. 24, 1529.

⁶⁰⁸ *Metaphysics*, Λ, 1072b.

⁶⁰⁹ Tafsīr, LAM, t. 39, 1620.

⁶¹⁰ *Ibid.*, t. 39, 1620.

⁶¹¹ Ibid., t. 39, 1624.

⁶¹² Tahāfut al-Tahāfut, p. 270; 176.

⁶¹³ Tafsīr, LAM, t. 36, 1594.

⁶¹⁴ Taylor, Richard C., Averroes' Philosophical Conception of Separate Intellect and God, in La Lumière de l'intellect. La Pensée Scientifque et Philosophique d'Averroès dans Son Temps. ed. Ahmad Hasnawi (Leuven: Peeters Publishers, 2011, pp. 391-404), p. 391. Abb.: Taylor, Averroes' Philosophical Conception of Separate Intellect and God.

not prior to its effect in the temporal sense, instead it has ontological priority – it sustains the motion and with it the existence of its effect as long as it acts as mover. If we take into account that for Ibn Rushd motion is the cause of existence, the cause of motion is the efficient cause, or agent. This fundamentally departs from Ibn Sīnā's view. As we saw, for Ibn Sīnā the real meaning of 'efficient causality' is 'that which bestows existence' and motion does not belong into this metaphysical category. According to Ibn Rushd, such division is unacceptable, because only by the means of motion we can understand existence, otherwise 'existence' is just the most general notion of the mind. In this sense, Ibn Rushd's proof does not represent only the proof for the ultimate cause of motion, but for the ultimate efficient cause of existence. This ultimate cause of motion is not the efficient cause in the real sense, otherwise it would be affected by the motion it 'creates,' but the final cause that acts in such specific way that, when considered in the mind, it is comprehended as something that has two identities: the identity of the final cause and the identity of the efficient cause. However, Ibn Rushd is well aware that proving the existence of the ultimate cause of motion is not sufficient to establish that such entity is God. For this reason it must also be proven that the First is incorporeal, that it is the unity, as well as the fact that this entity is aware of itself, i.e. that it is alive and intellectual. This reasoning is analytical, but not in the same sense as Ibn Sīnā's - in order to provide the proper and complete demonstration for God's existence, according to Ibn Rushd, one has to show that the eternal first mover is incorporeal, one and intellectual from the perspective of the empirical phenomenon of motion. The entire reasoning of Ibn Rushd closely follows Aristotle, who might be considered the originator of the proof from motion, but who also provided some basic deductive inquire into Divine attributes on the basis of his proof. Aristotle is the first who reasoned that since no corporeal object could contain power sufficient to sustain eternal motion, the First Unmoved Mover cannot be a corporeal.⁶¹⁵ The fact that the First cannot be corporeal further implies that it cannot have matter, and hence must be one number.⁶¹⁶

In this way the only adequate proof of the existence of God for Ibn Rushd is Aristotle's proof from motion as set in *Physics*. This is the only proof that "meets the standards of serious philosophers".⁶¹⁷ Because of this I believe that Davidson is right when states that for Ibn Rushd "the precise, philosophic formulation of the cosmological argument would be nothing other than Aristotle's proof from motion" and that

⁶¹⁵ Physics, VIII, 10.

⁶¹⁶ Metaphysics, XII, 8, 1074a.

⁶¹⁷ Davidson, *Proofs for Eternity*, p. 230.

"what he means when referring to a philosophic formulation of the scriptural teleological argument is evidently to be taken in the same vein. He must be permitting himself a certain liberty; and his meaning must be that in a loose sense the proof from motion subsumes the teleological argument, and the latter can be thought of as a popular version of the former".⁶¹⁸

In short, there is only one way to prove God's existence in Ibn Rushd, and that is through natural sciences that rest of Aristotle's conception of motion as it is explained in science of physics. Everything else is just a sort of addition for various purposes, which must not contradict the doctrine established by the scientific demonstration.

2.2 Relationship between God and the World

2.2.1 The idea of emanation

Ibn Sīnā's explanation of the relation between God and the world is based on his notion of 'existence' and the idea of efficient causality as it is explained in metaphysics. There are several principles involved in the explanation: 1) from one only one proceed, i.e. one cause has only one immediate effect 2) cause is ontologically prior to the effect, not temporally prior to it, i.e. if the cause is finite in time, the effect is finite in time; and if cause is eternal, the effect is eternal, 3) effect's existence depends on the existence of the cause, but not *vice versa* - if the cause cease to exist, the effect will cease to exist, but if the effect cease to exist, that does not necessarily mean that the cause ceased to exist, but it might be interrupted and prevented to produce its effect.

After the proof for God's existence is established, the main goal of metaphysics is fulfilled. The next phase is to explain the world in the most general way by the means of this new 'discovery.' This is an important task for a metaphysician, as Ibn Sīnā explains, because in order to understand the world one must investigate the First Cause "from which emanates every caused existent inasmuch as it is a caused existent, not only inasmuch as it is an existent in motion or [only inasmuch as it is] quantified"⁶¹⁹ but inasmuch as it is existent. Only God is self-existent. Everything other than God is the effect of God, directly or indirectly and is as such contingent, i.e. possible in itself while necessary through its cause. What Ibn Sīnā calls

⁶¹⁸ Ibid.

⁶¹⁹ al-Ilāhiyyāt, I, 2, (16).

'the world' is thus the totality of all contingent beings. This means that it is possible to consider non-existence of the world without contradiction. The existence of the world is completely determined by the First. To be determined by something eternal means that the world also must be eternal; "...temporal coming into existence must be due to the temporal coming into existence of the cause, and [this must occur simultaneously] with it...⁹⁶²⁰ Because there is no point at which an eternal agent does not act, the eternal cause and its effect must temporally coexist. God is the ultimate essential efficient cause of all existence and if He would be temporally prior to the existence of the world, He would not be a true agent nor the world would be a genuine act.⁶²¹ God is therefore both necessary and sufficient for the existence of the world, He is the unique cause of the world and the existence of the world is entirely dependent upon this cause.⁶²²

The relationship between God as 'the Necessary Existent' and the world is the relationship between cause and the effect in the absolute sense. This means that all above mentioned principles must be applied to this relationship absolutely. So the first and the most important problem is how the plurality of the world proceeds from Divine unity and uniqueness? Ibn Sīnā's solution to the problem is, as it was for al-Fārābī before him, the theory of emanation (*şudūr*). Both al-Fārābī and Ibn Sīnā were under the influence of Arabic Plotinus, although it is still questionable whether or not they were aware of this, or they simply subscribed this works to Aristotle. Doctrine of emanation, according to Plotinus, describes the procession of all things from the One; this procession is not a procession in time, but it is the ontological order of existence. In any case, although the theory of emanation has Neoplatonic origin, in Islamic philosophy it is based on the Aristotelian notion that God is self-thinking intellect.⁶²³

The most detail explanation of the emanation theory is in Ibn Sīnā *al-llāhiyyāt*, book VIII and IX. Once again, the first thing that one should take under consideration when inquiring into Divine's act is that He is the First, who as such, has no genus, no quiddity, no quality, no quantity, no 'where,' no 'when,' no equal, no partner, no contrary-may, and no similar, is not subject to definition and demonstration – i.e. that He is one (or oneness) in all respect.⁶²⁴ Thus, in order to understand the world one has to grasp that "the principle of the whole is an essence necessary in its existence, and what proceeds from the Necessary Existent is

⁶²⁰ *ibid.*, IX, 1, (5).

⁶²¹ Kogan, *Metaphysics of Causation*, p. 55.

⁶²² *Ibid.*, p. 56.

⁶²³ Belo, *Chance and Determinism*, p. 97.

⁶²⁴ al-Ilāhiyyāt, VIII, 4, (14); IX, 1, (1).

necessary; otherwise, [the Necessary Existent] would have a state which did not [previously] exist and, hence, would be necessary in all His aspects."⁶²⁵

As we saw, one of the most important parts of the proof for God's existence is to show that He is an intellectual being. This does not only imply that God is living, hence the object of worship, but also that His primary and sole act is the act of comprehension. In order to remain in His perfection, God's only object of knowledge is himself. Up to this point it seems that Ibn Sīnā is the faithful follower of Aristotle. But things are about to change, because, as we saw, God is the ultimate efficient cause, thus the bestower of existence in the absolute sense and His act of bestowing existence must be through His only appropriate action: self-comprehension.

It is important to underline once more that the notion of 'intellect' and 'comprehension' here have an equivocal meaning: God is intellect in the sense that He is not in a subject at all, nor connected with matter and the unique entity, so the notion of 'intellect' is among those that describe Him the best: He is intellect in the sense "that in Him there is no variety of forms arranged and differing, such as there is in the [human] soul, in the sense previously [discussed] in the *Psychology*".⁶²⁶ As such God

"intellectually apprehends things all at once, without being rendered multiple by them in His substance, or their becoming conceived in their forms in the reality of His essence. Rather, their forms emanate from Him as intelligibles. He is more worthy to be an intellect than the forms that emanate from His intellectuality. Because He intellectually apprehends His essence, and that He is the principle of all things, He apprehends [by] His essence all things.⁶²⁷

God bestows existence by the manner of knowing Himself as the eternal and perfect agent⁶²⁸ and because His knowledge represents the absolute reality and pure existence, everything that *is* emanates from Him necessarily. This is so because God's apprehension of Himself as the eternal First Cause necessitates the apprehension of everything that is possible, i.e. of everything that can proceed from His existence⁶²⁹ and because that knowledge is the Reality, all things are becoming real. This is important in order to understand in what sense Ibn Sīnā claims that God does not know particulars and that His knowledge is only universal; He does

⁶²⁵ *ibid.*, IX, 1, (11).

⁶²⁶ ibid., VIII, 7, (1).

⁶²⁷ Ibid.:

فهو لذلك يعقل الأشياء دفعة واحدة من غير أن يتكثر بها في جوهره، أو تتصور في حقيقة ذاته بصورها، بل تفيض عنه صورها معقولة، وهو أولى بأن يكون عقلا من تلك الصور الفائضة عن عقليته، ولأنه يعقل ذاته، وأنه مبدأ كل شيء، فيعقل من ذاته كل شيء. ⁶²⁸ ibid., VIII, 7, (2).

⁶²⁹ *ibid.*, (5).

not know particulars in the sense that they are something that have existence in external reality⁶³⁰ - this is so because in fact there is no external reality of God, His knowledge is all reality.

This is also the reason why the term 'creation' $(ibd\bar{a})$ - although acceptable for Ibn Sīnā after certain divisions are explained and the eternity of the world established - should be replaced with 'emanation' (*sudūr*). This term more adequately denotes Divine act that consists in His intellectual apprehension of His Divine essence which results in creation of all intelligibles. Among them, there is one intelligible that has the First as its principle without an intermediary, hence from one only one proceeds - this is the first emanation, or the first contingent existent, that is prior to all other creation, which can be classified as prior and posterior in accordance with the order of the causal chain of existence.⁶³¹ The first thing created is a contingent intelligence, in connection to which the emanative creation begins and which comprehends itself as both the effect and the cause. Further on, comprehension of itself as something contingent, i.e. that it is something only possible in itself and necessary through another.⁶³² In this way the world emanates eternally from God as a consequence of His self-knowledge, in a hierarchical chain of causes and effects, primarily in the hierarchical chain of the ten intelligences.

Ibn Sīnā's conception of existence as being either possible in itself but necessary through another, or of being necessary in itself, is crucial for the explanation of the emanative process. This explanation has triadic form: God, as the Necessary Existent is engaged in an eternal act of self-knowledge which results in the emanation of the first intellect. This intellect, as Marmura puts it, then contemplates (a) God as the existent necessary in Himself, (b) his own existence: as necessitated by God, and (c) his own existence as in itself only possible; "these three contemplative acts produce, respectively, three existents: another intellect, a soul, and a sphere; this contemplative activity is repeated by the successive intellects, resulting in the celestial triads that terminate with the active intellect from which the terrestrial world emanates".⁶³³ These successive intellects affect the movements of the spheres which influence events on sublunary world - in this way the souls of the spheres know what happened and will

⁶³⁰ *ibid*.

⁶³¹ *ibid.*, (6).

 ⁶³² Janssens, Jules L., *Creation and Emanation in Ibn Sina*, Documenti e Studi sulla Tradizione Filosofica Medievale 8 (Florence, 1997, pp. 455-477), p. 455. Abb.: Janssens, *Creation and Emanation in Ibn Sina*.
 ⁶³³ Marmura, *Avicenna's Proof from Contingency*, p. 23.

happen on the world of generation and corruption.⁶³⁴ This is how the distinction between essence and existence stands in the foundation of both Ibn Sīnā's proof of God's existence and his argument for the manner in which the world emanates from Him.⁶³⁵ Therefore, from the Necessary Existent emanates the First Intelligence alone, since from a single, absolutely simple entity, only one thing can proceed. Hence there are several separate intellects, but they do not originate from the First directly, instead each of them follows from the previous one in succession and below each intellect there is a sphere with its own matter and form; which means that these successive intellects possess their own body and soul.⁶³⁶

The nature of the first emanated intelligence no longer remains absolutely simple because it is not necessary by itself; in itself it is possible and its possibility is actualised by God.⁶³⁷ This is why after the first intelligence is created, it causes plurality of the world; from the absolute oneness of God only one proceeds, but this one existent is not necessary in itself, but contingent and this contingency eventually results in plurality. Plurality exists because intellects subsequent to the First Cause have plural thoughts;⁶³⁸ the first emanated intellect, by contemplating the First Cause, gives rise to an intellect below itself - it produces a soul as a concomitant and a form of the sphere. According to Ibn Sīnā there are several separate intellects, but they do not originate from the First Divine intellect directly, rather each of them follow from the previous one in succession, and below each intellect there is a sphere with its own matter and form. To account for the existence of these successive intellects with their own body and soul, Ibn Sīnā puts forth the emanation theory. The cause of this process is selfreflective thought on the part of each intellect. When the first emanation becomes aware of its own intrinsic possibility it causes corporeality; it becomes aware that it only exists through a cause. In this way all emanated intellects are aware of their contingency, or 'possibility',639 which allows emanation to proceed. This is the main specification of Ibn Sīnā's version of the theory of emanation: notions of 'necessary' and 'possible' (or necessity and contingency) here have crucial role in the explanation of the origin of matter. As Catarina Belo summarise it, after the first creation becomes aware of its contingency, it becomes aware of its being an effect rather than cause, i.e. it becomes aware of its passivity which transforms into

 ⁶³⁴ Gutas, Dimitri, Intellect Without Limits: the Absence of Mysticism in Avicenna, in Intellect et imagination dans la philosophie, ed. Maria Candida Pacheco and Jose Francisco Meirinhos (Brepols, 2006), p. 362.
 ⁶³⁵ Ibid.

⁶³⁶ Belo, Chance and Determinism, p. 98.

⁶³⁷ Nabi, Mohammad Noor, *Theory of Emanation in the Philosophical System of Plotinus and Ibn Sina*, Islamic Culture, 54, July, 1982,

⁶³⁸ Davidson, Alfarabi, Avicenna and Averroes, on Intellect, p. 75.

⁶³⁹ Belo, Chance and Determinism, p. 99.

materiality that manifests itself in the emergence of the intellect's body - its sphere. Therefore,

"the 'matter' which is to be found in the celestial realm is a result of passivity and potentiality, rather than created separately as an individual and autonomous entity; as such it results from wholly intelligible principles. It must be noted that while corporeality differs from materiality, it is constituted through the latter, since the form represented by the soul must inhere in matter... Thus the self-thinking process of the first intellect emanated from the First generates intellect, form and corporeality. This process is then repeated, until a total number of ten intellects and nine spheres is reached"⁶⁴⁰

An outermost sphere, the sphere of the fixed stars and the seven spheres that contain the planets, the sun, and the moon.⁶⁴¹

So the main goal of the theory of emanation is, as Ibn Sīnā himself states, to solve the problem between God's unity and the plurality of the world;⁶⁴² the First represents the absolute perfection and the ultimate cause of all contingent existence - in fact, He "does not only have the existence that belongs only to Him, but every [other] existence also is an overflow of His existence and belongs to Him and emanates from Him".⁶⁴³ In this way God creates by giving His existence to all existents through successive mediation of intellectual spheres, until this succession reaches the final tenth emanation - the Active Intellect, or the Giver of Forms⁶⁴⁴ - from which the sublunary world emanates. The Active Intellect represents the last emanation, from which both the matter and the form of the world emanate and this succession continues through the emanation of rational, animal and vegetative souls - with the rational soul the hierarchy of the existence of the intellectual substances ceases.⁶⁴⁵ The Active Intellect has three functions, it is: (1) the emanating cause of the matter of the souls of plants, animals and man, and (3) the cause of the actualization of the human intellect.⁶⁴⁶ In this way

⁶⁴⁰ *ibid.*, p. 100.

⁶⁴¹ Altıntaş, Hayrani, İbn Sina Metafiziği, Ankara, Kültür Bakanlığı Yayınları (2002), p. 87.

⁶⁴² *al-Ilāhiyyāt*, VIII, 4, (2).

⁶⁴³ *ibid.*, 6, (1).

⁶⁴⁴ Janssens, Jules, *The Notions of Wāhib al-şuwar (Giver of Forms) and Wāhib al-'aql (Bestower of Intelligence) in Ibn Sīnā*, in *Intellect et imagination dans la Philosophie médiévale; Intellect and Imagination in Medieval Philosophy*, ed. C. Pacheco & F. Meirinhos, Actes de XIe Congrès International de Philosophie Médiévale, Porto, 26 au 30 août 2002 organisé par la Société Internationale pour l'Étude de la Philosophie Médiévale, 3 (Turnhout, Brepols, 2006, pp. 551–562), pp. 557-558; Lizzini, Olga, *The relation between Form and Matter: some brief observations on the 'homology argument' (Ila-hiyya-t, II, 4) and the deduction of fluxus,* in *Interpreting Avicenna*, ed. J. McGinnis & D. Reisman, Proceedings of the Second Conference of the Avicenna Study Group (Leiden & Boston: Brill, 2004, pp. 175-185), p. 180.

⁶⁴⁶ Davidson, Alfarabi, Avicenna and Averroes, on Intellect, p. 76.

the Active Intellect guarantees the existence of the forms of the material existents as well as the matter itself by providing the forms which cause its actuality.⁶⁴⁷

In order to fully grasp the emanative scheme one has to take under consideration the existence of the infinite incorporeal power and that this power is the principle of primary motion, as well as that the circular heavenly motion is not temporally generated.⁶⁴⁸ This is why we have to have pre-knowledge of natural sciences before inquiry into metaphysical thinking. Heavenly motion does not occur by mechanistic nature, but by the nature of will⁶⁴⁹ - the intellects are alive, and they move out of obedience and desire to imitate the First, as Ibn Sīnā explains:"... this [desire] is followed by way of emanating states and measures through which [the celestial sphere] imitates the First (exalted be He) inasmuch as He is the provider of good thing...".⁶⁵⁰ The whole process of emanation thus results in motion by the nature of the soul; the movement of the celestial sphere is engendered by will, desire and choice; "this motion is as though it is a kind of worship, angelic or pertaining to the celestial sphere (...) if the appetitive power has a desire toward something, an influence emanates from it that moves the bodily members".⁶⁵¹ Therefore, all supra-lunar emanations move according to their knowledge and desire and in this sense they move by will. Yet this will is determined by their natures that proceed from the First: they are perfect beings, as such they seek perfection and want to imitate, in accordance with their powers and abilities, the One who is the pure perfection and goodness. According to this idea, therefore, the eternity in the absolute sense (ontological and temporal) belong only to God, while the incorruptible celestial bodies are eternal only by virtue of the relation to the sole being which is necessary in itself - in this sense it is right to say that the eternity of the celestial bodies is a kind of "semi-eternity".⁶⁵²

In addition to this, Ibn Sīnā stresses that the number of separate intellects after the First Principle would be the same as the number of movements, which is ten, amongst which the first represents the unmoved mover that moves the sphere of the outermost body and the second is the one similar that moves the sphere of the fixed stars, after which is the one that moves the sphere of Saturn and so on, terminating with the intellect the intellect of the

⁶⁴⁷ Cerami, Cristina, *The Eternity of the World*, in *The Routledge Companion to Islamic Philosophy*, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016, pp.141-155), p. 149. Abb.: Cerami, *The Eternity of the World*.

⁶⁴⁸ *al-Ilāhiyyāt*, VIII, 1, (2).

⁶⁴⁹ *ibid.*, IX, 2, (4).

⁶⁵⁰ *ibid.*, (18).

⁶⁵¹ *ibid.*, IX, 2, (21).

⁶⁵² Cerami, *The Eternity of the World*, p. 148.

terrestrial world, i.e. the active intellect.⁶⁵³ It seems that there is no particular reason why Ibn Sīnā chooses this number, other than perhaps because of astronomical theories of his era.⁶⁵⁴ It also seems by the rest of the chapter that Ibn Sīnā himself is not sure in definite number of intelligences, however that is clearly not important for understanding the existence in the metaphysical sense, as the inquiry into particulars is not within the scope of the first philosophy.

Metaphysically speaking, the origin of motion is the desire to imitate what is good. This desire comes from the intellectual apprehension of what is good, as in this way heavenly bodies affect everything what is beneath them, and all contingent being is set in motion which has purpose that is above the motion:

"From this, however, there is emitted that which is of a rank lower than it-namely, the desire to imitate Him to the utmost measure possible. Hence, the seeking of motion becomes necessary, not inasmuch as it is motion, but in the manner we have stated. This desire would follow that love, and the enjoyment springing from [love], and this perfecting process arising from desire. It is in this manner that the First Principle moves the body of the heaven".⁶⁵⁵

This example can further help us with understanding the relationship between metaphysics and other sciences in Ibn Sīnā. Metaphysics offers the explanation of existence and with it the explanation of motion from the absolute perspective, while physics deals with particular motion between bodies and cannot explain its ultimate purpose. The metaphysical explanation of motion is that it necessitates from the eternal process of emanation of the world from God as a consequence of His self-knowledge in the hierarchical chain of causes and effects.

The relationship between God and the world is unique, as it is the result of the Unique Creator. It is necessitated by Divine will in a very specific way. As all attributes of God are the same with his essence (i.e. his existence), the same is with Divine knowledge and will, thus according to Ibn Sīnā "the knowledge belonging to Him is identical with the will that belongs to Him" as well as

"the power belonging to Him consists in His essence being an intellectual apprehender of the whole in [such] a way that the apprehension is a principle of the whole, not derived from the whole, and a principle in itself, not dependent on the existence of anything. This will, in the form we have ascertained (which is not

⁶⁵³ al-Ilāhiyyāt, IX, 3, (23).

⁶⁵⁴ Janssens, Creation and Emanation in Ibn Sina, p. 455.

⁶⁵⁵ al-Ilāhiyyāt, IX, 2, (22):

وهو الشوق إلى التشبه به بمقدار الإمكان، فيلزم طلب الحركة لا من حيث هي حركة، ولكن من حيث قلنا؛ ويكُونُ هذا الشوق يتبُعُ ذلك العشق والالتذاذ منبعثًا" عنه، وهذا الاستكمال منبعثًا" عن الشوق، فعلى هذا النحو يحرك المبدأ الأول جرم السماء.

connected with a purpose within the emanation of existence), is nothing other than emanation itself". 656

This means that God's action is both willing and necessary at once; all the Divine attributes have a single meaning, which is the necessity of existence and His creation is through the necessity of existence. This means that the existence of contingent beings represents a sort of continuation of God's existence.⁶⁵⁷ The necessity of existence implies intellect, intellect implies knowledge, knowledge implies will and will eventually implies emanation. God emanates only existence, necessarily/knowingly/willingly, hence all creation represents His will/knowledge/necessity. All these notions are equivocal, due to the fact that nothing is like God and it would be wrong to compare them with any meaning concerning contingent being. I believe that this is the reason why Ibn Sīnā sometimes talks about emanation as something that necessitates from God and sometimes as something that results from His choice/will. There is no contradiction between these two ideas, because in God, they are all one.

In al-Ilāhiyyāt, IX, 4, (4) Ibn Sīnā summarises his account: the essential act of the First is to intellectually apprehend His own essence, which in itself is the principle of the order of the good in existence. He thus intellectually apprehends the order of the good in existence and how this ought to be by one single act of intellection. It becomes a necessary concomitant of what He intellectually apprehends of the order of the good in existence that He apprehends intellectually how this order is possible and how the best thing to take place is for the existence of the whole to come about in accordance with what He intellectually apprehends. For the reality that is intellectually apprehended with Him is itself, knowledge, power, and will. In this way intellection is the cause of existence in accordance with what He intellectually apprehends. By this, from God all existence emanates as an emanation that is distinct from His essence. In this way the fundamental relationship between God and His creation is explained. The world, as something possible in itself deserves only non-existence. This non-existence reflects in its essence per se, that is apprehended by God as something good that reflects His knowledge, power and will and results in one single eternal act of creation, i.e. emanation from God, which necessitates the first created intellect from which the successive causal chain continues. In this way God is the eternal bestower of existence, and the world eternally depends on this Divine action.

⁶⁵⁶ *ibid.*, VIII, 7, (12):

فواجب الوجود ليست إرادته مغايرة الذات لعلمه، ولا مغايرة المفهوم لعلمه، فقد بينا أن العلم الذي له بعينه هو الإرادة التي له. وكذلك قد تبين أن القدرة التي له هي كون ذاته عاقلة للكل عقلا، هو مبدأ للكل لا مأخوذا" عن الكل، ومبدأ بذاته، لا يتوقف على وجود شيء. ⁶⁵⁷ Janssens, Creation and Emanation in Ibn Sina, p. 458.

We could accept that with these ideas Ibn Sīnā does not want to contradict Aristotle, but to renew Philosopher's system,⁶⁵⁸ yet in doing so he departs from the Philosopher's cosmology significantly. The way Ibn Sīnā's sees it, Aristotle's philosophy is an incomplete system, so he takes upon the task add his own ideas in order to complete it.⁶⁵⁹ To the classical Aristotelian proof of the existence of a First Cause from motion of the universe, Ibn Sīnā adds a new perspective - the proof from the existence of the universe, and to Aristotle's inference of the existence of the celestial intelligences from the motion of the celestial spheres, Ibn Sīnā adds a proof of their existence from the existence of the spheres.⁶⁶⁰ Similarly, to the inference of the existence of the Active Intellect from movement of the human intellect from the existence of sublunary matter, as he will also infer the existence of an active intellect from the existence of natural forms in the world, especially from the existence of the human soul.⁶⁶¹ As for the sublunary world, the process of emanation imitates the supra-lunar world, just with the opposite order:

"Just as the first of beings [proceeding from the First], from the commencement [down] to the rank of the elements, had been intellect and then soul and then body, so here [in the terrestrial world] existence begins with bodies, then souls coming into being, then intellects. [All] these forms necessarily emanate from these [celestial] principles. The temporal events that take place in this [terrestrial] world come about [as a result] of the collision of the active celestial powers. The passive terrestrial [powers] follow the collisions of the celestial active powers".⁶⁶²

In this way the matter of sublunary world is affected by the perfection of heavenly spheres, which results in creation of a bodies, souls and eventually earthly intellects.

2.2.2 The Problem With Emanation

In his early days, Ibn Rushd was a follower of emanation theory, especially in his *Epithome of the Metaphysics*, where his ideas are very close to al-Fārābī and Ibn Sīnā. In his later works he

⁶⁵⁸ As it is described and argued in Gutas, Dimitri, Avicenna and the Aristotelian Tradition, Introduction to Reading Avicenna's Philosophical Works, Leiden Boston, Brill (2014), pp. 15-75; Macit, Muhittin, Ibn Sina'da Doğa Felsefesi ve Meşşai Gelenekteki Yeri, İstanbul, Litera Yayıncılık (2016), pp. 26-58; Macit, Muhittin, Ibn Sina'da Metafizik ve Meşşai Gelenek, İstanbul, Litera Yayıncılık (2012), pp. 15-28.

⁶⁵⁹ Kutluer, Ilhan, Islam'ın Klasik Çağında Felsefe Tasavvuru, Istanbul, , İZ Yayıncılık (2013), pp. 58-94.

⁶⁶⁰ Davidson, Alfarabi, Avicenna and Averroes, on Intellect, p. 77.

⁶⁶¹ Ibid.

⁶⁶² *ibid.*, X, 1, (3):

وكما أن أول الكائنات من الابتداء إلى درجة العناصر كان عقلاً ثم نفساً ثم جرماً، فههنا يبتدئ الوجود من الأجرام، ثم تحدب المفوس، ثم عقول، وإنما تغيض هذه الصور لا محالة من عند تلك المبادئ، والأمور الحادثة في هذا العالم تحدث من مصادمات القوة الفاعلة السماوية، والمنفعلة الأرضية تابعة لمصادمات القوى الفعالة السماوية.

criticises this view. Due to the fact that in my thesis we are interested in Ibn Rushd's critique, i.e. his later philosophy, we are going to skip the historical inquiry into his development and focus on the problem.

As Ibn Sīnā attempts to explain the world with the emphasis on efficient causality, the problem between Divine unity and the plurality of the world occurred, which he treats with the emanation theory. According to Ibn Rushd, this attempt failed, not just because of Ibn Sīnā's mistaken ontological starting point, but also because the idea of emanation simply cannot solve anything. Regarding this he states: "How untrue is this proposition that the one can produce only one, if it is understood in the way Ibn Sīnā and Fārābī understand it, and Ghazālī himself in his *Niche for Lights*, where he accepts their theory of the First Principle".⁶⁶³ According to Ibn Rushd, the principle that from one only one can proceed in the context in which Ibn Sīnā puts it is not an Aristotelian principle.⁶⁶⁴ This idea in Ibn Sīnā's context means that God's unity and the unity of contingent existents is one and the same type - all existents represent the same simplicity. The notion of 'unity,' which Ibn Sīnā uses univocally, is in fact equivocal notion - the unity of the First Agent and the unity which we find in the empirical world is not the same.⁶⁶⁵

At this point Ibn Rushd again partly agrees with al-Ghazālī: from the context of Ibn Sīnā's emanationism it is impossible to solve the problem of the multiplicity of the world. The principle of plurality remains the principle of plurality and the principle of unity remains the principle of unity⁶⁶⁶ and this is so in accordance with the logical principle of identity. If identities of 'unity' and 'plurality' are mixed together, it would follow that the first effect consists in an infinite plurality and therefore cannot be caused by the First unique principle.⁶⁶⁷ Regarding the idea that plurality is caused in the first effect due to its apprehension of its own contingency, Ibn Rushd claims that when al-Fārābī and Ibn Sīnā say "that the plurality in the second principle arises through its self-knowledge and it knowing another, it follows for them that its essence has two natures or two forms, and it would be interesting to know which form proceeds from the First Principle and which does not"⁶⁶⁸ – in other words, the problem remains unsolved, as if we have two principles in the effect it remains the problem how these two principles proceeded from the cause that is absolute unity. Another issue is, again, the

⁶⁶³ Tahāfut al-Tahāfut, p. 208; 129.

⁶⁶⁴*Ibid.*, p. 161; 95.

⁶⁶⁵ *Ibid.*, p. 163.

⁶⁶⁶ Sarıoğlu, Hüseyin, İbn Rüşd, Istanbul, İSAM yayınları (2011), pp. 133-134.

⁶⁶⁷ Tahāfut al-Tahāfut, p. 209; 130

⁶⁶⁸ *ibid*, p. 209; 130.

claim that the first emanation is in itself possible and necessary through another; as according to Ibn Rushd, being is either possible or necessary - "there is in necessary natures no possibility at all, be it a possibility necessary by itself or a possibility necessary by another".⁶⁶⁹ This means that if from one only one proceeds, then no multiplicity can occur except the infinite chain of 'ones.' Oneness is the opposite of plurality, nothing can have mutually exclusive attributes at the same time and in the same respect. Something is either oneness or plurality; so "the fundamental mistake of Ibn Sīnā and al-Fārābī was that they made the statement that from the one only one can proceed, and then assumed a plurality in the one which proceeds".⁶⁷⁰ Therefore, the theory of emanation is found on a claim which is paradoxical if used in the context of the efficient causation.⁶⁷¹ For Ibn Rushd, this problem is similar with the problem of Ibn Sīnā's necessary-possible division. In Ibn Rushd's philosophy, as we saw, these notions have their meaning outside of the mind only with respect to causation, so something is either caused or uncaused, it cannot be both in the same time and in the same respect. Instead, there is only one solution to this problem, one must realise that "the first effect possesses plurality, and that necessarily any plurality becomes one through a unity which requires that plurality should depend on unity".⁶⁷² This is why Ibn Rushd's proof for the existence of God, as we saw in the previous chapter, depends on proving the existence of the first moved mover, which owes its motion and through this motion its unity, to the First Unmoved Mover who is the ultimate final cause of all existence.

The First simply cannot be the ultimate efficient cause of all existence in the way that Ibn Sīnā teaches. According to Ibn Rushd, the world as a whole represents a complex substance that consists of parts, and yet as a substance it has certain unity due to which we can refer to it as 'the world.' If the efficient cause represents the absolute unity, or oneness, and the effect represents the plurality, then this cause is not the cause of that particular effect. On the basis of his distinction between logical and causal necessity, Ibn Rushd claims that an effect necessarily follows from its cause only insofar as it is a formal or final cause; but it does not necessarily follow from its efficient cause, since the efficient cause or agent often exists without the existence of its effect; the efficient cause may be fully in act and yet not produce its proper effect.⁶⁷³ Cause and effect are in the case of efficient causation separable and in this

672 Tahāfut al-Tahāfut, p. 211; 132.

⁶⁶⁹ Ibid.

⁶⁷⁰ *ibid.*, p. 212; 132.

⁶⁷¹ Sarıoğlu, Hüseyin, İbn Rüşd, Bir Denge Filozofu, in İslâm Felsefesi, Tarih ve Problemler, ed. Cüneyt M. Kaya (Istanbul, İSAM Yayınları, 2013, pp. 365-395), p. 387.

⁶⁷³ Kogan, Metaphysics of Causation, p. 67

case one may assert the cause and deny the effect without contradiction.⁶⁷⁴ God, therefore, cannot be the efficient cause of the world, but must be some other kind of cause. As we saw in the previous chapter, Ibn Rushd's answer is that God is the final cause of the world, by which the world is set in motion that maintains its existence. In this way, by being the ultimate final cause, God is in a sense the efficient cause as well. Therefore, the solution to the problem is not the emanation theory, but simply the idea that the plurality of the world is uncaused in the sense of efficient causation. This is the true meaning of the statement that 'the world is eternal,' and the theory of emanation once again shows that Ibn Sīnā was under the influence of theologians' idea of creation out of nothing, which is the consequence if God is understood as the ultimate efficient cause. In fact, there is no direct cause of existence, but only cause of motion, or the cause due to which potentiality passes into actuality,⁶⁷⁵ and in accordance with this the relationship between God and the world has to be interpreted.

God has to be the perfect agent, and the perfect agent produces the perfect act. This is another reason why the world cannot have a temporal beginning; if God had created the world at a point in the past, His activity would not have been continuous and unchanging - such an activity would have inmly that He is an imperfect agent. Similarly, if the world has a temporal beginning, its existence would not have entailed any prior existence and, again, it would have been an imperfect act.⁶⁷⁶ On the basis of his critique of the theory of emanation Ibn Rushd reformulates the main problem: the problem is not how from one the plurality occurs, because such thing is impossible, but how the eternal unchangeable principle can be the principle of the changeable world.

If we consider Ibn Sīnā's theory of emanation together with his understanding of existence, it might seem that it has serious pantheistic implication. This may be another problem for Ibn Rushd. All things have essences and attributes "which determine the special functions of each thing through which the essences and names of things are differentiated".⁶⁷⁷ Otherwise all things would be one, but this oneness would not be the real philosophical oneness as it lacks any specifications, and therefore to say that all things are one in this sense indicates that all things are in fact nothingness. Ibn Rushd stresses that if the nature of oneness is denied, the nature of being is denied and the consequence of the denial of being is nothingness.⁶⁷⁸ Thus, according to Ibn Rushd, the doctrine of theologians implies pantheism (if they are to be

⁶⁷⁴ Ibid.

⁶⁷⁵ Tafsīr, LAM, t. 44, 1652.

⁶⁷⁶ Kogan, Metaphysics of Causation, p. 52

⁶⁷⁷ Tahāfut al-Tahāfut, p. 424; 291.

⁶⁷⁸ *ibid.*, p. 425; 291.

followed consistently), and every philosopher who follows their teaching regarding essence and existence, causality and creation essentially teaches pantheism. Although Ibn Rushd does not use the accusation for pantheism against Ibn Sīnā explicitly, it seems that this critique of the theologians is also aimed against his metaphysical system, especially because of the emanation theory. After all, 1) Ibn Rushd accuses Ibn Sīnā on several places that he is under the influence of theologians, and 2) he also accuses Ibn Sīnā for misunderstanding of Aristotelian notion of 'existence'; if existence is not the essential property of a substance, then we cannot claim that substances have their specific natures by themselves (in fact, they are in themselves nothing), hence all things are one - or nothing. If we keep this in mind, there might be serious pantheistic implication in Ibn Sīnā's metaphysics, despite he himself rejects such idea. Although the primary purpose of Ibn Sīnā's theory of emanation is in fact to prevent his metaphysical system to end up in pantheism and consequently to explain plurality, Ibn Rushd seems suspicious that such metaphysics is nevertheless pantheistic.⁶⁷⁹ This is so because for Ibn Rushd every non-naturalistic theistic system tends to be pantheistic, no matter if it is theological or philosophical, as it does not rely on Aristotelian understanding of substance. Instead such systems rely on the idea that beings in fact participate in the Divine existence, as God is the only existent that has existence essentially. This is the case with Ibn Sīnā's emanation. As for Ibn Rushd Aristotelian substance means 'to have existence essentially', if there is only one such being then there is only one substance.

2.2.3 The Relationship Between God and the World in Ibn Rushd

As we can see, Ibn Rushd proof for God's existence starts from observation of the world of substances as well as from the analysis of the fact that the world, motion and time are eternal. This means that when talking about the relationship between God and the world, we do not talk about the relationship between the world and its efficient cause - what is eternal does not have agent - but between the world and its final cause. Thus, in order to explain the relationship between the world and its cause we must start from the consideration of motion; and in context of the relationship between God and the world, this means to explain the relationship between eternal and particular motion.

⁶⁷⁹ I believe this suspicion is expressed in the following quotation:

[&]quot;And further, what do the theologians say about the essential causes, the understanding of which alone can make a thing understood? For it is self-evident that things have essences and attributes which determine the special functions of each thing and through which the essences and names of things are differentiated. If a thing had not its specific nature, it would not have a special name nor a definition, and all things would be one-indeed" (*Tahāfut al-Tahāfut*, XVII, 1, p.424).

This explanation is an important part of what Ruth Glasner calls "a turning point in Ibn Rushd's natural philosophy".⁶⁸⁰ The interpretation is based on the division between successive, contiguous and continuous motion in Ibn Rushd's Long Commentary on Physics. Successive motions (that were advocated by the theologians as the main form of motion in the world) follow one another and are separated by rests, it starts at one point in time and it ends at another point in time. Contiguous motions are not separated, but are still distinguishable from one another. Continuous motions cannot be distinguished one from another and thus form one motion. Based on this division, Ibn Rushd's solution to the problem of the relationship between Divine unity and world's plurality is suggested in Long Commentary on *Physics*, book VIII, 1, and it consists in drawing the clear distinction between the continuous and contiguous motion, as well as in attributing the first kind to the supra-lunar world (i.e. the celestial world, or the world of heavenly bodies) and the latter type to the sublunary world (i.e. the world of generation and corruption). Therefore, substances of the sublunary world are subject to contiguous motion and are in the process of constant change not only in place, but substantially; supra-lunar world on the other hand, consists of bodies that are set in continuous motion, hence they are unchangeable substances that do not $corrupt^{681}$ - the celestial motion is continuous, uniform and eternal, and due to it the continuous structure is fully deterministic. Through heavenly bodies continuous motion affect the motion of the whole world qua totality, hence the totality of all existent moves continuously, while particular beings in the sublunary region move contiguously, due to their causal connections⁶⁸² and so "the core of the turning point is the understanding (achieved after an intensive inquiry) that the source of the stability of the sublunary world and of the perpetuity of sublunary motion must be in the celestial region".⁶⁸³ Thus, Ibn Rushd's cosmology tends to explain Aristotle's by adding some new ideas while maintaining rigid in following Philosopher's fundamental principles. This interpretation of Ibn Rushd is according to some scholars the most the most sophisticated representation of Aristotelian cosmology ever offered.⁶⁸⁴

Ibn Rushd's interpretation of Aristotle states that by proving that there must be infinite successions of sublunary events, the Philosopher implies that the link between successive motions cannot be essential, but only accidental and that the time between two consecutive

⁶⁸⁰ Glasner, Ruth, *Averroes' Physics, A Turning Point in Medieval Natural Philosophy*, Oxford-New York, Oxford University Press (2009). Abb.: Glasner, *Averroes' Physics*.

⁶⁸¹ Tafsīr, LAM, t. 41, 1631; De substantia orbis, II, pp. 83-84.

⁶⁸² Glasner, *Averroes' Physics*, pp. 68-69.

⁶⁸³ *Ibid.*, p. 76.

⁶⁸⁴ Twetten, David B., Arabic Cosmology and the Physics of Cosmic Motion, in The Routledge Companion to Islamic Philosophy, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016, pp.156-167), p. 165.

motions (or the time of rest) is the time of the state of possibility.⁶⁸⁵ In this way the sublunary motion as a whole is also eternal because it is moved by supra-lunar motion, but it consists of finite parts that allow various possibilities within it. While the corporeal character of the sublunary world consists of four elements of corruptible matter, the celestial bodies consist of a fifth element, the ether, and due to it are not subject to substantial change. Celestial bodies are simple in the sense that they consist of form and ether, and are no able to change their form.⁶⁸⁶ Due to their simplicity their form has no contraries, so they cannot have a cause of destruction⁶⁸⁷ thus cannot fall under substantial change.

According to Ibn Rushd, the celestial bodies are constituted by a self-subsistent matter, and have forms "that do not subsist in their subjects", otherwise their motion would be finite and they would be corruptible.⁶⁸⁸ Also, in celestial bodies the intellect and the intelligible are the same thing.⁶⁸⁹ The material of the celestial spheres and the material of sublunary substances is not the same, we just address them as 'matter' by homonymy, "since the former is in actuality and the latter in potentiality, i.e. the matter of celestial bodies is the body and the matter of thing subject to generation and corruption is prime matter".⁶⁹⁰ Due to this specific kind of matter, the celestial intellects are not immanent forms belonging to their bodies but immobile and separate movers which move celestial bodies as end and object of desire.⁶⁹¹ Also, when we talk about plurality in celestial bodies and in the sublunary world, they are two different types of plurality; celestial bodies possesses the plurality of simple existents, "and some of these are the causes of others and that they all ascend to one unique cause which is of their own genus, and is the first being of their genus, and the plurality of the heavenly bodies only arises from the plurality of these principles",⁶⁹² while that the plurality of the sublunary world comes from matter and form and the celestial bodies.⁶⁹³ Thus, according to Ibn Rushd, Ibn Sīnā's mistake regarding celestial bodies consists in his doctrine that heavens are composed of matter and form like any other body. Ibn Rushd sees his own position of the 'true Peripatetic' as contrary to Ibn Sīnā's: the body of the heavens is a simple body, otherwise it would suffer corruption.⁶⁹⁴ So in sum, the celestial body is not composed of matter and form in the same

⁶⁸⁵ Glasner, Averroes' Physics, p. 78

⁶⁸⁶ *Tahāfut al-Tahāfut*, III, p. 207; 129.

⁶⁸⁷ De substantia orbis, I, p. 59.

⁶⁸⁸ Ibid., pp. 68-72

⁶⁸⁹ *ibid.*, p. 71.

⁶⁹⁰ Tafsīr, LAM, t. 56, 1726.

⁶⁹¹ Cerami, *The Eternity of the World*, p. 149.

⁶⁹² Tahāfut al-Tahāfut, III, p. 164; 98.

⁶⁹³ ibid.

⁶⁹⁴ Tahāfut al-Tahāfut, III, p. 204; 127, 392; De substantia orbis, II, p. 74.

manner as sublunary world and they even do not belong to the same genus because their matter does not contain potentiality,⁶⁹⁵ their matter exist in actuality and their forms are even not prerequisites for for the existence of their bodies.⁶⁹⁶ In fact, the nature of celestial beings belongs to the genus of the soul,⁶⁹⁷ because of which they move in circle and are "neither light nor heavy".⁶⁹⁸

This is very important for Ibn Rushd because the movement of celestial bodies affects the sublunary world not only by setting it in motion, but also through celestial intermediary life is distributed to all living beings.⁶⁹⁹ This happens due to heat that is produced by the movement of celestial spheres, and this heat play the crucial role for the life within the sublunary region - this heat possesses a form to which Ibn Rushd refers as "the form of soul in potentiality".⁷⁰⁰ Also, one can easily conclude that the celestial bodies are alive, not just through observation of their motion, but also through realisation that all life in the sublunary realm depends on them: "for the living can only be guided by a being leading a more perfect life".⁷⁰¹ In this way the dynamism of the heavenly bodies affects every part of sublunary world; inasmuch as the spheres and their stars are bodies, they are able to affect bodies, to the extent they are animate they generate life and due to their continuous movement they assure the cyclical continuity of sublunary change.⁷⁰²

The main role of the celestial world is that of mediation between God and the world. Through it the First impart motion without being moved.⁷⁰³ In this way all existence depends on eternal motion - if the motion would cease, the heavens would cease, and if the heavens would cease, the movement of what exists under the heavens would also cease.⁷⁰⁴ All this is maintained by God's perfection, that as the final cause through heavenly bodies acts as the cause of eternal continuous motion, without which the world as a whole would cease to exist.⁷⁰⁵ Having this in mind we could say that for Ibn Rushd, while the world is related to God, God bares no relation to the world, as everything is in motion initiated by Divine's perfection only.⁷⁰⁶

⁶⁹⁵ De substantia orbis, II, p. 74.

⁶⁹⁶ *ibid.*, p. 82.

⁶⁹⁷ *ibid.*, pp. 75-77.

⁶⁹⁸ *ibid.*, p. 77.

⁶⁹⁹ *Tahāfut al-Tahāfut*, IV, p. 389; 149.

⁷⁰⁰ *Tafsīr*, LAM, t. 18, 1501-1502.

⁷⁰¹ *Tahāfut al-Tahāfut*, p.173; 104.

⁷⁰² Kogan, *Metaphysics of Causation*, p. 179.

⁷⁰³ Tafsīr, LAM, t. 36, 1592.

⁷⁰⁴ De Substantia Orbis, IV, p. 117.

⁷⁰⁵ *ibid*.

⁷⁰⁶ Taylor, Averroes' Philosophical Conception of Separate Intellect and God, p. 329, 402-403.

By following Aristotle's idea that heavens are eternal in *Metaphysics* 1072a and *De Caelo* I, Ibn Rushd advocates that all generation and corruption and all change refers ultimately to the heavenly spheres and through them to the First Unmoved Mover. Only in this way all existents have their existence from God and only in this context we can consider God 'the bestower of existence,' or 'the creator of the world.' This is the only way, according to Ibn Rushd, that the problem of the relationship between eternal and perishable can be solved; the existence is eternal, and it consists of three levels of reality:

1) The first level is God Himself, the ultimate reality, who as eternal intellectual substance consists in thinking,⁷⁰⁷ and who thinks only Himself, and does not think changeable things, otherwise its substance would change⁷⁰⁸ – His comprehension is that of "all things at once" through self-intellection⁷⁰⁹

2) The second is the world of celestial bodies, that consists of intellectual substances that are in the state of eternal incorruptible motion⁷¹⁰ driven by their desire for God's perfection – this desire is due to them being intellectual living entities, hence the principle of motion in celestial bodies are intellectual representations.⁷¹¹ These intellectual representations happen within their eternal souls, which act as movers and forms of celestial bodies.⁷¹²

3) The third is the material world, that is eternally moved by celestial spheres, but due to its materiality is subsequent to change and corruption. The forms in the sublunary world are acquired in two ways: from the celestial movers and from causal relationship within the sublunary world; in any case, their composition, i.e. their unity as substances, depends entirely on celestial movers.⁷¹³

These three realms are incomparable, as they represent completely different standards of reality, and because of this one must always be aware that the common notions which refer to their phenomenon are equivocal. Thus, "if the celestial and terrestrial natures differ in species, then the term 'corporeity' is predicated of them either according to equivocation or according to a sort of priority and posteriority".⁷¹⁴ The observable agent in the sublunary world is such that from it only one effect can proceed, and it can be compared with the First only in an

⁷⁰⁷ Tafsīr, LAM, t. 51, 1696.

⁷⁰⁸ Ibid., 1697.

⁷⁰⁹ Ibid., 1698.

⁷¹⁰ Which is in accordance with Aristotle's demonstration in *De Caelo*, I, 3, 270a.

⁷¹¹ Tafsīr, LAM, t. 37, 1599-1600.

⁷¹² Tahāfut al-Tahāfut, III, p. 165; 99.

⁷¹³ *Ibid*.

⁷¹⁴ De Substantia Orbis, I, pp. 41-42.

equivocal way; they are both agents in some sense, but the First is the absolute agent, while sublunary agents are "relative agents".⁷¹⁵ The same goes for the comparison between the celestial realm and the sublunary region, as well as for the comparison between God and the celestial movers, as "...two different things can be essentially different and have nothing in common but their name".⁷¹⁶ In fact, the celestial bodies and bodies of the sublunary realm for Ibn Rushd do not even have common genus, the same goes for their intellect and even their existence - all these meanings are equivocal and all mistakes that come from their comparison is due to the univocal considerations.⁷¹⁷

The relationship between God and the world is the relationship between the absolute agent and its absolute effect and the absolute effect is not something individual in the sense of one simple particular substance,⁷¹⁸ but the substance that represents the total unity of everything that *is.* This unity is caused by God, as "…every compound is only one because of a oneness existing in it, and this oneness exists only in it through something which is one through itself".⁷¹⁹ Whatever is one through itself precedes every compound and acts as agent of all existents which exist through its oneness; such agent must be eternal - this is how the relationship between God and the world should be understood.⁷²⁰ Therefore, by being the form of all forms, and the final cause of all being, God establishes and guarantees the unity of all things.⁷²¹

In this way, just like in Aristotle, the world represents an eternal substance, which has its oneness from God, and which moves by itself in one sense through the desire of celestial spheres, but also is eternally moved in another sense through the absolute presence of God who comprehends His own perfection. It is important to note that although Ibn Rushd refers to the celestial spheres as eternal and fully actualised, they still contain potency in one sense: they are in motion.⁷²² The celestial bodies move spontaneously, that is by will and desire, "…the eternity of its motion must come from a mover in which there is no potentiality at all

⁷¹⁵ *Tahāfut al-Tahāfut*, III, p. 165; 99.

⁷¹⁶ *ibid.*, V, p. 245; 157.

⁷¹⁷ *ibid.*, p. 244-245; 157.

⁷¹⁸ *ibid.*, III, p. 165; 99.

⁷¹⁹ *ibid.*, VI, p.276; 180. Ibn Rushd's argument in *Tahāfut* IV goes similarly to al-Kindī's main argument for God's existence: unity of every being is not something essential, but accidental to it, therefore there must exist one being that has its unity essentially. Through this being every other being have its unity. This being is God, the absolute unity (see *al-Falsafa al-ūlā*, p. 84. (Ar. 132).

⁷²⁰ *ibid*.

⁷²¹ Tafsīr, t. 44, 1650.

⁷²² Taylor, Averroes' Philosophical Conception of Separate Intellect and God, p. 391.

for any sort of change, either essentially or accidentally. The mover, then, will necessarily be for the celestial body an immaterial power",⁷²³ and:

"... the longing of the celestial bodies is aroused by the intellect and the intellect desires only what is more beautiful than itself, than it follows necessarily that the celestial bodies desire in this motion that which is more beautiful than themselves, and since they are the most excellent and most beautiful sensible bodies, then the beautiful object which they desire is the most excellent being, in particular that which the whole heaven desires in its daily motion".⁷²⁴

The world composed in such way is in the state of eternal origination, passing from the state of potentiality into actuality in the sense of intellectual acknowledgment and motion in space of heavenly spheres, as well as by passing from the state of potentiality into actuality in the sense of material substances of sublunary world, that are reaching perfection of actualisation through succession of forms. Celestial bodies are eternal by their local movement that is coming from the eternal final cause,⁷²⁵ hence not all existence is subject to generation and corruption. As the ultimate final cause of all existence, God ultimately brings the world's movement from the state of potency into the state of actuality. In this way by being the ultimate final cause of all things, He is also the ultimate efficient cause. His agency is His essence that represents the eternal act that produces the eternal effect – agent with such characteristics is the agent in the ultimate sense and pure perfection.⁷²⁶ The world, as God's creation, is the prefect effect, eternally caused substance, brought from potency to act through its continuous motion that affects the contiguous motions consisting of parts of which every contiguous movement entails a prior movement. Due to materiality of the sublunary realm, although eternal, the world is never fully actualised. This is the exact reason why it is in a constant need of the cause, because agent can produce its effect only if the effect represents something incomplete. Otherwise the effect is not in need of the agent. The world's existence is always connected with non-existence, or privation, due to its materiality, hence is always in need for the cause.

With these ideas combined into one naturalistic metaphysical system, the plurality of the world is explained according to Ibn Rushd. Plurality is caused by the combined activity of

⁷²³ Tafsīr, LAM, t. 41, 1633.

⁷²⁴*ibid.*, t. 36, 1597-1598:

الاجرام السماوية اذ كانت شهوتها من قبل العقل و كان العقل انما يشتهى ما هو اكثر حسنا منه فيلزم ضرورة في الاجرام السموية ان تشتهى في مذه الحركة ما هو اكثر حسنا منها واذا كانت هي افضل الاجسام المحسوسة واحسنها فالشيء الحسن الذي تشتهيه هو افضل الموجوذات ونجاصة الذي تشتهيه السماء باسر ها في الحركة اليومية.

⁷²⁵ *ibid.*, t. 41, 1633.

⁷²⁶ Kogan, *Metaphysics of Causation*, p. 51.

God, matter and the celestial mediators.⁷²⁷ God represents the supreme intellect whose only activity is to think Himself, hence his intellection is free from the plurality which belongs to all things, including celestial and human intellects.⁷²⁸ Yet by thinking himself God also comprehends all forms, this way he is the form of all forms.⁷²⁹ Through self-comprehension, i.e. self-knowledge, which is identical with His essence,⁷³⁰ God affects celestial spheres and they move according to their knowledge and desire, which further sets the entire world in eternal motion. At this point, although conceived primarily as final cause, God is at the same time the ultimate formal as well as the efficient cause of all motion. This is so because, "by being forms and ends for the spheres the movers actualize potential circular motion, which is why they count as efficient causes".⁷³¹

Therefore, when we talk about the principle that 'from the one there only one can proceed,' we have to be aware of the context upon which this proposition depends, as "this proposition does not apply in the same way to the agents which are forms in matter as to the agents which are forms separate from matter".⁷³² As we saw, 'that from one only one proceeds' applies only in the case of efficient causation (i.e. cause of motion in Ibn Rushd), but never for the final causation, and especially not for the ultimate final cause.

⁷²⁷ *Tahāfut al-Tahāfut*, III, p. 220; 137.

⁷²⁸ *ibid.*, VI, p. 281; 184.

⁷²⁹ Tafsīr, LAM, t. 18, 1505; t. 44, 1652; t. 51, 1702.

⁷³⁰ Tahāfut al-Tahāfut, p. 284; 186.

⁷³¹ Adamson, Peter, *Averroes on Divine Causation*, in *Interpreting Averroes*, *Critical Essays*, eds. Peter Adamson and Matteo Di Giovanni (Cambridge University Press, 2019, pp. 198-217), p. 214. Abb.: Adamson, *Averroes on Divine Causation*.

⁷³² *Tahāfut al-Tahāfut*, III, p. 203; 125.

THIRD PART: APPROACH TO METAPHYSICS

3.1 Ibn Sīnā's Approach

3.1.1 Ibn Sīnā's View on Science of Existent qua Existent

Islamic philosophers inherited and developed their doctrines on demonstration and certainty, as well as the distinction between demonstration, dialectics and sophistic, from the Greeks;⁷³³ however, the specificity of Ibn Sīnā's philosophy derives from his discontent with Greek thought, considering that it represents only the beginning towards a certain explanation of the world. Amongst Ibn Sīnā's works the *Book of the Cure (Kitāb al-Shifā')*, his *opus magnum*, is certainly the most dependent upon Aristotle's philosophy. Still, as we saw, Ibn Sīnā largely departs from Aristotle's ideas. From what we analysed so far, we could agree with Legenhausen's summary:

"Two further points of difference should be noticed between the ways Ibn Sina and Aristotle looked at metaphysics. For Aristotle, the discussion of causality was largely imported to the metaphysics from the physics. For Ibn Sina, on the other hand, causality takes on a special role in metaphysics as that which brings something into existence-ontological as distinct from physical causation. Second, the distinction between contingency and necessity in Aristotle was primarily seen as a logical distinction, while in Ibn Sina it becomes the focus of metaphysical discussion. Aristotle interprets the necessary as that for which there is no change, no motion, while for Ibn Sina the necessary is that which needs no cause for its existence. In Aristotle, the necessary and contingent are understood in terms of time and change, while in Ibn Sina they are interpreted independently of temporality. Metaphysics in the hands of Ibn Sina becomes at once richer and more abstract. With regard to the substantiality of the rational soul and God, Aristotle and Ibn Sina take opposite positions: Aristotle holds that theos is a substance, while Ibn Sina denies that God is a substance; Aristotle holds that the soul is not a substance, while Ibn Sina claims that it is. In both of these regards we observe the movement toward greater abstraction in Ibn Sina. The concept of God is more abstract when considered outside the categories, and the soul is understood more abstractly, not merely as the form of an organism, but as independent of any materiality. God is freed from the constraints of substantiality while the soul is freed from the constraints of corporeality."⁷³⁴

⁷³³ Bäck, Allan, *Demonstration and Dialectics in Islamic Philosophy*, in *The Routledge Companion to Islamic Philosophy*, eds. Richard C. Taylor i Luis Xavier Lopez-Farjeat (London and New York, Routledge, 2016, pp. 93-104), p. 93.

⁷³⁴ Legenhausen, Ibn Sina's Arguments Against God's Being a Substance, p. 119

The metaphysical section of the project, *Kitāb al-Shifā'; al-Ilāhiyyāt*, contains two important aspects of Ibn Sīnā's modification of Aristotel's *Metaphysics*: Ibn Sīnā changes the scientific profile of Aristotle's work as well as the content.⁷³⁵ Although mainly inspired by Aristotle, Ibn Sīnā has different idea on what kind of science metaphysics should be. After grasping the main ideas from Aristotle's *Organon* Ibn Sīnā's accepts that every science should be strictly defined and dealt with well-defined genus of things that functions as its subject-matter, that the relationship between its subject matter, principles and goal must be clear and precisely organised, that all arguments should have demonstrative character and that every science must be in a certain relation of subordination or superiority in regards with the other sciences.⁷³⁶

However, it seems that there is a certain inconsistency between Aristotle's *Metaphysics* and his *Organon*, as well as between certain parts and books within *Metaphysics* itself, that might prevent its understanding of as complete and unified work. Due to this, historians of philosophy debate until this day what was Aristotle's original idea, in particularly what is the connection between so called 'ontology' (Book Γ) and 'theology' (Book Λ) in *Metaphysics*; some would say that *Metaphysics* does not represent one, but several independent books, amongst some investigates first principles and causes, some investigates being *qua* being, some deal with substance and one of them is Aristotle's theology,⁷³⁷ others would disagree, claiming that *Metaphysics* describes one science that starts as ontology and develops towards philosophical theology, metaphysics deals with being *qua* being, and God represents the ultimate being.⁷³⁸ Ibn Sīnā is also aware of this issue, so he offers an original solution: metaphysics is, in different respects, a study of 'existent *qua* existent', which is its subjectmatter, a study of the first causes and God, which is the main thing searched, as well as a study of immaterial and motionless things, insofar as both the first causes and God, on the one hand, and 'existent *qua* existent,' on the other, are immaterial and motionless realities.⁷³⁹

Certainly, Ibn Sīnā established metaphysics as a science in the Islamic world⁷⁴⁰ and with this his inquiry became a foundational for entire Western metaphysical thought.⁷⁴¹ The name 'metaphysics' stands for science that deals with "that which is after nature," which, as we

⁷³⁵ Bertolacci, Amos, *Arabic and Islamic Metaphysics, The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/sum2015/entries/arabic-islamic-metaphysics/ (7). Abb.: Bertolacci, *Arabic and Islamic Metaphysics*.

⁷³⁶ Bertolacci, *Establishing Metaphysics*, p. 186.

⁷³⁷ Barnes, Jonathan, *Metaphysics*, in *The Cambridge Companion to Aristotle*, ed. Jonathan Bernes, Cmbridge, 1995, pp. 66-108.

⁷³⁸ Patzig, *Theologie und Ontologie*.

⁷³⁹ Bertolacci, Establishing Metaphysics, p. 192.

⁷⁴⁰ Türker, *The Possibility of Thinking on Existence*, p. 14.

⁷⁴¹ As it is extensively shown in Bertolacci, *The Reception*.

saw, means something beyond the corporeal matter; it is the science that investigates what is prior to observable existence.⁷⁴² In the short division of sciences at the beginning of his *al*-Ilāhiyyāt Ibn Sīnā, following his predecessors, places metaphysics within theoretical sciences, together with the natural and the mathematical sciences. The natural sciences deal with bodies as something that is subject to motion and rest, while the subject matter of mathematical sciences are quantities abstracted from matter as well as quantities of certain things that have quantities.⁷⁴³ In his *al-Madkhal* (Ibn Sīnā's *Isagoge*) he makes the division within theoretical sciences into those that are mixed with motion and those that are not mixed with motion among the latter are mind and God.⁷⁴⁴ This division has the same meaning as the one in *al*-Ilāhiyyāt, because in Ibn Sīnā's philosophy everything that is mixed with motion is also mixed with matter and vice versa. What becomes immediately evident is that two theoretical sciences, natural and mathematical, have one thing in common: they are connected with the material, one way or another. The first specificity of metaphysics, in comparison to other sciences in this category, is that it investigates "the things that are separable from matter in subsistence and definition".⁷⁴⁵ Immediately after this statement Ibn Sīnā stresses that metaphysics deals with the first causes of natural and mathematical existence - with the Cause of all causes and the Principle of all principles.⁷⁴⁶ As we can see, at the very beginning of his metaphysical works Ibn Sīnā prepares the terrain for the proclamation of the superiority of metaphysics. In *al-Madkhal*, he also makes the distinction between those theoretical sciences that deal with matter in the conception and in existence, those that deal with matter in the existence only, but in the conception are separated (tujarrad) from material, and science that is completely separated from material in the conception as well as in existence; the first are natural sciences, the second are mathematical sciences, and the third is metaphysics.⁷⁴⁷ In another words, sciences that are mixed with motion are of two kinds: those that depend on motion, as motion is the necessary condition for their existence, and those who are mixed with motion but do not depend on it.⁷⁴⁸ Hence all theoretical sciences can be divided into those that are mixed with motion/matter on the one hand, and that one special science that is completely separated from motion/matter. By stating that metaphysics is completely separate from material, Ibn Sīnā still follows Aristotle's idea in Metaphysics E, 1, 1026a. However, as we know, his al-Ilāhiyyāt also contains certain themes of religious relevance, not just the

⁷⁴² al-Ilāhiyyāt, I, 2, (13).

⁷⁴³ al-Ilāhiyyāt, I, 1, (2)-(5); I, 2, (2)-(3); Dānish Nāma-I 'alā'ī, I, p. 12.

⁷⁴⁴ al-Madkhal, I, 2, [11].

⁷⁴⁵ al-Ilāhiyyāt., I, 1, (6).

⁷⁴⁶ *ibid*, (7).

⁷⁴⁷ al-Madkhal, I, 2, [12].

⁷⁴⁸ Marmura, Avicenna on the Division of the Sciences, p. 5.

existence of God, but also ideas regarding His attributes, providence, theodicy, prophecy and man's destiny in the afterlife. In order to prepare the terrain for such reasoning he has to establish his own 'Aristotelianism'.

When stating that metaphysics has its subject matter (mawd \bar{u}) being qua being (al-mawj $\bar{u}d$ *bi-mā huwa mawjūd*),⁷⁴⁹ Ibn Sīnā is following Aristotle's Metaphyisics Γ 1003a, and regarding its its goal (matlūba) in the proof for God's existence, again it is from Metaphysics A 982b. But as we saw, what Ibn Sīnā has in mind is that as ontology metaphysics is based on the self-evidence of the concept of existence, that it is as such a priori that precedes every other concept.⁷⁵⁰ Metaphysics starts as ontology, which serves as the fundamental structure on which the philosophical theology is built (we already have seen in what manner). Thus, Ibn Sīnā retains the theological conception highlighted by al-Kindī and at the same time, he develops the line that al-Fārābī initiated by positing existent instead of God as the focus and goal of metaphysics as a universal science; with this he gives his own original solution to a traditional question: how should Aristotle's metaphysics be defined.⁷⁵¹ The central question of metaphysics is the question about existence, which is explained through unity of ontology, which deals with its divisions, and theology, which deals with its source.⁷⁵² By solving this problem in his own way, Ibn Sīnā establishes metaphysics as an articulated and coherent apodictic science, which has position of eminence with respect to all other philosophical disciplines.753

From what is elaborated in the previous chapters we can see that for Ibn Sīnā metaphysics is unique in three main senses: 1) its subject matter is the most general of all notions, that cannot be defined, and yet it represents something best known – the notion of 'existence'; every other science starts from something specific, that is admitted in that science, but proven in the higher science, only the subject matter of metaphysics is admitted exactly because it cannot be proven, but every proof rests upon it, 2) it is the only science that can provide the proof for the existence of God,⁷⁵⁴ because God cannot be body, nor involved with matter, not have parts, nor be involved in motion,⁷⁵⁵ and more so because the subject matter of metaphysics is existence, 3) it relies on the very

⁷⁴⁹ al-Ilāhiyyāt, I, 1, (17); I, 2, (12).

⁷⁵⁰ Türker, *The Possibility of Thinking on Existence*, p. 10.

⁷⁵¹ Bertolacci, *Establishing Metaphysics*, pp. 187-189.

⁷⁵² Türker, Ömer, *Metafizik: Varlık ve Tanrı*, in *İslâm Felsefesi, Tarih ve Problemler*, ed. Cüneyt M. Kaya (Istanbul, İSAM Yayınları, 2013, pp. 603-654), p. 638.

⁷⁵³ Bertolacci, Arabic and Islamic Metaphysics, (7).

⁷⁵⁴ al-Ilāhiyyāt, I, 1, (11).

⁷⁵⁵ *ibid.*, (12).

specific method⁷⁵⁶ that consists in the pure analysis of the most evident notions, and does not involve any inductive inquiry or observation whatsoever; for this reason it is the most perfect and the best knowledge. Ibn $S\bar{n}\bar{a}$ summarise these points:

"This, then, is the science sought after in this art. It is first philosophy, because it is knowledge of the first thing in existence (namely, the First Cause) and the first thing in generality (namely, existence and unity). It is also wisdom, which is the best knowledge of the best thing known. For, it is the best knowledge (that is, [knowledge that yields] certainty) of the best thing known (that is, God, exalted be He, and the causes after Him). It is also knowledge of the ultimate causes of the whole [of caused things]. Moreover, it is knowledge of God and has the definition of divine science, which consists of a knowledge of the things that are separable from matter in definition and existence. For, as has become clear, the existent inasmuch as it is an existent, and its principles and the accidental occurrences [it undergoes] are all prior in existence to matter, and none of them is dependent for its existence on [matter's] existence".⁷⁵⁷

The relationship between the subject matter and the goal of metaphysics reflects a twofold way of considering existence itself: when it is taken as set apart from any condition, in its absolute meaning, existence is the subject-matter of metaphysics, but also it is identified as the existence of the First Uncaused Principle, or the Necessary Existent - in the first sense existence is a non-determinative meaning and can be predicated unconditionally to everything, and in the second it means 'the condition of not adding a composition' and as such it belongs to God, whose existence is the goal of metaphysics.⁷⁵⁸ Metaphysics is the highest science and wisdom because it deals with the ultimate causes, immaterial existents, and with the Cause of all causes. This is possible only because this science is founded and established on the consideration of existence *qua* existence and all its general implications. Because it is based on consideration, i.e. analysis, it is 'the best knowledge', or the most certain knowledge; it is, as we have seen in the chapter on Ibn Sīnā's proof for God's existence, the discursive *a priori* knowledge. This apriorism is based on the notions that are

⁷⁵⁶ This method very often includes *reductio ad absurdum* argument, Hodges explained (2017), but also, as it is clear from his proof for the existence of God, on the pure analysis of the meaning of 'existence' to which Ibn Sīnā refers at one point as "the clear implications" - *al-dalā 'il al-wādiha (al-Ilāhiyyāt*, VIII, 5, (14). ⁷⁵⁷ *al-Ilāhiyvāt*, I, 2, (18):

فهذا هو العلم المطلوب في هذه الصناعة وهو الفلسفة الأولى، لأنه العلم بأول الأمور في الوجود، وهو العلة الأولى وأول الأمور في العموم، وهو الوجود والوحدة. وهو أيضاً الحكمة التي هي أفضل علم بافضل معلوم؛ فإنها أفضل علم أي اليقين، بأفضل المعلوم أي الله تعالى وبالأسباب من بعده. وهو أيضاً معرفة الأسباب القصوى للكل. وهو أيضاً المعرفة بالله، وله حد العلم الإلهي الذي هو أنه علم بالأمور المادة في الحد والوجود. إذ الموجود بما هو موجود ومبادئه وعوارضه ليس شيء منها، كما اتضح، إلاً متقدم الوجود على المادة وغير متعلق الموجود.

⁷⁵⁸ Lizzini, Ibn Sina's Metaphysics, 2.2.

"common to all matters" that have "the highest claim to be conceived in themselves and they cannot be proven and explained totally devoid of circularity".⁷⁵⁹

The distinction between necessary and possible, as we interpreted it, implies the meaning of causality. This meaning is treated *qua* such only in metaphysics, every other science deals with causal relationship within context that is defined by their subject-matter.⁷⁶⁰ Thus, every particular science limits the meaning of 'causality,' and deals with only one type of cause, or with only one aspect of causal relationship. Metaphysics, however, analyses the meaning of cause *qua* cause, and by this analysis it concludes to the absolute cause of all existence, which is recognised as the efficient cause that explains the totality of all things. As science of existence, metaphysics reveals us that the most general reality of all beings is that they exist through participation in the Divine existence by the limitation of their own essences.

While explaining his short history of the development of metaphysics in al-Ilāhiyyāt VII 2, Ibn Sīnā states that the stage of perfection in metaphysics starts with Aristotle. However, this does not mean that metaphysics is yet fully accomplished as an apodictic science, but only that the Philosopher was the initiator of an idea that philosophers that will come after him have to bring to full completion.^{761 762} We can see what Ibn Sīnā has in mind: the method of metaphysics is the unique combination of analysis and demonstration. The ultimate achievement of the pure analysis is the accomplishment of the goal of metaphysics, while in demonstration metaphysics rely on natural sciences in order to provide the ultimate and the most general explanation of the world. In this sense it could be said that "the complete integration between demonstration (i.e. perfection in method) and metaphysics (perfection in content) is not performed by Greek philosophers (not even by Aristotle) but by Ibn Sīnā himself".763 Ibn Sīnā approach to metaphysics represents a scientific syllogistic inquiry that relies on a synthesis between Posterior Analytics' concept of demonstration, and the analysis of the meanings of 'existence' and its implications. Metaphysics does not rely on anything commonly accepted, but provides the demonstration for everything starting from the notions that have the clearest meaning as well as from most certain premises. He relies on the axiomatic nature of the most fundamental principles of logic, defined by Aristotle, as well as

⁷⁵⁹ al-Ilāhiyyāt, I, 5, (5).

⁷⁶⁰ *ibid.*, VI, 5, (51).

⁷⁶¹ Bertolacci, *The Reception*, p. 219.

⁷⁶² Metaphysics is not the only example of Ibn Sīnā's idea of the development Aristotle's philosophy towards its completion; he also makes great changes in logic and develops a modal syllogistic that is quite different from that of Aristotle. This eventually causes that, in the East at least, Aristotle's logical texts will no longer be read much and Avicenna's texts will take precedence (Druart, 2016, p. 70).

⁷⁶³ Bertolacci, *The Reception*, p. 220.

the most general meanings (the existent, the thing and the necessary), that he treats equally axiomatically, that serve as principles of metaphysical ontology and with it as the principles of every science. In this way metaphysics explains the very principles of demonstration and defends science from scepticism.⁷⁶⁴

3.1.2 The Relationship Between Metaphysics and Other Sciences in Ibn $S\bar{\imath}n\bar{a}$

Due to the fact that metaphysics, as science of existence *qua* existence, is in various ways concerned with any scientific inquiry into reality, this complex science must be divided into parts. Regarding the divisions of metaphysics Ibn Sīnā says:

"What adheres necessarily to this science [therefore] is that it is necessarily divided into parts. Some of these will investigate the ultimate causes, for these are the causes of every caused existent with respect to its existence. [This science], [also] investigate the First Cause, from which emanates every caused existent inasmuch as it is a caused existent, not only inasmuch as it is an existent in motion or [only inasmuch as it is] quantified. Some [of the parts of this science] will investigate the accidental occurrences to the existent, and some [will investigate] the principles of the particular sciences. And because the principles of each science that is more particular are things searched after in the higher science-as, for example, the principles of medicine [found] in natural [science] and of surveying [found] in geometry-it will so occur in this science that the principles of the particular sciences that the principles of the particular science that the principles of the particular science that the principles of the particular science in the science and of surveying [found] in geometry-it will so occur in this science that the principles of the particular sciences that investigate the states of the particular existents are clarified therein".⁷⁶⁵

By discussing the subject-matters of other sciences from a completely different perspective (that is from the perspective of the most general divisions and considerations) metaphysics provides the foundation of every other science. It clarifies the principles on which all sciences are built. Because of the specificity of its subject-matter, metaphysics is able to address some specific issues that cannot be discussed in the other disciplines; "the interrelation among the sciences is not simply a matter of interconnection - it rests ultimately on the dependence of all the other disciplines upon metaphysics".⁷⁶⁶ This is so because no science investigates the ontological principles of its subject-matter, and because the subject matter of metaphysics is the ultimate ontological starting point, it provides the foundation for the particular sciences by

⁷⁶⁴ al-Ilāhiyyāt, I, 8, (13)-(14).

⁷⁶⁵ *al-Ilāhiyyāt* I, 2, (16):

ويلزم هذا العلم أن ينقسم ضرورة إلى أجزاء منها: ما يبحث عن الأسباب القصوى، فإنها الأسباب لكل موجود معلول من جهة وجوده، ويبحث عن السبب الأول الذي يفيض عنه كل موجود معلول بما هو موجود معلول لا بل ما هو. وجود متحرك فقط أو متكمّم فقط. ومنها ما يبحث عن العوارض للموجود. ومنها مايبحث عن مبادئ العلوم الجزئية. ولأن مبادئ كل علم أخص هي مسائل العلم في الأعلى، مثل مبادئ الطب في الطبيعي، والمساحة في الهندسة، فيعرض إذن في هذا العلم أن يتضح فيه مبادئ العلوم الجزئية التي تبحث عن أحوال الجزئية التي ت

⁷⁶⁶ Bertolacci, *The Reception*, p. 266.

the means of distinction between existent, its divisions and species; amongst this divisions are the ten categories, which server as the principles of the particular sciences' subject-matters in so far as they are more general than the specific types of existents.⁷⁶⁷ As the very existence of nature is presupposed in the natural sciences, so the proof of its existence must be the task of metaphysician; the same goes for the explanation of substantial change as well as the explanation of the relationship between matter and form.⁷⁶⁸

Metaphysics as the highest science acts as the purpose for the lower sciences.⁷⁶⁹ This means that all knowledge should lead towards the ultimate explanation of existence, i.e. the explanation of the relationship between God and the world, for the sake of the attainment of "happiness in the hereafter".⁷⁷⁰ The role of particular sciences is to explain the world that we observe, as well as to find and formulate the laws according to which observable nature behaves in the particular way. Metaphysics seeks to provide the proof for the ultimate cause of all things, thus explains existence in the most general way. Also, metaphysics demonstrates the principles of the particular sciences, and because of it the particular sciences are subordinate to metaphysics.⁷⁷¹ As combined, all the theoretical sciences provide a full picture that explains totality of existence including both, particular and observable as well as the most general and the absolute. In this way the relationship between metaphysics and other sciences is of mutual benefit; while metaphysics provides the principles for the existence of particular sciences is of metaphysics.⁷⁷² This is why natural sciences as well as mathematics serve as a sort of preparation and should be studied before metaphysics;

"This is because many of the things admitted in this science are among the things made evident in the natural sciences as [for example] generation and corruption, change, place, time, the connection of every moved thing by a mover, the termination of [all] moved things with a first mover, and other than these. As for mathematical sciences, this is because the ultimate aim in this [metaphysical] science-namely, knowledge of God's governance, knowledge of the spiritual angels and their ranks, and knowledge of the order of the arrangement of the spheres-can only be arrived at through astronomy; and astronomy is only arrived at through the science of arithmetic and geometry".⁷⁷³

⁷⁶⁷ *Ibid.*, p. 269.

⁷⁶⁸ al-Ilāĥiyyāt I, 4, (1); II, 2, (15), (22)-(23); IX, 5; al-Samā ʿal-Tabī ʿī I, 5, (3); 10, (8)-(9).

⁷⁶⁹ al-Ilāhiyyāt, I, 3, (2)).

⁷⁷⁰ *ibid.*, I, 3, (1) and X, 3, (5).

⁷⁷¹ Bertolacci, Amos, *The 'Ontologization' of Logic; Metaphysical Themes in Avicenna's Reworking of the Organon*, in Methods and Methodologies (Leiden, Brill, January 2011, pp. 25-51), p. 28. Abb.: Bertolacci, *The 'Ontologization' of Logic*.

⁷⁷² *al-Ilāhiyyāt*, I, 3, (5).

⁷⁷³ *ibid.*, (6):

Clearly, there are two senses regarding the relationship between metaphysics and other sciences; in one sense metaphysics is prior, it proves principles of other sciences and all science depend on it. In another sense other sciences serve as a preparation for metaphysics; due to the fact that they deal with particular existent, particular sciences provide certain content for metaphysical speculations. With this additional information metaphysician is able to provide more complete explanation of the world. This is why Ibn Sīnā says:

"Thus, this science investigates the states of the existent-and the things that belong to it that are akin [to being] divisions and species until it arrives at a specialization with which the subject of natural science begins, relinquishing to it this speciality; [and at a] specialization with which the subject matter of mathematics begins, relinquishing to it this speciality; and so on with the others. And [this science] investigates and determines the state of that which, prior to such specialization, is akin to a principle. Thus, [some of] the things sought after in this science are the causes of the existent inasmuch as it is a caused existent; some [of the things] sought after pertain to the accidental occurrences to the existent; and some [pertain] to the principles of the particular science."⁷⁷⁴

Therefore, metaphysics is in one sense prior to natural sciences and in another sense it is posterior and should be learned lastly.⁷⁷⁵ As we saw, the metaphysical proof for God's existence in its core functions as completely independent of any notion or principle defined in particular sciences. Now, if we analyse carefully Ibn Sīnā words quoted above, we will see that notions he suggests as those used in metaphysics and defined in natural sciences and mathematics are: generation and corruption, change, place, time, the connection of every moved thing by a mover, the termination of moved things with a first mover, as well as facts from astronomy in order to understand God's governance. Although some of these notions are metaphysical notions, they do not help metaphysician in achieving its goal - proving God's existence; hence we could say that these notions are not essential for metaphysical goal. However, all these notions do have an important use in explanation of the relationship between God and the world: God represents the ultimate cause of all existents, and as such He bestows existence upon the world of generation and corruption, while not being the subject of

فلأن كثيراً من الأمور المسلِّمة في هذا مما تبين في علم الطبيعي مثل: الكون، والفساد، والتغير، والمكان، والزمان وتعلق كل متحرك بمحرك، وانتهاء المتحركات إلى محرك أول، وغير ذلك. وأما الرياضية، فلأن الغرض الأقصى في هذا العلم هو تدبير الباري تعالى، ومعرفة الملائكة الروحانية وطبقاتها، ومعرفة النظام في ترتيب الأفلاك، ليس يمكن أن يتوصل إلاّ بعلم الهيئة، وعلم الهيئة لا يتوصل إليه إلاّ بعلم الحساب والهندسة.

⁷⁷⁴ *ibid.*, I, 2, (17):

فهذا العلم يبحث عن أحوال الموجود، والأمور التي هي له كالأقسام والأنواع، حتى يبلغ إلى تخصيص يحدث معه موضوعُ العلمُ الطُبيعي فيسلمه إليه، وتخصيص يحدث معه موضوع الرياضي فيسلمه إليه، وكذلك في غير ذلك. وما قبل ذلك التخصيص كالمبدأ فنبحث عنه ونقرر حاله فتكون إذن مسائل هذا العلم في أسباب الموجود المعلول بما هو موجود معلول، وبعضها في عوارض الموجود، وبعضها في مبدئ العلوم الجزئية.

⁷⁷⁵ *ibid.*, I, 3, (12).

generation and corruption, the relationship between God and the world is such that they are coeternal in time, and by being the bestower of existence God acts as the ultimate Unmoved Mover, while by being the ultimate intellectual being God establishes the balance between supra-lunar and sublunary world. This means that without particular sciences metaphysics does not have any use except providing the proof for God's existence, thus providing a general guidance to scientific thinking as well as the ultimate goal for human life, but for the complete scientific picture of the world it depends on natural sciences and mathematics. However, due to the fact that the proof for God's existence is the main goal of metaphysics, we could say that metaphysics' dependence on particular sciences is not essential, but accidental, while particular sciences depend on metaphysics essentially.

Metaphysics is thus elevated above other sciences, and its purpose "is to attain a principle without another science",⁷⁷⁶ that is the principle of all existence and of all understanding. Another important thing is that "things which have been subjects in other [particular] sciences become accidental occurrences in this [metaphysical] science, because they are states that occur to the existent and are a division of it; thus, that which is not demonstrated in another science is demonstrated here".⁷⁷⁷ Clearly, metaphysics can fulfil its goal through its own principles, without requiring another science, and without any inference from the sensible.

While natural sciences deal with various occurrences in nature, like motion and rest, metaphysics deals with nature *qua* nature, and while mathematics deals with the relationships between numbers, metaphysics deals with the very essence of number and quantity. The division between essence and existence and between necessary and contingent stressed in Ibn Sīnā's metaphysical system allows him to establish first philosophy independently of natural philosophy. To analyse existence *qua* existence means to consider all its implications: its relation to ten categories, the meaning of 'substance' and its divisions, the nature of potentiality and actuality, the meanings of 'essential' and 'accidental,' the 'true' and 'false,' the state of universal and particular, the whole and the part, genus and species, the manner of existence in the soul and outside of the soul, the relationship between cause and the effect, and the difference between the efficient and the final cause, the relationship between priority and posteriority, the difference between priority in intellect and priority in nature, the relationship between one and many and similar, after which the principles of existing thing are going to be research, and the existence of the First Principle, as well as God's relation to

⁷⁷⁶ *ibid.*, (11).

⁷⁷⁷ *ibid.*, I, 8, (15).

the existence that proceeds from Him.⁷⁷⁸ Also, metaphysics deals with some things common to all sciences even though no particular science discusses the mode of their existence, like 'one qua one,' 'many qua many', 'congruent,' 'different,' and 'contrary,' etc.⁷⁷⁹ All these matters can be classified into five main categories within metaphysical science: 1) the general ontology that deals with metaphysical vocabulary and main definitions, 2) the methodology that deals with principles of metaphysical knowledge, 3) theology, or the investigation of God's existence and His characteristics, 4) angelology, that deals with spiritual substances and 5) teleology, or inquiry into Divine wisdom, purpose and balance in the world.⁷⁸⁰ Therefore, metaphysics is not the most universal science only because it deals with existent qua existent, but it also comprehends reality as a whole and not just some part of it. This is why in al-Burhān II, 7 Ibn Sīnā maintains that the particular sciences are subordinate to metaphysics, and as such their principles become questions in the highest science. This is why metaphysics cannot be subordinated to any science - it provides other sciences with their principles, i.e. it answers those questions that particular sciences cannot solve. These principles of particular sciences represent their presuppositions, or in other words they are the particular sciences' hypotheses.⁷⁸¹ In this way, as Bertolacci explains, all the other sciences are clarified in metaphysics:

"It does so by investigating the 'divisions' $(aqs\bar{a}m)$ and 'species' $(anw\bar{a}')$ of 'existent', i.e. the categories, whose particularization determines the subjectmatters of the particular sciences: metaphysics clarifies the principles of the particular sciences by taking into account their subject matters (corporeal substance in the case of natural philosophy, continuous and discrete quantity in the case of mathematics, etc.) simply as existents and as divisions and species of 'existent', before they are specified as peculiar subject-matters of the particular disciplines".⁷⁸²

Ibn Sīnā obviously sees that something very important is missing in Aristotle's system: not just that none of the four causes explains existence, but sciences are not properly coordinated and their dependence is not explained after classification. According to Aristotle, efficient causes are potential at one time and actual at another and same works for their effects. This understanding is due to the fact that within natural philosophy, the efficient cause explains "both coming to be and passing away and every kind of natural change".⁷⁸³ For Aristotle, the

⁷⁷⁸ *ibid.*, I, 4, (1)-(8).

⁷⁷⁹ *ibid.*, I, 2.

⁷⁸⁰ Kutluer, *Ibn Sina Ontolojisinde Zorunlu Varlık*, p. 69.

⁷⁸¹ Bertolacci, *The Reception*, p. 269.

⁷⁸² Ibid.

⁷⁸³ Physics 2.3, 194b 21-23

efficient cause of the statue is the sculptor;⁷⁸⁴ this is so because efficient cause is defined as "the primary source of the change or rest"⁷⁸⁵ and its effect is "the fulfilment of what is potentially, as such".⁷⁸⁶ For Ibn Sīnā, this represents false understanding of the real nature of efficient causality.⁷⁸⁷ So, the main point on which Ibn Sīnā departs from Aristotle is the claim that metaphysics must explain the transition from non-existence into existence. As we saw, Ibn Sīnā's metaphysics achieves this by making the division between metaphysical efficient cause and physical efficient cause. Physics only anticipates the idea of the Principle that metaphysics demonstrates, but it is unable to answer the fundamental ontological question about the origin of the world's existence.⁷⁸⁸ After explaining the relationship between God and the world with the theory of emanation, a metaphysician gives an additional meaning to 'efficient causality' with which he can transcend the traditional explanation that is based on the conception of 'motion.' With this metaphysics provides a foundation for the scientific system that can include physics, psychology, epistemology, prophecy etc.⁷⁸⁹

In his *Physics* Ibn Sīnā confirms that metaphysics proves "that there are existing causes for everything that is subject to generation and corruption".⁷⁹⁰ Besides, as physics is concerned with explanation of natural bodies, i.e. of what is corporeal, it takes the maning of four causes strictly in this context.⁷⁹¹ He sees Aristotle's conception of causality as a conception that fits only into natural philosophy only. So while fully adopting Aristotelian conception of causality for the purpose of natural science, he rejects it insofar as it is considered to reflect the features of efficient causality in metaphysics.⁷⁹² From naturalistic perspective the efficient cause is a principle of motion in another, whereas motion is every transmission from potency into actuality. However, if the notion of 'efficient cause' is considered in the sense of existence itself, then it is a concept more general than Aristotelian naturalistic meaning. Therefore, while natural philosopher deals with the specific causes in a specific kind of matter while the metaphysician research causality as such and with causality as one of the concomitants of the existent considered as such. Only type of cause that can be considered as one of the

⁷⁸⁴ *ibid.*, 2.3 194b 30-32.

⁷⁸⁵ Ibid.

⁷⁸⁶ *ibid.*, 2.3, 194b 30; 3.1, 201a 11-12

⁷⁸⁷ al-Ilāhiyyāt, VI, 2, (1).

⁷⁸⁸ Lizzini, *Ibn Sina's Metaphysics*, 2.3.

⁷⁸⁹ Lizzini, Ibn Sina's Metaphysics, 6.3.

⁷⁹⁰ al-Samā ' al-tabī 'ī, I, 10, (2).

⁷⁹¹ ibid., I, 9.

⁷⁹² In *Physics* I, 10 (*al-Shifā': al-Samā' al-tabī'ī*) Avicenna also discusses efficient causation and draws the distinction between efficient causes which serve as a sort of preparers "which puts matter in order", and efficient causes which gives perfection by giving the form. But even here Avicenna claims that the efficient cause that gives form surpasses the subject matter of investigation in natural sciences.

concomitants of the existent considered as such is, as we saw, the efficient cause. Hence natural philosophy is subordinated to metaphysics, and, as Bertolacci stated, for Ibn Sīnā metaphysics is providing the epistemological foundation of natural philosophy.⁷⁹³

The most important task for metaphysician regarding his relation to natural philosophy is proving that natures exists belongs only to the metaphysician, while the natural philosopher studies its essence.⁷⁹⁴ Thus, Aristotle's approach is too narrow to explain the real nature of causation, and with it the true nature of existence. The relationship between ontology and theology in Ibn Sīnā's metaphysical system serves that exact purpose: to extend Aristotelian view by developing a hierarchy of efficient causes that will correspond with the hierarchy of sciences. In this way the highest science will provide the most general, i.e. the most fundamental explanation of the world, while special sciences will deal with specific problems. The highest science will provide for special sciences will provide an important data and conception to the highest science. In this way all natural sciences essentially depend on metaphysics in the sense of their principles which these sciences presuppose. In this sense metaphysics stands as the highest science and the ultimate wisdom that provides meanings and principles for lesser sciences.

Therefore, the difference between natural philosophy, as inferior science, and metaphysics is in approach and explanation of causes of certain phenomena. For example, natural philosophy (physics, astronomy and psychology) provides an explanation of the movement of the first celestial sphere by naming and describing its formal cause, or the nature of the celestial bodies, as well as by identifying its material cause (as we saw, the matter of the celestial bodies is simple, incorruptible and unchangeable, and therefore it cannot be of the four sublunary elements); on the other hand metaphysical speculation identifies the separate efficient cause (the Uncaused Cause, or the Necessary Existent) which is also the absolute final cause (the Pure Perfection) as the cause of existence.

Similarly, even the propaedeutic science of logic, as normative instrument that protects man from going astray in thinking which deals "with meanings which classify meanings",⁷⁹⁵ stands as subordinate to metaphysics. Logic has its subject-matter in universals, which are based on Aristotle's categories as their principles. This subordination reflects in fact that the principles of logic are epistemologically grounded in metaphysics, while logic also

⁷⁹³ Bertolacci, *The Reception*, p. 284.

⁷⁹⁴ al-Samā ' al-tabī 'ī I, 5, (4).

⁷⁹⁵ Street, Arabic Logic, p. 540.

independently treats certain issues which metaphysics itself also treats;⁷⁹⁶ for example, logic takes universality for granted without investigating its cause - the problem which is investigated in metaphysics and psychology – but on the other hand both logic and metaphysics deal with the distinction between universal and particular.^{797 798}

The purpose of logic is to perfect our capacities to conceptualize (*tasawwur*), acquire assents $(tasd\bar{i}q)$ and definitions $(hadd, ta'r\bar{i}f)$ thus providing the tool for acquiring truth and realising false. Metaphysics clarifies the principles of logic by examining the meanings of 'universal' and 'particular' as well as 'subject', 'predicate', 'essential' and 'accidental'. These notions are the subject-matter of logic. However, 'universal' and 'particular' are among the properties of existent, and the categories examined by logician are the species of existent, hence they can be examined only in the science of existent qua existent. Moreover, this examination is achieved from the standpoint of their existence, not their capacity of leading the mind from the known to the unknown.⁷⁹⁹ Therefore, the principles of logic in the sense of the modality of their existence belong to metaphysics.⁸⁰⁰ This is so because the entire epistemological foundation of logic rests upon the distinction between essence and existence, i.e. the fundamental distinction drawn in metaphysical ontology.⁸⁰¹ Upon this ontological division rests the very confirmation of existence of the logical categories, as well as the confirmation that nine of them are accidents of substance.⁸⁰² Since ontology searches for the common ground according to which 'things exist', it explains in which way logical propositions are related to reality, i.e. it explains how essence becomes instantiated.⁸⁰³

Logic is concerned to prevent one going astray in thinking about conceptions and assent; that is, it provides a theory of definition, and a theory of proof,⁸⁰⁴ as it deals with the relations between universals as they are in themselves, and not with regard to their relations with one of two modes of existence.⁸⁰⁵ However, logic cannot defend its own principles, so the

⁷⁹⁶ Bertolacci, *The 'Ontologization' of Logic*, p. 29.

⁷⁹⁷ *ibid.*, pp. 32-33; also in *al-Madkhal* I, 5 and *al-Ilāhiyyāt* V, 1.

⁷⁹⁸ Regarding the relationship between metaphysics and logic, an interesting observation is provided by Bertolacci. He states that Ibn Sīnā applies his distinction between essence and existence to this matter, and so by taking "logic as elucidating the essence of categories and universals, and metaphysics as investigating their existence, thus providing their ultimate explanation" (in Bertolacci, *The 'Ontologization' of Logic*, p. 35). ⁷⁹⁹ Bertolacci, *The Reception*, p. 273.

Bertolacci, *The Reception*, p. 27

⁸⁰⁰ *al-Maqūlāt* I, 1, [4].

⁸⁰¹ Bertolacci, *The Reception*, p. 279.

⁸⁰² *ibid.*, p. 275.

⁸⁰³ Bäck, Allan, *Avicenna on Existence*, Journal of the History of Philosophy, 25, No. 3 (July 1987, pp. 351-367), p. 366.

⁸⁰⁴ Sabra, Abdelhamid I., *Avicenna on the Subject Matter of Logic*, in Journal of Philosophy, 77 (1980, pp.746-764), p. 761; Street, *Arabic Logic*, p. 541.

⁸⁰⁵ *al-Madkhal*, I, 2, [15]; 12, [93].

fundamental principles of logic - principles of definition and principles of demonstration, i.e. the axioms of non-contradiction and excluded middle – can be defended only in metaphysics.⁸⁰⁶ While logic primarily deals with the principles of demonstration, metaphysician still defends the axiomatic principle of demonstration against the objections of the sophists and sceptics, and is in this sense science that philosophically 'heals' the perplexed.⁸⁰⁷ Therefore, both logic and natural philosophy are constitutively dependent on metaphysics.⁸⁰⁸

The self-sufficiency of metaphysics is also indicated by Ibn Sīnā's comparison of its method with dialectics and sophistic in *al-Ilāhiyyāt*, I, 2, (21); metaphysics deals with something that cannot be approved nor denied by any particular science, and in this respect it is similar to dialectics and sophistic. However, the method of metaphysics produces certainty, not merely an opinion, and the desire of metaphysician is only the truth. This is clear from *al-Burhān* II, 7, where metaphysics is described as apodictic and certain, thus in this sense distinct from dialectics, whose premises are only commonly accepted. Therefore, we could say that the similarity between metaphysical approach and dialectics and sophistic is merely accidental; no particular science can disprove their claims. These disciplines are essentially distinct; metaphysician desires only truth and is able to reach it with certainty, while dialectician offers only arguments in order to support his opinion. Sophist, on the other hand, is not interested in truth nor in opinion, but only in achieving confusion within the belief of his opponent.⁸⁰⁹

Ibn Sīnā's philosophical project resulted in the well-structured system of sciences, culminating with metaphysics as the crowning discipline. The pyramidal hierarchy of sciences is displayed so that metaphysics stays at the top as well as in the very foundation, while logic describes the laws of reasoning and the other two theoretical sciences, natural philosophy and mathematics, provide additional content to the system. The same works for practical philosophy (ethics, politics and household management) and also other particular disciplines subordinated to the main branches of theoretical and practical philosophy.⁸¹⁰

⁸⁰⁶ al-Ilāhiyyāt, I, 8, (13).

⁸⁰⁷ De Haan, Daniel D., *Avicenna's Healing and the Metaphysics of Truth*, Journal of the History of Philosophy, Vol. 56, No. 1 (January 2018, pp. 17-44), pp. 39-40.

⁸⁰⁸ Bertolacci, *The Reception*, pp. 267-279, pp. 284-288.

⁸⁰⁹ Ibn Sīnā, *al-Safsata*, transl. Ömer Türker, parallel Turkish – Arabic text *Sofistik Deliller (as-Safsata)*, Istanbul Litera Yayıncılık (2016), I, 1, [1]-[2].

⁸¹⁰ More details on Ibn Sīnā's classification of sciences as well as on the classification of sciences in general in Islamic philosophy see Biesterfeldt, 2007 (pp. 77-98).

3.2 Ibn Rushd's Approach to Metaphysics

3.2.1 Ibn Rushd Against Ibn Sīnā on Metaphysics

Regarding classification of sciences, Ibn Rushd account is similar to Ibn Sīnā's: there are three kinds of disciplines and sciences: 1) theoretical disciplines, which goal is only knowledge, 2) practical disciplines, which goal is knowledge for the sake of good deeds and 3) logical disciplines, which as propaedeutic disciplines serve as method and guide for theoretical and practical disciplines.⁸¹¹ Further on, Ibn Rushd names two sorts of theoretical disciplines: 1a) universal, which take into consideration existent *qua* existent and its essential concomitants and 1b) departmental disciplines, which take into consideration existent *qua* existent in a certain disposition, these are physics and mathematics.⁸¹² Interestingly, among universal theoretical disciplines Ibn Rushd puts dialectic, sophistic, and metaphysics⁸¹³ – this will become of extreme importance in his later works and develop into real naturalistic view, at least according to medieval standards.

The real problem is the starting point of Ibn Sīnā's metaphysics; Ibn Rushd agrees that notions such as 'the existent,' 'the thing' and 'the necessary' are "common to all matters," but the problem lies with Ibn Sīnā's claim that these notions have "the highest claim to be conceived in themselves and they cannot be proven and explained totally devoid of circularity.⁸¹⁴ Ibn Rushd very well understands what Ibn Sīnā mens by this, and is not something he approves. The problem with Ibn Sīnā's metaphysics is exactly that it is based on the tautological claim and due to it represents the tautological system. This tautology rests upon Ibn Sīnā's ontological starting point of metaphysics. But for Ibn Rushd existence *qua* existence cannot be a starting point of anything, especially not of a serious scientific inquiry into reality. 'Existence *qua* existence' is a notion without meaning and as such it cannot be the object of knowledge. It is the notion of ultimate extension and any scientific establishment on that notion must represent a meaningless system of connected words that does not provide any positive knowledge about reality.

According to Ibn Rushd, Aristotle's metaphysical project culminates with the Book Λ , which aim is to

"... explain the principles of the first sensible substance, but he sets out, in its beginning, to expound the principles of all substances in the absolute sense,

⁸¹¹ Epitome Met., I, p. 21, a2

⁸¹² *ibid.*, pp. 21-22, a2.

⁸¹³ *ibid*.

⁸¹⁴ al-Ilāhiyyāt I, 5, (5).

starting with the principles of the substance subject to generation and corruption... ...Then he expounded the principles of the firs substance: he explained that it is a substance, and in how many senses it is a principle".⁸¹⁵

Existence primarily means 'substance;' ontologically amongst all substances, the Divine substance has absolute priority, but epistemologically observable substance is prior. For this reason Ibn Rushd states that the task of metaphysics is to explain the first sensible substance, not by the means of pure analysis, but by the means of observation of the process of generation and corruption. As in Aristotle scientific research starts with concrete observable substance and gradually develop towards inquiry into eternal in Book Λ ,⁸¹⁶ so should any future development of his ideas. From Aristotle's works, as they are interpreted by Ibn Rushd, we can conclude on three types of substances: corruptible sensible substances, eternal sensible substances, and non-sensible substances.⁸¹⁷ None of these exclusively belong to metaphysics.

Obviously, for Ibn Rushd Ibn Sīnā's mistake is not only in his view on existence, but in his entire approach to metaphysics. Indeed, Ibn Sīnā's system is an original approach to metaphysical problems, as well as his understanding of the relationship between subject-matter and goal of first philosophy. Ibn Rushd sees exactly this as problematic; Ibn Sīnā's approach represents an innovation and has very little in common with the true Aristotelian doctrine.⁸¹⁸ Ibn Sīnā in all his originality is not a follower of Aristotle, only the careful student of Aristotle's method, which makes his metaphysical system even more dangerous in the sense that it is not only the false teaching, but also very rigorously elaborated, which makes it falseness conceived under many philosophical meanings. For scientific discovery of truth one should rely on Aristotle's original ideas, and not on Ibn Sīnā's presuppositions, which do not lead towards certainty, but are mere guessing.⁸¹⁹

Ibn Sīnā believes that no science can prove its own principle and takes that as an absolute instance; yet from Ibn Rushd's perspective it is the task of the metaphysician to explain the existence of the principles of the sensible substance, whether that substance is eternal or

⁸¹⁵ Tafsīr, LAM, 1404:

^{...} ففغرضة الاول فيها ان يعرف مبادى الجوحر المحسوس الاول لكن شرع في اولها بان يعرف مبادى جميع الجواهر باطلاف فابتدأ بمبادى الجوهر الكاءن الفاسد و ذكر بما تبين... ...ثم بين مبادى الجوهر الاول وبين ان هذا هو جوحر و على كم نحوهو مبدأ.

⁸¹⁶ *ibid.*, t. 1, 1407.

⁸¹⁷ *ibid.*, t. 5, 1420.

⁸¹⁸ Druart, Theresa Anne, *Averroes: The Commentator and the Commentators*, in *Aristotle in Late Antiquity*, ed. By Lawrence P. Schrenk (Washington, D.C., The Catholic University of America Press, 1994, pp. 184-202), p. 196.

⁸¹⁹ Tahāfut al-Tahāfut, III, p. 166; 100.

not.⁸²⁰ To understand Ibn Rushd's point here we again need to go back to Aristotle; for Aristotle metaphysics is science that deals with first causes and principles,⁸²¹ it is also the universal science of being qua being⁸²² as well as philosophical theology that investigates Divine things.⁸²³ However, it is clear that for Aristotle the proof for God's existence is not the exclusive right of metaphysics, as he argues about it in his Physics as well as in Metaphysics Λ . This fact is the textual basis in Aristotle for Ibn Rushd's critique: the subject-matter of metaphysics is not existent qua existent in Ibn Sīnā's sense, but the separate existents and the goal of metaphysics is not proving God's existence. According to Aristotle, as Ibn Rushd sees it, the scientific corpus starts from the investigation of particular being, from which one grasps general concepts and is able to ask general questions about genus and species of the given fact. All sciences start from empirical data, i.e. from natural philosophy, and no science including metaphysics can avoid it. Indeed, metaphysics analyses existent qua existent, but the possibility of abstraction of the concept of 'existent' is showed in natural sciences. Therefore, 'existent' is just an abstraction and because of it not positive truth about the world cannot be deduced from it. So if we take into account Ibn Rushd's nominalist and naturalistic position all together, by saying that metaphysics is the science of existent qua existent he means that first philosophy investigates the most general conception and the way that it is predicated to things in the mind. This is obvious, because according to him outside of the mind 'existence' primarily means 'substance'. Metaphysics, therefore, investigates and classifies the ways we predicate things to secondary substances in the mind and cannot provide the proof for God's existence in any way.⁸²⁴

In sum, the entire Ibn Sīnā's understanding and approach to metaphysics is wrong according to Ibn Rushd: 1) existence is not an accident, nor something additional to the essence,⁸²⁵ 2) the division between essence and existence is a nominal one and nominal divisions do not necessitate divisions in existents as they are in themselves,⁸²⁶ 3) it is not appropriate to divide existence into possible in itself and necessary in itself, nor in any way that will apply modal judgements,⁸²⁷ but beside these 4) there cannot be a division between metaphysical and physical knowledge, hence the metaphysical proof for God's existence cannot be

⁸²⁰ Tafsīr, t. 5, 1424.

⁸²¹ *Metaphysics*, A, 1, 981b; A 2, 982b.

⁸²² *ibid.*, Γ, 1, 1003a.

⁸²³ *ibid.*, E, 1, 1026a.

⁸²⁴ *LC Physics*, II, t. 22, f. 57B.

⁸²⁵ Tahāfut al-Tahāfut, p.250; 161 ; p.251; 162.

⁸²⁶ Tafsīr, LAM, 1623.

⁸²⁷ Tahāfut al-Tahāfut, p. 178, 108; p. 261, 170; Tafsīr, LAM, 41, 1632.

established.⁸²⁸ From this it follows that the main problem of Ibn Sīnā's approach is that it cannot provide any positive knowledge about the world whatsoever. More so, if Ibn Sīnā's metaphysics indicates that God is in fact identical with existence *per se*: if God's essence is His existence, the answer to the question 'what is God' is 'existence' and the absoluteness of existence would be the absoluteness of Divine existence. For Ibn Rushd such conclusion would be unacceptable, not just because of its pantheistic implications, but also from the epistemological point. As we saw, his understanding of substance implies that no metaphysical proof can be provided other than which will be based on the cosmological proof from motion, and no scientific knowledge can be established except the one based on the perceivable - existents separated from matter can be demonstrated only in physics by the means of speculation that relies on the observation of motion. This means that these separate existents are taken for granted in metaphysics and as such are its subject-matter and not goal.⁸²⁹ Metaphysics, therefore, deals with God's existence, as well as with other separable existents, in the sense of analysis of their dispositions,⁸³⁰ i.e. their attributes and relationship with the world of generation and corruption by the mean of the explanation of final causality.

Another mistake of Ibn Sīnā is his view that only metaphysician speaks of prime matter, while natural philosopher deals exclusively with material beings. According to Ibn Rushd, prime matter as well as the First Mover are demonstrated in natural philosophy; this is implied by the fact that natural philosophy deals with concrete existent as well as with the universal that depends on this concrete existent, while metaphysics treats the most general notions starting with the meaning of 'existence' and its relationship with substance and accidents.⁸³¹ Therefore, all positive speculative beings, like God, celestial intellects and prime matter can be demonstrated only in natural philosophy, through synthesis of facts demonstrated mainly in physics, psychology and astronomy.

Ibn Rushd is well aware of Ibn Sīnā's claim that natural philosopher only postulates the existence of nature, and that the metaphysician proves its existence,⁸³² but this is an obvious mistake because, as we can see, metaphysics cannot prove anything, but it only uses the proofs from natural sciences. According to Ibn Rushd, both natural science and metaphysics deal with forms, but from different perspectives; natural sciences deals with material and metaphysics investigates non-material forms – but although metaphysics investigates the non-

⁸²⁸ LC Physics, II, t. 22, f. 57B.

⁸²⁹ LC Physics, I, t. 26, f. 59 BC; I, t. 83, f. 47FG.

⁸³⁰ *ibid.*, t. 26, f. 59 BC.

⁸³¹ *ibid.*, IV, 56M-57B.

⁸³² Tafsīr LAM, t. 5, 1424.

material entities, it does not prove them, instead the proof lies within physics.⁸³³ Non-material existents are, therefore, proven in physics, and provided to metaphysics where they serve as the subject-matter of this science. Therefore, for Ibn Rushd metaphysics is undetachable from natural philosophy, and any sort of attempt to establish metaphysics as stand-alone science (or at least some aspect of metaphysics) results in tautological system that does not produce any positive knowledge whatsoever.

As Bertolacci notices, Ibn Rushd's view on the subject-matter of metaphysics seems inconsistent; mainly whether the subject-matter of the divine science is existent *qua* existent or God's existence.⁸³⁴ Still, although Ibn Rushd did not offer a systematic explanation of the problem of the relationship between the subject-matter and the goal of metaphysics, he clearly indicates that the subject-matter of first philosophy is every conclusive fact demonstrated in natural sciences, and the goal is the synthesis and the confirmation of these facts. In this sense Ibn Rushd claims that Ibn Sīnā is wrong in thinking that metaphysics provides proof for the existence of prime matter and the First Mover to physics (in fact it is *vice versa*), and that Aristotle's intention is not to prevent natural scientist to prove the subject-matter of his science, but only to demonstrate the causes of its own subject-matter in the sense of absolute demonstration that provides the cause and the existence of God, and against any sort of 'metaphysics.

Metaphysical inquiry must be about substance, i.e. about physical entities. This is the only way to avoid the tautology in knowledge - as Aristotle said, for what is sought in this science "are the causes and principles of substance",⁸³⁶ therefore, Ibn Rushd concludes, "substance is the true being and the cause of all others".⁸³⁷ Actual being is a subject, i.e, that by which accidents are. This is the meaning of 'substance', something that 'stands under' accidents, or as Aristotle says ' $o\dot{v}\sigma i\alpha$ ' in the true, primitive and strict meaning of this term.

3.2.2 Physics and metaphysics

Due to the fact that only natural philosophy explains the existence of the eternal substance (which is shown at the end of Aristotle *Physics*), and because it is impossible to demonstrate

⁸³³ LC Physics, IV, 47 F-K.

⁸³⁴ Bertolacci, Avicenna and Averroes on the proof of God, p. 95.

⁸³⁵ *LC Physics*, IV, 56M-57B.

⁸³⁶ Metaphysics, 1069a18.

⁸³⁷ Tafsīr, LAM, t. 1, 1406.

the existence of eternal substances outside of natural philosophy⁸³⁸ the way to re-establish Aristotelian wisdom means for Ibn Rushd to connect natural philosophy, especially physics, and metaphysics. These two sciences represent different approach to the same reality; physics is the demonstrative science that research material existent and through it proves the existence of non-material entities, while metaphysics accepts what is demonstrated in physics as its subject-matter. Natural philosophy is the foundation of all knowledge, as it satisfies all criteria of Aristotle's *Posterior Analytics*: it deals with a single subject-matter whose existence must be taken for granted and cannot be proved, it researches the per se accidents of its subjectmatter, it demonstrates through causes that these per se accidents belong to the subject-matter, and it possess a finite set of proper principles that are neither established by another higher science nor demonstrated in an absolute sense within the same science - by showing this Ibn Rushd clarifies that natural science is a perfect and most certain science.⁸³⁹

However, as we are going to see, although physics and psychology represent the most important sciences in the sense of foundation of scientific knowledge, in other sense metaphysics remains the highest science. Although original in his interpretation, Ibn Rushd still attempts to follow Aristotle as close as possible: if there is no other substance but material, then there is no more important science than natural philosophy, but if such substance exists first philosophy is the highest science.⁸⁴⁰

As we saw so far, Ibn Rushd puts a great effort in establishing natural philosophy as a real autonomous science in accordance with all the epistemological criteria of Aristotle's *Posterior Analytics*.⁸⁴¹ The subject-matter of natural philosophy covers both types of substances: those that are subjects to generation and corruption and those that are not.⁸⁴² Only physics demonstrates these things because "it is impossible to demonstrate the existence of the first substance except by means of motion; methods which are thought to lead to the existence of the First Mover other than the method based on motion are all suasive".⁸⁴³ Natural philosophy represents for Ibn Rushd an inquiry into reality that produces certainty exactly it is strictly based on empirical data. It is the sense experience what verifies the true statements, and unless the statement does not agree with the sensed things they do not have

⁸³⁸ *ibid.*, t. 5, 1422.

⁸³⁹ Cerami Averroes' Natural Philosophy, pp. 181-187.

⁸⁴⁰ Metaphysics, VI, 1, 1026a 29-31; Tafsīr, HA, t. 2, 714.

⁸⁴¹ Cerami Averroes' Natural Philosophy, pp. 179-180

⁸⁴² Tafsīr LAM, t. 5, 1422.

⁸⁴³ *ibid*, 1423.

any scientific value.⁸⁴⁴ All scientific knowledge is based on the observation of motion and rest from which one grasps the principles of nature in the light of causal efficacy.⁸⁴⁵As it is clear from *Tahāfut al-Tahāfut* XVII, Ibn Rushd strongly argues that the causal efficacy represents an absolute self-evident principle in which no one can seriously doubt. This also goes for the nature of substances as well as for the fact of motion and rest. That things are in the process of constant motion is evident from inductive inquiry into reality.

Through observation it becomes acknowledged that the substance is composed of passive principle, or matter, and active principle, or form. The notion of 'substance' is the fundamental notion of any science and therefore basis of all knowledge, and due to the fact that substance *per se* is a particular existent investigated in physics, it is this science that has the absolute priority over other sciences. But although substance is, like motion and rest primarily investigated in physics, the meaning of the notion 'substance' is analysed in metaphysics. Therefore, primary use of metaphysics is the analysis and clarification of certain meanings such as oneness, multiplicity, potency, actuality and "other general concomitants, and, in general, things which adhere to sensible things with respect to the fact that they are existents".⁸⁴⁶ This analysis, however, does not produce real positive knowledge about the world, but only conceptual clarification. This view of metaphysics changed in Ibn Rushd over time. In his On Aristotle's 'Metaphysics' he still considers metaphysics as science that provides the proof for the existence of God. The proof, as he advocates, should be established on the basis provided by natural sciences, but nevertheless metaphysics is capable to offer certain 'positive' knowledge about the world by going beyond physics in identifying not only the final but also the ultimate efficient cause:

"It aims, as has been shown, at considering [(i)] being inasmuch as it is being, [(ii)] all its species up to [that point] where it reaches the subject matters of the departmental sciences, [(iii)] the essential concomitants of [being qua being], and [(iv)] at the completion of all this [by considering] the first causes of [being qua being], i.e. the things separated [from matter]. This is why this science states only the formal and the final causes, and, in a specific respect, the efficient cause, that is to say, not in the respect in which the efficient cause is predicated of changeable things... In short, it is [Aristotle's] basic aim in this science to state that which remains [to be stated] scientifically with respect to the knowledge of the most remote causes of sensible things, because that which has been shown in this respect in physics are only two remote causes, namely the material and the moving [causes]. What remains to be shown here [in metaphysics] are their formal and final causes, and [also] the agent. For [Aristotle] thinks that that which moves is distinct from the agent inasmuch as that which moves gives to the movable only [its] motion, whereas the agent gives the form through which the motion [occurs]. This knowledge is peculiar to this science because it is through general things that one apprehends the existence of these causes; and this still [holds true] when we take for granted here what became plain in physics: that there is an immaterial [first] mover".⁸⁴⁷

⁸⁴⁴ *LC Physics*, VIII, t. 22 - t. 23.

⁸⁴⁵ Kogan, *Metaphysics of Causation*, p. 110

⁸⁴⁶ *Epitome Met.* I, p. 23, a3.

⁸⁴⁷ *ibid.*, I, pp. 23-24, a3-a4.

Thus, we can see certain continuity in Ibn Rushd's philosophical development. Even when he was follower of the emanation doctrine, he still maintained that natural philosophy should have priority in knowledge. This view he gradually developed into a real naturalistic metaphysics.

All basic principles of natural sciences are self-evident, cannot be deduced⁸⁴⁸ and, as such, are not dependent upon metaphysical arguments. However, to be 'self-evident' for Ibn Rushd does not mean 'to be able to be grasped by everyone.' These principles are not impressed in us in any way except empirical evidence, so they can be ignored. For example, one can still assume that existent is one and immobile, like Parmenides, but from the point of natural philosophy this is nonsense.

It is natural philosophy that shows that the reality is composed of many natural entities that are mobile, that they have a cause and that they are composite; however, it is not a job of natural philosopher to defend these principles against those who are not able to grasp them.⁸⁴⁹ Therefore, natural scientist is concerned only with research, i.e. scientific inquiry into reality. He does not discuss about his founding with non-scientists. At one point Ibn Rushd draws an analogy that explains the relationship between natural scientist and metaphysician: it is the metaphysician that argues with those who do not understand the scientific principles; just as just as the geometer does not argue with those who deny the principles of geometry, nor should physicist: "speaking with this kind of people belongs to a different sciences, either to the special one or to the one common to all [sciences], that is, either to the first philosophy or to the art of arguing [i.e. dialectics]".⁸⁵⁰ As science that systematise scientific theories and concepts, metaphysics is best suited to defend theories of natural philosophy against those who are not scientists themselves. Natural philosopher does not argue, but demonstrates starting from the fundamental principles of his art; he defines substances and quiddities of particular existents and provides his findings to metaphysician so they can be systematise and elaborated.851

Text 8 of the first part of Ibn Rushd's *Long Commentary on Aristotle's Physics* implies that metaphysics, besides being a science that completely depends on natural philosophy, or on the

⁸⁴⁸ LC Physics I, t. 8. This is also argued throughout entire Tahāfut al-Tahāfut XVII.

⁸⁴⁹ LC Physics I, t. 8.

⁸⁵⁰ *ibid*:

Et tamen qui hoc ponit negat principia posita a naturali, rectum est, ut cum eo non fiat disputatio, quemadmodum geometra non disputat cum negantibus prima principia geometriae, sed loqui cum huiusmodi hominibus pertinet et ad aliam scientiam, aut propriam aut communem omnibus scientiis, scilicet primam philosophiam aut artem disputandi.

⁸⁵¹ *ibid.*, I, t. 11; VIII, t. 22.

demonstrations and principles of natural sciences, also 'serves' the science of physics by defending its demonstrations and principles. It seems that metaphysics uses the method similar to dialectics to refute possible objections against principles of physics,

"for the natural scientist is not expected to defend the principles of his own science, but to *use* them in expanding the frontiers of knowledge in his discipline. Clearly, then, it is in his capacity as metaphysician that Averroes, following Aristotle, undertakes to answer all those who denied the diversity, mobility, stasis, and intelligibility of being."⁸⁵²

This idea is further developed in the *Tafsīr*, JIM, where Ibn Rushd discusses dialectic as acceptable form of philosophy that has certain place in science.⁸⁵³ In this sense dialectic, or perhaps more specifically 'metaphysical dialectics', is a necessary part of metaphysical science.

However, Ibn Rushd still maintains that metaphysics is in a way superior to physics, as he is well aware of Aristotle's doctrine in Metaphysics and Posterior Analytics:⁸⁵⁴ the inferior science provides the fact to a superior, and superior science offers additional explanation of that fact. In the context of the relationship between metaphysics and natural sciences, for example, physics provides the proof for the existence of the non-material substances and metaphysics deals with the explanation of their natures. Therefore, although metaphysician deals with non-material existents, they are not proven in his science, but in physics, so they are taken for granted as subject matter of metaphysics. Thus, Ibn Rushd states that "physicist provides proof that there are existents separated from matter, and the mathematician demonstrates their exact number" and metaphysician further on uses these data in order to investigate "their substances and all that pertains to them".⁸⁵⁵ (LC on the Posterior Analytics, A. 100, 369; Lat. I.2a 230 C-E; Bertolacci, 2007). This viewpoint obviously represents a gradual development from Ibn Rushd's earlier ideas, like in On Aristotle's 'Metaphysics' where he states that metaphysician "...takes for granted the existence of the [first mover] from physics... ... and states [only] the mode in which it is the moving [cause], just as he takes for granted the number of the [celestial] movers from the discipline of mathematical astronomy" (Epitome Met. I, p. 24, a4).

⁸⁵² Kogan, *Metaphysics of Causation*, p. 111.

⁸⁵³ Tafsīr, JIM, t. 2.

⁸⁵⁴ Post. Analytics, A, 13, 78b-79a

⁸⁵⁵ LC on the Posterior Analytics, A. 100, 369; Lat. I.2a 230 C-E; from , Avicenna and Averroes on the proof of God, pp. 92-93.

As we can see, Ibn Rushd's understanding of existence eventually led him towards a position that could rightly be called "a turning point towards natural philosophy". His elaboration shows that it is physics, and not metaphysics, the fundamental science for all demonstrative knowledge of the world. Evidently, in order to explain the world one must explain it by the relationship with its cause - God - and this is the task of metaphysician because, as we have seen, physics focuses on efficient, formal and material causality. Final causality is properly explained in metaphysics, after all abstract ideas are grasped from physics, psychology and astronomy. So, in order to go 'beyond' physics one must first analyse the physical. Therefore, although metaphysics is still considered as the highest science and 'wisdom'⁸⁵⁶ it is not 'the most perfect science' in the sense of production of the most reliable knowledge.

It may be the case that Ibn Rushd saw Book A of Metaphysics as main connection between Aristotle's works on natural philosophy and the ideas about the science of metaphysics, due to the discussion about generation and corruption which is widely emphasize in this part of Metaphysics.⁸⁵⁷ Reliability of metaphysics depends on demonstrations provided by natural sciences is evident from the analysis of Ibn Rushd's proof for the existence of God: while physics here provided the proof for the existence of the celestial bodies, the celestial souls, separate intellects and God as the absolute first cause,⁸⁵⁸ metaphysical speculations in *Tafsīr* extended this knowledge by showing that God is in fact the ultimate final cause of all things. In other words, once the existence of God is established in natural sciences, metaphysics further clarifies 'what' God is.⁸⁵⁹ This clarification shows that God is the ultimate goal, the end and the form of all existence; so metaphysician "shows in this science that the immaterial existent which has been shown to be the mover of the sensible substance is a substance prior to the sensible substance and its principle insofar as it is its form and its end" - in this way metaphysics offers the ultimate and the most general explanation of being qua being.⁸⁶⁰

Similar is the relationship between metaphysics and psychology. Psychology is a demonstrative science that investigates principles of living beings.⁸⁶¹ Due to the fact that according to Ibn Rushd heavenly bodies are living causes of the movement of the sublunary world, it is up to psychology to provide demonstrations for the understanding of these living

⁸⁵⁶ Ibn Rushd, Tafsīr ma ba'd at-tabī'āt, Metafizik, Büyük Şerhi, transl. Muhittin Macit, Istanbul, Litera Yayıncılık, 2016, BA, [297].

⁸⁵⁷ Altuner, Ilyas, Some Remarks on Averroes' Long Commentary on the Metaphysics Book Alpha Meizon, Entelekya Logico-Metaphysical Review, Vol. 1, No. 1-2 (November, 2017, pp.6-17), pp. 7-9. ⁸⁵⁸ Twetten, Averroes on the Prime Mover, p. 131.

⁸⁵⁹ Conditionally speaking, of course, as there is really no 'what' regarding God's nature.

⁸⁶⁰ Tafsīr, LAM, t. 6, 1433.

⁸⁶¹ Alper, Ömer Mahir, Ibn Sīnā, Istanbul, ISAM (2010), p. 79.

entities (*qua* living). Psychology proves the existence of the non-material intellect that represents substance independent of body. ⁸⁶² This demonstrative knowledge is further used in metaphysics together with facts from physics for the final synthesis that gives the complete explanation of existence by the means of the intellectual and living final cause. Psychology, therefore, provides key principles for metaphysics by proving the existence of separate intellectual forms in a different way than physics.⁸⁶³ In short, without psychology it is impossible to grasp that the First Cause is in fact the pure intellectual actual reality that has no potency whatsoever,⁸⁶⁴ which means that it would be impossible to explain the world as the effect of the ultimate intellectual living cause. In this sense the essential principles of metaphysics are established in the science of the soul.⁸⁶⁵

The world, as we saw, is according to Ibn Rushd the result of eternal movement which is moved by the intellectual desire of living celestial intellect for the Unmoved Mover which is the supreme intellectual being - psychology as science that deals with the nature of intellect is in this sense essential for the explanation of the world.

Therefore, the only way to build metaphysics is on the basis of Aristotelian physics and psychology; while physics provide the demonstrations for the eternity of heavenly movements, psychology shows the nature of intellect by pointing to its difference with regard to matter, thus it becomes evident that non-material beings which set the entire world in motion are in fact intelligent.⁸⁶⁶ In this way natural sciences are synthesised into the harmonious system with the universals of metaphysics.⁸⁶⁷ In *Tafsīr* Ibn Rushd summarises his view:

"... it has been explained in the eighth book of the *Physics* that the mover of these celestial bodies is without matter and a separate form, and in the *De Anima* that the separate forms are intellect. It follows that this mover is an intellect and that it is a mover insofar as it is the agent of motion and the end of motion. This is distinct and multiple only in us, I mean that which moves us locally as efficient

⁸⁶² Ibn Rushd, *Long Commentary on De Anima of Aristotle*, transl. Richard Taylor, Yale University Press, 2009, III c. 5. 410. Abb.: *LC De Anima*.

⁸⁶³ Taylor, Richard C., Averroes on Psychology and the Principles of Metaphysics, in Journal of the History of Philosophy, 36:4, Research Library Core (October 1998, pp. 507-523), p. 514. Abb.: Taylor, Averroes on Psychology and the Principles of Metaphysics.

 ⁸⁶⁴ Taylor, Richard C., Averroes' Philosophical Conception of Separate Intellect and God, in La Lumière de l'intellect. La Pensée Scientifque et Philosophique d'Averroès dans Son Temps. Eds. Ahmad Hasnawi (Leuven: Peeters Publishers, 2011, pp. 391-404), pp. 392-395. Abb.: Taylor, Averroes' Philosophical Conception of Separate Intellect and God. Also in Taylor, Averroes on Psychology and the Principles of Metaphysics, p. 518.
 ⁸⁶⁵ Taylor, Averroes' Philosophical Conception of Separate Intellect and God, p. 395.

⁸⁶⁶ Taylor, Richard C., Averroes: religious dialectic and Aristotelian philosophical thought, in The Cambridge Companion to Arabic Philosophy, eds. Peter Adamson and Richard C. Taylor (Cambridge University Press, 2005, pp.180-200), pp. 194-195.

⁸⁶⁷ Endress, Averroes' De Caelo, pp. 23-24.

cause and that which moves us as final cause, because it has two modes of existence, one in the soul and one outside the soul. Insofar as it exists in the soul it is the efficient cause of motion, and insofar as it exists outside the soul, it is mover as end".⁸⁶⁸

Metaphysical knowledge is clearly the extension of the content that provides physical demonstration, while metaphysics cannot demonstrate anything on its own. However, metaphysics offers an important synthesis that unites all knowledge of particular sciences and shows that sometimes (like in the case of God's existence) different aspects of different scientific inquiries represents only nominal distinction of the mind.

The only way to solve aporetic character of metaphysics, as it is described by Aristotle in *Metaphysics* B, but also to properly respond to any sort of critique, like the one from al-Ghazālī's *Tahāfut*, is by establishing first philosophy on the philosophy of nature. From this we can conclude on twofold function of metaphysics in Ibn Rushd: 1) metaphysics is the highest science that synthesizes all scientific demonstrations and 2) it provides the dialectical defence against those who attack the principles of natural sciences.

This view is not in itself inconsistent, and these two functions are tightly interconnected: metaphysics does not provide any demonstration on its own, but uses demonstrative knowledge from other sciences which are synthesised into one complete scientific system; by accomplishing this task there is no one better to defend scientific knowledge against those who do not understand it than a metaphysician, as he has the complete inquiry into reality and so only he can provide proper explanation for those who do not know better ways of reasoning than dialectics and rhetoric. As the science that synthesise all positive knowledge, i.e. all the demonstrations provided by natural sciences, strives for the more general demonstration.⁸⁶⁹

For this reason it is correct to say that physics deals with substance *qua* moved, while establishing efficient causes as the principles of substances, and that metaphysics investigates substances *qua* such, and establishes that all the principles established in natural sciences are also formal and final causes of substances.⁸⁷⁰ But it is important to underline that in this whole

⁸⁶⁸ Tafsīr, LAM, t. 36, 1594:

^{...}اصناف المشتهيات السماوية قد تبين انه في غير هيولى وانه صورة مفارقة في الثامنة من السماع و تبين في كتاب النفس ان الصور المفارقة هي عقل فيلزم من ذلك ان يكون هذا المحرك عقل وانه محرك من جهة انه فاعل للحركة و من جهة انه غاية الحركة و ذلك ان هذا انما يفترق فينا و يتعدد اعنى الذى حيركنا في المكان على جهة انه فاعل والذى حيركنا على انه غاية و ذلك انما هو من قبل ان له وجودين وجود في النفس و وجود خارج النفس فهو من جهة وجوده في النفس فاعل للحركة و من جهة وجوده خارج النفس محرك على طريق الغاية.

⁸⁶⁹ Tafsīr, ALIF, t. 6, 22.

⁸⁷⁰ Adamson, Averroes on Divine Causation, p. 209.

process natural philosophy is using its own demonstration, while metaphysics is using the demonstrations established by the natural philosopher. Therefore, metaphysics according to Ibn Rushd is not the highest science by its demonstrative character, but its synthesis of all other sciences into one complete system.

CONCLUSIONS

Ibn Rushd's critique of Ibn Sīnā's approach to metaphysics is based on his nominalist approach to being and existence; it is merely a notion that as such in its abstract form does not denote anything. Its primary denotation is substance and secondary other nine accidents. Thus, in Ibn Rushd the most general metaphysical meaning is tightly interconnected with Aristotelian conception of 'substance,' which results in Comentator's firm belief that Aristotle's philosophy must represent scientific perfection, thus cannot be refuted but only expanded on certain cases and aspects that the Philosopher himself did not take under consideration (Chapter 1.2.2).⁸⁷¹

Therefore, all reality cannot be divided into what is possible in itself and what is necessary in itself, but in substance and accidents. For Ibn Rushd, modalities belong only within the judgment of the mind for Ibn Rushd, but categorisation of particular things corresponds with their real natures, i.e. natures of species, which reflect in their forms (Chapter 1.2.4). Science represents a strict logically guided inquiry into substance; that is into the concrete particular substance in the sense of natural philosophy and into the meaning of 'substance' in the sense of metaphysics. Such inquiry of natural philosophy leads towards the proper positive knowledge about the world, while on this knowledge metaphysics establishes speculative explanations of the world (Chapter 3.2).

According to Ibn Rushd, there is no and cannot be a scientific inquiry into existence *qua* existence. Such metaphysics represents logical analysis of empty notions and has no positive use. All knowledge is based on two processes: 1) observation of certain behaviour of material substances, which is determined by their innate natures, according to which they act as causes, interact and move and 2) abstraction, or forming universal concepts and judgement about things - this includes grasping of the meaning of 'existence' (Chapter 1.3.2). As we saw, such empiricist foundation leads Ibn Rushd to oppose Ibn Sīnā in three main senses: ontological, cosmological and in the sense of the relationship between metaphysics and other sciences.

Metaphysics as science of being primarily analyses the relationship between two meanings, 'existence' and 'substance'. The analysis is based on the scientific inquiry into material world

⁸⁷¹ This becomes even more evident if someone pays attention on less philosophical theories within Ibn Rushd's thought, for example his zoological theories in *Kitāb al-ḥayawān/De animalibus* - see Fontaine, Resianne, *Averroes' Commentary on Aristotle's 'De Generatione Animalium' and its Use in Two Thirteen-Century Hebrew Encyclopedias*, in *Islamic Thought in the Middle Ages*, ed. Ann Akasoy and Wim Raven (Leiden Boston: Brill, 2008), pp. 489-502.

and it reveals that the distinction here is only conceptual: in reality, existence is substance, a real being that posess its intrinstic nature, or essence, according to which it behave as a member of a species. In this sense, in every real being existence is its essence. In Greek all three meanings are encompassed by one universal term, $o\dot{v}\sigma i\alpha$, which is the unique meaning that in the mind can be grasped as *jawhar*, *mawjūd*, *māhiyya*, but what stands primarily for 'what is real', 'what stands under' or 'what is the specific cause of a particular being'. Thus, in Greek terms the main formulation of Ibn Rushd's philosophy would be that $e\bar{i}v\alpha i$ primarily, or in reality, means $o\dot{v}\sigma i\alpha$, and all divisions are merely divisions of the mind. This is the core of his Aristotelianism.

From such established ontology it is clear why according to Ibn Rushd one cannot establish the proof for God's existence through pure analysis of any concept (Chapter 2.1.3.1). Due to the fact that we acquire intelligibles from images we abstract from sensory experience, the proof for the existence of God can be established only by the means of observation of the motion of empirical substances (Chapter 2.1.3.2). Consequently, the proof is established within science that research motion and rest, i.e. physics. Ibn Sīnā failed to realise this because of the influence of theologians who considered the division between essence and existence as division in thing itself, as well as because of their understanding of existence as accidental property of an existent. No proof can be established on the pure consideration of the meaning of 'existent', 'thing' or 'necessary'. On the contrary, these meanings denote substance, accident and causal relationship - this is why there is no such thing as metaphysical proof for God's existence, but only the proof provided by natural sciences. In metaphysics we do not establish proofs, but the ultimate synthesis of proofs. Thus, metaphysics is the highest science in explanatory sense, not in epistemological or demonstrative sense.

The fact that existence is not *per se* accidental property of substance implies that it is not and cannot be something 'bestowed', hence theory of emanation is not just wrong, but useless in its explanation (Chapter 2.2.2). Existence of the world as totality of existing substances cannot be consistently explain by emanative process of the bestowment of existence, but only by the explanation of the succession of forms which give actuality to material existent (Chapter 2.2.3). Ibn Sīnā's cosmology is based on his view of existence as accident as well as metaphysical efficient causality. But in Ibn Rushd, existence is not an accident, and we cannot tlak about metaphysical efficient causality. Efficient cause is the cause of motion, and through motion world as eternal substance has existence in its own right.

Another problem with Ibn Sīnā's 'metaphysical causality' and the emanation theory is that, like al-Ghazālī noticed, it does not answer the question about the origin of the plurality. The plurality exists within the first emanation immediately after the existence is bestowed upon it. Therefore, it cannot be a strict rule that from one only one proceedes. Also, if the emanation is the result of the bestowment of existence that eventually ends with the Giver of Forms, this is just another subtle way to affirm the creation *ex nihilo* doctrine, which obviously contradict Ibn Sīnā's own claim that the world is eternal (Chapter 2.2.2).

To correct these missconceptions we have to realise that metaphysics is the ultimate science of being in a different sense than Ibn Sīnā understood it. It is the continuation of natural philosophy that deals with scientific conception, and not with demonstration. Metaphysics synthetise scientific knowledge and elaborates scientific facts. It takes its foundation in the form of subject-matters from natural philosophy, as any higher science depends on lower sciences in terms of its subject-matter (Chapter 3.2.2). In fact, as we saw, for Ibn Rushd, even the goal of natural sciences is the highest possible goal - God's existence, its demonstration and the means for understanding Him as intellectual being. Thus, due to its explanatory nature and all-encompassing synthesis, metaphysics is the preffered science when arguing with science illiterates, or in order to dialectically defend scientific theories. A dialectical argumentation is, therefore, important for reasoning with those unables to grasp real demonstrative arguments. If someone would be able to grasp Aristotelian demonstration, he would have no doubt in the facts established by natural scientist (Chapter 3.2.2).

In the end, it is important to draw attention how through his critique Ibn Rushd anticipated many later arguments against classical metaphysics, mostly that of logical positivism and metaphysical physicalism. Historically, this is one of Ibn Rushd's greatest contributions for the development of philosophical thought.

But how acceptable is Ibn Rushd's critique and how could Ibn Sīnā reply?

As 'existence', in the sense of Ibn $S\bar{n}\bar{n}$'s *wujūd*, is the meaning of the ultimate extension it cannot be grasped by the means of abstraction but has to be 'impressed' in the soul (Chapter 1.1.1). Moeover, it is 'existence' that allows us to grasp intelligibles through experience, as every meaning becomes intelligible through this absolute meaning (Chapter 1.3.1). As every thing that exists in any way must participate in the absoluteness of existence, every meaning must participate in the absoluteness of this meaning. Thus we can in fact talk about existence *per se* as 'existence' has certain denotation, other than substance, which is 'everything-that-is' - it denotes the absoluteness of all beings, those that exist as well as those that can exist.

Therefore, in its abstract form, the meaning of 'existence' cannot be an empty meaning, but on the contrary, the fullest possible meaning. As such, it is opposite to 'nothingness' and can never be equal to it in accordance to all three principles of logic; 1) if something exists, it does exists, 2) something cannot exist and does not exist, and 3) it must either exist or does not exist. Thus the very principles of logic are implied in the absolute meaning of 'existence'.

For this reason Ibn Sīnā takes 'existence' as the starting point of his metaphysical speculations. He notices that this absolute meaning is grasped with connection to 'existent', 'thing' and 'necessary' (Chapter 1.1.1); this is so because it is evident that *existence* in the most general sense is *necessarily* predicated to every *thing* as *existing*; and this cannot be otherwise. This is the basis of every conception, thus the foundation of scintific thinking. Therefore, scientific necessity is based on ontological necessity, which implies certainty of existence.

Because of its absolute extension, and the fact that the meaning of 'existence' corresponds with the absoluteness of reality, existence is predicated to a thing not just in the mind but also outside of the mind. In the mind this predication is the predication of a statement, but outside of the mind every existing being participates in the absoluteness of existence by the limitation of its own essence. Thus when we say "X exists", this means that X is a part of reality, i.e. part of the totality of existence. This also means that the division of existence into necessary and contingent as established in the mind must correspond with the division in reality; if we say that a being is contingent, we say it so because we realised that its existence is based on the participation in the absoluteness of existence, which means that it cannot have its existence essentially. It is for this reason, as Ibn Sīnā noticed, that our mind can consider an essence of 'X' devoid of its existence. The division between necessary and contingent is thus found by Ibn Sīnā in every existent inasmuch as it is an existent: this is the division between *what* a thing is and *why* it is, or the division between its essence and existence (Chapter 1.1.2). This consideration simply must correspond with any existing substance as it is in itself because it is the most general consideration of existent, hence no particular existing being can avoid it. According to this division an existent is never its existence, in fact its what-ness per se is always something else, ungraspable for the intellect, hence unexplainable - the absolute determined potential nature that is manifested as a concrete existent outside of the mind or as a concrete thought, or idea in the mind.

We can talk about possible existence in two senses: in the sense of essence and in the sense of prime matter (Chapter 1.1.3). In fact there is a similarity between these two natures, of

essences *per se* and Aristotelian prime matter: they are both unknowable, because they are not and cannot be actually existing as such, but their postulation necessarily follows from the consideration of their phenomena; prime matter cannot exist *per se*, but only as material existent actualised by certain form, and essence *per se* cannot exist except through the actualisation through the efficient cause that gives existence to that absolute potential nature it is this actualisation that contains the intelligible which is grasped by the intellect. For this reason, both speculative inquiry into essence as well as into prime matter, belong to metaphysics.

Therefore, if the ultimate meaning of 'existence' stands for the starting point of metaphysical inquiry into reality, then the division between necessary and possible also stands. This division is indeed a consideration of the mind. However, as this consideration is absolute and neceaasry, it also reveals something about things as they are in themselves: every existent is either such that it can be otherwise, or it cannot be otherwise. Thus, the very fact that we can imagine a non-existence of a certain object without contradiction reveals something about the most general nature of that object. The division starts as consideration, but as it necessarily accompanies the absolute meaning of 'existence' then it necessarily accompanies the absoluteness of existence as well - the absoluteness of the meaning of 'existence' transcends nominal boundaries. For this reason, nominalist critique of Ibn Rushd, as well as of al-Ghazālī before him, does not work on Ibn Sīnā; one cannot simply point out that 'existence' has merely a copular function in a judgement, or that it simply denotes the truth – instead, 'existence' as the meaning of the absolute extension corresponds with the absoluteness of reality, thus its necessary divisions must also correspond with reality.

We can see that existence is not an accident in Ibn Sīnā in the sense of Aristotle's ten categories. By existence being accident Ibn Sīnā means that as being is either such that its non-existence can be imagined without contradiction, or such that its non-existence cannot be imagined without contradiction, then it either has existence essentially (the former case) or it has existene accidentally (the latter case) (Chapter 1.3.1). While the former is contingent, the latter is in itself necessary. Ibn Sīnā is fully aware of Aristotle's doctrine, but he obviously does not follow it dogmatically. For Ibn Sīnā substance indeed exists by itself, but only in specific sense: when compared with the existence of accidents, or as something 'that is not in a subject'; in this sense substance is ontologically prior to all other categories, but this does not mean that it exists absolutely. In fact what exists absolutely is existent that cannot be a substance in the Aristotelian sense: as something that has attributes that are distinct from its

essence - this is so because such existence involves composition and whatever is composed does not exist absolutely. In this way Ibn Sīnā adds an additional meaning to Aristotelian substance, the meaning that perhaps is indeed borrowed from Islamic theologians as Ibn Rushd notices. However, Ibn Sīnā's understanding of substance is perfectly consistent with his understanding of existence, and is implied by it. So, in order to dispute this conception it is not sufficient to just compare it with the theological account, but one has to undermine the very foundation of his metaphysics – his understanding of 'existence. As we saw, Ibn Rushd tries exactly that, but according to my opinion unsuccefully.

Therefore, if Ibn Sīnā's ontology stands his proof for God's existence as well as the entire approach to metaphysics also stands. The analysis of the meaning of 'existence' does produce positive knowledge about the wold due to the absolute extension of the meaning. Although Ibn Rushd correctly notices that Ibn Sīnā's metaphysics stands on tautological foundation, his derived criticism misses the point. In *al-Ilāhiyyāt*, I, 5, (5) Ibn Sīnā himself admits that his ontology is based on tautological ground, yet this tautology is the necessity of the absolute meaning of 'existence', and necessary tautology is not like any other arbitrary tautology. The absolute knowledge, i.e. knowledge based on the most general notion, represented by the most general explanation, and is related to the absolute cause, must be tautological in order to be valid.

This necessitates need for the division between approach of natural philosophy and approach of metaphysics. This also indicates why metaphysical knowledge cannot be continuation of physical in the sense of Ibn Rushd. The absolute understanding can be based only on intuition of absoluteness, never on inquiry into what is particular as materially present. This intuition of absoluteness is immediatelly evident in Ibn Sīnā, as his thought experiment in *al-Nafs* (I, 1, 16) shows: the one cannot not to affirm the existence of the self, even if he would have no prior experience (Chapter 1.3.1). This is so because the self *qua* self is intuitively aware of his participation in the absoluteness of existence and only through this participation can be self-confirmed. This means that 'existence' is such absolute meaning that it is grasped before even 'self' is grasped; in order to confirm self-existence, the meaning of 'existence' must be comprehended. Thus, we have two complementary approaches to reality: meaning sensible, and the other from 'what is separable from matter in subsistence and definition'. The first approach relies on demonstrative induction that searches for the middle term, the latter on speculative deduction that follows "clear" implications. In essence, in order to provide the ultimate explanation of reality we must rely on what is intuitively evident, which is

'existence' - the meaning so general that encompass the whole reality. Empirical approach simply cannot fulfil this task.

Beside this, due to the necessity that every state of potency can become a state of act only through the action of the cause it is also necessary that we talk about physical and metaphysical causality, or causality investigated in natural philosophy and causality investigated in metaphysics (Chapter 1.2.2). This could be an additional argument that investigation of natural philosophy and investigation of metaphysics represent two different but needed approaches to the same reality.

Once Ibn Sīnā's ontological starting point is understood, it becomes clear that Ibn Rushd's critique of the proof for the existence of God fails as well. Ibn Rushd is clearly under the influence of al-Ghazālī's objection that Ibn Sīnā's notion of 'the Necessary Existent' is conversible with 'the Uncaused Cause', and that the division between necessity and possibility of existence can mean only the division between 'being caused' and 'being uncaused'. But if we have to predicate existence to any object in order to think about is at all, and when we say that an object exists we are also predicating necessity to it, then this relationship between existence, necessity and thing is such that it must be shared by every being inside as well as outside of the mind. In addition to this, metaphysics treats causality as an intellectual concept that is implied by 'necessity' i.e. by the division of existence into necessary in itself and possible in itself (Chapter 1.2.2). This is important as the relationship between the Uncaused Cause'; the latter is implied by the former. This means that in metaphysical reasoning we reach understanding and conception of 'the Uncaused Cause' only through the necessary division of existence, not *vice versa* (Chapter 2.1.1.1).

This is something that Ibn Rushd could not (or perhaps refused) to grasp, due to his nominal presupposition; if closely analyse Ibn Rushd's arguments we will see that he is not able to disprove Ibn Sīnā's doctrine in any way, but instead offers merely an alternative approach to reality - the approach that could rightly be considered as naturalistic. So, while al-Ghazālī's alternative is scepticism, Ibn Rushd turns to more constructive metaphysical naturalism.

The basis of Ibn Rushd critique of Ibn Sīnā is his naturalistic and nominalist interpretation of Aristotle's philosophy. These naturalistic matrices are the essential part of his philosophy. However, his critique does not pose a real treat for Ibn Sīnā's metaphysical system if we accept his well established ontological starting point. Hence Ibn Rushd naturalistic view can be merely an alternative to Ibn Sīnā's metaphysical foundationalism. The evaluation of Ibn 194

Rushd's criticism to Ibn Sīnā depends entirely on acceptance of his naturalistic philosophical project, and his critique is acceptable only from the perspective of requirements set by his interpretation of Aristotle.

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Bibliography

Primary sources

- Ibn Sīnā, *Kitāb al-Shifā' al-Ilāhiyyāt*, (*The Metaphysics of The Healing*), trans. Michael E. Marmura (Provo Utah: Bringham Young University Press, 2005).
- Ibn Sīnā, *Kitāb al-Shifā' al-Ilāhiyyāt, Metafizik*, trans. Ekrem Demirli and Ömer Türker, (Istanbul: Litera Yayıncılık, 2013).
- Ibn Sīnā, *Kitāb al-Shifā' al-Samā' al-Tabī'ī (Physics*), transl. Jon McGinnis (Provo Utah: Bringham Young University Press, 2009).
- Ibn Sīnā, *Kitāb al-Shifā' al-Ilāhiyyāt, Fizik*, transl. Muhittin Macit and Ferruh Özpilavcı, (Istanbul, Litera Yayıncılık, 2004),
- Ibn Sīnā, *Kitāb al-Ishārāt wa-t-Tanbīhāt (Remarqs and Admonitions)*, transl. Shams Inati, (New York: Columbia University Press, 2014).
- Ibn Sīnā, *Kitāb al-Najāt, (The Book of Salvation)*, in ed. Jon McGinnis and David Reisman, *Classical Arabic Philosophy, an Anthology of Sources*, (Indianapolis/Cambridge: Hackett Publishing Company, 2007),
- Ibn Sīnā, *Kitāb al-Shifā': al-Madkhal, Mantığa Giriş,* transl. Ömer Türker (Istanbul: Litera Yayıncılık, 2013).
- Ibn Sīnā, *Kitāb al-Shifā': al-Makūlāt*, transl. Muhittin Macit (Istanbul: Litera Yayıncılık, 2010).
- Ibn Sīnā, *Kitāb al-Shifā': al-Burhān*, ed. 'A. R. Badawī, 2. edn., (Cairo: Association of Authorship, Translation & Publication Press, 1966).
- Ibn Sīnā, *Kitāb al-Shifā': al-Burhān (İkinci Analitikler)*, transl. Ömer Türker, (Istanbul: Litera Yayıncılık, 2006).
- Ibn Sīnā, *Kitāb al-Shifā': al-Safsata (Sofistik Deliller)*, transl. Ömer Türker (Istanbul, Litera Yayıncılık, 2006).
- Ibn Rushd, Tafsīr ma ba'd at-tabī'at. Deuxième vol. Livres DAL, HE, ZAY, HHA', TTA' (Bibliotheca arabica scholaslicorum. Série arabe VI) by M. Bouyges.

Ibn Rushd, Metaphysics (*Tafsīr ma ba'd at-tabī'at, Lam*): a translation with introduction of Ibn Rushd's commentary on Aristotle's metaphysics, book Lam, by Charles Genequand, (Leiden: Brill, 1984).

- Ibn Rushd, *Tafsīr ma ba'd at-tabī'at, Metafizik, Büyük Şerhi*, transl. Muhittin Macit (Istanbul: Litera Yayıncılık, 2016).
- Ibn Rushd, *Tahāfut al-Tahāfut*, transl. by Simon Van den Bergh (EJW Gibb Memorial Trust: 1954).
- Ibn Rushd, Tahāfut al-Tahāfut, ed. Dunya Arabic, 1965.

- Ibn Rushd, *Long Commentary on De Anima of Aristotle*, trans. Richard Taylor, Yale University Press, 2009.
- Ibn Rushd, *Averroes' De Substantia Orbis*, Critical Edition of the Hebrew Text with English Translation and Commentary by Arthur Hyman (Cambridge, Massachusetts and Jerusalem: Medieval Academy of America, 1986).
- Ibn Rushd, Aristotelis Stagiritae De physico auditu libri octo, cum Averrois Cordubensis variis in eosdem commentariis, in Aristotelis Opera cum Averrois Commentariis, (Long Commentary on Aristotle's Physics), Venice, 1562.
- Ibn Rushd, *On Aristotle's "Metaphysics"*, An Annotated Translation of the So-called "Epitome", ed. Rüdiger Arnzen (Berlin/New York: De Gruyter, 2010).
- Ibn Rushd, *Kitāb Fasl al-Maqāl, The Book of the Decisive Treatise*, transl. Charles E. Butterworth (Provo, Utah: Brigham Young University Press, 2001).
- Ibn Rushd, *Kitāb al-Kashf 'an manāhij al-adillah fi 'aqā 'id al-millah*, in *Philosophie und Theologie von Averroes*, e.d. M. J. Müller (Munich, 1859).
- Ibn Rushd, Middle Commentary on Aristotle's Prior Analytics, in Averrois Cordumensis Epitome in Libros Logicae Aristotelis Abramode Balmes Interprete, (Venice, 1574).
- Aristotle, *The Complete Works of Aristotle*, transl. Jonathan Barnes (Princeton: Princeton University Press, 1991).
- al-Kindī, fī al-Falsafa al-ūlā; Al-Kindi's Metaphysics, A Translation of Yaqūb ibn Ishāq al-Kindi's treatise "On First Philosophy", trans. Alfred L. Ivry (Albany: State University of New York Press, 1974).
- al-Fārābī *On the Perfect State (Mabādi' ārā' ahl al-madīnat al-fādila)*, transl. Richard Walzer (Oxford: Clarendon Press, 1998).
- al-Ghazali, *The Incoherence of the Philosophers*, transl. Michael E. Marmura (Provo, Utah: Brigham Young University Press, 2000).

Secondary literature

- A Companion to the Latin Medieval Commentaries on Aristotle's Metaphysics, ed. Gabriale Galluzzo and Fabrizio Amerini (Leiden-Boston: Brill, 2014).
- Acar, Rahim, *Talking about God and Talking about Creation, Avicenna's and Thomas Aquinas' Positions*, (Leiden-Boston: Brill, 2005).
- Acar, Rahim, Creation: Avicenna's metaphysical account, in Creation and the God of Abraham, eds. David B. Burrell, Carlo Cogliati, Janet M. Soskice and William R. Stoeger (Cambridge: Cambridge University Press, 2010), pp. 77-90.
- Adamson, Peter, From the Necessary Existent to God, in Interpreting Avicenna: Critical Essays, ed. Peter Adamson (Cambridge: Cambridge University Press, 2013), p. 170-189.

- Adamson, Peter, *Averroes on Divine Causation*, in *Interpreting Averroes*, *Critical Essays*, ed. Peter Adamson and Matteo Di Giovanni, (Cambridge: Cambridge University Press, 2019), pp. 198-217,
- Afnan, Soheil M., Avicenna, His Life and Works (London: George Allen & Unwin Ltd, 1958),
- Alexsadru, Stefan, Aristotle's Metaphysics Lambda, Annotated Critical Edition Based upon a Systematic Investigation of Greek, Latin, Arabic and Hebrew Sources (Leiden-Boston: Brill, 2014),
- Altuner, Ilyas, Some Remarks on Averroes' Long Commentary on the Metaphysics Book Alpha Meizon, Entelekya Logico-Metaphysical Review, Vol. 1, No. 1-2, (November, 2017), pp.6-17,
- Artsen, Jan A., Avicenna's Doctrine Of The Primary Notions And Its Impact On Medieval Philosophy, in Islamic Thoughts in the Middle Ages, ed. Anna Akasoy and Wim Raven (Leiden-Boston: Brill, 2008),
- Aristotle and the Arabic Tradition, ed. Ahmed Alwishah and Josh Hayes (Cambridge: Cambridge University Press, 2015),
- Aristotelova Metafizika, zbirka rasprava, ed. Pavel Gregoric and Filip Grgic (Zagreb: Kruzak, 2003),
- Alper, Ömer Mahir, Avicenna's Argument for the Existence of God, Was He Really Influenced by the Mutakallimun? in Interpreting Avicenna: Science and Philosophy in Medieval Islam: Proceedings of the Second Conference of the Avicenna Study Group, ed. Jon McGinnis (Leiden – Boston: Brill, 2004), pp. 129-141,
- Alper, Ömer Mahir, Ibn Sīnā (Istanbul: ISAM, 2010),
- Alper, Ömer Mahir, İbn Sīnā ve İbn Sīnā Okulu, in İslâm Felsefesi, Tarih ve Problemler, ed. Cüneyt M. Kaya (Istanbul: İSAM Yayınları, 2013), pp. 251-283,
- Altıntaş, Hayrani, İbn Sina Metafiziği (Ankara: Kültür Bakanlığı Yayınları, Ankara, 2002),
- Aristotle Today, ed. M. Matthen, Edmonton (Alta., Canada: Academic Printing & Publishing, 1987),
- Averroes and the Aristotelian Heritage, ed. Carmela Baffioni (Napoli: Guida, 2004),
- Avicenna and his Heritage, eds. Jules Janssens and Daniel De Semt (Leuven: Leuven University Press, 2002),
- Avicenna and his Legacy, a Golden Age of Science and Philosophy, ed. Tzvi Y. Langermann (Turnhout: Brepols, 2009),
- Barnes, Jonathan, *Metaphysics*, in *The Cambridge Companion to Aristotle*, ed. Jonathan Bernes (Cambridge: Cambridge University Press, 1995), pp. 66-108,
- Bäck, Allan, Avicenna the Commentator, in Medieval Commentaries on Aristotle's Categories, ed. Lloyd A. Newton (Leiden, Boston: Brill, 2008), pp. 31-73,

- Bäck, Allan, *Demonstration and Dialectics in Islamic Philosophy*, in *The Routledge Companion to Islamic Philosophy*, eds. Richard C. Taylor i Luis Xavier Lopez-Farjeat (London and New York: Routledge, 2016), pp. 93-104,
- Bäck, Allan, *Avicenna on Existence*, Journal of the History of Philosophy, Volume 25, Number 3 (July 1987), pp. 351-367,
- Bäck, Allan, *Aristotle's Theory of Abstraction* (Switzerland: Springer Science+Business Media, Springer International Publishing 2014),
- Bäck, Allan, Avicenna and Averroes: Modality and Theology, in Potentialitat und Possibilitat Modalaussagen in der Geschichte der Metaphysik, eds. Thomas Buchheim, Corneille Henri Kneepkens and Kuno Lorenz (frommann-holzboog, 2001),
- Belo, Catarina, *Chance and Determinism in Avicenna and Averroes* (Leiden Boston: Brill, 2007),
- Belo, Catarina, Essence and Existence in Avicenna and Averroes, Al-Qantara 30(2) (2009),
- Belo, Catarina, *The Concept of Nature in Aristotle, Avicenna and Averroes*, Kriterion, vol. 56, no. 131, Belo Horizonte (Jan./June 2015),
- Benevich, Fedor, Fire and Heat: Yahyā B. 'Adī and Avicenna on the Essentiality of Being Substance or Accident, in Arabic Sciences and Philosophy, vol. 27 (Cambridge: Cambridge University Press, 2017), pp. 237-267,
- Bertolacci, Amos, The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifā': A Milestone of Western Metaphysical Thought (Leiden – Boston: Brill, 2006).
- Bertolacci, Amos, *Establishing the Science of Metaphysics*, in *The Routledge Companion to Islamic Philosophy*, ed. Richard C. Taylor and Luis Xavier Lopez-Farjeat (London and New York: Routledge, 2016), pp.185-197.
- Bertolacci, Amos, Avicenna and Averroes on the proof of God's Existence and the Subject Matter of Metaphysics, Medioevo, 32 (2007), pp.61-97,
- Bertolacci, Amos, The Distinction of Essence and Existence in Avicenna's Metaphysics, in Islamic Philosophy, Science, Culture, and Religion, Text and Studies, ed. Hans Daiber Anna Akasoy Emilie Savage-Smith, Vol. LXXXIII (London and New York: Brill, 2012), pp. 257-288,
- Bertolacci, Amos, *Arabic and Islamic Metaphysics*, *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/sum2015/entries/arabic-islamic-metaphysics/
- Bertolacci, Amos, Avicenna's and Averroes's Interpretations and Their Influence in Albertus Magnus, in A Companion to the Latin Medieval Commentaries on Aristotle's Metaphysics, Brill (October 2013), pp. 95-135,
- Bertolacci, Amos, Averroes against Avicenna on Human Spontaneous Generation: The Starting-Point of a Lasting Debate, in Renaissance Averroism and Its Aftermath: Arabic Philosophy in Early Modern Europe, eds. Anna Akasoy and Guido Giglioni (Springer Science+Business Media Dordrecht, 2013),

- Bertolacci, Amos, *The 'Ontologization' of Logic; Metaphysical Themes in Avicenna's Reworking of the Organon*, in Methods and Methodologies, Brill (January 2011), pp. 25-51,
- Biesterfeldt, Hinrich H., Medieval Arabic Encyclopedias of Science and Physolosphy, in The Medieval Hebrew Encyclopedias of Science and Physolosphy (Dorcreth, 2007), pp. 77-98,
- Black, Deborah L., *Constructing Averroes' Epistemology*, in *Interpreting Averroes, Critical Essays*, ed. Peter Adamson and Matteo Di Giovanni (Cambridge: Cambridge University Press, 2019),
- Cerami, Cristina, *The Eternity of the World*, in *The Routledge Companion to Islamic Philosophy*, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016), pp.141-155,
- Cerami, Cristina, Averroes' Natural Philosophy as Science of Nature, in Interpreting Averroes, Critical Essays, eds. Peter Adamson and Matteo Di Giovanni (Cambridge: Cambridge University Press, 2019), pp. 177-197,
- Classical Arabic Philosophy, An Anthology of Sources, trans. Jon McGinnis and David C. Reisman (Indianapolis/Cambridge: Hackett Publishing Co, 2007),
- Charles, David, Aristotle on Meaning and Essence (Oxford: Clarendon Press, 2000),
- Cohen, Marc S., Alteration and Persistence: Form and Matter in the Physics and De Generatione et Corruptione, in The Oxford Handbook of Aristotle, ed. Christopher Shields, (Oxford: Oxford University Press, 2012),
- Craig, William Lane, *The Cosmological Argument from Plato to Leibniz* (Houndmills, Basingstoke, Hampshire and London: Macmillan Press, 1986),
- Davidson, Herbert A., *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (Oxford: Oxford University Press, 1987),
- Davidson, Herbert A., *Alfarabi, Avicenna and Averroes, on Intellect* (Oxford and New York: Oxford University Press, 1992),
- De Haan, Daniel D., *Where Does Avicenna Demonstrate the Existence of God*, Arabic Sciences and Philosophy, vol. 26 (Cambridge University Press, 2016), pp. 97-128,
- De Haan, Daniel D., *Avicenna's Healing and the Metaphysics of Truth*, Journal of the History of Philosophy, Vol. 56, No. 1 (January 2018), pp. 17-44,
- De Haan, Daniel D., *The Doctrine of the Analogy of Being in Avicenna's Metaphysics of the Healing*, Review of Metaphysics, 69.2 (December 2015), pp. 261-286,
- DeFilippo, Joseph G., "Aristotle's Identification of the Prime Mover as God", in The Classical Quarterly vol. 44, Issue 2 (December 1994), p. 393-409.
- Di Giovanni, Matteo, *The Commentator: Averroes's Reading of the Metaphysics*, in *A Companion to the Latin Medieval Commentaries on Aristotle's Metaphysics*, (Leiden Boston: Brill, 2013), pp. 59-94,

- Dunlop, Douglas M., Averroes on the Modality Propositions, in Islamic Studies Vol. 1 (1962), pp. 23-34,
- Druart, Theresa Anne, *Shay' or Res as Concomitant of Being in Avicenna*, Documenti e Studi sulla Tradizione filosofica medievale, 12 (2001), pp. 125-142,
- Druart, Theresa Anne, Averroes: The Commentator and the Commentators, in Aristotle in Late Antiquity, ed. By Lawrence P. Schrenk (Washington, D.C.: The Catholic University of America Press, 1994), pp. 184-202,
- Druart, Theresa Anne, Logic and Language, in The Routledge Companion to Islamic Philosophy, ed. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016), pp.69-81,
- Druart, Theresa Anne, Avicennan Troubles: the Mysteries of the Heptagonal House and of the Phoneix, Tópicos, no. 42 México (July 2012), pp. 51-73
- Druart, Theresa Anne, *Ibn Sīnā and the Ambiguity of Being's Univocity*, in *Views on the Philosophy of Ibn Sīnā and Mullā Ṣadrā Shīrazī*, ed. M.A. Mensia (Tunis: Tunisian Academy of Sciences, Letters and Arts Beït al-Hikma, 2014),
- Durusoy, Ali, İbn Sinâ Felsefesinde İnsan ve Alemdeki Yeri (Istanbul: İFAV, 2012),
- Durusoy, Ali, Olanak, Olasılık ve Olabilirik, (İmkan, İhtimal ve Kuvve), Marmara Üniversitesi İlahiyat Fakültesi Dergisi 27 (2004), pp. 123-134,
- Endress, Gerhard, Averroes' De Caelo, Ibn Rushd's Cosmology in his Commentaries on Aristotle's On the Heavens, Arabic Science and Philosophy, Vol. 5 (1995), pp. 9-49,
- Eshots, Janis, *The Principle of the Systematic Ambiguity of Existence in the Philosophy of Ibn Sina and Mulla Sadra*, in Afkar, Journal of 'Aqidah and Islamic Thought, vol. 6 (2005),
- Fakhry, Majid, A History of Islamic Philosophy (New York: Columbia University Press, 2004),
- Fakhry, Majid, *The Ontological Argument in the Arabic Tradition: The Case of al-Fārābi*, Studia Islamica, No. 64 (1986), pp. 5-17,
- Fakhry, Majid, Averroes (Ibn Rushd) His Life, Works and Influence (Oxford: Oneworld, 2008),
- Fontaine, Resianne, Averroes' Commentary on Aristotle's 'De Generatione Animalium' and its Use in Two Thirteen-Century Hebrew Encyclopedias, in Islamic Thought in the Middle Ages, ed. Ann Akasoy and Wim Raven (Leiden Boston: Brill, 2008), pp. 489-502,
- Galluzzo, Gabriele, Averroes and Aquinas on Aristoteles Criterion of Substantiality, Arabic Sciences and Philosophy, vol. 19 (2009), pp. 157–187,
- Gilson, Etienne, *Being and Some Philosophers* (Toronto, Canada: Pontificial Institute of Medieval Studies, 1952),
- Gilson, Etienne, Avicenna et le point de départ de Duns Scot, Archives d'Histoire Doctrinale Et Littéraire du Moyen Age, 2 (1927), pp. 89-149,

- Glasner, Ruth, Averroes' Physics, A Turning Point in Medieval Natural Philosophy (Oxford: Oxford University Press, 2009),
- Goichon, Amélie Marie, La Distinction de l'Essence Et de l'Existence d'Après Ibn Sina, (Desclée de Brouwer, 1937),
- Griffel, Frank, Al-Ghazalis Philosophical Theology (Oxford: Oxford University Press, 2009),
- Griffel, Frank, *The Relationship Between Averroes and al-Ghazālī*, in *Medieval Philosophy and the Classical Tradition in Islam, Judaism, and Christianity*, ed. by John Inglis (Richmond: Curzon Press, 2002), pp. 51–63,
- Gutas, Dimitri. Greek Thought, Arabic Culture (London: Routledge, 1998),
- Gutas, Dimitri, Avicenna and the Aristotelian Tradition, Introduction to Reading Avicenna's *Philosophical Works* (Leiden Boston: Brill, 2014),
- Gutas, Dimitri, Intellect Without Limits: the Absence of Mysticism in Avicenna, in Intellect et imagination dans la philosophie, eds. Maria Candida Pacheco and Jose Francisco Meirinhos (Turnhout: Brepols, 2006), pp. 351-372
- Gutas, Dimitri, *The Empiricism of Avicenna*, in Orientations of Avicenna's Philosophy, VII (2012), pp. 1-53,
- Hapler, Yehuda, *Dialecticians and Dialectics in Averroes' Long Commentary on Gamma 2 of Aristotle's Metaphysics*, Arabic Sciences and Philosophy, vol. 26 (2016), pp. 161-184,
- Harari, Orna, Knowledge and Demonstration, Aristotle's Posterior Analytics (Springer-Science+Business Media, 2004),
- Hasse, Dag Nikolaus, Avicenna on Abstraction, in Aspects of Avicenna, by Robert Wisnovsky (Princeton: Markus Wiener Publishers, 2001),
- Henry of Ghent, *Summa of Ordinary Questions 21-24*, transl. Jos Decorte and Roland J. Teske, Peeters (Paris-Leuven-Dudley, 2005),
- Hodges, Wilfrid, *Ibn Sînâ on reductio ad absurdum*, Review of Symbolic Logic, 10.3 (2017), pp. 583-601,
- Hourani, George F., *Ibn Sīnā on Necessary and Possible Existence*, Philosophical Forum, 4 (1972), pp. 74-86,
- Houser, Rollen E., Essence and Existence in Ibn Sīnā, in The Routledge Companion to Islamic Philosophy, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016), pp. 212-224,
- Ivry, Alfred L., *Al-Kindi's Metaphysics, A Translation of Yaqūb ibn Ishāq al-Kindi's treatise* "On First Philosophy" (Albany: State University of New York Press, 1974),
- Ivry, Alfred L., The Ontological Entailments of Averroes' Understanding of Perception, in Theories of Perception in Medieval and Early Modern Philosophy, Vol. 6, ed. Simo Knuuttila and Pekka Kärkkäinen (Springer Science + Business Media B.V, 2008),
- Interpreting Avicenna: Science and Philosophy in Medieval Islam: Proceedings of the Second Conference of the Avicenna Study Group, ed. Jon McGinnis (Brill, Leiden – Boston, 2004),

- Interpreting Avicenna, Critical Essays, ed. Peter Adamson (Cambridge: Cambridge University Press, 2013),
- Interpreting Averroes, Critical Essays, ed. Peter Adamson and Matteo Di Giovanni, (Cambridge: Cambridge University Press, 2019),
- Intellect et imagination dans la philosophie médiévale / Intellect and Imagination in Medieval Philosophy / Intelecto e imaginação na Filosofia Medieval: Actes du XIe Congrès International de Philosophie Médiévale de la Société Internationale pour l'Étude, ed. Maria Candida Pacheco and Jose Francisco Meirinhos (Brepols, 2006),
- *Islamic Philosophy, Science, Culture, and Religion, Text and Studies*, ed. Hans Daiber Anna Akasoy Emilie Savage-Smith, Vol. LXXXIII (Leiden, Boston: Brill, 2012),
- İslâm Felsefesi, Tarih ve Problemler, ed. Cüneyt M. Kaya (Istanbul: İSAM Yayınları, 2013),
- *Islam and Rationality, The Impact of al-Ghazālī,* Vol. I, ed. Georges Tamer (Leiden-Boston: Brill, 2015),
- Islamic Philosophy and Mysticism, ed. Parviz Morewedge (Delmar: NY: Caravan Books, 1981),
- Janos, Damien, Avicenna on the Ontology of Pure Quiddity (Berlin, Boston: De Gruyter, 2020),
- Johnson, A. Steve, *Ibn Sina's Fourth Ontological Argument for God's Existence*, in *The Muslim World*, vol 74, issue 3-4 (1984), pp. 161-171.
- Janssens, Jules, The Notions of Wāhib al-şuwar (Giver of Forms) and Wāhib al-'aql (Bestower of Intelligence) in Ibn Sīnā, in Intellect et imagination dans la Philosophie médiévale; Intellect and Imagination in Medieval Philosophy, ed. C. Pacheco & F. Meirinhos, Actes de XIe Congrès International de Philosophie Médiévale, Porto, 26 au 30 août 2002 organisé par la Société Internationale pour l'Étude de la Philosophie Médiévale, 3 (Turnhout, Brepols, 2006), pp. 551–562,
- Janssens, Jules L., "Experience" (tajriba) in Classical Arabic Philosophy (al-Fārābī Avicenna, Questio, IV (2004), pp. 45-62.
- Janssens, Jules L., *Creation and Emanation in Ibn Sina*, Documenti e Studi sulla Tradizione Filosofica Medievale 8, Florence (1997P, pp. 455-477,
- Janssens, Jules L., *Henry of Ghent and Avicenna*, in *A Companion to Henry of Ghent*, ed. Gordon A. Wilson (Leiden Boston: Brill, 2011), pp. 63-85,
- Kaukua, Jari, *Self-Awareness in Islamic Philosophy, Avicenna and Beyond* (Cambridge University Press, 2015),
- Kaukua, Jari, Avicenna on Subjectivity, A Philosophical Study (Jyväskylä: University of Jyväskylä, 2007,
- Kaya, Mahmut, İslam Kaynakları Işığında Aristoteles ve Felsefesi (Istanbul: Ekin Yayınları, 1983),

- Kaya, Cüneyt, Varlık ve İmkan, Aristoteles'ten İbnSina'ya İmkanın Tarihi (Istanbul: Klasik, 2011),
- Karlığa, Bekir, Batıyı Aydınlatan İslam Düşünürü İbn Rüşd (Istanbul: Mahya Yayıncılık, 2014),
- Kogan, Barry S., Averoes and the Metaphysics of Causation, (Albany: State University of New York Press, 1985),
- Kutluer, Ilhan, Ibn Sina Ontolojisinde Zorunlu Varlık (Istanbul: İZ Yayıncılık, 2013),
- Kutluer, Ilhan, Islam'ın Klasik Çağında Felsefe Tasavvuru (Istanbul: İZ Yayıncılık, 2013),
- Lammer, Andreas, The Elements of Avicenna's Physics (Berlin Boston: De Gruyter, 2018),
- Lasica, Vladimir, *Ibn Rushd's 'Naturalistic Turn' in philosophy; Turning Towards Philosophy of Nature (Ibn Rušdov "naturalistički obrat"; zaokret ka filozofiji prirode*),Sophos, no. 10, Scientific and Research Incubator (ZINK), Faculty of Philosophy, Sarajevo (2017), pp. 133-154
- Lasica, Vladimir, *Empiricism and Metaphysics; A Fundamental Relation for Founding Philosophy as Science in Avicenna*, in Logos, Journal of Philosophy and Religion, Vol. 5, No. 1-2, Tuzla (January-July, 2017), pp. 81-108,
- Lizzini, Olga, *Wuğūd-Mawğūd/Existence-Existent in Avicenna, A Key Ontological Notion of Arabic Philosophy*, Quaestio, 3 (2003), pp. 111–138,
- Lizzini, Olga, The relation between Form and Matter: some brief observations on the 'homology argument' (Ila-hiyya-t, II, 4) and the deduction of fluxus, in Interpreting Avicenna, ed. J. McGinnis & D. Reisman, Proceedings of the Second Conference of the Avicenna Study Group (Leiden & Boston: Brill, 2004), pp. 175-185,
- Lizzini, Olga, Causality as Relation: Avicenna (and al-Ghazālī), Questio 13, Brepols (2013),
- Lizzini, Olga, *Ibn Sina's Metaphysics*, in *The Stanford Encyclopedia of Philosophy* (Fall 2016 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/ fall2016/entries/ibn-sina-metaphysics/
- Legenhausen, Muhammad, *Ibn Sina's Arguments Against God's Being a Substance*, in From ontos verlag: Publications of the Austrian Ludwig Wittgenstein Society New Series, Vol. 5 (2007), pp. 117-143,
- Legenhausen, Muhammad, *Necessity, Causation, and Determinism in Ibn Sina and His Critics*, The Imam Khomeini Education and Research Institute Qom, Iran Spring (2009), pp. 1-45,
- Lopez, Luis Xavier, Causality in Islamic Philosophy, in The Routledge Companion to Islamic Philosophy, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016), pp. 131-140,
- Loux, Michael J., Substances, Coincidentals, and Aristotle's Constituent Ontology, in The Oxford Handbook of Aristotle, ed. Christopher Shields (Oxford: Oxford University Press, 2012),

- Łukasiewich, Jan, Über den Satz des Widerspruches bei Aristoteles, in Bulletin International de l'Academie de Cracovie, Cl. d'histoire et de philosophie (1910), pp. 15-38,
- Macit, Muhittin, *Ibn Sina'da Doğa Felsefesi ve Meşşai Gelenekteki Yeri* (Istanbul: Litera Yayıncılık, 20016),
- Macit, Muhittin, Ibn Sina'da Metafizik ve Meşşai Gelenek (Istanbul: Litera Yayıncılık, 2012),
- Makin, Stephen, *Energeia and Dunamis*, in *The Oxford Handbook of Aristotle, ed.* Christopher Shields (Oxford: Oxford University Press, 2012),
- Marmura, Michael, *Ghazali's Attitude to the Secular Sciences and Logic*, in *Essays on Islamic Philosophy and Science*, ed. G.F. Hourani (Albany: Sate University of New York Press, 1975), pp. 100-111,
- Marmura, Michael, The Fortuna of the Posterior Analytics in Arabic Middle Ages, in Knowledge and the sciences in medieval philosophy: Proceedings of the eighth International congress of Medieval Philosophy (S.I.E.P.M.), Helsinki 24-29 August 1987 (Vol. 1-3), Törinoja, Reijo, Inkeri Lehtinen, Anja, Follesdal, Dagfinn [Publ.]. - Helsinki (1990), pp. 85-103,
- Marmura, Michael, Avicenna's Proof from Contingency for God's Existence in the Metaphysics of the Shifa in Probing in Islamic Philosophy: Studies in the Philosophies of Ibn Sina, al-Ghazali and Other Major Muslim Thinkers, Global Academic Publishing, Binghamton University, State University of New York at Binghamton (2005), pp. 131-149.
- Marmura, Michael, *Quiddity and Universality in Avicenna*, in *Neoplatonism and Islamic Thought*, ed. Parviz Morewedge (New York: State University of New York Press, 1992), pp. 77-87.
- Marmura, Michael, *Avicenna on the Division of the Sciences in the Isagoge of his Shifa'*, Journal for the History of Arabic Science (1980), pp. 239-251
- Marmura, Michael, *Avicenna's Chapter on Universals in the Isagoge of His Shifa*, Islam: Past Influence and Present Challenge, edited by Welch, Alford T. and Cachia, Pierre, (Albany: State University of New York Press, 1979), pp. 34-56,
- Marmura, Michael, Avicenna on Causal Priority, in Islamic Philosophy and Mysticism, ed. Parviz Morewedge (Delmar: NY: Caravan Books, 1981), pp. 65-83
- Marmura, Michael, Avicenna on primary concepts in the Metaphysics of his al-Shifa, in Logos Islamikos: Studia Islamica, ed. Savory, Roger and Agius, Dionisius (Toronto: Pontifical Institute of Mediaeval Studies, 1984), pp. 219-239,
- Mayer, Toby, Avicenna Against Time Beginning: The Debate Between the Commentators on the Ishârât, in Classical Arabic Philosophy: An Anthology of Sources (Indianapolis/Cambridge: Hackett Publishing Company, Inc. 2007), pp. 125-149,
- McGinnis, Jon, Great Medieval Thinkers, Avicenna (Oxford: Oxford University Press, 2010),
- McGinnis, Jon, Avicenna's Naturalized Epistemology and Scientific Method, u The Unity of Science in the Arabic Tradition, eds. Shahid Rahman, Tony Street, Hassan Tahiri (Springer, 2008), pp. 129-152.

- McGinnis, Jon, *Scientific Methodologies in Medieval Islam*, in *Journal of the History of Philosophy*, Vol. 41, No. 3 (The Johns Hopkins University Press, July 2003), pp. 307-327,
- McGinnis, Jon, "Ibn Sina's Natural Philosophy", *The Stanford Encyclopedia of Philosophy* (Winter 2018 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/win2018/entries/ibn-sina-natural/,
- McCormick, John F., *Scholastic Metaphysics* (Chicago, Illinois: Loyola University Press, 1940),
- *Medieval Islamic Philosophical Writings*, ed. Muhammad Khalidi (Cambridge: Cambridge University Press, 2005),
- *Medieval Philosophy and the Classical Tradition in Islam, Judaism and Christianity*, ed. John Inglis (London and New York: RoutledgeCurzon, 2002),
- Methods and Methodologies, Aristotelian Logic East and West, 500–1500, ed. Margaret Cameron and John Marenbon (Leiden-Boston: Brill, 2011),
- Michot, Yahya, La destinée de l'homme selon Avicenne, Le retour à Dieu (maʿād) et l'imagination (Leuven : Peeters, 1986),
- Morewedge, Parviz, *The Metaphisica of Avicenna* (New York: Columbia University Press, 1973),
- Morewedge, Parviz, A Third Version of the Ontological Argument in Ibn Sinian Metaphysics, in Islamic Philosophical Theology, ed. P. Morewedge (New York: State University of New York Press, 1979), pp. 182-222,
- Montada, Josep Puig, Averroes on the Cognitive Process, in Intellect et imagination dans la philosophie médiévale / Intellect and Imagination in Medieval Philosophy / Intelecto e imaginação na Filosofia Medieval: Actes du XIe Congrès International de Philosophie Médiévale de la Société Internationale pour l'Étude, ed. Maria Candida Pacheco and Jose Francisco Meirinhos (Brepols, 2006), pp. 583-594
- Montada, Josep Puig, *Aristotle and Averroes on Coming-to-be and Passing-away*, Oriens 35 (1996) pp. 1-34,
- Nabi, Mohammad Noor, *Theory of Emanation in the Philosophical System of Plotinus and Ibn Sina*, Islamic Culture, 54, (July, 1982),
- Ohler, Klaus, Der unbewegte Beweger als sich selbst denkendes Denken, in K. Ohler, Der unbewegte Beweger des Aristoteles, Frankfurt a. M. (1984), p. 64-94,
- Owens, Joseph, *The Doctrine of Being in the Aristotelian Metaphysics* (Toronto, Canada: Pontifical Institute of Medieval Studies, 1978),
- Patzig, Günther, *Theologie und Ontologie in der Metaphysik des Aristoteles*, in *Kant-Studien*, 52 (1960/1961), pp. 185-205,
- *Philosophy and the Abrahamic Religions: Scriptural Hermeneutics and Epistemology*, ed. Torrance Kirby, Rahim Acar and Bilal Baş (Cambridge Scholars Publishing, 2013),

- Pickave, Martin, *Henry of Ghent's Metaphysics*, in *A Companion to Henry of Ghent*, ed. Gordon A. Wilson (Leiden Boston: Brill, 2011), pp. 153-180,
- Rahman, Fazlur, Ibn Sina's Psychology (Hyperion Press, 1981),
- Rahman Fazlur, *Prophecy in Islam, Phylosophy and Orthodoxy* (London: George Allen and UNWIN LTD, 1958),
- Rahman, Fazlur, Ibn Sina's Theory of the God-World Relationship, in God and Creation, an ecumenical Symposium, eds. David B. Burrell and Bernard Mc Ginn (Indiana, Notre Dame: University of Notre Dame, 1990), pp. 38-56,
- Reisman, David C. and Ahmed H. al-Rahim ed. *Before and After Avicenna Proceedings of the First Conference of the Avicenna Study Group Islamic Philosophy, Theology, and Science*, (Leiden Boston: Brill, 2003),
- Reisman, David C. and Jon McGinnis ed. Interpreting Avicenna Science And Philosophy In Medieval Islam-Proceedings Of The Second Conference Of The Avicenna Study Group Islamic Philosophy (Leiden Boston: Brill, 2004),
- *Renaissance Averroism and Its Aftermath: Arabic Philosophy in Early Modern Europe*, ed. Anna Akasoy and Guido Giglioni (Dordrecht: Springer Science+Business Media, 2013),
- Ross, David, Aristotle's Prior and Posterior Analytics (Oxford: Clarendon Press, 1949),
- Sabra, Abdelhamid I., *Avicenna on the Subject Matter of Logic*, in *Journal of Philosophy*, 77 (1980), pp.746-764,
- Sarıoğlu, Hüseyin, İbn Rüşd (Istanbul: İSAM yayınları, 2011),
- Sarıoğlu, Hüseyin, *İbn Rüşd, Bir Denge Filozofu*, in *İslâm Felsefesi, Tarih ve Problemler*, ed. Cüneyt M. Kaya (Istanbul: İSAM Yayınları, 2013), pp. 365-395,
- Shehadi, Fadlou, *Metaphysics in Islamic Philosophy* (Delmar, New York: Caravan Books, 1982),
- Staley, Kevin M., Avicenna, Aquinas and the Real Distinction: In Defense of Mere Possibilities or Why Existence Matters, Saint Anselm Journal, 9.1 (Fall 2013), pp.1-20,
- Street, Tony, *Arabic Logic*, in *Handbook of the History of Logic*, ed. Dov M. Gabbay, John Woods & Akihiro Kanamori (Amsterdam, Boston: Elsevier, 2004), pp.534-596
- Strobino, Ricardo, Principles of Scientific Knowledge and the Psychology of (their) Intellection in Avicenna's Kitāb al-Burhān, in Studia Artistarum, Études sur la faculté des arts dans les universités médiévales (Brepols, 2015),
- Strobino, *Time and Necessity in Avicenna's Theory of Demonstration*, Oriens 43, Brill (2015), pp. 338-367,
- Strobino, Riccardo, Avicenna on Knowledge ('ILM), Certainty (Yaqīn), Cause ('Illa/Sabab) and the Relative (Mudāf), British Journal for the History of Philosophy, Vol. 24, No. 3, (2015), pp. 426-446
- Taylor, Richard C., Averroes on Psychology and the Principles of Metaphysics, in Journal of the History of Philosophy, 36:4, Research Library Core (October 1998), pp. 507-523,

- Taylor, Richard C., *Averroes: religious dialectic and Aristotelian philosophical thought*, in *The Cambridge Companion to Arabic Philosophy*, eds. Peter Adamson and Richard C Taylor (Cambridge: Cambridge University Press, 2005), pp.180-200,
- Taylor, Richard C., Averroes' Epistemology and its Critique by Aquinas, in Medieval Masters: Essays in Memory of Msgr. E. A. Synan (Houston, TX: University of St. Tomas, 1999), pp. 147-177,
- Taylor, Richard C., Averroes' Philosophical Conception of Separate Intellect and God, in La Lumière de l'intellect. La Pensée Scientifque et Philosophique d'Averroès dans Son Temps. Eds. Ahmad Hasnawi (Leuven: Peeters Publishers, 2011), pp. 391-404,
- Taylor, Richard C., Primary and Secondary Causality, in The Routledge Companion to Islamic Philosophy, eds. R. C. Taylor, L. X. López Farjeat (London-New York, Routledge: 2016, pp. 225-235), pp. 230-231,
- *Theories of Perception in Medieval and Early Modern Philosophy*, Vol. 6, ed. Simo Knuuttila and Pekka Kärkkäinen (Springer Science+Business Media B.V, 2008),
- *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*, ed. Dag Nikolaus Hasse and Amos Bertolacci (Berlin Boston: De Gruyter, 2012),
- *The Cambridge History of Medieval Philosophy*, Vol. I and II, ed. Robert Pasnau (Cambridge: Cambridge University Press, 2010),
- The Routledge Companion to Islamic Philosophy, eds. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016),
- The Medieval Hebrew Enciclopedias of Science and Philosophy, ed. Steven Harvey (Dordrecht: Springer Science+Business Media, 2000),
- The New Cambridge History of Islam, Vol. 4, Islamic Cultures and Societies to the End of the Eighteenth Century, ed. Robert Irwin (Cambridge: Cambridge University Press, 2011),
- Thom, Paul, *Averroes' Logic*, in *Interpreting Averros, Critical Essays*, ed. Peter Adamson and Matteo Di Giovanni (Cambridge: Cambridge University Press, 2019), pp. 81-95,
- Treiger, Alexander, Avicenna's Notion of Transcendental Modulation of Existence (Taškīk al-Wuğūd, Analogia Entis) and its Greek and Arabic Sources, in Islamic Philosophy, Science, Culture, and Religion, Text and Studies, Ed. by Hans Daiber Anna Akasoy Emilie Savage-Smith Vol. LXXXIII (Leiden, Boston: Brill, 2012), pp. 327-363,
- Türker, Ömer, *Ibn Sina Felsefesinde Metafizik Bilginin İmkanı Sorunu* (Istanbul: İSAM, 2010),
- Türker, Ömer, *Metafizik: Varlık ve Tanrı*, in *İslâm Felsefesi, Tarih ve Problemler*, ed. Cüneyt M. Kaya (Istanbul: İSAM Yayınları, 2013), pp. 603-654,
- Türker, Ömer, Being and Meaning: Fakhr al-Dīn al-Rāzī and His Followers on Identity of Knowledge and Known, Nazariyat Journal for the History of Islamic Philosophy and Sciences 1/1, Istanbul (2014), pp. 41-60

- Türker, Ömer, *The Possibility of Thinking on Existence: An Analysis Following the Traditions of Islamic Metaphysics*, Nazariyat Journal for the History of Islamic Philosophy and Sciences 1/2, Istanbul (2015), pp. 1-35
- Twetten, David B., Averroes on the Prime Mover Proved in the "Physics", Viator, 26 (1995), p.107-135,
- Twetten, David B., Arabic Cosmology and the Physics of Cosmic Motion, in The Routledge Companion to Islamic Philosophy, ed. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016), pp.156-167,
- The Routledge Companion to Islamic Philosophy, ed. R. C. Taylor, L. X. López Farjeat (London-New York: Routledge, 2016),
- Vagelpohle, Uwe, Aristotle's Rhetorc in the East: The Syriac and Arabic Translation and Commentary Tradition (Leiden Boston: Brill, 2008),
- Verbeke, G, Avicenna, Grundleger einer neuen Metaphysik, Rheinisch-Westfälische Akademie der Wissenschaften, G 263 (Opladen: Westdeutscher Verlag, 1983),
- Wisnovsky, Robert, *Avicenna's Metaphysics in Context* (New York: Cornell University Press, 2003),
- Wisnovsky, Robert, Aspects of Avicenna (Princeton: Markus Wiener Publishers, 2001),
- Wisnovsky, Robert, Avicenna on Final Causality (Ph.D. Dissertation), Princeton University, 1994,
- Wolfson, Harry A., *Averroes' Lost Treatise on the Prime Mover*, Hebrew Union College Annual Vol. 23, No. 1 (1950-1951), pp. 683-710
- Wolfson, Harry A., *The Amphibolous Terms in Aristotle, Arabic Philosophy and Maimonides*, Harvard Theological Review 31 (1938), pp. 151–173
- *The Cambridge Companion to Medieval Logic*, ed. Catarina Dutilh Novaes i Stephen Read (Cambridge: Cambridge University Press, 2016),
- Waterlow, Sarah, *Nature, Change and Agency in Aristotle's Physics* (Oxford: Clarendon Press, 1982),
- Weisheipl, Athanasius J., Aristotelian Methodology, A Commentary on the Posterior Analytics of Aristotle (Illinois: Pontifical Institute of Philosophy Dominican House of Studies-River Forest, 1958).