

NURETTİN TOPÇU'S THEORY OF INTUITION AS A
RESPONSE TO POSITIVISM: AN ANALYTICAL-
CRITICAL STUDY WITH REFERENCE TO
NATURALISED EPISTEMOLOGY

BY

ALPARSLAN ONBASI

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Civilization

International Institute of Islamic Thought and Civilization
International Islamic University Malaysia

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ABSTRACT

This research analyses the concept of intuition in naturalized epistemology, comparing it in terms of epistemologists and naturalists through Nurettin Topçu's interpretation of intuition and its connection with self/consciousness. This study examines primary and secondary sources using the research methodology of critical analysis with exploratory qualitative research. First of all, it explores the contention of Willard Van Orman Quine (1908-2000), who is accepted as the founder of naturalized epistemology, that philosophy is no longer needed because science will replace philosophy. In this context, there is a problem in which this claim creates in terms of both the philosophy and "Islamic thought". The concept of intuition, which has an important place in naturalized epistemology discussions, is a concept to which Topçu attributes significance in acquiring knowledge, which he associates with the concept of *Irādah* (will). Modern positivism i.e. logical positivism, which underwent a radical change with Quine, was also scrutinized under Naturalized Epistemology. Fundamentally, three distinguished processes emerged as Replacement Naturalism represented by Quine, Substantive/Moderate Naturalism represented by Alvin Goldman (1938-2024), and Cooperative Naturalism represented by Hilary Kornblith (b. 1954). It has been determined that the debate about the concept of intuition, which is as old as the history of philosophy, is not about its existence but about its nature. In this regard, the discussion seems to be whether intuition is Extra Natural in essence, or it is a completely Natural Kind. Topçu, who is against the exclusion of metaphysics from philosophy, resembles naturalists in some respects, including in his treatment of intuition. He clearly puts forward his stance with the concept of *Irādah* (will), which he bases on a metaphysical basis that reflects his epistemological point of view/stance. Apparently, the concept of intuition is also essential in Topçu's Islamic thought, which is directly related to his philosophical thought. Appropriately, the relationship between Topçu's mystical intuition and Sufism is examined. However, as observed, the intuition he used in philosophical methodology and the intuition he systemized in Islamic mysticism are different from each other, albeit they are not completely separate. Accordingly, his concepts of intuition and mystical intuition are analysed. The thesis concludes that Nurettin Topçu raises a novel Islamic epistemology, in which intuition and *Irādah* are metaphysically formative, and play an active role in the process of acquiring knowledge.

ملخص البحث

يُجمل هذا البحث مفهوم الحدس في نظرية المعرفة الطبيعية، ويقارنه من منظور علماء المعرفة والطبيين من خلال تفسير نور الدين طوبجو للحدس وارتباطه بالذات/الوعي. تدرس هذه الدراسة المصادر الأولية والثانوية باستخدام منهجية البحث للتحليل النقدي مع البحث النوعي الاستكشافي. بادئ ذي بدء، يستكشف البحث ادعاء ويلارد فان أورمان كوين (1908-2000)، الذي يُعد مؤسساً لنظرية المعرفة الطبيعية، بأن الفلسفة لم تعد ضرورية لأن العلم سيحل محل الفلسفة. في هذا السياق، توجد مشكلة يخلقها هذا الادعاء من حيث كل من الفلسفة و”الفكر الإسلامي”. مفهوم الحدس، الذي له مكانة مهمة في مناقشات نظرية المعرفة الطبيعية، هو مفهوم يعزو إليه طوبجو أهمية في اكتساب المعرفة، والتي يربطها بمفهوم الإرادة. كما خضعت الوضعية الحديثة، أي الوضعية المنطقية، التي خضعت لتغيير جذري مع كواين، للتدقيق في إطار نظرية المعرفة الطبيعية. وبرزت ثلاث عمليات متميزة، وهي الطبيعية الاستبدالية التي يمثلها كواين، والطبيعية الموضوعية/المعتدلة التي يمثلها ألفين جولدمان (1938-2024)، والطبيعية التعاونية التي تمثلها هيلاري كورنيليث (مواليد 1954). وقد ثبت أن الجدل الدائر حول مفهوم الحدس، الذي يعود تاريخه إلى تاريخ الفلسفة، لا يدور حول وجوده، بل حول طبيعته. وفي هذا الصدد، يبدو أن النقاش يدور حول ما إذا كان الحدس طبيعياً للغاية في جوهره، أم أنه نوع طبيعي تماماً. يشبه طوبجو، الذي يعارض استبعاد الميتافيزيقيا من الفلسفة، علماء الطبيعة في بعض النواحي، بما في ذلك في معالجته للحدس. ي طرح بوضوح موقفه من مفهوم الإرادة، الذي يؤسسه على أساس ميتافيزيقي يعكس وجهة نظره/موقفه المعرفي. ويبدو أن مفهوم الحدس أساسي أيضاً في الفكر الإسلامي لطوبجو، والذي يرتبط ارتباطاً مباشراً بفكره الفلسفي. وبشكل مناسب، يتم فحص العلاقة بين حدس طوبجو الصوفي والتصوف. ومع ذلك، وكما لوحظ، فإن الحدس الذي استخدمه في المنهجية الفلسفية والحدس الذي نظمه في التصوف الإسلامي يختلفان عن بعضهما البعض، وإن لم يكونا منفصلين تماماً. وبناءً على ذلك، يتم تحليل مفهوميه للحدس والحدس الصوفي. وتخلص الأطروحة إلى أن نور الدين طوبجو يطرح نظرية معرفية إسلامية جديدة. فالحدس والإرادة التي تمكن من تكوينه ميتافيزيقيان بطبيعتهما ويلعبان دوراً فعالاً في عملية اكتساب المعرفة.

APPROVAL PAGE

The thesis of Alparslan Onbasi has been approved by the following:

Assoc. Prof. Dr. Mehmet Özey
Supervisor

Professor Mohamed El-Tahir El-Mesawi
Co-Supervisor

Datuk Prof. Dr. Berghout Abdelaziz
Internal Examiner

Prof. Dr. Turker Habip
External Examiner

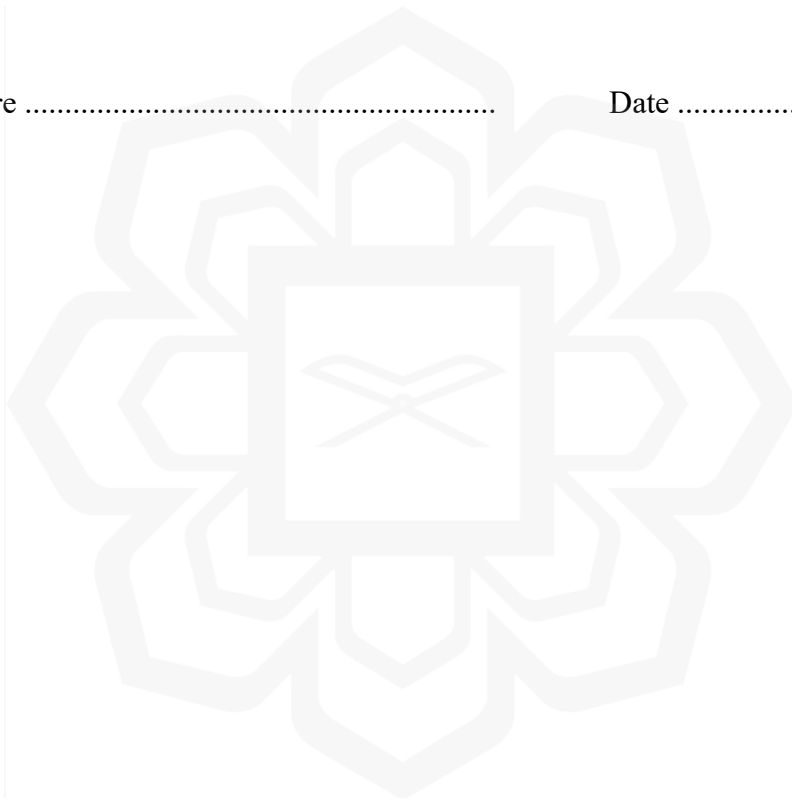
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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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This thesis is dedicated to Republic of Türkiye Ministry of National Education.

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TRANSLITERATION TABLE

Arabic Transliteration Scheme (According to IIUM Thesis Manual)

Consonant

Arabic term	Transliteration	Arabic term	Transliteration	Arabic term	Transliteration
ء	“	ز	z	ق	q
ب	b	س	s	ك	k
ت	t	ش	sh	ل	l
ث	th	ص	ṣ	م	m
ج	j	ض	ḍ	ن	n
ح	h	ط	ṭ	ه	h
خ	kh	ظ	ẓ	و	w
د	d	ع	‘	ي	y
ذ	dh	غ	gh		
ر	r	ف	f		

Vowel

Arabic term	Transliteration	Arabic term	Transliteration
اَ	a	اَ +	É
اِ	i	اِ +	Ê
اُ	u	اُ +	Ë
اِي	ay	اِي	aw

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Nurettin Topçu (1909-1975) was a Turkish thinker who mastered both Eastern and Western philosophy, and the most prominent aspect of his thought system is Islam, especially its metaphysical philosophy, as epitomized in Sufism. The underlying drivers of his thought can be summarized as “*Action (harakah), will (iradah) and revolt (‘iṣyān).*”¹ Topçu’s thought was shaped by the circumstances in which he lived, as well as his own personal intellectual trajectory. He experienced the late Ottoman and early Republican periods, which were tumultuous eras in Turkish life, as well as the broader Muslim world. Witnessing Ottoman and Republican modernization and the fundamental rupture with the traditional Islamic past of the Turkish nation and Muslim world, he himself completed his university education and doctorate in philosophy in France and was imbued with a deep knowledge of modern philosophy and the ability to critique it from a Turkish perspective.²

The intellectuals of his lifetime in Türkiye were overly concerned with attempting to achieve material development commensurate with Western Europe. He himself noted that he was educated at a time when positivism was universally enforced in Türkiye and Europe, recalling that most of his teachers at İstanbul High School were positivists.³ While acknowledging benefits and strengths of this paradigm, Topçu noted some inconsistencies in the way it has been appropriated in Türkiye, and offered original ideas on how the situation could be improved, to enable more agreeable national and

¹ İsmail Kara, *İsyan Ahlakı Peşinde Nurettin Topçu Albümü*, (İstanbul: Dergah Yayınları, 2018), 11.

² Ibid, 11, 15.

³ Turkish modernization projects from the late Ottoman era embraced positivism/scientism in the education system. See Halil İnalçık, *Atatürk ve Demokratik Türkiye*, (İstanbul: Kronik Kitap, 2020) 39-40; Gürcan Bozkır, “İzmir Basınında Mustafa Kemal Atatürk’ün Kastamonu Gezisi,” *Çağdaş Türkiye Tarihi Araştırmalar Dergisi*, Vol. 9, No. 20-21, (Jun, 2010) 117; Hülya Baykal, “Atatürkçü Çağdaşlaşma Yönünden Türkiye’nin Avrupa Topluluklarına Tam Üyeliği,” *Atatürk Araştırma Merkezi Dergisi*, Vol. 4 No. 12, (July, 1988), 742; On the root of the need for positivism, see Niyazi Berkes, *Turkish Nationalism and Western Civilization; Selected Essays of Ziya Gökalp*, translated from Turkish Language by Niyazi Berkes (New York: Columbia University Press, 1959), 28, 49, 50, 174, 212, 242-243, 266, 279; M. Şükrü Hanioglu, *Atatürk: An Intellectual Biography*, (New Jersey: Princeton University Press, 2011), 131-132, 157.

global development.⁴ He particularly emphasized that interpretations that reduce the universe to mere matter have a toxic effect on the faith of the Turkish youth.⁵ Positivism was the movement that gained influence in the West and beyond by resolving many philosophical uncertainties within science and governance. Rooted in Auguste Comte's (1798-1857) claim that all knowledge arises from sensory experience, classical positivism provided the epistemological foundation of modern science and facilitated the shift from "primitive" to "modern" thought by linking new scientific discoveries with new understandings of existence and society.⁶

Comte sought to propose a universal concept of science in which the laws of all social phenomena could be investigated by positivist methodologies, whereby and a secular ethical system of right and wrong could be determined by human mind and will. In this context, even the essence of man was reduced to a material object.⁷ This approach to the understanding of existence had a strong effect on the determination of the way of acquiring knowledge, the truth of knowledge. As a result of this, we can utter that the "naturalized epistemology" paradigm as the latest branch of positivism of has emerged, and this is an attempt at the materialization of epistemology.⁸ This describes movements arguing that all areas of philosophy, particularly epistemology, should be "naturalized" and brought into a materialist understanding. The main goal is to confirm that the philosophy of ethics, mind, and language are harmonious with empirical science, which only operates in beings that science can support. Basically, it rejects any possibility of knowledge without empirical input.⁹

⁴ Kara, *İsyan Ahlakı Peşinde Nurettin Topçu Albümü*, 15.

⁵ Kara, *İsyan Ahlakı Peşinde Nurettin Topçu*, 39; Mehmet Birgöl, *Irade Hareket İsyan Nurettin Topçunun Entelektüel Biyografisi*, (Istanbul: Dergah Yayınları, 2013), 81; Nurettin Topçu, *Kültür ve Medeniyet*, (Istanbul: Dergah Yayınları, [17th Publ], 2020), 80; Topçu, *Türkiyenin Maarif Davası*, (Istanbul: Dergah Yayınları, [3rd Publ], 1997), 38-39.

⁶ Frederick Copleston, *A History of Philosophy: Modern Philosophy: From the French Revolution to Sartre, Camus, and Levi-Strauss*, (New York: Doubleday, 1974), xii, 59-60, 75, 77-84.

⁷ Frederick Copleston, *A History of Philosophy: 19th and 20th Century French Philosophy*, (New York: Continuum, ed., 2003), 56, 57; Munz, Peter, *Our Knowledge of the Growth of Knowledge*, (New York: Routledge & Kegan Paul, 1985), 20, 21; Mevlüt Uyanık, *Bilginin İslamileştirilmesi ve Çağdaş İslam Düşüncesi*. (Akara: Ankara Okulu Yayınları, 3rd edn., 2014), 83; Copleston, *A History of Philosophy: Greece and Rome*, (New York: Doubleday, ed., 1993), 3; Sebastian Rödl, *Self-Consciousness*, (London: Harvard University Press, 2007), passim. Topçu was familiar with Comtean thought because of his higher education in France. Besides, the Ottoman intellectual milieu and Young Republican elite were also connected to some or larger extent to this French sociologist and his ideas.

⁸ *The Encyclopedia of Philosophy Supplement*, "Naturalized Epistemology"; to see the effect of this kind of approach on Islamic Modernism, see Alparslan Onbasi, *Modernism and Shibli Nu'mani*, (MA Thesis, International Islamic University, 2020), passim.

⁹ *The Encyclopedia of Philosophy Supplement*; Patrick Rysiew, "Naturalism in Epistemology," *Stanford Encyclopedia of Philosophy*, (Jan 8, 2016), 1-2, 14-17.

The ways in which this process has unfurled over recent centuries can be summarized as replacing “epistemological enterprise with empirical psychology,” as described by W. Willard Van Orman Quine (1908-2000), who is regarded as the founder of naturalized epistemology theory. He saw such a replacement as a necessity, contending that all psychology and psychological methods totally answer epistemological questions, “materializing the epistemological method, just as chemistry was replaced with alchemy.”¹⁰ According to this view, the core concepts of epistemology (i.e., self, essential self, intuition, and mind) can be reduced to empirical terms. However, such reductionism effectively negates the very essence of philosophy, amounting to its conceptual self-annihilation. Based on differences in views on epistemology, the movement is divided into three branches: “Replacement Naturalism” by Orman Quine, “Substantive” or “Moderate Naturalism” by Alvin Goldman and “Cooperative Naturalism” by Hilary Kornblith.¹¹ However, the case of complete materialization of epistemology raised fundamental questions concerning whether the positivist methodology of acquiring knowledge can be totally materialistic/determinist.

In his analysis of the concept of knowledge, Topçu argued that there is no raw process of acquiring knowledge from matter, and intuition plays an important role in this process. Intuitive knowledge, in general, was described by Edmund Husserl (1859-1938) as “immediate apprehension or immediate insight,” meaning that it is perceiving and sensing knowledge without inference; enables justification symbol, effort for thinking and defining a term.¹² Topçu argued that the nature of knowledge is fundamentally based on experience, and the claim that sensation is direct and incidental is illusory. According to Topçu, sensation expresses a tension or an act of *will* (*Irādah*) that is evident with an *intention* (*niyyah*) towards the object. There is an idea of *tension* (*sense of effort*) or an *intention* (*niyyah*) towards the object. The *intention* (*niyyah*) is a subjective state, and particularly a state of *consciousness* (*shuur*), which together comprise intuition (*hads*) about a thing. According to this topology of Topçu, intuition (*hads*) is the first thought, and the first cause in human action; while this might appear

¹⁰ Hilary Kornblith, *Introduction: What is Naturalistic Epistemology*, in Hilary Kornblith, *Naturalizing Epistemology*, (Cambridge: MIT Press, 1994, 2nd ed.), 5, 7; W. V. O. Quine, *Epistemology Naturalized*, in Hilary Kornblith, *Naturalizing Epistemology*, 30.

¹¹ Quine, *Word and Object*, (Cambridge: MIT Press, 2013), xii-xiii; Rysiew, 9.

¹² Edmund Husserl, *Ideas General Introduction to Pure Phenomenology*, translated from German by W. R. Boyce Gibson (New York: Macmillan Publishing, 1962), 48, 51; *Encyclopedia of Philosophy*, “intuition”; *The Cambridge Dictionary of Philosophy*, “intuition”; Thomas Mautner, *A Dictionary of Philosophy*, “intuition,” “intuitionism.”

to be identical to the sensation, in reality, he considered that the sensation occurs with an intermingling of cognition and other elements. For Topçu, the sensation is described as a tension of the subject towards the object to be known via their fusion and mixing. Consequently, there is no such thing as an unmixed sense-in-itself. All sensorial data is mixed with intelligence (and actually *Irādah*), and has ceased to be pure (i.e., objective external stimuli); in this context, *intuition (hads)* manifests itself in *consciousness (shuur)*. If reality could come directly to our senses and our consciousness, and if we could create a direct relationship with existence and ourselves, art would be insufficient, or all of us would be an artist.”¹³

To conclude, the flow of the thesis will be briefly as follows. Chapter two presents the life of Topçu and the Western and traditional elements on him through charting his intellectual and biographical development. Chapter three investigates the philosophical roots of the epistemology and the main discussions about the nature of intuition. It also discusses about the place of intuition in the naturalized epistemology. In chapter four, we analytically scrutinize Topçu’s approach to epistemology and show the differences between the understandings of intuition of Topçu and naturalist epistemologists. Chapter five evaluates the concept of intuition in the context of Islamic philosophy, according to Ibn Sina, Al-Farabi, and Al-Ghazālī from the perspective of the *qalb*’s function in knowledge. Moreover, it analyses Topçu’s understanding of intuition in the context of Islamic thought, and in terms of “mystical intuition” in his own words. Chapter six concludes the thesis, summarizing main findings on intuition and general understanding it in terms of ontology and epistemology.

1.2 STATEMENT OF THE PROBLEM

The deformation of scientific progress in Europe and the subsequent progress of science and technology without a spiritual metaphysical foundation was premised on viewing religion and traditional philosophy as unnecessary and even evil in terms of apprehending reality and its knowledge, based on Western historical experiences and assumptions.¹⁴ The global dominance of Western colonialism, especially from the 19th

¹³ Nurettin Topçu, *Conformisme et Révolte*, translated from French by Nurettin Topçu (Istanbul: Dergâh Yayinlari, 3rd ed., 2020), 118–122.

¹⁴ Moritz Schlick, *The Turning Point in Philosophy*, translated from German by David Rynin, in Alfred Jules Ayer, *Logical Positivism* (New York: MacMillan, The Free Press, 1959), 53-54, 56-57; Carnap, *The Old and the New Logic*, in Ayer, *Logical Positivism*, 133-134, 137.

century onward, led many colonized societies to abandon their native metaphysical and intellectual traditions in favour of Western modernity.

Westernization, grounded in the modern scientific worldview, requires that any notion of transcendence be interpreted only in ways that align with the empirical and positivist framework of modernity. Observation and experimental science are presumed to be the supreme or even only ways of apprehending reality. “Science” and its doctrine of knowledge can be described as “positivism and determinism,” as expressed in “naturalized epistemology,” whereby ontology and epistemology are regarded as having a determinist and material nature. These philosophical claims are necessary for secularism, which is why they were embraced by the secular colonialist political elites and native Westernizing circles who shaped modern Europe, and thus the modern world.

As Al-Attas has observed, this process necessarily damages Islamic thinking and identity; just as modernism swept away the religious world of traditional Europe, it purposively obliterated the venerable civilizations of Asia, Africa, and the Americas, to reshape the remnants in its image. Al-Attas has highlighted the natural intertwining between positivism, secular logic, and secularization, criticizing the idea that the worldview that the West has reached is compulsory for all societies in the world, and he warned Muslims against secularization.¹⁵ Besides, Al-Attas declares that there is a need for a more comprehensive epistemological method in terms of acquiring knowledge about the material world and points out the inadequacy of science.¹⁶

In this regard, numerous fundamental questions arise, including: are the universe and the way we know it inherently deterministic? Is the nature of ontology and epistemology only material? Is there a divine influence or abstract action in the way the universe works and in our way of knowing this process? Topçu’s philosophy is rooted in more universal assumptions, including the rich ontological and epistemological traditions of Islamic thought as shaped by historical developments in Anatolia, in particular Sufism. For instance, he introduced the notion that even positivistic

¹⁵ Syed Muhammad Naquib Al-Attas, *Islam and Secularism*, (Kuala Lumpur: Art Printing Works Sdn. Bhd., 1993), passim; Al-Attas, *Prolegomena to the Metaphysics*, 4, 14, 135; *International Encyclopaedia of the Social Science*, 2nd ed., “Positivism”; Auguste Comte, *A General View of Positivism*, translated from France by J.H. Bridges (New York: Cambridge University Press, 2009) 34-35; Onbasi, 25-26.

¹⁶ Al-Attas, *Prolegomena to the Metaphysics of Islam*, 135.

knowledge has spiritual and abstract implications and processes pertaining to the context of intuition in knowledge.¹⁷

In the context of modern science, we see that there has been very limited academic consideration of the understanding of science in terms of intuitionism, especially in Islamic intellectuals.¹⁸ The context of naturalized epistemology, positivism, and intuition according to Topçu are comprehensively analysed for the first time in this study. It can be seen that studies on Nurettin Topçu have ignored his approach to the concept of intuition and its epistemic value. Furthermore, while Topçu's ideas are well-known and influential in Türkiye, knowledge of him outside of the Turkish-speaking world remains limited. Consequently, it is necessary to undertake an academic study in English of his theory of “*motion, will (Irādah), intuition, and knowledge,*” which has never been studied before in the context of epistemology. On the basis of ongoing analysis, this study investigates the concept of intuition and its place in the positivistic naturalized epistemology according to Topçu's approach.

1.3 RESEARCH QUESTIONS

- In what ways did Nurettin Topçu's personal and cultural identity shape his understanding of knowledge and subjectivity?
- To what extent do modernity and its evaluation by Western and Muslim intellectuals affect Topçu's thought and method?
- How do the intellectual foundations and characteristics of Topçu's approach influence his study of intuition?
- How far does the approach of Topçu abide by the Islamic epistemological principles in criticizing the process of the use of intuition within positivistic naturalized epistemology?
- What are the positive and negative aspects of Topçu's approach to his study of intuition within positivistic naturalized epistemology?

¹⁷ Topçu, *Conformisme et Révolte*, passim.

¹⁸ Concerning this subject, only Arunjit Gill's *In Research of Intuitive Knowledge: A Comparison of Eastern and Western Epistemology* has broached intuitionism, but only in the context of the teaching of Buddhism, without talking much about the epistemological theory of intuitionism. He explains intuitionism superficially in terms of Buddhist teachings relating to “Western” science, but intuitive thought is a separate epistemological system that has come into existence on its own apart from empiricism and rationalism in the tradition of Islamic thought.

- How are the relevance and implications of Topçu’s approach for the use and place of intuition in the Islamic theory of knowledge?

1.4 RESEARCH OBJECTIVES

- To investigate the interrelation between Nurettin Topçu’s personal and cultural identity and his epistemological conception of the knowing subject.
- To analyse the concept of intuition and its place in positivistic naturalized epistemology.
- To outline the social, cultural, and political contexts of the paradigm in which Topçu lived and their impacts on his thought and understanding of positivism compared to naturalized epistemology.
- To shed light on the approach of Topçu by studying the place of intuition within positivistic naturalized epistemology.
- To formulate an analytical critical evaluation of Topçu’s approach and views from an Islamic philosophy perspective regarded to epistemology.

1.5 SIGNIFICANCE OF THE STUDY

The ascendancy of positivist empiricism and experimental scientific methods based on mathematically oriented hypotheses in natural sciences, driven by Western influence, has increasingly impinged social, cultural, economic, political, and ethical assumptions among individuals and communities. Qualitative issues that require in-depth analytical thinking and interpretation have been increasingly displaced by rude quantitative approaches.¹⁹ Civilizations throughout the world have been cajoled into jettisoning their time-honoured cultural and religious precepts in order to be compatible with “the modern age,” which was reflected in the rise of ethnic nationalism and religious reforms, such as those promulgated by “Islamic modernists.” All of these efforts acclaim – whether explicitly or implicitly – the supremacy of scientific positivism and its secular pretensions, and by extension the modern Western *Weltanschauung*.²⁰

¹⁹ George Henry Lewes, *The Physical Basis of Mind*, (Boston and New York: The Riverside Press, 1891), 235- 236; Cemil Akdogan, *Science in Islam and the West*, (Kuala Lumpur: ISTAC, 2008), passim.

²⁰ Onbasi, 2, 7, 37, 41, 43; To see some Muslim modernists’ reaction over the matter, Charles C. Adams, *Islam and Modernism (A Study of the Modern Reform Movement Inaugurated by Muhammad ‘Abduh)*, (Kuala Lumpur: Islamic Book Trust 2nd edition, 2010), 39-40, 108, 174; Aziz Ahmad, *Islamic Modernism in India and Pakistan 1857-1964* (London: Oxford University Press, 1967), x, 10-11, 19, 31-

Topçu, along with other thinkers, tried to comprehend these stages and proposed an alternative *weltanschauung*. He stated that even in the positivist method itself, *Irādah* and intuition (*hads*) have a vital effect in the process of knowledge formation. The prescience of such ideas, as unpacked in detail through the chapters of this thesis, are of increased contemporary relevance, as the nature of knowledge is being fundamentally reconsidered. Recent theoretical and empirical breakthroughs have shaken traditional and logical positivism, such as the idea that even the atom, which is the essence of matter and materialism, in philosophy does not have a determinist nature, and the Western positivist paradigm is increasingly uneasy with the uncomfortable implications of emerging developments in quantum physics and biology.²¹

This is because even scientific laws accepted as determinist have been fundamentally challenged by the emerging findings on the complexity of the universe offered by quantum physics since the 20th century. The fundamental premises of classical positivism are increasingly debatable, to a far greater extent than during Topçu's lifetime. When looking at the core of existence and its essence being substantively non-material in nature (e.g., "dark matter" and "dark energy"), modern physics is perplexed with questions of "whether an object of zero size makes physical sense at all."²² Moreover, as will be examined in detail later, the complete materialization of epistemology has raised many questions even within the positivist methodology itself. The current epistemological paradigm that has dominated Western and, increasingly, global ontological assumptions in recent centuries is increasingly besieged by scientific developments; and even if positivism/scientism is the only way

34, 37, 41-45, 54-56; *The Oxford Encyclopaedia of the Islamic World*, "Modernism"; *The Oxford Encyclopaedia of the Islamic World*, "Hadith."

²¹ Niels Bohr, *Atomic Theory and the Description Of Nature* (Cambridge: Cambridge University Press, 1961), 1-4; Ian G. Barbour, *When Science Meets Religion*, (New York: Harper San Francisco, 2000), 4-11-12; Caner Taslaman, *Kuantum Teorisi Felsefe ve Tanrı*, (Istanbul: Istanbul Yayınevi, 2008), 9, 12, 36; Gordon Kone, 107-108, 110; Karl R. Popper, *A World of Propensities*, (Bristol: Thoemmes, 1990), 7-10; Akdoğan, 29.

²² Chary Rangacharyulu and Christopher Polachic, *From Atoms to Higgs Boson: Voyages in Quasi-Spacetime*, (Temasek: Jenny Stanford Publishing, 2019), 14, 24, 109-110, 112, 147; Bohr, 1-4; Gordon Kone, *Supersymmetry and Beyond: From the Higgs Boson to the New Physics*, (New York: Basic Books, 2013), 1, 31, 107-108, 110. For example, it is argued that there is a massless existence, which is called "Higgs Boson." Gordon Kone describes it as a mechanism that gives mass to the elements that make up the atom, the smallest building block of matters such as "the W and Z bosons, and also the quark and leptons," but bosons and fermions cannot take mass themselves. Also, he says that "Higgs boson allows electrons that make up atoms to have mass. If electrons were massless, atoms would have effectively infinite size, and small objects like people and planets would not exist."

of knowing, it is questionable whether this method of knowledge itself is purely materialistic/deterministic.²³

Topçu opposes the subjective assumption that the scientific/positivist methodology determines all truth, arguing that the intuitive knowledge exists independently of sensory perceptions, and some domains of faith are not necessarily subservient to positive science and experimentation. Positivism ignores the transcendent, such as non-material aspects of human existence traditionally understood to be matters of the spirit, along with religion, which expresses the bond between God and man, which is rendered futile in modernity. This study unpacks Topçu's analysis to better comprehend the current impasse facing humanity, particularly the Islamic world and argues that the situation of the modern age is not an immutable law of history, despite the utility of the acceptance of scientism/positivism in worldly sciences. Eventually, apart from its contribution to philosophical and Islamic thinking, the study aims to contribute to scientific thinking, as well. At the current juncture, quantum theory may entail a new paradigm shift in science,²⁴ and due to the nature of science itself, we should make this examination. Moreover, this study contributes to the argument that there is conformity between thought and object, which is one of the most important claims of rationalists; thoughts are not just about objects and include mental and intuitive processes of knowledge experience according to Topçu.

Positivist sciences, epitomized by Western science since the "Enlightenment," have enabled unprecedented developments in science and technology. The main purpose of this thesis is not to discuss the value of positive science *per se*, but to explore the implications and contributions of intuition to scientific activity in the ontological and epistemological sense, based on Topçu's analysis. This has implications for the position of religious and philosophical thinking in modern times, and the Islamization of important ontological and epistemological paradigms that underlie diverse contemporary academic fields. This thesis thereby contributes to the stance of Muslim thought with the ideas of Topçu.²⁵ More than this, this thesis offers a contribution in introducing Topçu as an original and authentic scholar in Türkiye in the field of

²³ At the time the writing of this thesis began, quantum findings had not yet been proven, but as of December 2025, quantum proofs were deemed worthy of the Nobel Prize, and it was proven that the universe has an indeterministic structure. See <https://www.nobelprize.org/prizes/physics/2025/popular-information/>.

²⁴ Akdoğan, 29.

²⁵ Topçu, *Conformisme et Révolte*, 33, 62, 72-74.

philosophy and Islamic thinking; and his intuitive knowledge theory with action philosophy to global audiences, opening up his under-researched epistemological perspective and the new ontological basis. Furthermore, Topçu is unique to bring together modern epistemology and traditional Sufism with the concept of *Irādah*. We saw limited academic interest in the understanding of science from the perspective of intuition, especially among Islamic intellectuals. As far as we can determine, he is the only Muslim thinker who used *Irādah*-intuition in modern epistemic discussions. Topçu's *Irādah*-based epistemology of intuition is operative in both idealist and realist ontological approaches. While Topçu opposes a realist determinism, he does not accept an idealist determinism either.

1.6 CONCEPTUAL FRAMEWORK

The modern era curtailed “the truth” to the realm of observation and experiment, but for many people, the realm of the truth is much more expansive and comprehensive than this. Contrary to such claims, as Topçu has stated, the nature of knowledge cannot be limited to matter and material interaction. There is a spiritual activity, coming from intuition and *Irādah*, in the nature of knowledge, and in the nature of man. Today's scientific developments show that there is an immaterial operation even in the nature of matter itself. The widening of human knowledge requires the development of an intuitive epistemological methodology, which Islamic thought tradition already had in operational form until its traditional epistemology was usurped by the force of modernism.

When discussing intuition, and intuitive knowledge, the concept is assessed in terms of “hunch, immediate knowledge, non-propositional knowledge, sense perception, *a priori* truth, inexpressible intuition.”²⁶ These concepts are related to how humans acquire knowledge from objects and the process of knowing independent from an object, called sensory and non-sensory intuition, covering non-inferential knowledge, such as mathematical axioms and analytical truths. Also, the matter of the

²⁶ Gilbert Ryle, *The Concept of Mind*, (New York: Routledge, 2009), 191-194, 217, 266-267; Henry Bergson, *An Introduction to Metaphysic*, translated from French by T. E. Hulme (New York and London: The Knickerbocker Press, 1903), 7, 22, 24, 78; Kant, 7-9, 16, 36, 161; Edmund Husserl, *The Idea of Phenomenology*, translated from German by William P. Alston and George Nakhnikian, (Dordrecht: Kluwer Academic Publishers, 1990), XI, 6-7, 10, 45, 47; *The Encyclopaedia of Philosophy*. “Intuition.”

main differences between reasonable and experimental knowledge needs to be examined in terms of this study.

Although there are different definitions of intuitive knowledge, generally it is divided into two types in an academic context: *particular facts*, as in “This looks white” or “This hurts,” and *general facts*, such as “every event has a cause” and “If *a* then *b*.”²⁷ While the first one is accepted as sensory intuition, the second is referred to as non-sensory intuition. The first type of intuition is generally studied in philosophy to investigate consciousness and self-consciousness, while the latter is discussed in the understanding or perceiving of general notions. Intuitive knowledge is explained as “immediate apprehension or immediate insight,” implying that perceiving and sensing knowledge without inference, causes justification symbol and effort for thinking and defining a term,” which has been described as “anti-empiricist philosophy.”²⁸ Contrary to this general definition, some of the naturalized epistemology theorists suggests that abstract areas such as mind, perception, and comprehension should be embodied in the process of acquiring knowledge and states that only if this happens, scientific knowledge is obtained.²⁹

On the other hand, Topçu interprets ‘*intuition*’ in a different way, and argues that the source of our knowledge and sensation is *action*, and the basic element of taking action is intuition. In this case, intuition and *Irādah* determine our action, and action determines our sensation and knowledge. Intuition is spiritual; consequently, he argues that this spiritual function is embedded even in empirical knowledge.³⁰ By this, Topçu ascends human beings into a higher level like the others observed in the “tradition.” In Islamic tradition, man has been accepted as having dual nature of body and soul, as explained by Al-Attas:

²⁷ Kant, *Critique of Pure Reason*, translated from German, (Cambridge: Cambridge University Press, 1998), 6-7, 10, 16, 36, 41, 51, 155, 160, 280; Edmund Husserl, *Cartesian Meditations: An Introduction to Phenomenology*, translated from German by Dorion Cairns, (Dordrecht: Martinus Nijhoff Publishers, 1982), 36, 39; Husserl, *Ideas General Introduction to Pure Phenomenology*, 45, 48, 51-53; *The Encyclopedia of Philosophy*. “intuition.”

²⁸ Ryle, *The Concept of Mind*, 191-194, 217, 266-267; Bergson, *An Introduction to Metaphysic*, 7, 22, 24, 78; Kant, 7-9, 16, 36, 161; Husserl, *The Idea of Phenomenology*, XI, 6, 10, 45, 47; *The Encyclopedia of Philosophy*. “intuition”

²⁹ Kornblith, *Introduction: What is Naturalistic Epistemology*, in Kornblith, *Naturalizing Epistemology*, 5, 7; Quine, *Epistemology Naturalized*, in Kornblith, *Naturalizing Epistemology*, 30; *The Encyclopedia of Philosophy Supplement*, “Naturalized Epistemology.”

³⁰ Topçu, *Conformisme et Révolte*, 19, 51, 53, 61, 66, 97, 105, 109, 110.

The names (knowledge) of everything” (*al-asmā*) [*al-’ilm al-ashyā*] was taught to men by Allah (ﷻ), which the knowledge means relating to sensible and intelligible things... so as to make known the relations and distinctions existing between them and to clarify their natures within these contexts in order to discern and understand their causes, uses, and specific individual purpose. This knowledge does not refer to knowledge of the essence (*dhāt*) or inmost ground (*sirr*) of a thing (*shay*) such as, for example, the spirit (*al-rûh*), of which only a little knowledge is vouchsafed to man by Allah (ﷻ)... where knowledge emerges in man is his spirit or soul (*al-nafs*) and his heart (*al-qalb*) and his intellect (*al-’aql*).³¹

In this case, as in the context of Ibrahim Kalin, and in fact Islamic thinkers in general, it is accepted that all information and knowledge are seen as having originated in “the transcendent and sacred universe” (*‘alam al-Quds*), pertaining to the metaphysical concepts alluded to by Al-Attas in the above excerpt. Humans have varying degrees of perceptivity when it comes to obtaining illumination from the outside environment, which results in a perceptual hierarchy, by which some people are born with the ability to comprehend causal truths without any effort or study. This ability or skill is referred to as intuition (*hads*) by Mulla Sadra, a name he adopted from Ibn Sina, recognizing that the divine universe is the basis of knowledge, although different souls have various capacities. Causation may be understood via its external and evident manifestations at times, or it may be concealed at other times. That which compels capable souls to learn is the exact cause hidden from the senses. Its effect on spirits is fully concealed, although that might occasionally emerge from the inside to the outside, from the habitation of the Unseen (*al-ghayb*) to the realm of the visible to the naked eye (*al-shahada*).³²

In the tradition of Islamic thought, it is seen that the intuitive type of knowledge is mostly used for conceptual knowledge. In the context of spiritual competence in knowing, this study demonstrates that this ability is applicable and valid with regard to modern sciences in the modern age, in terms of both conducting scientific activities, and understanding science itself. The most important point to be considered here is the purpose of accessing truth, because knowledge is required not for worldly interests, but only for the happiness of this world and the hereafter, and to seek Allah’s (ﷻ)

³¹ Al-Attas, 139.

³² Ibrahim Kalin, “*Knowledge in Later Islamic Philosophy: Mulla Sadra on Existence, Intellect and Intuition*,” (New York: Oxford University Press, 2010), 154–155.

approbation. This is also within the scope of spiritual competence.³³ Besides the understanding of intuition in traditional Islamic thought, Topçu distinguishes intuition found in human nature from mystical intuition. Intuition is a path to mystical intuition, but the latter is not the same as intuition *per se*.³⁴

1.7 LITERATURE REVIEW

The sources of this study consist of many essential books and articles by experts on this topic, as expounded in detail in the following chapters. The focus of these resources explains the relationship between knowledge and perception and explores the role and reliability of thought over knowledge. Also, the sources introduce the effect of ontological approaches on the nature of epistemology in the history of thought. This perspective, in light of new scientific progress, shows the recent ontological view and the benefit and importance of intuition in knowledge. This section presents a brief preliminary review of some key books and articles that are essential when comparing the ideas of philosophers from different perspectives on intuition in knowledge, and the nature of knowledge. Also, the sources show the necessity of using intuition in positivist knowledge even in its special school namely “naturalized epistemology” in the context of Topçu, and evaluating his intuition theory with regard to epistemology. These are the answers to the crisis of epistemology in science. Moreover, the resources cited here allow us to analyse and understand Topçu’s ideas.

Sebastian Rödl’s *Self-Consciousness*³⁵ criticizes practical and theoretical thinking (i.e., action and belief), stating that we need to put self-consciousness at the foundation of all forms of knowledge. For him, self-consciousness precedes before perceptual knowledge of an independent object. From this point of view, self-consciousness is more important than ontological grounding. Moreover, he regards “contemporary epistemology” as a part of a theory of self-consciousness. In this regard, this approach needs to be rethought in terms of both ontological and epistemological aspects. On the other hand, Rödl supposes the nature of epistemology to be specifically materialistic and empiric, but we will try to introduce the concept that the nature of epistemology exceeds the materialistic and empiric approaches. Although Rödl accepts

³³ Al-Attas, 138.

³⁴ Topçu, *Conformisme et Révolte*, 112.

³⁵ Sebastian Rödl, *Self-Consciousness*, (London: Harvard University Press, 2007).

the role of intuition in acquiring knowledge, he regards it as something within a materialistic understanding. Based on some Muslim scholars such as Al-Ghazālī, we will observe the matter from an aspect of the spiritual nature of epistemology. Mainly, this dissertation will criticize this view according to Topçu's understanding of intuition in knowledge.

One of the representatives of naturalistic epistemology, Donald T. Campbell, argues in his article "*Neurological Embodiments of Belief and the Gaps in the Fit of Phenomena to Noumena*"³⁶ that the all-knowing process is material and can be tracked by scientific methods. He describes his endeavour in his article as being:

to mechanize and physicalize all aspects of believing and/or knowing, which in turn follows from a hypothetical realism that examines sensation, perception, cognition, and choice of actions as material and mechanical processes.³⁷

Although he supposes that "all aspects of believing or knowing" are materialistic, Topçu argues that the human motion process that determines our knowing process starts with intuition. In addition, according to Topçu, to accept all knowledge processes as materialistic is to say there is no free choice for humans, and his behaviour is deterministic. In contrast to Campbell's theory, this study will investigate the non-materialistic aspects of the knowing process, which is related to free will as argued by Topçu.

Willard Van Orman Quine, who coined the term "naturalized epistemology," mentions in *Ontological Relativity and Other Essays*³⁸ the necessity of denying the analytical approach to knowledge. After introducing two main ways of epistemology, namely analytical and empiric, which are accepted as synthetic *a priori*, based mainly on R. Descartes and I. Kant, he claims that all epistemological methodology must be decontaminated from its synthetic character by excluding the analytical approach. He calls this distinction the "dogma of modern empiricism," and states that these two categories actually receive influence from each other. In this case, the situation arises whereby we can call any inference "knowledge" only if it is based on "science" in terms

³⁶ Donald T. Campbell, *Neurological Embodiments of Belief and Gaps in the Fit of Phenomena to Noumena*, in Abner Shimony and Debra Nails, *Naturalistic Epistemology A Symposium of Two Decades*, (Boston: D. Reidel Publishing Company, 1987).

³⁷ Ibid, 166.

³⁸ Willard Van Orman Quine, *Ontological Relativity and Other Essays*, (New York: Columbia University, 1969).

of sensory data namely via empirical and observable methods. According to him, epistemology must be compatible with science, and all belief is based on sensory data, and he replaces analytical thinking with psychology, the study of cognition according to empirical and observable methods. To this conventional materialist view, Topçu would respond that the problem of free will come to the fore again, as explained previously.

On the other hand, Van Orman Quine defines the process of receiving knowledge from nature as a mental process that stores impressions and a psychological process. However, Topçu talks about the stage of thinking and taking action in the process of acquiring knowledge and states that human will is the most effective factor in this operation. Moreover, according to the findings of quantum physics, the laws that are valid for the physical functioning of the universe as conventionally understood (i.e., the “Newtonian” universe) may be diametrically opposite in the subatomic realm. Since the physical realm on which empiricism is based is also a part of our study, Van Orman Quine’s approach is examined in terms of Topçu’s theory of intuition, scientific and philosophical approach to the concept of intuition.

Richard Rorty’s *Philosophy and the Mirror of Nature*³⁹ comprehensively analyses the foundation of epistemology in terms of ontology, mind-body dualism, existentialism, phenomenology, behaviourism, empiricism, language, and hermeneutics, offering a critique of the explanations of knowledge proffered by the classical Western philosophers Locke and Kant. He states that he is trying to create the possibility of an epistemic basis that is purely based on empiricism, freed from traditional and religious dogmas, and says that it is possible to do this while remaining in the field of psychology. In this context, the assumption which material existence, experimental and observational approaches are the base of knowledge is queried in terms of the nature of matter itself not necessarily being explicable by experiment and observation. On the other hand, these theories only materially describe the process of acquiring knowledge from the material realm based on subjective prejudice. Topçu claims that the non-material (i.e., spiritual) dimension of human cognition is also instrumental in the process of acquiring knowledge from the material world. The role of intuition in knowledge is not mentioned at all by Rorty, which deals with theories of

³⁹ Richard Rorty, *Philosophy and the Mirror of Nature*, (New Jersey: Princeton University Press, 1979).

knowledge in a general way. Based on Topçu, the role of intuition in the process of obtaining knowledge will contribute to the field of science in this context.

Alvin Goldman's article *Epistemic Folkways and Scientific Epistemology*⁴⁰ questions the mission of epistemology and its proper methodology, positioning his theories within naturalistic epistemology. According to Goldman, epistemology primarily concerns "knowledge, justification, rationality, and principles associated with these concepts." He identifies two main approaches for this, the first of which is "our ordinary epistemic concepts and principles" rooted in conventional materialism, and the view that these are not adequate for complex cognitive phenomena. He determines his position as a place between these two approaches, describing "common-sense epistemic concepts and norms" as "epistemic folkways." According to him, one of the main missions of epistemology is to illuminate "epistemic folkways" which determine our knowledge, justification, rationality, and so on. He offers a path to "incorporating a more detailed and empirically based depiction of psychological mechanisms" to proceed.

Because his method depends on science, Goldman calls his conception of epistemology "scientific epistemology." He explains two arms of scientific epistemology, "descriptive and normative," whereby the former is regarded as aiming to designate our "ordinary epistemic assessments," and the latter concerns "the practice of making epistemic judgments or formulating systematic principles for such judgments." However, Topçu states that intuition plays a key role in our knowledge, justification, and rationality during this whole knowledge process. While Goldman only explains the empiric nature of epistemology, describing this as a necessity for proper epistemic methodology, Topçu explicates it in detail, arguing for the intuitive side of epistemology. This study contributes to a more detailed understanding of the nature of epistemology from the perspective of Topçu.

James Gibson's article *Locke's Theory of Mathematical Knowledge and a Possible Science of Ethics*⁴¹ discusses Locke's theory of knowledge. To see what changed the understanding of knowledge, the article provides a general view of a method of obtaining knowledge. He introduces Locke's style and argues the way of

⁴⁰ Alvin Goldman, "Epistemic Folkways and Scientific Epistemology" *Philosophical Issues, Vol. 3, Science and Knowledge. (1993).*

⁴¹ James Gibson, *Locke's Theory of Mathematical Knowledge and a Possible Science of Ethics*, *Journals*, Vol. 5, No. 17 (Jan., 1896).

acquiring knowledge, observing that Locke made ideas visible and sensible through the accuracy of mathematics. In general, Locke's main endeavour was to build a system that the human mind could perceive and introduce most truly. In his system, ideas take a material form so that they can be truly and accurately understood by all human minds, leaving no gap for speculation. According to him, this was achieved in mathematics, and this method should be used in other fields of science as well.

For example, in mathematics, all abstract ideas are shown with signs. In addition, he says, geometry, which is an abstract branch of study, has gained precision and accuracy thanks to the mathematical method. In geometry, although there are ideas that exist in the mind but do not exist in space, we still define them as absolutely correct. For instance, Gibbs observes that "diagrams, an angle, a circle, or a square drawn on paper are copies of ideas in the mind." He finds in Locke "the possibility of expressing our geometric ideas in visible and permanent expressions," and says that this means recognizing the intuitive character of science. Moreover, Gibbs argues that, for Locke, the species of knowledge through the intuition of relations between ideas is not confined to the region of mathematics, and mathematical certainty can be induced in other subjects. In this article, Gibbs questions the possibility of mathematizing other sciences such as ethics in general. However, we will inquire whether intuitive knowledge as systemized in Topçu can be functional and promoter in all sciences.

Immanuel Kant's classic *Critique of Pure Reason*⁴² examines knowledge under two main headings, basically talking about two different forms of reasoning: pure and empiric. Kant calls "pure" knowledge acquired independently of experience and perception "*a priori*," which is analogous to intuitive knowledge in many respects. Pure knowledge is knowledge that exists independently of empirical elements. Based on Kant's statements, we can say that he confines the field of philosophy within the boundaries of science. In his book, Kant draws the limits of human knowledge, which was a pioneering contribution to Western philosophy. Although he says that the basis of human knowledge is *a priori* knowledge, including empirical knowledge itself which builds upon the foundation of pure knowledge, it is stated that human knowledge will only be operated in the context of space and time over objects.

⁴² Immanuel Kant, *Critique of Pure Reason*, translated from German, (Cambridge: Cambridge University Press, 1998).

In a sense, this is accepting knowledge only based on experience, because Kant states that we cannot rely on non-experimental knowledge or at least we have to confirm it by experiment, otherwise it will mislead us. Many scientists and philosophers believe that the foundation of today's science is based on the thought of Kant. In this context, it is implied that the only way to produce knowledge is scientific positivism. If there is a compatibility between the thought and the object, as the rationalists and Kant accept, it is not consistent to create a knowledge ground based on the object alone. Kant mentions that the forms of pure reason are unreliable if they cannot be checked by experiment. However, in this case, Rupert Hall's statement comes to the fore:

Although the criteria of rationality are unchanging, their application to changing sets of facts ensures that propositions irrational in one period become rational in another.⁴³

On the other hand, according to Topçu, in addition to an object and its impression on the mind, knowledge is also based on human *action* and *will* toward the object. These concepts are strictly related to each other. In this work, we will try to explain this relation according to Topçu.

Edmund Husserl's *The Crisis of European Sciences and Transcendental Phenomenology*⁴⁴ presents a profound challenge to positivism, asserting that modern science—through its positivist tendency to confine knowledge to empirical facts and mathematical precision—has become detached from the “life-world” (*Lebenswelt*). He argues that positivism's reliance on sensory data and quantifiable observation as the sole grounds of knowledge results in a crisis of meaning, since it disregards the subjective and intentional aspects of consciousness that render experience meaningful. According to Husserl, this approach to science ignores the constitutive function of the knowing subject (i.e., the “transcendental ego”), and thus overlooks the very basis on which scientific understanding rests. By limiting reality to what can be observed and measured, positivism neglects the pre-scientific realm of lived experience that underlies all scientific inquiry. Consequently, Husserl advocates a return to phenomenology as a rigorous investigation of consciousness, capable of restoring the lost harmony between

⁴³ A. Rupert Hall, *Magic, Metaphysics and Mysticism in the Scientific Revolution*, in Maria Luisa Righini Bonelli and William R. Shea, (New York: Science History Publications, 1975), 28, 277-278.

⁴⁴ Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology An Introduction to Phenomenological Philosophy*, translated from German by David Carr, (Evanston: Northwestern University Press, 1970).

objective knowledge and the subjective sources of meaning. He was a pioneer of thinkers such as Nurettin Topçu in terms of highlighting concepts such as subjectivity, self and intentionality in knowledge. This study shows the facility that concepts such as self and intuition/İrādah, which we can describe as transcendent elements in epistemology in many respects, can also take place in the positivist methodology of knowledge.

Rober Audi, in his *The Good in The Right: A Theory of Intuition and Intrinsic Value*,⁴⁵ discusses intuition in terms of moral philosophy, in the context of the eponymous concepts of “good” and “right.” In this context, “The Good” belongs to the realm of *value* and *meaning*, determining whether something is intrinsically *good*. “The Right” belongs to the realm of *duty*, meaning that it determines what we *ought to do*. Audi argues that these two realms are irreducible to one another, but are in rational harmony. He argues that moral knowledge, as we are accustomed to seeing in epistemology, is also justified through reasoned intuitive awareness. However, Audi explains intuition not as a mystical insight, but as rational intuitive awareness (i.e., “rational intuition”). From the perspective of our thesis, we see that Audi adopts a naturalist epistemological approach to the concepts of İrādah/Niyyāh, whose epistemological significance we frequently touch upon, and their role in determining the self’s motivations (i.e., its dispositions). Nurettin Topçu offers a different perspective to such approaches, by explaining the metaphysical dimension of these concepts and by explaining in detail their relationship to the divine İrādah.

Gilbert Ryle’s the *Concept of Mind*⁴⁶ is also another valuable source for our investigation. Generally, it mentions the contemporary reaction to Cartesianism. According to this, a human has two dimensions or senses to acquire knowledge: the mind, which gains knowledge from the phenomenal world through the five senses; and reason, which is bounded by non-material analytic investigation. To cover the process of knowing, this valuable study would help this thesis, covering some similarities with Topçu.

⁴⁵ Robert Audi, *The Good in The Right: A Theory of Intuition and Intrinsic Value*, (New Jersey: Princeton University Press, 2004)

⁴⁶ Gilbert Ryle, *The Concept of Mind*, (New York: Routledge, 2009).

In *Simply Rational: Decision Making in the Real World*,⁴⁷ Gerd Gigerenzer explains the importance of intuitive knowledge even in science, especially in the context of uncertain conditions. Across the domains of medicine, psychology, and economics, the book agglomerates actual and theoretical studies on “risks and decision making.” The essays in the book show why the contexts in which statistics are presented are critical for larger comprehension and smart decision-making, as well as how “understanding risks” and vagueness have far-reaching ramifications in everyday life. Gigerenzer offers a clear overview and collection of real examples of heuristics/intuitive, or “rules of thumb,” whereby people and animals are accustomed to making decisions in the face of ambiguity, demonstrating why they are frequently more reasonable than probability models. Following a thorough examination of behavioural theories that do not accurately reflect psychological processes, the book finishes with a plea for a “heuristic revolution” to comprehend the ecological rationality of both statistics and heuristics, as well as inject some sanity into the rationality research. This book is important to see heuristics/intuition in action examples, showing some similarities with Topçu.

G. E. R. Lloyd’s *Magic Reason and Experience*⁴⁸ provides an account of traditional controversies between rationalists and empiricists concerning intuitive knowledge, mentioning the problematics in traditional and scientific thought. Among the important issues that the author discusses, he critiques the scientific knowledge paradigm and others, introducing the historical origin of the distinction between them. He also mentions that the types of knowledge expressed outside the paradigm described as scientific knowledge can contribute to modern science, giving the ancient Greeks as an example:

Several of those who were prominent in the development of Greek cosmology and science combined interest and belief in magic with their other work in the ‘inquiry into nature.’ To mention just the most obvious single example here, it is well known that most ancient, like most medieval and Renaissance astronomers, were also practicing astrologers.⁴⁹

⁴⁷ Gerd Gigerenzer, *Simply Rational: Decision Making in the Real World*, (New York: Oxford University Press, 2015).

⁴⁸ G. E. R. Lloyd, *Magic Reason and Experience*, (New York: Cambridge University Press, 1979).

⁴⁹ *Ibid*, 5.

It will contribute to our study to see the study the permeable transition from science to belief, from belief to science, and to see the usability of different knowledge paradigms in science.

Rudolf Steiner's *Intuitive Thinking as a Spiritual Path: A Philosophy of Freedom*⁵⁰ claims that "free spiritual activity," defined as the human potential to reason and act independently of physical nature, is the best way for people to learn about themselves and the world today. To understand the importance of the subject, the author is aware of the profound change that takes place in the consciousness of thinking. The process that started with modernization and radically changed the paradigm of thought is also important for our thesis. Based on the notion of "freedom in human thinking," the book investigates the limit of human thinking, the differences between "knowledge and perception" and how much we trust our ability in thinking activities while he underlines the value and importance of modern thought developing in the West. For all these discussions, Topçu offers a very unique perspective to unpack deeper and more meaningful insights, mentioning transcendent impacts in the process of human understanding of nature. This book is critical for understanding the relationship between intuitive knowledge and perception and comparing Topçu's understanding of intuition and knowledge.

Henry Bergson's *An Introduction to Metaphysic*⁵¹ underlines the law of "relativity" and its relation to our way of knowing. He summarizes the two ways of knowing thus: "We move around the object, and we enter into it." What this means is that we are trying to know has an absolute reality, and a reality that reflects on us; more precisely, we see, understand, and express an understanding of where we stand. Our knowledge of anything in the universe is thus like a translated poem; while the translator (e.g., our empirical perceptions) attempts to convey the meaning that the poet wanted to say, the unadulterated intrinsic meaning of the poem cannot be translated. Consequently, we are left with an *interpretation* of that poem. Similarly, what we receive after experimentation and observation about anything will be our interpretations of it rather than the real meaning of things in the universe. Due to this, Bergson describes

⁵⁰ Rudolf Steiner, *Intuitive Thinking as a Spiritual Path: A Philosophy of Freedom*, (United States: Anthroposophical Press, 1995).

⁵¹ Henry Bergson, *An Introduction to Metaphysic*, translated from France by T. E. Hulme (New York and London: The Knickerbocker Press, 1903).

human knowledge of things as relativity and things themselves as absolute. He thinks that we can perceive the essence of existence only in a way of intuition:

Absolute could only be given in an intuition, whilst everything else falls within the province of analysis. Intuition is meant the kind of intellectual sympathy by which one places oneself within an object to coincide with what is unique in it and consequently inexpressible. Analysis, on the contrary, is the operation that reduces the object to elements already known, that is, to elements common both to it and other objects. To analyze, therefore, is to express a thing as a function of something other than itself. All analysis is thus a translation, a development into symbols, a representation taken from successive points of view from which we note as many resemblances as possible between the new object which we are studying and others which we believe we know already.⁵²

This study has critical importance for our research in terms of examining both the nature of the known object (i.e., ontology) and the issues that should be taken into account in the act of knowing (i.e., epistemology). Topçu himself identified the differences between his and Bergson's understandings of intuition, and this comparative analysis is beneficial for this study in terms of reaching a more nuanced understanding of Topçu's unique approach.

Brand Blanshard's *Reason and Analysis*⁵³ is also germane to this study in showing the view that intuitive knowledge of *a priori* truths is founded upon a non-propositional knowledge of universals or essences. To see the basis of knowledge over ontology, the study would contribute to a wider understanding. Also, to point out the difference in Topçu's understanding of intuition, the book is comprehensive to cover general conceptions and would contribute to this study.

Michael DePaul and William Ramsey's *Rethinking Intuition: The Psychology of Intuition and its Role in Philosophical Inquiry*⁵⁴ contains four articles by psychologists linking and analysing some experimental findings on intuition and eleven by philosophers supporting various answers to these questions. Their articles mainly address two related questions: (a) How much evidential weight should be given to intuition? and (b) Are concepts governed by necessary and adequate conditions, or by

⁵² Ibid, 7.

⁵³ Brand Blanshard, *Reason and Analysis*, (New York: Routledge, 1962).

⁵⁴ Michael DePaul- William Ramsey, *Rethinking Intuition: The Psychology of Intuition and its Role in Philosophical Inquiry*, (United States: Rowman & Littlefield Publishers, 1998).

conditions of “family resemblance”? This book is particularly important for our study to contextualize the intuitive basis of knowledge.

In *Islam and Secularism*,⁵⁵ Al-Attas highlights the importance of Islamic thought systems for Muslims. According to him, because the West misunderstood and applied Greek philosophy, they created a model of thought and life contrary to human nature and reason. As a natural consequence of this situation, they had to turn to secularism today, which deeply affected their attitudes toward ontology and epistemology. At this point, he warns Muslims not to fall into the same secularism and secularization error. To see the importance of having our own ontological and epistemological basement, this study is important for our dissertation. On the other hand, the book underlines the significance of ethics and faith in acquiring true knowledge. According to Al-Attas, our internal dynamics are as important as our contact with the object in the process of acquiring knowledge. This is essential because internal interaction is as important in knowledge acquisition as physical interaction. In this case, some factors other than physical ones, such as ethics and faith, play a significant role in epistemology. While investigating the nature of intuitive knowledge, this book contributes to giving general points on the possibility of alternative epistemological theory.

Mehmet Birgöl’s **İrade Hareket İsyân: Nurettin Topçu’nun Entellektüel Biyografisi** [Will Action Revolt: An Intellectual Biography of Nurettin Topçu]⁵⁶ investigates the studies and memories that were written about Topçu’s personality and life by his students and loved ones. In light of such data, Birgöl creates Topçu’s intellectual biography, which enables us to understand his inner world, as well. The author emphasizes in this study that such a study is important in terms of getting to know well Topçu who had inspired many contemporary intellectuals. With the author’s expressions, in order to get to know Topçu’s beliefs, philosophy, actions, and his world of emotions, it is necessary to know his admirable personality. In addition to this, the author criticizes a lot of information written about Topçu in this work and comparatively clarifies ambiguous issues. Apart from this, the book gives a sight to understand the

⁵⁵ Syed Muhammad Naquib Al-Attas, *Islam and Secularism* (Kuala Lumpur: Art Printing Works Sdn. Bhd., 1993).

⁵⁶ Mehmet Birgöl, *İrade Hareket İsyân: Nurettin Topçu’nun Entellektüel Biyografisi*, (İstanbul: Dergâh Yayınları, 2013).

socio-political conditions in which Topçu lived, offering many important contributions to deepen our understanding of the thinker and his times.

İsmail Kara's *İsyan Ahlakı Peşinde Nurettin Topçu Albümü* [*Nurettin Topçu: Album in Pursuit of the Ethics of Revolt*]⁵⁷ contains many personal documents pertaining to Topçu, such as photographs, official documents, diplomas, and his own handwritten manuscripts and letters. These documents, which are original and obtained from his relatives, make this book more valuable. The compiled data allows us to see the changes and developments in Topçu's world of thought, as it covers the part from his childhood to the end of his life in a chronological manner. Moreover, this book, which also benefits from the writings about Topçu and the works reflecting the period in which he lived, allows us to see the process that formed his thought and philosophy.

Ali Osman Gündoğan's⁵⁸ *Arafta Bir Düşünür Nurettin Topçu* [*A Thinker in Purgatory, Nurettin Topçu*]⁵⁹ emphasizes that Topçu complains about "Westernism" (i.e., Western culture and civilization) being steamrolled into every field of human activities and thought, including literature, social life, industrialization, and the imitation of ideas such as positivism and sociologism. He charts Topçu's critique of the imitation of positivism and its materialistic character, which destroys spiritual and philosophical bases. According to him, Topçu saw how Christian spiritualism had been abused by materialism, and he saw the same process being applied to Muslims. In addition to this, the author also expresses that Topçu offers a way other than positivism and its mechanistic, determinist universe. However, Gündoğan's analysis of Topçu does not talk about his epistemological analysis of positivist thought, although he mentions the damage that the basis of positivist thought has caused to morality and Islamic thought and modernity. This study seeks to fill this gap.

Fatih Birgül's⁶⁰ **İlk Dönem Hareket'in Çağdaş Türk Düşüncesi Açısından Önemi** [*The Importance of the First Period Movement for Contemporary Turkish Thought*]⁶¹ explains Topçu's discussion of positivism, firstly emphasizing how dominant positivism was during the time Topçu lived, and how he exhibits an intellectual discourse against this dominant paradigm. Birgül defines positivism as a

⁵⁷ Kara, *İsyan Ahlakı Peşinde Nurettin Topçu Albümü* (İstanbul: Dergâh Yayınları, 2018).

⁵⁸ Head of the Department of Philosophy at the Faculty of Arts and Sciences at Muğla University.

⁵⁹ Ali Osman Gündoğan, *Arafta Bir Düşünür Nurettin Topçu*, (Ankara: Altınordu Yayınları, 2018).

⁶⁰ He is Assoc. Prof. Dr. in Theology Faculty of Uludag University.

⁶¹ Fatih Birgül, *İlk Dönem Hareket'in Çağdaş Türk Düşüncesi Açısından Önemi*, in *Nurettin Topçu Sempozyumu*, 15-16 April, 2016: 131-146.

philosophy that reduces the truth to the knowledge of facts pertaining to the matter, and Topçu's critique of positivism was premised on an excellent philosophical background. He summarizes Topçu's definition of positivism thus:

Positivism only accepts knowledge of events as real. Events are known by our senses and also by the sciences, which are the systematized form of the knowledge they give. The means of recognition of the senses or sciences is an experiment. The sciences established through experimentation are the only means to introduce us to the truth. When the human mind cuts off contact with experiments and goes beyond the horizons of experience, it remains stuck in error; beyond that is a dead end. The experiment is a set of relations that can be established between our senses and things. Our thought can reach the truth only through these relations. Truth is nothing but the understanding of these relations. Apart from this, there is nothing, but a belief tied to delusion and illusion. Religions and metaphysics always fly on the wings of this dream. They have deceived humanity for centuries.⁶²

According to Birgül, Topçu draws attention to the damage done by positivist epistemology and states that the greatest damage is done to the characteristics that make human beings human, whereby the functionality of the *heart* is cast aside by positivism. However, the author does not mention intuition even in the positivist methodology that Topçu systemizes. This study tries to fill this gap.

Ahmet Kılıç's *Bilinmeyen Yönleriyle Türk Filozofu Nurettin Topçu* [*Nurettin Topçu: Turkish Philosopher with Unknown Aspects*]⁶³ gives general information about Topçu's ideas in biographical context, exhibiting the influences of the period in which he lived on his intellectual biography. Although this study gives detailed information about how Topçu's philosophy was shaped, the "critique of positivism" that played an active role in his thought was incomplete. Our research aims to reveal Topçu's approach to positivism, particularly filling in some gaps about the role of intuitionism in modern thought.

Gordon Kone's *Supersymmetry and Beyond: From the Higgs Boson to the New Physics*⁶⁴ gives a general understanding of how quantum physics works, what the Higgs Boson theory is, and its importance for the formation of the atom. This intellectual infrastructure is important for our work because medieval thought, which

⁶² Ibid, 132.

⁶³ Ahmet Kılıç, *Bilinmeyen Yönleriyle Türk Filozofu Nurettin Topçu*, (İstanbul: Ravza Yayıncılık, 2020).

⁶⁴ Gordon Kone, *Supersymmetry and Beyond: From the Higgs Boson to the New Physics*, (NewYork: Basic Books, ed., 2013).

was the dominant paradigm, was re-criticized after a new understanding of the universe with the breakthroughs of modern physics radically changed the ontological paradigm. Naturally, this led to serious questions about the nature of epistemology as evaluated in the light of new physics. The nature of atoms that give existence to matter is indeterministic; contrary to the axioms of classical physics, their nature fundamentally suggests transcendent (or even irrational) manifestation and aetiology. Put simply, advanced scientific discoveries about matter suggest transcendent effects, which calls for a reassessment of the place of the transcendent and intuitive in the process of acquiring knowledge. Topçu's analysis can explain this correlation between new physics and intuition in knowledge in the context of re-evaluating the prevailing ontological framework.

Karen Harding's *Causality Then and Now: Al-Ghazālī and Quantum Theory*⁶⁵ examines quantum theory as a new understanding of the material world, and the universe regarding Al-Ghazālī's causality theory, introducing similarities between them. According to Harding, quantum theory emerged with the accumulation of scientific data that cannot be explained by this mechanical model and the data supporting the quantum theory are so strong that this theory cannot be ignored. Acceptance of the theory entails ideas that compel many scientists to re-examine the ideas underlying scientific initiatives. Emerging theory makes it necessary to rethink scientific viewpoints, along with ontological and epistemological assumptions. Harding's article deals with the movement of objects rather than their existence; however, related to our topic, the movements of objects are as important as their existence in terms of ontology, because they contain important information about the essence of existence.

Accordingly, this new and emerging understanding, which is fundamentally different from the Newtonian mechanistic approach, is based on the probability that the electron, which is one of the particles that make up the physical universe, does not have "a definite size and definable location in the space." Moreover, when observed, it has been noted that although electrons sometimes behave like particles, at other times they behave like waves. It was later realized that electrons can behave both like particles and like waves, depending on the observer. If knowledge comes to us only from objects,

⁶⁵ Karen Harding, "Causality Then and Now: Al-Ghazālī and Quantum Theory," *The American Journal of Islamic Sciences* 10/2 (1993).

then what will be our way of acquiring knowledge? Do we need any other way of acquiring knowledge contrary to what is assumed? This study is important in our opinion as it makes it necessary for us to ask the basic questions of our thesis and to see the relationship between the new scientific approach and traditional ontologies, particularly that of Al-Ghazālī.

İbrahim Kalin argues in his *Knowledge in Later Islamic Philosophy: Mulla Sadra on Existence, Intellect, and Intuition*⁶⁶ for the importance of ontological perspectives in proper philosophy in terms of reaching pure knowledge, which was the most significant subject during the existence of human beings. Citing Sadra, he emphasizes that knowledge is an action that is jointly formed by the known and the knower. According to him, in order to ensure this integrity, the structure of ontology is as important as the structure of epistemology. For Sadra, while perceiving things, we uncover a characteristic of existence and thus engage with the countless modalities and colours of the all-inclusive reality of existence. The intrinsic intelligibility of existence, an argument Sadra establishes through his elaborate ontology, strips the knowing subject of its privileged position of being the sole creator of meaning. Instead, meaning and intelligibility are defined as functions of existence to be deciphered and unveiled by the knowing subject. This leads to a redefinition of the relationship between subject and object, or what Muslim philosophers call “the knower and the known.”

The new developments in science have made it necessary for us to approach existence in a different way than it was understood in the 19th and 20th centuries. Quantum physics presents us with a completely different understanding model of the universe, and this requires us to update our epistemological approach as well. In terms of the importance of grounding ontology and epistemology, this study will make a contribution to our dissertation. On the other hand, as cited by Kalin, Sadra takes representational-discursive knowledge on the one hand and intuitive and mystical knowledge on the other. He posits these two forms of knowledge not as alternative explanations of the same reality, but as belonging to different orders of intelligibility. In his understanding, there is no single way of knowing that is adapted to all situations. Knowledge is not solely based on ontology or epistemology; meaning is formed in the partnership of these two. From this aspect, the study provides the overall review of

⁶⁶ İbrahim Kalin, “*Knowledge in Later Islamic Philosophy: Mulla Sadra on Existence, Intellect and Intuition*,” (New York: Oxford University Press, 2010).

ontology and epistemology in classical philosophy, encompassing the views of Aristotle, Plato, Ibn Sina, Al-Farabi, and Mulla Sadra. This contributes to our study in terms of discussing the root of intuitive knowledge in the Islamic thought tradition.

John Walbridge's *The Science of Mystic Lights*⁶⁷ analyses Outb al-Din Shirazi's (1236-1311) approach to "The Philosophy of Illumination," and compares it with that of as-Suhrawardī (1155-1191). The work also criticizes the ideas of Peripatetic philosophy regarding quiddity, reality and knowledge from the perspective of Suhrawardī. Although the work generally talks about mystical intuition, it also occasionally points to the experiential aspect of intuition. More than this, when we examine the faculty of intuition in knowledge, we see that it points to the concept of self/consciousness from the perspective of an Islamic thinker. This study contributes to a more comprehensive understanding of the faculty of intuition, both in terms of Islamic philosophy and modern epistemological discussions.

In his *Intuition Its Powers and Perils*,⁶⁸ David G. Myers discusses the concept of intuition from very broad perspectives, including individual and social, and provides examples of the use of intuition in everyday life and scientific activities. Through examples, he talks about the risks of relying solely on intuition, but emphasizes the importance of intuition not to be completely ignored. However, the work has deficiencies in providing an academic basis for discussions on the ontological and epistemological basis of the concept of intuition. Nevertheless, it does offer specific examples of belief acquisition. This work is useful for this thesis because it contributes to a broader understanding of the topic.

Zailan Moris's *Revelation Intellectual Intuition and Reason in the Philosophy of Mulla Sadra*⁶⁹ examines Mulla Sadra's understanding of knowledge in terms of Revelation, Intellectual Intuition, and Reason. Moris argues that these three elements are not alternatives to one another in Mulla Sadra, but rather exist in a hierarchical unity. He argues that these three paths of knowledge must be in harmony to attain truth, as these methods of knowledge complement each other. He also reveals the differences between the understandings of philosophers and Sufis of the concept of intuition,

⁶⁷ John Walbridge, *The Science of Mystic Lights Outb al-Din Shirazi and the Illuminationist Tradition in Islamic Philosophy*, (Massachusetts: Harvard University Press, 1992).

⁶⁸ David G. Myers, *Intuition Its Powers and Perils*, (New Haven: Yale University Press, 2002).

⁶⁹ Zailan Moris, *Revelation Intellectual Intuition and Reason in the Philosophy of Mulla Sadra*, (London: Routledge, 2003).

namely as a rational faculty or as something associated with the heart. The author argues that this distinction highlights how the epistemological basis of Islamic philosophy differs from that of Western philosophy, since in the Islamic tradition, reason is integrated with intellectual intuition or illumination, both of which are ultimately placed under the authority of revelation.

Yusuf Al-Qaradawi's *Mawḳif al-Islām min al-Ilhām wa al-Kashf wa al-Ru'ā'*⁷⁰ examines how Islam approaches the concepts of inspiration (divine inspiration), mystical intuition, and ru'ya (dreams), based on Islamic sources. Al-Qaradawi emphasizes that experiences such as inspiration, *kashf*, and dreams are not completely rejected in Islamic thought, but they should not be confused with revelation. Qaradawi begins by identifying the sources of knowledge in Islam: revelation, reason, and the senses. He explains that paths other than revelation, such as intuition, inspiration, *kashf*, and dreams, cannot be sources of religious knowledge, but can be considered individual experiences. In other words, to him, *kashf* exists, but its criterion is the religious texts. He acknowledges that such spiritual experiences, as non-prophetic means of knowledge, may come to some individuals as a divine blessing. However, he states that such a knowledge does not have the power to impose religious rulings or produce definitive knowledge, but merely serves as personal spiritual guidance. He analyses how these concepts are used in the Sufi tradition and evaluates Sufi understandings of *kashf* and inspiration according to the criteria of the Quran and Sunnah. Ultimately, Al-Qaradawi argues that Islam takes a balanced and cautious approach to such experiences: it neither rejects them outright, nor exalts them excessively. As can be understood from the perspective of our study, the work deals with intuition from a religious perspective, and evaluates it from the basis of sharia. It thus contributes to the evaluation of intuition in the context of Islamic philosophy.

Abd Al-Raḥmān Ibn Zayd Al-Zunaydī's *Maṣādir al-Ma'rifah fī al-Fikr al-Dīnī wa al-Falsafī: Dirāsah Naqdiyyah fī Ḍaw' al-Islām*⁷¹ addresses the issue of the source of knowledge (*maṣādir al-ma'rifah*) from the perspective of both Western philosophy and Islamic thought, and examines the Islamic theory of knowledge in a comparative

⁷⁰ Yusuf Al-Qaradawi, *Mawḳif al-Islām min al-Ilhām wa al-Kashf wa al-Ru'ā'*, (Cairo: Wahba Library, 1st ed., 1994).

⁷¹ Abd Al-Raḥmān Ibn Zayd Al-Zunaydī's *Maṣādir al-Ma'rifah fī al-Fikr al-Dīnī wa al-Falsafī: Dirāsah Naqdiyyah fī Ḍaw' al-Islām*, (Riyadh: Maktabat al-Mu'ayyad & International Institute of Islamic Thought (Herndon, Virginia), 1992).

and critical manner with other traditions. Al-Zunaydī outlines the nature and possibility of knowledge while also providing a brief overview of the historical development of sources of knowledge. He also examines the fundamental sources of knowledge in Western philosophy (reason, senses, intuition, and experience), beginning with ancient Greece, and the debates over rationalism, empiricism, intuitionism, and positivism in modern epistemology. From the perspective of Islamic thought, he discusses the positions of the concepts of revelation, inspiration, spiritual knowledge, and intuition within the context of religious knowledge and how they function as sources of knowledge. In this context, he critically examines the epistemological assumptions of modern philosophy.

Generally, Al-Zunaydī considers that the sources of knowledge in Islam comprise a holistic system. In this context, he holistically examines the concepts of the senses (*hiss*), reason (*‘aql*), revelation, and spiritual intuition (*ilhām*). The work draws attention to the epistemological problems that arise with the secularization of knowledge sources in modern philosophy. It criticizes approaches that limit knowledge solely to reason and experience and presents Islamic epistemology as a unity that preserves its metaphysical foundation. In these respects, it contributes to discussions about creating a modern knowledge system in line with the spirit of Islam, similar to Nurettin Topçu’s initiative.

In his *Durūs Falsafīyyah fī Sharḥ al-Manzūmah*,⁷² Murtaza Mutahhari generally explains the basic concepts of Islamic philosophy and, in particular, presents the Peripatetic, Illuminationist, and Sadrianic doctrines in a comparative manner. Mutahhari views philosophy not merely as an intellectual activity, but as a deepened form of spiritual experience (*shuhud*). According to him, true knowledge (*ma’rifah*) is attained through the illumination of both the intellect and the heart; in this respect, he reconstructs the epistemology of the Illuminationist tradition in a modern language. The work discusses the limits of reason and the epistemic value of *kashf* and inspiration (*ilham*). The process of acquiring knowledge is explained on an ontological level. Also addressing the concept of self, Mutahhari examines the self not as passive in the face of knowledge, but as an active structure, evolving with knowledge. Nurettin Topçu draws heavily from Western philosophy and Islamic Sufism in his examination of the concept

⁷² Murtaza Mutahhari, *Durūs Falsafīyyah fī Sharḥ al-Manzūmah*, translated from Persian by Shaykh Mālik Muṣṭafā Wabhī al-‘Āmilī, (Beirut: Dār al-Hādī, vol. 2, 2002).

of intuition, and he also touches lightly on the *Ishrāqīyyah* (Illuminationism) and *Mashshāīyyah* (Peripateticism) schools. Consequently, Mutahhari's work offers a broader perspective on the concept of intuition from the perspective of these two schools.

Seyyed Hossein Nasr in *Intellect and Intuition: Their Relationship from the Islamic Perspective*⁷³ introduces what intellect, reason, and intuition mean in Islamic thought tradition and modern thought. He explains the differences between the reason defined in traditional Islamic thought and the modern definition of reason. The author states that it is a mistake to use the concepts of reason in the same sense as intelligence, whereas in classical Islamic thought, these are different but complementary concepts, which is expressed in a single term *al-'aql*. On the other hand, the concept of *al-'aql* in the Islamic tradition of thought actually includes an ontological acceptance, because the concept of *al-'aql* expresses man's connection to God and his connection with the essence of man created by God. As for the concept of intuition which revelation and intellect construct, it gives opportunity to participate in the truth. In other words, this unity namely revelation, intellect provides the opportunity to obtain knowledge of the truth.

In classical Islamic thought, this notion, namely intuition, is placed between reason and intellect, and there is no bifurcation between them. However, in our context, the author mainly mentions about the nature of intuition in the context of religious illumination for the salvation of the souls. As for the function of intuition, Nasr takes the notion as a potency that enlightens the reason as in *Ishraqi* school intuitive philosophy. Accordingly, in this school, reason and intellect are active to acquire knowledge but intuition illuminates the reason, widens the limit of the mind and increases the capacity of comprehension. The most important point in terms of our thesis is that the intuitive intellect here is active in both sensory and transcendental knowledge. Moreover, intuition in this sense is a path from sensory truth to transcendent truth. In this case, in addition to understanding transcendental reality, we can talk about the contribution of intuition to the process of understanding in the sensory field. In this work, although Nasr mainly mentions about the nature of intuition in the context of

⁷³ Seyyed Hossein Nasr, *Intellect and Intuition: Their Relationship from the Islamic Perspective*, in Salem Azzam, *Islam and Contemporary Society*, (London and New York: Longman, 1982).

religious illumination for the salvation of the souls, he contributes to the function of intuition in the positivist theory of knowledge from the Islamic tradition of thought.

Seyyed Hossein Nasr, in his “*Reflections on Methodology in the Islamic Sciences*,”⁷⁴ discusses the concept of “scientific method” from the aspect of both Muslim and Western scholars. Essentially, he questions positivism, as the prevailing orthodox methodology of science, because in both respects, in order for knowledge to be scientific, it must be based on experiment and observation. The author, who discusses this concept and method from a historical perspective, emphasizes that this method was used very strongly in Islamic civilization by Ibn al-Haytham and al-Biruni in physics, and al-Farghani and Ibn Yunus in astronomy. According to him, the associated scientific ontology and epistemology, which is called “scientific” today, is in fact quite limited, and was traditionally acknowledged to be so. The method used in Islamic civilization both completely covers the concept called “science” today, while transcending its intrinsic limitations in a unique way.

To conceptually ground his argument, Nasr gives examples of the concept of “*al-‘ilm*” as used in the Islamic tradition, which is a powerful concept that “embraces a vast spectrum ranging from God’s knowledge of the world and man’s knowledge of Allah (ﷻ) to history and physics,” and which contains “for the most part the sciences of nature (*al-tabi’iyyat*), the mathematical sciences (*al-riyadhiyyat*) and also in another category the so-called occult sciences (*al-‘ulum al-khafiyya*).” Moreover, he states that today’s concept of science is far from meeting the needs of *intellectual* science, pointing out that it has limitations even within itself. This concept is very important for our study, because Topçu often points out the shortcomings of the scientific method in understanding even material existence, in addition to its inadequacy to explain the nature of human beings, and moral and intellectual aspects of knowledge. While Topçu mainly addresses this issue from the perspective of philosophical principles and man’s inner necessities, Nasr approaches it from the dimension of classical Islamic thought. This study makes a contribution to our study both from a philosophical and traditional Islamic perspective.

⁷⁴ Seyyed Hossein Nasr, *Reflections on Methodology in the Islamic Sciences*, *Hamdard Islamicus*, Vol. III., No: 3, 1980, 313.

Osman Bakar's article "*The Question of Methodology in Islamic Science*"⁷⁵ examines the dichotomy between the methodology of traditional science and that of modern science. He also brings into question the limited nature of modern scientific methodology, compared to methodology of Islamic sciences. In addition, he points out the impact of this limited methodology on not only the view of the traditional Islamic scientific method, but also worldwide societies. On the other hand, pointing to Seyyed Hossein Nasr, he criticizes the modern scientific method that excludes other methods, and compels the narrowing of scientific scope to merely observation and experiment, disregarding the more comprehensive structure of the scientific method used in the Islamic thought tradition, which covers not only observation-experiment and but also the explication of Revelation. Moreover, he offers the possibility of the traditional science methodology to benefit the modern scientific method, offering a more comprehensive framework.

In terms of our thesis, his arguments enable us to extend the expression "using intuition in positivistic knowledge" because, according to Bakar, intellectual intuition is important both in understanding Revelation and in understanding nature. In regard to this, just as there is unity regarding Allah (ﷻ) and the universe, there is also unity regarding divine knowledge and the knowledge of the universe. Moreover, this provides us with ontological and epistemological consistency from an Islamic perspective. Apart from this, the article philosophically points out the problems that would arise from using only the modern scientific method in obtaining knowledge and adapting it to the knowledge methodology developed in the Islamic tradition. This is because, as we often emphasize in our thesis, it seems to damage the essence of Islam, the notion of Unity (*Tawhīd*) in case of considering the knowledge of existence only materially. This work will contribute to our thesis on issues such as the scientific methodology in the Islamic tradition completing the deficiencies of modern science and the ability to use intuition effectively in this method.

Naquib Al-Attas's book "*Islam and the Philosophy of Science*"⁷⁶ highlights the true meaning of the concept of *Ad-dīn*; conventionally translated as "religion," and etymologically related to "debt" or "obligation," *dīn* has a much more expansive

⁷⁵ Osman Bakar, *The Question of Methodology in Islamic Science*, in Osman Bakar, *Tawhid and Science: Essay on the History and Philosophy of Islamic Science*, (Kuala Lumpur: Nurin Enterprise, 1991).

⁷⁶ Syed Muhammad Naquib Al-Attas, *Islam and the Philosophy of Science*, (Kuala Lumpur: ISTAC, 1989).

meaning than “religion” in the Western sense of the term. According to Al-Attas, the Qur’anic concept of *dīn* embeds the axiom that man’s existence was given by Allah (ﷻ) as gift, entailing *submission to God* (i.e., Islam), which must be with the sense of *indebtedness*. From the Islamic perspective, this acceptance creates an ontological basis for understanding nature and determining an epistemological stance. Besides, if what is meant by the concept of religion is the way of perceiving the universe as a kind of transcendent or magical structure, the concept of *dīn* is completely different from it.

Al-Attas also explains the importance of intuition to acquire true knowledge, but evaluates this concept more in terms of metaphysical knowledge rather than mundane materialist-empirical knowledge. He states that excluding religion and metaphysics and accepting existence only as a combination of the things will naturally cause a limitation in obtaining knowledge of existence. In this case, the only purpose of knowledge is to describe the movements of the matter. Although he does not state it very clearly, Al-Attas here criticizes the claims of naturalized epistemologists because limiting knowledge in this way naturally requires materializing concepts such as mind, consciousness, self-consciousness, intuition etc. In addition, the acceptance that every person’s cognitive, intellectual and intuition capacities should be at the same level is only an assumption, and there is no evidence that the perception occurs with the pure experience, according to Al-Attas.

Thus, in the context of Islamic thought, Al-Attas contends that not every person’s capacity to perceive and understand is the same, subject to degrees and limits of cognition, perception, and understanding that are determined by and known to Allah (ﷻ) alone. At this point, Al-Attas indicates the functionality of the heart regarding knowledge, whereby pursuing a questionable subject or being convinced of a doubtful matter takes place according to the *inclinations* of the heart. Indeed, what one person finds suspicious, another may find acceptable. Therefore, whatever “reality” is perceived to be or existentially is, it is actually hypothetical in the face of Divine Authority. Al-Attas reminds us of the following verse here... “and conjecture avails naught against truth” (Qur’ān 10:36). At the same time, Al-Attas underlines that Qur’ān provides us with the opportunity to develop methodologies of knowing and understanding about the created universe and its creator. In this context, he examines the concept of intuitive knowledge both within the philosophical discipline and in the

context of the Qur'an. The book significantly contributes to our thesis on the functionality of intuition in positivist knowledge.

In his book "*Knowledge and the Sacred*,"⁷⁷ Seyyed Hossein Nasr first explains the fundamental difference between the traditional and modern period in the context of the purpose of obtaining knowledge. It contained a sacred purpose in knowledge, not only in terms of the Islamic tradition but also in all other ancient traditions. In this context, while in the traditional period the being, knowledge, and value presented a methodological integrity, in the modern period, knowledge has been dissociated from the being, the value, and the sacred. However, according to him, no matter how much this dissociation is made, human consciousness is inherently incompatible with this separation, stating that "consciousness is itself proof of the primacy of the Spirit or Divine Consciousness of which human consciousness is a reflection and echo."

This part is important for our thesis because Topçu also states that the process of obtaining knowledge begins with consciousness, which is the field of intuition, and that this area is inherently connected with God. On the other hand, Topçu mentions that knowledge methods that exclude *qalb* namely heart and metaphysics harm the human essence and faith. Just as Topçu questions whether this is a necessity in order to attain true knowledge or not, Nasr examines the historical roots of the elimination of sacred values from knowledge and examines our probability to benefit from our traditional skills in obtaining knowledge in the modern era. Explaining how cognition, which is one of the main elements in obtaining knowledge, is influenced by philosophy and science, Nasr also states that inspiration is also effective here. This inspiration is sacred, and the sacred is effective not only in knowledge but also in art through inspiration. Nasr, by his book, complements Topçu's claims in many ways in terms of intuition and its role in attaining knowledge.

When the works written about Topçu are examined, we clearly see that Topçu's contribution to the epistemological discussions, his thoughts on intuition and its epistemic importance, the relationship between *Irādah* and intuition, and their role on self/consciousness, and a systematic evaluation of positivism are missing. Furthermore, when Western sources on the nature and epistemic role of intuition are examined, especially theorists of naturalized epistemology, it is seen that the transcendent aspect

⁷⁷ Seyyed Hossein Nasr, *Knowledge and the Sacred*, (New York: New York University Press, 1986).

of *Irādah* is not included in their explanations. When Muslim thinkers are examined, it is seen that they generally emphasize only the transcendent aspect of intuition and *Irādah*, while their role in modern epistemology is not addressed. This study consequently seeks to address these deficiencies.

1.8 RESEARCH METHODOLOGY

This study examines primary and secondary sources using a research methodology of critical analysis with exploratory qualitative research. The primary sources are analysed by connective and documentary examination approaches in order to discover new conclusions. These sources are documents, books, and articles to analyse the times, careers, and opinions of Topçu in an intellectual-analytical method. The primary sources mainly comprise Topçu's major works, which enable us to cover his approach to modernism, explaining widely his reasons and deductions. To examine "the concept of intuitive knowledge" some sources by Topçu are analysed in context, such as:

- *İsyân Ahlakı* [Conformity and Revolt] (his doctoral thesis)
- *İslâm ve İnsan* [Islam and Human]
- *Bergson*
- *İradenin Davası* [The Case of Will]
- *Felsefe* [Philosophy]
- *Ahlak Nizamı* [Moral Code]
- *Sosyoloji* [Sociology]
- *Psikoloji* [Psychology]
- *Ahlak* [Ethics]
- *Kültür ve Medeniyet* [Culture and Civilization]
- *Varoluş Felsefesi ve Hareket Felsefesi* [Existential Philosophy and Action Philosophy]
- *Mantık* [Logic]
- *İslâm ve İnsan, Mevlana ve Tasavvuf* [Islam and Human, Mawlana and Tasawwuf]
- *Millet Mistikleri* [Mystics of Nation]

Secondary sources about Topçu's ideas consist of books, articles, theses, and conference papers, which reached various conclusions to observe "the concept of

intuitive knowledge.” Some of the books are translated into Turkish, Arabic, and (mostly) English languages. These resources were generally based on documents written about Topçu, some Muslim scholars in modern times, and the philosophers’ connection with knowledge and intuition in Ottoman and Modern Turkish, and English such as the following:

- Ali Osman Gündoğan’s *Arafta Bir Düşünür Nurettin Topçu* [A Thinker in Purgatory, *Nurettin Topçu*]
- Fatih Birgül’s “İlk Dönem Hareket’in Çağdaş Türk Düşüncesi Açısından Önemi” [The Importance of the First Period Movement for Contemporary Turkish Thought]
- Ahmet Kılıç’s *Bilinmeyen Yönleriyle Türk Filozofu Nurettin Topçu* [Turkish Philosopher with Unknown Aspects: Nurettin Topçu]
- Aziz Ahmad’s *Islamic Modernism in India and Pakistan 1857-1964, Islam, and Modernity*
- Muhammad ‘Abduh’s *Theology of Unity*
- Key works by other philosophers analysed in this thesis include the works presented in the previous literature review, including the following:
- Naquib Al-Attas’ *Islam and Secularism, Some Aspects of Sufism as Understood and Practised Among the Malays*
- Gordon Kane’s *Supersymmetry and Beyond: From the Higgs Boson to the New Physics*
- İbrahim Kalın’s *Knowledge in Later Islamic Philosophy: Mulla Sadra on Existence, Intellect and Intuition*
- Sebastian Rödl’s *Self-Consciousness*
- Donald T. Campbell’s *Neurological Embodiments of Belief and the Gaps in the Fit of Phenomena to Noumena*
- Willard Van Orman Quine’s *Ontological Relativity and Other Essays*
- Richard Rorty’s *Philosophy and the Mirror of Nature*
- Alvin Goldman’s *Epistemic Folkways and Scientific Epistemology*
- Immanuel Kant’s *Critique of Pure Reason*
- James Gibson’s *Locke’s Theory of Mathematical Knowledge and a Possible Science of Ethics*

- Gilbert Ryle's the Concept of Mind
- Gerd Gigerenzer' Simply Rational: Decision Making in the Real World

Additionally, some encyclopaedias such as *Islam Ansiklopedisi* (Encyclopaedia of the Institute of Islamic Research), and the *Oxford Encyclopaedia of the Islamic World* are surveyed to cover the meaning of notions and to introduce documents as sources.

The secondary sources are studied by subject matter and dissertation analysis to determine the essentials of the subjects under study.

1.9 SCOPE AND LIMITATIONS

This study is based on conceptually analysing and comparing the modern epistemology of positivism with Topçu's intuition theory of epistemology and knowledge. To do this, our first aim is to analyse Topçu's thoughts from his works, and secondly to analyse commentaries and critiques about Topçu's works. Moreover, while another dimension of the study is to scrutinize intuition in knowledge by showing differences between Topçu's understanding of it and the Western approach to it, the other aspect is to show Topçu's theory of intuition in modern knowledge by comparing it with the theories of intuition in the tradition of Islamic thought. In addition, one of our study's aims is to analyse the basis of naturalized epistemology in terms of ontology, comparing to Topçu's critics.

This study does not aim to devalue the current positivist ascendancy, but to chart the epistemological way forward, contributing to a robust philosophical approach to acquire truth in light of emergent scientific developments, whereby multiple epistemological methods can provide greater insights and knowledge when used in harmony.⁷⁸ After showing the importance and root of intuitive knowledge, compared to that of modern Western knowledge, the study will particularly explore how Topçu's concept of intuitive knowledge and inquiry can be applied in the field of modern science theorization.

⁷⁸ The need for a more comprehensive methodology than positivism in grasping the truth was expounded by Al-Attas. See Syed Muhammad Naquib Al-Attas, *Prolegomena to the Metaphysics of Islam: An Exposition of the Fundamental Elements of the Worldview of Islam* (Kuala Lumpur: ISTAC, 1995), 135.

1.10 CHAPTER OUTLINE

Chapter one outlines the background and context of the thesis, covering the statement of the problem, research questions, the significance of the study, the literature review, methodology, and procedures used.

Chapter two examines the Western and traditional elements that influenced the intellectual life of Topçu and their effects on him and charts his intellectual and biographical development. The chapter emphasizes the influence of the Ottoman and Republican period in the formation of Topçu's concept of intuition and mysticism and compares that with the education he received in the est.

Chapter three investigates the role of intuition in knowledge, comparing the philosophical roots of the process of Enlightenment and its effect on the construction of knowledge, and the place of intuition in the naturalized epistemology. Also, it researches the importance of intuition on epistemology in terms of Western scholars such as René Descartes and Immanuel Kant. It also examines the epistemologically historical process of the concept of intuition and its influence on the classical positivism and logical positivism. Also, it presents the main discussions about the nature of intuition.

Chapter four analytically scrutinises Topçu's approach to epistemology, and shows differences between the understandings of intuition of Topçu and naturalist epistemologists. In addition, it examines the relationship between the concept of intuition and the concept of *Irādah* from an epistemological perspective, and reveals the place and importance of the concepts of self/consciousness. Besides, it sheds light on Topçu's similarities and disagreements with epistemologists.

Chapter five investigates Topçu's thoughts on intuition in terms of Islamic mysticism. In addition, the chapter explores how the concept of intuition was understood by Islam philosophers both in epistemological and mystical aspects, and the methodological differences among them. It researches some Islamic scholars such as Al-Ghazālī, Ibn Sina and Al-Farabi in terms of their attempts to establish the epistemic methodology by analysing their approach to intuition. Moreover, this chapter analyses the differences of approach to the concept of intuition between Topçu and Islamic philosophers in the context of Islamic thought.

Chapter six concludes the thesis, summarizing main findings on intuition and general understanding it in terms of ontology and epistemology, showing similarities

and differences. Also, it summarizes the general view of founders of intuitive knowledge methodology on traditional thinking, integrally evaluating all chapters. In addition, areas for future research are identified, including a compilation of identified topics that we could not examine in detail, because they were beyond the scope of the thesis in the context of the study.



CHAPTER TWO

INTELLECTUAL BIOGRAPHY OF NURETTİN TOPÇU

This chapter introduces a biographical sketch of Topçu's life and the trajectory of his intellectual progress. Additionally, as he had both Eastern and Western experiences because of the circumstances of his life, being born in the late Ottoman era while studying in France, we examine the roles of these two cultures in shaping his intellectual thought. Moreover, we analyse the social, cultural, and political developments and changes in both societies during his time in the context of their influence on Topçu's thoughts. In this context, we will occasionally refer to the thought dynamics and paradigm shifts of both societies.

2.1 OVERVIEW

Empirical positivism, which Topçu focused on and reinterpreted in all its aspects, occurred from the 15th-20th centuries as the driving intellectual paradigm of Western science and technology, and subsequently of Western political philosophies. Ultimately, this process overthrew traditional understandings of obtaining true knowledge. It reached to the point transcendent philosophical and religious thought came to the point of losing almost all their claims against positivism in terms of underpinning human life and society. This situation led to a serious anomie in religious and philosophical thought in many countries, due to the assumption that knowledge and the nature of the universe are only material and deterministic, based on “epistemological differentiation” as expressed in Western thought.⁷⁹

The success of positivism in the West, and subsequently in the rest of the world, was premised on how it clarified numerous philosophical ambiguities about the universe in institutions of science and governance, albeit its dimensions are still debatable to this day. Classical positivism which is the epistemological ground of modern science asserted that all knowledge comes from immediate experience and the data, which is

⁷⁹ John Herlihy, *The Essential René Guénon: Metaphysics, Tradition, and the Crisis of Modernity*, (Bloomington: World Wisdom, Inc. and Sophia Perennis, 2009), ix, 3, 68-71; Akdoğan, 12, 15, 52, 141-142.; *The Encyclopaedia of Philosophy*, “Logical Positivism”; Black Cyril Edwin, *The Dynamics of Modernization: A Study in Comparative History*, (New York: Harper & Row, 1966), 10-11.

gained through the senses, a view usually associated with Auguste Comte in France.⁸⁰ This mediated the change from the “primitive” to the “modern,” harnessing new scientific findings to new philosophical understandings about the nature of existence and human society.⁸¹ Sensualist-empirical knowledge and science-based ideas on dominating nature and ordering society constituted the basic theses of this movement, which ultimately sought to apply science to the human being, through the study of sociology, psychology, moral behaviour, and politics. It was considered that if this was the basis for the natural sciences, it could be the basis for science in those social branches such as economy, law, and so on.⁸²

During the 19th and 20th centuries, the literal colonization of Muslim lands was accompanied by ideological colonization, and the importation of Western education and ways of looking at the world. This fostered a shift in the mentality of science and the dominant epistemology from a predominantly metaphysical view toward a positivist interpretation, and the inculcation of the doctrine that empirical science offers the only valid way to comprehend phenomena, in fact not only in Muslim lands but also in the West, which Al-Attas describes it as “secular logic.”⁸³

In the face of this situation, some Muslim intellectuals tried to address this epistemological crisis by seeking to demonstrate the integration of Islam with this new knowledge paradigm, and to carve out a place for the traditional and the sacred in the modern world. This crisis was reflected through various social mechanisms from the early 19th century in Ottoman society, and intentionally reoriented society and people’s thinking with the policies of the New Republic of Türkiye.⁸⁴

When we look at Topçu’s life, two significant phases can be discerned. He stands out as a distinctive thinker who lived through both the Ottoman and Republican eras,

⁸⁰ Herlihy, 19; René Guénon, *The Crisis of Modernity*, translated from French; (Lahore: Suhail Academy, ed., 1999), 62, 66, 84-85; *International Encyclopaedia of the Social Science*, 2nd edition, “Positivism”; Christoph Delius et al., 20, 22, 25.

⁸¹ Paolo Rossi, *Hermeticism, Rationality and the Scientific Revolution*, in Maria Luisa Righini Bonelli and William R. Shea, *Reason, Experiment and Mysticism in the Scientific Revolution*, (New York: Science History Publications, 1975), 248, 264-265, 269; Rene Taton, *The Mathematical Revolution of the Seventeenth Century* in Maria Luisa Righini Bonelli and William R. Shea, 286; Al-Attas, *Islam and Secularism*, 2, 3; *Encyclopedia of Philosophy*, Positivism.

⁸² Copleston, *A History of Philosophy: 19th and 20th Century French Philosophy*, 56-57; Peter, 20-21; Uyanık, 83; Copleston, 3; Rödl, Passim.

⁸³ Al-Attas, *Islam and Secularism*, 2.

⁸⁴ Adams, 2, 9, 14, 21, 34, 39-40; Ahmad, x, 10-11, 19, 31-34, 3741-45, 54-56; Berkes, 28, 49-50, 174, 212, 242-243, 266, 279.

receiving an education that combined traditional and modern approaches.⁸⁵ This is important in terms of our thesis because the dominant features of both periods played important roles in shaping his thought system. For this reason, we will mainly examine Topçu's life in two parts: his early life, and his higher education.

Born on 7 November 1909, in Istanbul, just a year after the establishment of the Constitutional Monarchy (*Meşrûtiyet*), Topçu grew up witnessing the devastation caused by World War One.⁸⁶ Topçu's life journey closely intertwined with the major transformations of his era. When the National Assembly was established in Ankara in 1920, he was nearing the end of primary school. He attended secondary school during the most challenging phases of the War of Independence (1919–1923). With the proclamation of the Republic in 1923 the new political order was rapidly taking shape, Topçu was a high school student, directly experiencing these momentous changes. His intellectual development took a significant turn during his philosophy studies in France between 1928 and 1934, where he completed a doctoral thesis titled *Conformisme et Révolte* at the Sorbonne University. Upon returning to Türkiye, he became a firsthand observer of the single-party Republican People's Party (CHP) period from 1924 to 1950, and the transition to multi-party politics (which was later disrupted by the 1960 coup). Known as "Osman Nuri" in his first school, "Nurettin Ahmed" in France, and finally "Nurettin Topçu," he reflected deeply on the transformative events of his time. He articulated his thoughts and emotions on societal issues through his fundamental philosophical perspective. As Mehmet Birgül suggests, Topçu's philosophy and mysticism, shaped by his lifelong effort to transcend his own limits, must be understood within this historical and intellectual context.⁸⁷

⁸⁵ Kara, *İsyân Ahlakı Peşinde*, 11; Kara, *Nurettin Topçu Hayatı ve Bibliyografisi*, 22, 38; Ahmet Kılıç, *Bilinmeyen Yönleriyle Türk Filozofu Nurettin Topçu* (İstanbul: Motto Yayınları, 2020), 14-15; TDV Ansiklopedisi, *Nurettin Topçu*; Ali Osman Gündoğan, *Arafta Bir Düşünür*, (Ankara: Altınordu Yayınları, 2018) 11-12; M. Sarıtaş, *Nurettin Topçu'da Sosyo-Pedagojik Yapı*, (Ankara: Mesaj Yayınları, 1986) 9.

⁸⁶ Mehmet Birgül, *İrade, Hareket, İsyân*, 6; İsmail Kara, *İsyân Ahlakı Peşinde Nurettin Topçu Albümü*, 11; İsmail Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, (İstanbul: Dergah Yayınları, 2013), 38; TDV Ansiklopedisi, *Nurettin Topçu*; Kılıç, 14-15; Hüseyin Karaman, *Nurettin Topçu*, (İstanbul: Kaynak Yayınları, 2010) 13; Sarıtaş, 25; Fırat Mollaer, *Nurettin Topçu İçin Bir Entelektüel Biyografi Denemesi*, In İsmail Kara, *Nurettin Topçu* (Kültür Bakanlığı), 23; İsmail Kara, *Bir Ahlak Davası Nurettin Topçu: Cumhuriyetin 100. Yılına Armağan*, (İstanbul: Türk Kültürüne Hizmet Vakfı Yayınları, 2023), 15.

⁸⁷ Mehmet Birgül, 6; Kılıç, 14,15; Gündoğan, *Arafta Bir Düşünür*, 11; Kara, *İsyân Ahlakı Peşinde*, 31, 33; Kara, *Nurettin Topçu Hayatı ve Bibliyografisi*, 38; Kara, *Nurettin Topçu'nun Hayatı*, In İsmail Kara, *Nurettin Topçu* (Kültür Bakanlığı), 13, 15; Also see Esra Polat, *Modernisation in Türkiye: An Analytical Study on Attila İlhan (1925-2005) and Necmettin Erbakan (1926-2011)*, (PhD. Thesis, IIUM, 2025), 146-147.

Topçu's metaphysical interests stem from the nature of his intellectual framework and his opposition to philosophical doctrines and intellectual trends that excluded metaphysics, particularly those shaped by positivist and secular thought. The dismissive attitudes toward metaphysics among the mainstream Turkish intelligentsia of his time, often described as "a relic of the past, a dark and incomprehensible idea, a close relative of religion, or a delusion," reflected a broader effort to marginalize its relevance. This was evident in the removal of topics such as God and the soul from textbooks during the 1930s, especially between 1931–1941 and 1942–1950. Additionally, narrating human history solely through a positivist and secular methodology discouraged individuals from aspiring toward higher intellect and self-transcendence, and also stifled philosophy itself. By restricting the search for truth to material and empirical grounds, and to political orthodoxy, these approaches impoverished philosophical inquiry and obstructed the pursuit of spiritual and intellectual elevation.⁸⁸

Topçu's critique of positivism is presented in detail throughout this thesis, but a brief summary from the outset can help to set the scene. Put simply, Topçu thought that positivism is insufficient in making sense of existence, and that ontological views based on positivism are inconsistent. To summarize, he rejected philosophical tendencies that exclude metaphysics; tried to develop an epistemology and establish a moral philosophy by reinterpreting the concepts of "reason (*aql*), sense (*hiss*), emotion (*ātifah*), intuition (*hads*)"; and emphasized the importance of positive sciences in themselves, while emphasizing that they are not the sole basis for the concept of "civilization." He considered the latter to be based on science and technology, universally intertwined in the "modern" world with the ravages of capitalism, which is the end product of the Enlightenment. In particular, he foreshadowed contemporary environmental movements by lamenting the damage inflicted by modernity on "human nature," in

⁸⁸ Topçu, *Kültür ve Medeniyet*, 56-57, 80; Nurettin Topçu, *Yarınki Türkiye*, (İstanbul: Dergah Yayınları, 22nd. Publ., 2020) 73-78; Topçu, *Türkiyen'in Maarif Davası*, 39, 140; Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, 47; Fırat Mollaer, *Nurettin Topçu İçin Bir Entelektüel Biyografi Denemesi*, In İsmail Kara, *Nurettin Topçu* (Kültür Bakanlığı), 24; TDV İslam Ansiklopedisi, *Nurettin Topçu*; Mustafa Gündüz (03 Feb 2016), The radical transformations and deep continuities of a decade: Turkish educational policy, 1938–1950, "*Paedagogica Historica*," 52:3, 264; Canan Aratemur Çimen, Sezen Bayhan, *Değişen Ders Kitaplarında Sekülerizm ve Toplumsal Cinsiyet Eşitliği Araştırması*, 10; <https://www.raporlar.org/wpcontent/uploads/2019/12/degisender-kitaplarindasekulerizmvetoplumsalcinsiyetesitligiarastirmasirapor24eylul2018.pdf>; Başar Arı, "*Religion and Nation-Building in the Turkish Republic: Comparison of High School History Textbooks of 1931-41 and of 1942-50*," (MA Thesis, Middle East Technical University, 2010) 27, 56-57, 60; Esra Polat, 123.

addition to “nature” *per se*. He never accepted the validity of positivist science *replacing* metaphysical truth, and denied the utility of technological developments that ultimately destroy humanity and nature.⁸⁹

All the above-mentioned discussion is related to methodologically how Topçu inquired about knowledge or truth, because he addressed these issues in different dimensions. Topçu was particularly interested in the field of philosophical intuition, whereby a thinker cannot be thought independently of the social, historical, and cultural conditions he inhabits, and even from the conflicts of his own inner world. Consequently, as per his own principles, it is not possible to consider Topçu and his inclination towards the philosophy of “action” (*harakah*) independently of the political conditions he was in, and the currents of ideas that arose in the face of these conditions.

One of the most important features of Topçu as an intellectual who was deeply trained in Western thought is that he was aware of his own cultural values, and had a good command of the problems of his own culture and suppositions, while he was also critical in his evaluation of Western thought, rather than accepting Western cultural presumptions as always “true”. Furthermore, he brought his own cultural perspectives to bear in his development of a comparative perspective to evaluate the meanings of philosophical differences for the context of Türkiye, which was thus firmly rooted in this context through his local cultural values. While Topçu was a distinctive and brilliant original thinker, there is no doubt that his cultural values were rooted in the prevailing Anatolian⁹⁰ Turkish culture and Islamic milieu of the early 20th century. The dominant intellectual thought of the period in which Topçu’s thoughts began to emerge was sociology, which had a positivist character.⁹¹

The era in which Topçu lived was characterized by a moral-centric yet holistic worldview rooted in Anatolia as its geographic foundation and the Seljuk-Ottoman legacy as its historical and cultural essence. At the core of this worldview was Islam, with Sufism serving as its spiritual soul and foundational base. Topçu’s emphasis on Sufism, particularly in his moral studies, played a significant role in shaping his theory of *Conformisme et Révolte*. His ideas drew inspiration from the teachings of figures

⁸⁹ Kara, *İsyan Ahlakı Peşinde Nurettin Topçu Albümü*, 15-17.

⁹⁰ The name given to the lands in the Asian part of Türkiye.

⁹¹ Ali Osman Gündoğan, Topçu ve Hareket Felsefesi, “*Hece*,” Vol. 109, (January, 2016), 24, 26, 27; İsmail Kara, “Ahlâk Davasına ve Muallimliğe Adanmış Bir Ömür: Nurettin Topçu,” *Temaşa Erciyes Üniversitesi Felsefe Bölümü Dergisi*, Vol. 4, (January, 2016), 9, 15-17.

such as Hallac-ı Mansur, Mevlana Jalal ad-Din Rumi, and Yunus Emre etc. Moreover, while evaluating Western civilization and history, Topçu consistently approached them through the lens of Anatolian-Turkish Islamic culture. Despite his critique of the West, he did not shy away from acknowledging and appreciating the positive contributions of Western thought to humanity, demonstrating a balanced and integrative perspective in his intellectual evaluations.⁹²

Topçu's intellectual foundation was shaped by a diverse range of thinkers and historical figures. From the French philosophical tradition, he drew inspiration from Maurice Blondel, Louis Massignon, Paul Molla, and Ollée-Laprune. Within the Turkish cultural context, influential figures included Mehmet Akif, Remzi Oğuz Arık, and Hüseyin Avni Ulaş. Additionally, he engaged with the ideas of modernist Islamic thinkers such as Jamal-ad-Din Afghani and Muhammad Abduh. Beyond philosophical and cultural influences, Turkish historical figures like Alparslan (1029–1072) and Yavuz Sultan Selim (The Resolute) (1470–1520) also left a significant imprint on his thought, reflecting his deep connection to the historical and spiritual legacy of the Turkish-Islamic world.⁹³

Topçu stood firmly against a range of ideological currents, including positivism, materialism, sociologism, Westernism, Communism, conformism, Turanism,⁹⁴ superstitious religiosity, political Islamism, and even democracy. In his writings, he not only critiqued these “-isms,” but also offered alternative suggestions rooted in his philosophical perspective. Throughout his life, he remained dedicated to advancing science, philosophy, Turkish culture, morality, Anatolia, education, and mysticism, reflecting his commitment to an integrative and value-driven worldview.⁹⁵ First of all, Topçu defines the origin of the Turkish nation as Asian, not European.⁹⁶ In Topçu's novels, the emphasis on being Asian (specifically Anatolian) symbolizes an inherently anti-European stance, as noted by Mehmet Birgül. This perspective serves as a central point in his critique of Western ideas and ideologies that clash with Turkish-Islamic

⁹² Kara, *İsyan Ahlakı Peşinde*, 11; Topçu, *Yarınki Türkiye*, passim; Nurettin Topçu, *Ahlak Nizamı*, (İstanbul: Dergah Yayınları, 25th Publ., 2021). passim; Ezel Erverdi, Hocasız Hareket, “*Hareket*,” No. 112, (Jan-Feb-Mar, 1976), 4.

⁹³ Gündoğan, *Arafta Bir Düşünür*, 12, 14; Karaman, 39-40; Nurettin Topçu, *Ahlak Nizamı*, 170, 172-173.

⁹⁴ A pan-Turkic ethno-political ideology popular among many in Turkey and Central Asia during the early 20th century.

⁹⁵ Gündoğan, *Arafta Bir Düşünür*, 15; Sarıtaş, 53-55; Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, 48-49; Topçu, *Ahlak Nizamı*, passim; Topçu, *Yarınki Türkiye*, passim; Erverdi, 4.

⁹⁶ Topçu, *Yarınki Türkiye*, 166, 182-183; Mehmet Birgül, 35.

culture. At this juncture, the influence of Ziya Gökalp (a prominent Turkish nationalist) becomes particularly significant. Topçu argues that Gökalp's Turanism introduced a materialist and utopian form of nationalism, which later evolved into a crude and unrealistic nationalism during the Republican period. Additionally, Topçu contends that the efforts of Islamist thinkers to separate religion from national identity further exacerbated the societal confusion in Türkiye. He saw this dual divergence—both materialist nationalism and the detachment of religion from the nation—as key contributors to the fragmentation of Turkish cultural and moral unity.⁹⁷ He introduced an Anatolian-centred nationalism and socialism that was different from the understanding of nationalism that emerged in the last period of the Ottoman State and the first years of the Republic.⁹⁸

While Topçu is not inherently opposed to the West in itself, he strongly critiques Westernism because he emphasizes especially the imitation of the West as a form of cultural imperialism destroys the organic identity and the culture of Turks. In his view, Westernism represents a form of crusade, and Türkiye's modernization efforts have largely been a superficial imitation of Western culture and civilization across various domains, including literature, social life, industrialization, and intellectual movements like positivism and sociologism. Topçu highlights the errors in these modernization attempts, emphasizing that adopting the science and technology of another society inevitably involves absorbing its cultural and civilizational influences. He argues that science and technology cannot be separated from the cultural and civilizational context in which they originate, making uncritical imitation both impractical and detrimental to preserving Turkish-Islamic identity.⁹⁹

Topçu underscores the critical distinction between culture and civilization, emphasizing the need to preserve culture. He defines civilization as the collective body of technical achievements and lifestyles developed and sustained by a group of societies during specific historical periods. Culture, in contrast, represents the set of values and principles uniquely created by a society throughout its own history. Based on these

⁹⁷ Topçu, *Ahlak Nizamı*, 171-172; Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, 49; Mehmet Birgül, 35; Nurettin Topçu, *Reha*, (İstanbul: Dergah Yayınları, 2020), 40, 91; Nurettin Topçu, Taşralı, (İstanbul: Dergah Yayınları, 2019), 18, 146, 149, 293.

⁹⁸ Gündoğan, *Arafta Bir Düşünür*, 17; Sarıtaş, 59-60; Kara, *Müslüman Kalarak Avrupalı Olmak*, 486, 491; Topçu, *Ahlak Nizamı*, 170-171, 174; Topçu, *Yarınki Türkiye*, 165.

⁹⁹ Topçu, *Yarınki Türkiye*, 157, 167, 168, 170, 175, 179; Ibid, *Kültür ve Medeniyet*, 20, 24-25; Ibid, *Amerikan Mektupları: Düşünen Adam Aranızda*, (İstanbul: Dergah Yayınları, 2019), 50-57; Gündoğan, *Arafta Bir Düşünür*, 17; Sarıtaş, 53-54.

definitions, civilization is shared among multiple societies, while culture remains distinct to a single society. Civilization is material in nature, focusing on practical and technical advancements, whereas culture intersects with lived realities, including religious and spiritual activities and beliefs, rooted in intangible values. Culture is also inherently national, as it reflects the unique identity of the prevailing society that creates it (i.e., the sum of the “cultures” of individuals who collectively comprise communities and nations). The cultural values of a nation are expressed and sustained through its science, philosophy, art, and religion, all of which are national in essence as integral components of culture. Civilization is formed by the common denominators of cultures.¹⁰⁰

Topçu argues that while it is important to benefit from Western civilization, it is essential not to be subjugated by it. What he means by “benefiting from the West” is adopting the methods developed in the West that are based on the collective knowledge of humanity. He organizes this idea by distinguishing between the universal nature of science and the varying methods and mentalities of different cultures. According to Topçu, science itself is universal, but the approaches to it differ, which he described in terms of national generalizations of his generation (i.e., Germans are rationalists and synthesists, the British are experimentalists and critics, and the French are critics and analysts). While the paths to science may differ, their outcomes in terms of scientific progress are ultimately the same. Topçu advocates using “Western” methods, but insists that they must be grounded in one’s own cultural context. He emphasizes that any innovation should begin by drawing inspiration from one’s own cultural heritage, integrating it with contemporary advancements. For example, when engaging with philosophical thought, Topçu suggests *not* starting with Western philosophers like Descartes, but with prominent thinkers from Turkic cultural history. While Turkish culture can be traced back to the ancient Steppe, modern Turkish culture is more firmly rooted in classical Islamic civilization, which was profoundly affected by Arabic, Persian, and Turkish influences. Consequently, Topçu suggests that instead of transposing French historical claims to Turkish classrooms, viewing Descartes as the originator of “science,” Turks can trace such ideas to Al-Ghazālī, who pre-empted the significant contributions of Descartes by centuries, and who was part of the Turko-

¹⁰⁰ Gündoğan, *Arafta Bir Düşünür*, 17-18; Nurettin Topçu, *Milliyetçiliğimizin Esasları*, (İstanbul: Dergah Yayınları, 1978) 67; Topçu, *Yarınki Türkiye*, 168-170, 175; Topçu, *Kültür ve Medeniyet*, 20, 29.

Islamic world (living under the pre-Ottoman Seljuk dynasty), as a reflection of the richness of Türkiye's own historical thought and scientific heritage.¹⁰¹

To reiterate, Topçu is not fundamentally against the West and Western thought in themselves; rather, he is pro-Turkish, alongside an appropriate evaluation of other cultures' contributions. His expressions of admiration for some of Western thinkers and artists are clearly seen in his works. The point of note here is that he criticizes the blind veneration of Western ideas whereas he praises some Western figures with regard to metaphysical elements such as morality, conscience, and spirit. Topçu severely criticizes the adoption of Western mores concerning the systematic exclusion of metaphysics, morality, and spirit. Put simply, he is opposed to logical positivists and other analytical philosophers who embed what he considers to be anti-Turkish values in education and science itself.

Additionally, Topçu critiques Islamic figures like Al-Farabi and Ibn Sina (Avicenna) for what he perceives as a significant mistake in the history of Islamic thought: their uncritical acceptance of Aristotle's philosophy and syllogistic logic as the sole truth, which was in some ways a precursor to the 20th century adoption of Western ideologies in non-Western cultures. According to Topçu, the named classical thinkers viewed any idea that did not align with Aristotle's framework as being inherently false. In doing so, they not only subordinated other intellectual traditions, but also interpreted the Qur'an through the lens of Aristotle's ideas, attempting to reconcile Islamic teachings with Aristotelian logic. Topçu's criticism is rooted in the belief that such an approach restricts the richness and diversity of Islamic thought, imposing an external philosophical system rather than allowing for an organic and culturally relevant interpretation of both science and scripture. He sees this as an example of how Islamic thinkers, much like their Western counterparts in later centuries, sometimes became overly influenced by foreign ideas, limiting the potential for a more authentic and self-reflective a religious intellectual tradition.¹⁰² It can be said that something similar is being done for today's science regarding understanding and interpreting the Qur'an.

The central focus of Topçu's philosophy is morality, which he explores in both individual and social contexts. In his thought, morality is not only a key component of

¹⁰¹ Topçu, *Yarınki Türkiye*, 171-172; Topçu, *Kültür ve Medeniyet*, 20.

¹⁰² Gündoğan, *Arafta Bir Düşünür*, 26; Nurettin Topçu, *İslam ve İnsan/Mevlana ve Tasavvuf*, (İstanbul: Dergah Yayınları, 16th Publ., 2020), 56-57.

philosophy but also integral to personal and societal structures. To summarize his philosophical framework, the core concepts that stand out are action (*harakah*), will (*iradah*), and revolt (*‘iṣyān*). These are not only fundamental to his philosophical system, but also carry deep moral and mystical significance. For Topçu, these concepts shape human existence and behaviour, aligning ethical conduct with spiritual and intellectual development.¹⁰³

2.2 EARLY LIFE

Topçu whose original name was Osman Nuri,¹⁰⁴ was born on 7 November 1909 in Süleymaniye-İstanbul. The cognomen “artilleryman” was given to his family due to his grandfather Osman Efendi fighting as an artilleryman against the Russians who tried to occupy Erzurum in 1877-1878.¹⁰⁵

During Topçu’s early childhood, society was deeply divided by the opposition between modernity and traditionality. This conflict is exemplified in the contrast between the education he received at school and the knowledge passed down to him at home. One notable example of this contradiction was his introduction to science. While school provided a “modern” (Westernized) education, his family, influenced by traditional values, reacted with scepticism or resistance to the scientific ideas he encountered. This clash highlights the tension between the new, secularizing influences of modernization and the deeply rooted, conservative traditions that shaped Topçu’s upbringing.¹⁰⁶

¹⁰³ Kara, *İsyān Ahlakı Peşinde*, 13; Topçu, *Yarıncı Türkiye*, 24-25; Nurettin Topçu, *İradenin Davası Devlet ve Demokrasi*, (İstanbul: Dergah Yayınları, 10th ed., 2020) 75, 80; İsmail Kara, *Nurettin Topçu* (Ankara: Kültür ve Turizm Bakanlığı Yayınları, 2009), 7; Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, 39.

¹⁰⁴ Although generally known as “Nurettin Topçu,” his official name was “Osman Nuri,” as recorded in his secondary education and high school records in Turkey. His undergraduate diploma from France records his name as “Nouriddine Ahmed,” reflecting his father’s name (prior to the “Surname Law” of 1934), and he is similarly named “Nurettin Ahmet” on his doctoral diploma. See Mehmet Birgöl, *İrade, Hareket, İsyān*, 24; Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, 22; Kara, *İsyān Ahlakı Peşinde*, 21; Kara, *Nurettin Topçu’nun Hayatı*, in Kara, *Nurettin Topçu*, (Kültür ve Turizm Bakanlığı), 13.

¹⁰⁵ Mehmet Birgöl, 21, 24; TDV İslam Ansiklopedisi, *Nurettin Topçu*; Gündoğan, *Arafta Bir Düşünür*, 11; Tuncer Enginertan, *Çağdaş Bir Mistiğin Hayatına Dair Bazı Notlar*, in İsmail Kara, *Nurettin Topçu*, (Kültür ve Turizm Bakanlığı), 91.

¹⁰⁶ Topçu recalled quoting his teacher to his father: “The world is spinning, but we don’t notice it because it spins fast”, to which his father retorted: “If the world is spinning, why don’t the tiles on the roof of the house fall?” Mehmet Birgöl considered that this was illustrative of the burgeoning tension Topçu may have felt between the culture in which he grew up and modern science. See Mehmet Birgöl, 26; *Nurettin Topçu’ya Armağan*, (İstanbul: Dergah Yayınları, 1992), 178.

Mehmet Birgöl notes that in the late Ottoman period, religious individuals were divided into two groups, each reflecting different attitudes toward modernity. One group, characterized by traditionalism, wore the turban, while the other, which adopted a more moderate approach to modernity, wore the fez. Topçu's father, Ahmet Hamdi Bey, is placed in the second group, as he chose to send his son, Osman Nuri (Topçu), to a school focused on modern education, in contrast to his close friend M. Sırrı Bey, who enrolled his own son in a school that emphasized religious education. This contrast between the two families illustrates a difference in their approach to science and education. While both families were religious and loyal to the Ottoman state, their attitudes toward modern education and the associated interpretations of Islamic piety varied. One prioritized traditional religious education, while the other embraced modern education, highlighting the tension between traditionalism and the acceptance of modernity during this transformative period in Ottoman society among Muslims.¹⁰⁷

During his childhood, Topçu inherited two important traits from his family: first, the religiosity shaped by Ottoman customs, and second, a strong sense of belonging to his family, society, and religion. Politically, his father supported Sultan Abdülhamid II, although he was critical of the policies of that era.¹⁰⁸ The religiosity Topçu witnessed within his family was distinct from the broader societal religiosity of the late Ottoman period. In addition, his family's religious practices were influenced by Ottoman traditions, and the broader society's religiosity in the latest part of the Ottoman state was largely shaped by traditional Islam, as well. In that period, religiosity was not only a deeply personal matter, but also a source of social prestige. This social aspect of religiosity became especially prominent, with religious individuals often enjoying higher status and influence within the community, reflecting the intersection of religion and social identity during Sultan Abdülhamid II's reign.¹⁰⁹

Topçu was characterized by traits such as conscientiousness, strong moral values, religious sensitivity, and a tendency to emulate his father's personality. It is

¹⁰⁷ Mehmet Birgöl, 27, 31, 35; *Nurettin Topçu'ya Armağan*, 179.

¹⁰⁸ Muzaffer Civelek, *Yadında Kalanlar*, in İsmail Kara, *Nurettin Topçu*, (Kültür ve Turizm Bakanlığı), 386; Mehmet Birgöl, 27-28.

¹⁰⁹ Mehmet Birgöl, 37; To see the republican administration's strict positivist attitude in the modernization process, and its repressive attitude towards traditional religious understandings and promotion of a nationalized and state-approved Islam, see Fırat Mollaer, *Muhafazakarlığın İki Yüzü*, (İstanbul: Dergah Yayınları, 3rd Publ, 2017) 131-132, 148-155.

frequently highlighted that his family was devoutly religious.¹¹⁰ He developed mystical tendencies at an early age, which would later become one of the main elements of his philosophical thoughts. The strongest evidence that he had mystical tendencies before going to France is his novel *Reha*, which he started writing at the age of seventeen.¹¹¹ Topçu's mystical and Sufi perspective plays a key role in his interpretation of religion. Topçu believes that Islam devoid of philosophy or Sufism leads to what he terms "religious positivism." This concept refers to a mechanical form of religiosity characterized by rote rituals and repetitive actions. According to Topçu, religious positivism stifles Islamic philosophy in the same way that positivism halts the progress of classical philosophy.¹¹²

2.3 INTELLECTUAL AND SOCIOLOGICAL STANCES IN EARLY PERIOD

The transition process from the Ottoman state to the Republic during the early 1920s and the social fractures in this process are another significant topic to be discussed. As in almost every Islamic country, traditionalism and modernism debates were on the agenda during the Ottoman and Republican periods, as their reflections on social and political events. In this case, the effects of the intellectual movements of the period on Topçu and his attitude towards these movements need to be examined.

Intellectual movements in Türkiye trace their roots back to the Ottoman era, and can generally be categorized into pro-Western and anti-Western groups. Topçu firmly opposes Westernism, shaping and refining his ideas as a counterargument to deterministic, rationalist, sociological, and pragmatist approaches to morality.¹¹³ Philosophically, it is also possible to make this category as follows; metaphysicians and

¹¹⁰ Mehmet Birgül, 35-36, 87; Emin Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, (İstanbul: Dergah Yayınları, 8th ed. 2023), 11-12, 17; Karaman, 96, 98-100, 105-107; Kara, *Bir Ahlak Davası Nurettin Topçu: Cumhuriyetin 100. Yılına Armağan*, 41-43.

¹¹¹ Gündoğan, *Arafta Bir Düşünür*, 14; Mehmet Birgül, 59, 64-65, 241; Karaman, 53; In the introductory article he wrote in French about Hilmi Ziya Ülken's book *Aşk Ahlakı* (Love Ethics) during his higher education in France, he briefly talked about the importance of Sufism for Turkish society. See Kara, *Müslüman Kalarak Avrupalı Olmak*, 495; Kara, *Bir Ahlak Davası Nurettin Topçu: Cumhuriyetin 100. Yılına Armağan*, 56; Additionally, Ismail Kara states that there is no definitive information as to whether Topçu had a mystical or Sufi tendency before going to France; Ibid, 73.

¹¹² Topçu, *Yarınki Türkiye*, 53-54, 59-61, 65-66; Topçu, *Ahlak Nizamı*, 91-92; Fırat Mollaer, *Anadolu Sosyalizmine Bir Katkı: Nurettin Topçu Üzerine Yazılar*, (İstanbul: Dergah Yayınları, 2021), 78-79; Erverdi, Hocasız Hareket, "Hareket," 4-5.

¹¹³ Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, 38; TDV Ansiklopedisi, *Nurettin Topçu*; Kara, *İsyan Ahlakı Peşinde Nurettin Topçu Albümü*, 13; Sarıtaş, 11, 33.

positivists. In this case, it is understandable why Henry Bergson, who was also studied by Topçu, became a very crucial reference point for the advocates of metaphysics at that time.¹¹⁴ Table 2.1 summarizes the key intellectual movements of Topçu's formative milieu.



¹¹⁴ Fırat Mollaer, *Liberal Muhafazakarlık Karşısında Nurettin Topçu*, (İstanbul: Dergah Yayınları, 2nd ed., 2016) 83-84.

Table 2.1 Key intellectual movements of Topçu's period

Westernism	
Representatives	Abdullah Cevdet (1869-1932), Celal Nuri (1881-1938), Kılıçzade Hakkı (1872-1960)
Main ideas	Westernization is the only way for the Ottoman State to survive. The social and economic life of the West must be taken. Adopting Western sciences.
Example Publications	İctihad Journal
Islamism	
Representatives	Prince Mehmet Sait (1838-1914), Halim Pasha (1865-1917), Mehmet Akif (1873-1936), Sheikh Abdülhak Bağdadi (?), M. Şemsettin Günaltay (1883-1961), Babanzade A. Naim (1872-1934)
Main ideas	Revealing the negative aspects of Westernization. Defending Islam against articles against Islam. Two groups: Modernists and Pedestalists [<i>Kaideciler</i>])
Example Publications	Sırât-ı Mustakîm, Sebilürreşat, Beyanül Hak, Mahfel, Livâ-i İslam, Mekatip ve Medaris, Ceride-i İlmiyye, İslam, Sadâyı Hak, Volkan.
Turkism	
Representatives	Ziya Gökalp (1876-1924), Yusuf Akçura (1876-1935), Ahmet Ağaoğlu (1869-1939), Tekin (M. Kohen (1883-1961), Köprülüzade M. Fuat (1890-1966), Hamdullah Suphi (1885-1966), İsmail Hakkı (1883-1923), Kazım Nami (1875-1967), Ahmet Mithat Efendi (1844-1912)
Main ideas	It was mainly shaped around the ideas of Akçura and Gökalp. The basic idea is to ensure the unity and solidarity of the dispersed Turkish nations.
Example Publications	Türk Yurdu, Türk Derneği
Professional Social	
Representatives	Prince Sabahattin (1879-1948), Saffet Lütfü (1889-1975), Nan K. Zeki (Aral) (1888-1972), Hamit Ongunsu (1885-1967), A. Bedevi Kuran (1886-1966), Ahmet Fazlı (1884-1967), M. Ali Şevki (1881-1963), Nihat Reşat (1882-1961).
Main ideas	Necessary to move from the Communal Eastern Society type to the Particularist Western type society, to idea of private enterprise and decentralization for development
Example Publications	Professional Social Journal, Sa'y ve Tebeddu Journal

Table 2.1 Key intellectual movements of Topçu's period

Socialism	
Representatives	Ethem Nejat (1883-1921), Suphi Ethem (1880?-1920?), İştirakçi Hilmi (1885?-1922), Refik Nevzat (?-1960)
Main ideas	Argues that Westernization is only possible with socialism.
Example Publications	İdrak, İnsaniyet, Beşeriyet, İştirak Journal
Anatolianism	
Representatives	Hilmi Ziya Ülken (1901-1974), Ziyaeddin F. Fındıkoğlu (1901-1974), Mükremin H. Yinanç (1900-1961), Remzi Oğuz Arık (1899-1954), Raşit Hatipoğlu (1989-1973), Topçu (1909-1975)
Main ideas	The source of the Turkish culture and nation must be sought in Anatolia. According to Topçu, the Turkish nation, whose material element is the Oghuz, integrated with Islam in Anatolia and became a unique and different nation.
Example Publications	Anadolu, İş ve Dünya, Dönüm, Hareket

Note. Based on M. Sarıtaş's classification.¹¹⁵

From the late Ottoman period, intellectuals, who were actually civil servants, were busy searching for answers to a common question: "How can Türkiye be saved?" The Ottoman intellectuals' answers to this question included Ottomanism, Westernism, Islamism, Turkism (e.g., Turanism), and various combinations of these four. It should not be forgotten that all four of these views that guided Turkish politics at certain historical moments are modernist ones, because of their desire to find a solution to the contingent material decline of Turkish prestige and power, and to solve the problems facing Turkish society and national development.¹¹⁶ Sarıtaş highlights that the defining characteristic of intellectual movements during this period lies in their supportive or critical stance towards Westernization. However, Turkish thinkers' evaluations of Westernization must be understood within the context of the era's specific conditions. Based on this perspective, the core assessments can be summarized as follows: development is achievable only through Westernization; the state should ideally preserve its existence through traditional methods, but may consider Westernization as

¹¹⁵ Sarıtaş, 33-53.

¹¹⁶ Baral Dural, *Başkaldırı ve Uyum: Türk Muhafazakarlığı ve Nurettin Topçu*, (İstanbul: Bir Harf Yayınları, 2005) 83.

a last resort when necessary; Westernization represents a form of alienation; and, ultimately, Westernization is viewed as an attempt to reshape the self to align with imperialist goals.¹¹⁷

Mehmet Birgöl reminds us that, particularly after the proclamation of the Second Constitutional Monarchy (Meşrûtiyet) in 1908, there was significant opposition to Islam—an integral part of Ottoman society’s identity—and a strong inclination toward radical Westernization among graduates of Western-style schools. The prevailing sentiment among Muslims of the time was to “adapt to the requirements of the age and modern sciences while maintaining their own values,” to revitalize the declining Ottoman State and, by extension, the broader Islamic world. Topçu, educated during the Republican Era, experienced firsthand the conflict between traditional values and the positivist approach. He later dedicated himself to challenging and reforming this positivist sociology-driven education model.¹¹⁸

Topçu experienced both the Ottoman and Republican periods, and considered that the approach of these two distinct political administrations to religious people differed. In the social structure of the Ottoman period, religious life was respected in society, or at least encouraged and facilitated, while in the first years of the Republic, religiosity was perceived as a flaw, and it was actively suppressed.¹¹⁹

2.4 UNIVERSITY YEARS

This section examines Topçu’s acquaintance with Western philosophy and culture, especially the thinkers Bergson and Blondel, who significantly influenced his thoughts, and the philosophy they developed are examined. Additionally, it analyses how Topçu evaluated these thoughts in terms of his own philosophical bases. Topçu had a close

¹¹⁷ Sarıtaş, 33.

¹¹⁸ Mehmet Birgöl, 28, 30; To see the tendency of the period, Berkes, *Turkish Nationalism and Western Civilization*, 28, 49-50, 174; Muzaffer Civelek, *Yadımda Kalanlar*, in Kara, *Nurettin Topçu*, (Kültür ve Turizm Bakanlığı), 386; Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, 24; Kara, *Müslüman Kalarak Avrupa Olmak*, 475, 486, 491, 518-519; Kara, *Bir Ahlak Davası Nurettin Topçu*, 43, 48; Topçu, *Kültür ve Medeniyet*, 80; Topçu, *Türkiyenin Maarif Davası*, 38-39; Kara, *İsyah Ahlakı Peşinde Nurettin Topçu*, 39; Mehmet Birgöl, 81; To see the process of making education positivist, see Mollaer; *Liberal Muhafazakarlık Karşısında Nurettin Topçu*, 151-162. Nurettin Topçu’s emphasis on sociology and sociologists has a special resonance. According to him, the positivistic approach that negates metaphysics and religion came to Türkiye of the period through sociology and sociologists. His criticisms of these concepts actually show how these concepts are perceived in Türkiye. See Topçu, *Ahlak Nizamı*, passim; Topçu, *Yarınki Türkiye*, passim; Topçu, *Türkiye’nin Maarif Davası*, passim.

¹¹⁹ Mehmet Birgöl, 36.

relationship with Hasan Âli Yücel, his high school teacher who later became the Minister of National Education in the Republic's early years (1938-1946). Yücel played a significant role in encouraging Topçu to pursue his studies in France.¹²⁰ After graduating from high school, Topçu passed the official state scholarship exam and was entitled to study in France, but due to the diploma equivalence problem, he had to complete orientation courses and was registered in Aix High School when he went to France.¹²¹

Topçu's high school years at İstanbul Erkek Lisesi (1924–1928) coincided with a period of intense social transformation. The conclusion of the National Struggle and the establishment of the new Republic, with its capital in Ankara, marked the beginning of sweeping reforms introduced by the Republican administration. These reforms, implemented in rapid succession, created significant social upheavals, deeply shaping the atmosphere of the time.¹²² Topçu was very interested in philosophy during his high school years, and it is stated that Hilmi Ziya Ülken, a philosophy teacher at that time, and one of the pioneers of the Anatolian movement,¹²³ had a significant influence on his life. Later, they would have lifelong communication. However, Birgül states that what attracted Topçu to philosophy was not the influence of any particular teacher, but philosophy itself.¹²⁴ For him, philosophy evolved as a way of life opposing the determinist, rationalist, sociologist, and pragmatist moral frameworks, along with the capitalist worldview—all of which he conceived as products of modern thought. Over time, Topçu's philosophy became increasingly centred on Islam and Sufism.¹²⁵

¹²⁰ Mehmet Birgül, 82-83; Kara says that Hasan Âli Yücel did not have a direct influence on Topçu's education in Europe, and that it was a general policy that successful students were sent to Europe by the state for higher education at that time. See Kara, *Bir Ahlak Davası Nurettin Topçu: Cumhuriyetin 100. Yılına Armağan*, 50; Kara, *Müslüman Kalarak Avrupalı Olmak*, 476.

¹²¹ Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, 25-26; Kara, *Bir Ahlak Davası Nurettin Topçu: Cumhuriyetin 100. Yılına Armağan*, 55; Kara, *İsyah Ahlakı Peşinde*, 45.

¹²² Kara, *Bir Ahlak Davası Nurettin Topçu: Cumhuriyetin 100. Yılına Armağan*, 15, 43; Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, 21.

¹²³ This intellectual movement, represented by Hilmi Ziya Ülken, Ziyaeddin Fahri Fındıkoğlu, Mükremin Halil Yinanç, Remzi Oğuz Raşit Hatipoğlu, and later Topçu himself, emerged as a reaction to the ideology of the Second Constitutional Monarchy. The main theme of the movement was to oppose Western imitation and to defend the abstract/spiritual patriotism against the concrete (i.e., political) understanding of patriotism. In addition, this intellectual movement is a reaction to intellectual movements such as the Western, Islamism, Turkism, and Socialism movements, which were the leading intellectual movements of the period (see Table 2.1). See Sarıtaş, 49-51.

¹²⁴ Kara, *Bir Ahlak Davası Nurettin Topçu: Cumhuriyetin 100. Yılına Armağan*, 44; 38; İsmail Kara, *Müslüman Kalarak Avrupalı Olmak* (İstanbul: Dergah Yayınları, 2023) 475; Mehmet Birgül, 85-86; Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, 23, 25.

¹²⁵ Kara, *İsyah Ahlakı Peşinde*, 13; Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, 38; Mehmet Birgül, 79-80; Karaman, 20, 23-24, 103.

İsmail Kara encapsulates Topçu's efforts as an endeavour to construct a new sense of identity, nationhood, and state order through a critical lens. Topçu drew from modern thought, contemporary lifestyles, and the modernization initiatives of both the Ottoman and Republican periods. Simultaneously, he sought to develop a comprehensive understanding of history, science, art, morality, philosophy, mysticism, and religion to provide a solid foundation for his reconstruction project.¹²⁶

2.5 FRANCE

The political and sociological situations of the period profoundly shaped by the intellectual debates that Topçu engaged with in France, including the impacts of the "Vienna Circle" and philosophical arguments were touched in this section, including Topçu's inclinations or responses towards them. It should be noted, however, that Topçu's views formulated in response to the theories of the Vienna Circle and modern positivism will be discussed in detail in Chapter 4.

As alluded to above, psychology was very important place in Topçu's understanding of religion, as expressed in the subtitle of his doctoral thesis ("*A Sketch of the Psychology of Faith*"). In this regard, and in this thesis, the influence of Blondel is obvious. The subtitle of Blondel's main work, *L'Action*, is "A Critique of Life and a Practical Science Essay." Psychology has a very important place in Blondel's work. Since both had mystical inclinations, the importance of psychology should not be taken for granted. Indeed, Bergson, who also influenced Topçu's intellectual development, shared the same attitude.¹²⁷

During his time as a student at the Sorbonne, Topçu took courses in Ethics, Sociology, Psychology, History of Art, and Aesthetics, alongside Philosophy. His personal encounters and discussions with Louis Massignon and Maurice Blondel, the founder of "Action Philosophy," were pivotal in the development of Topçu's ideas. Influenced by Action Philosophy, Topçu applied its concepts and methods to examine moral issues through the lens of his own cultural context. In fact, the journal *Hareket*

¹²⁶ Kara, *İsyan Ahlakı Peşinde*, 15; Kara, *Nurettin Topçu Hayatı ve Bibliyografyası*, 38; Kara, *Müslüman Kalarak Avrupalı Olmak*, 467-68.

¹²⁷ Gündoğan, *Arafta Bir Düşünür*, 42; Topçu, *Türkiyenin Maarif Davası*, 157, 163; Topçu states that "spirit culture" has been completely destroyed by reducing psychology to laboratory experiments, and that this is a result of the positivist process that gradually develops with the removal of the mention of God and metaphysics from textbooks, as pioneered in the secularization of formerly Christian countries in Europe. See *Ibid*, 39, 153.

(Action), which he began publishing in 1939, and which played a role in establishing his school of thought, was directly inspired by the “philosophy of action.”¹²⁸

Influenced by M. Blondel’s “philosophy of action” (*harakah*), Topçu constructed his system of thought on the basis of the eternal and transcendent nature of movement/action, contrary to the determinist-mechanist-positivist, sociologist, pragmatist perception of the world as offered by the Western Enlightenment thought. In his ideas, the traces of M. Blondel and, in some respects, I. Kant and H. Bergson can be seen. According to Blondel, positive science has failed because it ignores the connection between the outer world of the object and the inner principle (i.e., two dimensions of truth). What makes this relationship is the *will* (*Irādah*). In his adoption of Blondel’s “philosophy of action,” Topçu wants to show how it is possible to achieve the super-nature through (*Irādah*) and *action*.¹²⁹

By this approach, Topçu considers the human being as live, active, and engaging with his tangible and intangible environment. In the context of the theory that Blondel systematized, what is meant by “action” is any human activity, whose source is the “will.” The “Creator” is inherent in this will, and manifests itself in action. For Topçu, action is a combination of man and Allah (ﷻ). For Topçu and Blondel, thinking is also an action, and action is changing both ourselves and things. Concerning science (and scientific ontology), Blondel contended that scientific knowledge based on experiment and observation can never replace “reality,” and the activity called “science” is nothing but an *interpretation* of “reality,” not reality itself. Moreover, he found the substitution of concepts in metaphysical rationalism for *reality* to be artificial and insufficient. In this case, he contended that positivism and rationalism reflect life, thought, spirit, and concrete existence as a one-dimensional plane on a flat surface.¹³⁰

In his doctoral thesis, Topçu posited that when people use their *Irādah* to take *action*, the latter itself plays a fundamental role in the entire process of knowledge. Thought is also an expression of *action*, and the *Irādah* of humans determines both

¹²⁸ Gündoğan, *Arafta Bir Düşünür*, 13; Topçu, *Yarınki Türkiye*, 24; Topçu, *Conformisme et Révolte*, 208-209; Kara, *Müslüman Kalarak Avrupalı Olmak*, 484; Kara, *Bir Ahlak Davası Nurettin Topçu*, 58, 61, 73, 86; Kara, *Nurettin Topçu'nun Hayatı*, In Kara, *Nurettin Topçu* (Kültür Bakanlığı), 15; Mehmet Birgül, 125, 167-169; Ali Birinci, *Hareket Mecmuası*, in Kara, *Nurettin Topçu* (Kültür Bakanlığı), 107.

¹²⁹ Gündoğan, *Topçu ve Hareket Felsefesi*, 24-25, 28; Topçu, *Conformisme et Révolte*, 12-24; Kara, *Ahlâk Davasına ve Muallimliğe Adanmış Bir Ömür: Nurettin Topçu*, 15; Katherine Gilbert, “Maurice Blondel’s Philosophy of Action,” *The Philosophical Review*, Vol. 33, No. 3 (May, 1924), 275-276, 278, 284.

¹³⁰ Topçu, *Conformisme et Révolte*, 12-25, 30, 42, 46-47, 52-54, 70-71, 75, 81, 103, 113-114; Gündoğan, *Topçu ve Hareket Felsefesi*, 28, 30; Gilbert, 274, 285.

action and *thought*. Thus, according to him, there are two basic principles of man in acquiring knowledge: logical intelligence and intuitive thinking (i.e., deductive and inductive reasoning, respectively). Bergson, another thinker who influenced Topçu, pointed out that intuitive reasoning has an unlimited potential and the means of acquiring knowledge is intuitional knowledge. While describing our knowledge of the object, Bergson distinguished between knowledge about the object *qua* object (i.e., in itself), and knowledge about the *movement/action* of the object. Although he accepted that mathematics and the empirical method are important methods in following the traces of the object, he stated that they cannot provide us with the truth about “the absolute nature of the thing [i.e., object].”¹³¹

Although the philosophy of action was not essentially Sufism, it was Topçu who included Sufi thought in the philosophy of action under the influence of Massignon. “The morality of revolt” that he developed as a fundamental concept in his doctoral thesis was inspired by the “philosophy of action,” and bears traces of Maurice Blondel, Immanuel Kant, and Henry Bergson. Topçu’s thesis, which he successfully defended, was chosen as the most successful thesis of the year in its field, and as is the tradition at the university, he was asked if he had any requests that he wanted to be fulfilled because of his success. In return, he requested that the national anthem be sung and the Turkish flag be raised at the Sorbonne graduation ceremony.¹³² Blondel, who is considered the founder of the action philosophy and has been in constant contact with Topçu since his first years in Paris, suggested Topçu “to stay in France and become an academician,” but Topçu declined this path and returned to İstanbul, where he started to work as a philosophy teacher at Galatasaray High School in 1934.¹³³ Topçu was compelled to teach in high school as he could not find the opportunity to become a lecturer in university in the Türkiye of that period, mainly because of his politically divergent philosophical views.¹³⁴

¹³¹ Topçu, *Conformisme Et Révolte*, 29-30, 56-57; William J. Fossati, *Out of the Shadow Henri Bergson and Three French Philosophers* [in, Douglas A. Ollivant, *Jacques Maritain and the Many Ways of Knowing*], 277- 279.

¹³² Kara, *İsyân Ahlaki Pesinde*, 13; Kara, *Nurettin Topçu Hayatı ve Bibliyografisi*, 38, 61; Kara, *Müslüman Kalarak Avrupalı Olmak*, 467; Kara, *Bir Ahlak Davası Nurettin Topçu: Cumhuriyetin 100. Yılına Armağan*, 57, 68; Topçu, *Kültür ve Medeniyet*, 149; Mehmet Birgül, 131.

¹³³ Kara, *İsyân Ahlaki Pesinde*, 71; Mehmet Birgül, 130-131, 139, 140, 143, 148, 267; Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, 73-74, 81; Kılıç, 24; Tuncer Enginertan, *Çağdaş Bir Mistiğin Hayatına Dair Bazı Notlar*, in Kara, *Nurettin Topçu*, (Kültür ve Turizm Bakanlığı), 92; Karaman, 19.

¹³⁴ Ercüment Konukman, Nurettin Topçu Hocamızın Ardından, “*Hareket*,” 67.

2.6 THE REPUBLICAN PERIOD

Topçu's life during the Republican period life needs to be examined with consideration of how he was raised with a traditional (albeit forward-looking) Ottoman education in his formative years, which shaped his philosophical and mystical thought system after he was introduced to Western philosophy. His critical attitude towards positivism, the prevalent thought movement of the period, and the prevailing weakness or disparagement of faith, which he thought was a natural consequence of it, also needs to be analysed. Bringing a very different perspective to the duality namely modernity-traditionalism debate, Topçu, as an insider critic, expresses the shortcomings of both traditionalism and modern thought in a rational and philosophical way. In this section, we examine his system of thought according to the Republican period, which was critical in his own life and thought as well as in national development.

After returning to Türkiye in 1934, Topçu became a civil servant and devoted himself to teaching at various high schools, including İzmir Erkek Lisesi (Boys' High School), İstanbul Vefa High School, Denizli İsmet İnönü High School, İstanbul Erkek Lisesi (Boys' High School), and Haydarpaşa High School, among others. His last teaching appointment was 18 years at the İstanbul Erkek Lisesi (İstanbul Boys' High School), from which he retired due to the national age limit in 1974.¹³⁵ In 1935, Topçu married the stepdaughter of Hüseyin Avni Ulaş, the last Ottoman Chamber of Deputies and First TBMM (Turkish Grand National Assembly) deputy (Deputy in 1887, Erzurum - in 23 February 1948, Istanbul), a figure who had a significant influence on him, and whose name frequently appeared in his writings. This marriage lasted for two years. Hüseyin Avni, an important figure in shaping Turkish thought and politics, had related to Topçu since his childhood. Despite the subsequent divorce, Topçu's relationship with Hüseyin Avni remained strong and uninterrupted.¹³⁶

"The morality of revolt," which Topçu defined as his central thesis, became a lifelong philosophical principle after his return from France. This philosophy, developed by him, played a key role in shaping his views on intellectual movements of

¹³⁵ Mehmet Birgül, 265, 268; Karaman, 24-25; Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, 81, 83, 93, 98, 123; Gündoğan, *Arafta Bir Düşünür*, 13-14; Kara, *İsyan Ahlakı Peşinde*, 77-85; Kara, *Nurettin Topçu Hayatı ve Bibliyografisi*, 29-33; Kara, *Bir Ahlak Davası Nurettin Topçu*, 20-25; Kara, *Nurettin Topçu'nun Hayatı*, In Kara, *Nurettin Topçu* (Kültür Bakanlığı), 15-17.

¹³⁶ Gündoğan, *Arafta Bir Düşünür*, 13-14; Kara, *Nurettin Topçu'nun Hayatı*, In Kara, *Nurettin Topçu* (Kültür Bakanlığı), 15; Karaman, 19; Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, 82-83; Kılıç, 30; Kara, *İsyan Ahlakı Peşinde*, 77; Kara, *Bir Ahlak Davası Nurettin Topçu*, 85; Mehmet Birgül, 268.

the time, such as Turkish nationalism and Durkheim's materialist/positivist sociologism. What sets his theory of revolt apart from anarchist individualism is its emphasis on adherence to an eternal and universal order of mercy, leading to obedience and submission to a higher power.¹³⁷ Essentially, Topçu's moral philosophy of revolt was developed as a counterpoise to conformism—an approach that advocates for submission to prevailing conditions and imposed ideas—and to socialism (sociologism), which was introduced to Türkiye by Emile Durkheim and Ziya Gökalp. Topçu opposed philosophical approaches that dismissed metaphysics, and sought to develop an epistemology and moral philosophy by reinterpreting concepts like emotion, reason, intuition, and love.¹³⁸ In this context, he evaluates the concepts of sociologism. In his words, according to sociologism, what introduces moral events to us is obligation or duty, desirability, or goodness. Although these characteristics were traditionally considered to emanate from God, Durkheim attributes these characteristics to what he calls “society” as a material entity.¹³⁹

According to Gündoğan, the morality that begins with a commitment to society is called “Social Duty Morality.” Ziya Gökalp pioneered this morality in Türkiye, and introduced sociology and Durkheim's ideas to the country. This sociologist's morality he formulated it with the sentence “There is no individual, there is society,” and stated that social duty cannot be criticized as in individual actions associated with judgment by absolute and sacred beings, summarized in the phrase “I close my eyes and do my duty.” This premise that the end justifies the means was the creed of many modernist political movements, whereby good citizens must follow orders that might appear repugnant to traditional religions, but which are expedient and necessary for the greater good (i.e., the state and its political elite). However, to Topçu, this ethical system, anchoring ethics in societal or governmental concerns, prevents the truth/ethic which is

¹³⁷ İsmail Kara, *İsyân Ahlakî Pesinde*, 13; Topçu, *Conformisme et Révolte*, 30, 34-37, 86-89, 144-146; Topçu, *İrâdenin Davası Devlet ve Demokrasi*, 78-79; Topçu, *Kültür ve Medeniyet*, 149, 152; Karaman, 128; Mollaer, *İsyân Ahlakının Etik ve Felsefî Temelleri*, in Kara, *Nurettin Topçu* (Kültür Bakanlığı), 195.

¹³⁸ Kara, *İsyân Ahlakî Pesinde*, 13, 15; Topçu, *Kültür ve Medeniyet*, 57; Topçu, *Yarınki Türkiye*, 27, 29, 31, 73-79, 146-147, 154, 156; Topçu, *Ahlak Nizamı*, 170-174, 178-180, 188; Topçu, *Conformisme et Révolte*, 34-37, 52-55. About Ziya Gökalp's imitation of Durkheim's sociology see; Berkes, *Turkish Nationalism and Western Civilization*, 22; and to see Ziya Gökalp's Westernist approach, Ziya Gökalp, *Türkçülüğün Esasları*, (Eskişehir: Anadolu Üniversitesi Yayınları, 2019) 71-72.

¹³⁹ Gündoğan, *Arafta Bir Düşünür*, 52; Topçu, *Sosyoloji*, 109-110. What Topçu means by “sociologism” is the adoption of the science of sociology systematized by Durkheim in the form of an ideology. His criticisms of this concept reflect his critical attitude towards both the way it is perceived in Türkiye, and Durkheim's theories in themselves.

beyond humans and attains towards the supernatural.¹⁴⁰ Moreover, Topçu contends that such a morality leads individuals to become passive, and undermines personal freedom. He argues that great artists, statesmen, scientists, philosophers, and geniuses cannot emerge in a society governed by this totalitarian morality, stating that:

At the beginning of our century, the movement in France led by Durkheim, who believed sociology could explain every event like a magician's spell, replaced the spiritual life of the individual with the consciousness of society.¹⁴¹

Despite his criticism of Durkheim's conclusions, Topçu acknowledges the scientific value of Durkheim's method, and adopts it in his own approach.¹⁴² Based on Durkheim's methodology, Topçu classifies the evolution of societies into historical stages of social organization: clan, tribe, tribal unions, city, empire, fiefdom, and nation. He seeks to identify the general patterns of societal evolution by analysing each social structure in this classification through economic, legal, and religious lenses. According to Gündoğan, Topçu uniquely evaluates the nation, which represents the final stage in this progression, and presents "Anatolian Nationalism" as the multicultural culmination of nationalist ideologies in Turkish history. It is important to note that the consciousness of nationhood that emerged in Anatolia was not based solely on material factors; a strong metaphysical element, particularly the Islamic faith, played a decisive role in shaping this identity.¹⁴³

The most crucial point Topçu emphasizes in his analysis of the evolution of societies is that religion is the first social institution, and the source of all sciences and morality. He rejects the converse idea (that society itself is the origin of religion). Topçu argues that denying the concept of Absolute Truth by attempting to trace the foundations

¹⁴⁰ Gündoğan, *Arafta Bir Düşünür*, 52; Topçu, *Yarınki Türkiye*, 39-40, 43, 53, 171; Topçu, *Sosyoloji*, 128; To see Durkheim's effect on Ziya Gökalp and anti-individual approach, Ziya Gökalp, *Türkçülüğün Esasları*, 17, 18, 71-12, 74. Topçu states that Durkheim's theory that the phenomenon of society has an existence independent of individuals and affects the individual leads to an inference such as "Whatever the society imposes, it is necessary to comply with it." He both criticizes this from a moral perspective, because it causes moral problems, and states that the individual is not a completely passive being in the face of society. The belief that human behavior and even religions being based on biological evolution and materialist causes was popular during the early 20th century. See Edward O. Wilson, *On Human Nature*, (London: Harvard University Press, 1988), 169, 175-178.

¹⁴¹ Gündoğan, *Arafta Bir Düşünür*, 53; Topçu, *Milliyetçiliğimizin Esasları*, 66.

¹⁴² It is worth remembering that what Durkheim generally tried to do was to create a methodology, and that he did not claim to be scientific by trying to prove his theories with fieldwork or experiments.

¹⁴³ Gündoğan, *Arafta Bir Düşünür*, 50; Nurettin Topçu, *Sosyoloji*, (İstanbul: Dergah Yayınları, 2019), 23, 82-83.

of concepts like time, space, and mind to society and reducing thought to social relativism would lead to the conclusion that Allah (ﷻ) is merely a product of society. This, he believes, would undermine and destroy the very foundation of religious beliefs.¹⁴⁴

Topçu opposes the sociological view that replaces individual conscience with society, and sees honour and morality as mere submission to societal rules. He also rejects the idea that morality is solely a product of social life, and that moral principles can only be discussed within the context of society. While it is true that morality is realized within society and through social relations, Topçu argues that treating society as the sole source of moral commands and ignoring the individual's spiritual world and conscience weakens the explanation of morality.¹⁴⁵ In light of these evaluations, Topçu discusses the concepts of civilization, culture, and nationalism.

According to Topçu, civilization, often defined through material development—particularly in terms of science and technology—and claimed to be universal, carries a tyrannical spirit, and is inseparable from the capitalist context. Science and technology, which are often presented as replacements for Truth, have become tools of industrialization and exploitation that harm both humans and nature.¹⁴⁶ For Topçu, the solution lies in creating our own scientific mindset by adopting the valuable methods of the West, while integrating these methods with the culture rooted in our own past and resources. This fusion, he believes, would result in a civilization that is both grounded in our heritage and enriched by universal contributions.¹⁴⁷

After discussing the concepts of sociology, civilization, and culture, Topçu examines nationalism from this framework. He offers a new interpretation of Anatolian Nationalism, centred on Islam, building upon its earlier foundations. At the same time, he criticizes Pan-Turanism, racism, and internationalist nationalisms that are

¹⁴⁴ Gündoğan, *Arafta Bir Düşünür*, 50, 51; Topçu, *Ahlak Nizamı*, 231-233.

¹⁴⁵ Gündoğan, *Arafta Bir Düşünür*, 51-52; Topçu, *Sosyoloji*, 109; Topçu, *Ahlak Nizamı*, 88, 231-233. His criticisms of Ziya Gökalp indicate that society is given exactly such a meaning according to his perspective, and that this understanding has its shortcomings.

¹⁴⁶ Kara, *Isyan Ahlaki Pesinde*, 17, 19; Topçu, *Kültür ve Medeniyet*, 23-24.

¹⁴⁷ Gündoğan, *Arafta Bir Düşünür*, 18; Topçu, *Milliyetçiliğimizin Esasları*, 72; Topçu's criticisms regarding the definition of civilization should be understood as a response to the issues of assuming "Western" civilization to be "Civilization," and identifying oneself with it to be considered a civilized person, which was the norm at that time. This is also an answer to those who defend Westernization through this concept of equating Western culture with scientific and technical development. See Topçu, *Yarınki Türkiye*, 171, 176.

disconnected from the land, as well as communism and political Islamism, which he sees as being at odds with the rooted, local identity he advocates.¹⁴⁸

Topçu criticizes political nationalism, which he identifies as a Western creation that had become the official policy of the Republican state. Materialist nationalism is the architecture of Gökalp, and its source is French positivism. It is a step taken towards the transition from spiritualist nationalism to materialist nationalism. According to Topçu, race (i.e., people) and nation (i.e., social organization) are two different things.¹⁴⁹ In Anatolian Nationalism, which Topçu strongly supports, the religion that shaped the spirit of the Oğuz Turks on Anatolian soil is considered the most crucial source of national identity. Topçu identifies 1071, the year of the Battle of Manzikert, as the starting point of the Anatolian Turkish nation and, consequently, “the beginning of our nationalism.” He refers to this as the “History of Anatolian Turks.” Topçu’s vision of socialism is spiritual in nature, which distinguishes it from materialist socialism. His version of socialism is rooted in spiritual values, reflecting his rejection of the materialist approach typically associated with socialist thought.¹⁵⁰ Topçu does not accept the romantic claims of Turanism, because it is not realistic or scientific. He notes the issue of “Arabs” and “Islam” becoming conflated in contemporary Turkish political discourse and societal understanding of religion. He expresses that the Turkish society, while trying to purify itself from foreign elements to its own culture and society,

¹⁴⁸ Kara, *İsyah Ahlaki Pesinde*, 13, 15; Topçu, *Kültür ve Medeniyet*, 57; Topçu, *Yarınki Türkiye*, 27, 29, 31, 73-79, 146, 147, 154, 156; Topçu, *Ahlak Nizamı*, 170-174, 178-180, 188.

¹⁴⁹ Gündoğan, *Arafta Bir Düşünür*, 20; Topçu, *Yarınki Türkiye*, 135; Topçu, *Büyük Fetih*, 16-17; Topçu, *Ahlak Nizamı*, 156; However, in another work, Topçu states that Ziya Gökalp abandoned this type of nationalism, adopted more cultural nationalism, and emphasized the spiritual elements of being a nation rather than its material elements. See Topçu, *Sosyoloji*, 83.

¹⁵⁰ Gündoğan, *Arafta Bir Düşünür*, 54, 55-56; Topçu, *Yarınki Türkiye*, 283-284. Independently of the concept of “nation” in the context of the nation-states that developed in the West, Topçu points out that the consciousness of being a nation has existed among the Turks since ancient times. Again, here he emphasizes the spiritual elements of being a nation, rather than its material elements, which can partly be attributed to the nomadic nature of early Turkic civilization. It is useful to remember here that the concept of *millet* is a Qur’anic one. To see an analysis of the concept of *millet* in the Qur’an in the context of “It is the principles and path around which a community gathers,” see Hatice Özyurt (December, 2020) “Millet Kavramının Anlam Alanı ve Teorik Çerçevesi,” *Genç Mütefekkirler Dergisi*, Vol:1, No: 2, 91-135. From the perspective of the concept of *millet* (nation), various “nations” of this type inhabited the Ottoman realms, with their own civil society organizations (e.g., the Christian and Jewish millets). Reflecting the amorphous nature of nationhood in the Ottoman state, Will Kymlicka argued that it long predated the system of federal institutions established in the USA centuries before such pluralistic organizations of national life could be conceived in Western European tradition. The Ottoman *millet* system, which distinguished citizens and minorities according to religion, is the most original example of multinational, multicultural state systems generally envisioned in liberal systems. See Will Kymlicka, *Multicultural Citizenship: A Liberal Theory of Minority Rights*, (New York: Oxford University Press, 2008), 156-158, 183, 230-231. Baral Dural, *Başkaldırı ve Uyum (İstanbul: Birharf Yayınları, 2005)* 82.

has fallen into the mistake of separating what are in fact intrinsic features (particularly Islam) from its own self. He proposes the following as a remedy for salvation: preparing to return to the traditional Anatolian model, which gained culture and faith with the spirit of Islam.¹⁵¹

After critiquing Western-centred nationalism, Topçu also challenges the political Islamist understanding of nationalism, which is the converse of interpretations of Turkish nationalism seeking to exclude Islam from Turkish identity. While the latter fails to see how Anatolians developed Islam in their own way (from its originally Arab roots), Topçu argues that Islamist political movements disregard the reality of nationhood/culture in people's identity and forms of social and political organization. Topçu acknowledges that the Oğuz people constitute the material aspect of the Anatolian nation, while Islam constitutes its soul. Just as he criticizes Western imitation, he also criticizes Arab imitation.¹⁵²

According to Topçu, there is a profound connection between culture and religion, with the latter entering a society through its culture, and evolving alongside it. Religion influences the culture, while the culture in turn shapes how religion is expressed. Topçu aims to raise awareness of this dynamic. For instance, he distinguishes between the religiosity of Arabs and that of Anatolian people, arguing that Islam developed a distinct style among the latter, both in spirit and aesthetics. Albeit Muslim Turks and Arabs are communities fed from the same source, and coming from the same religious and moral roots, they are two different nations, he says. On the other hand, nations whose cultures are nourished by the same common source can benefit from a common civilization. In the context of Western civilization, Topçu sees parallels in terms of its own internal development, with different nations fed from a common source, but this whole cultural tradition is a fundamentally different one from that of Anatolia. According to Topçu, since our cultural resources are not common with Western societies, our efforts at Westernization can be nothing but superficial imitations.¹⁵³

¹⁵¹ Kılıç, *Tüm Yönleriyle Türk Filozofu Nurettin Topçu* (İstanbul: Ravza Yayıncılık, 2020) 97; Topçu, *Yarınki Türkiye*, 40.

¹⁵² Gündoğan, *Arafta Bir Düşünür*, 21; Topçu, *Türkiyenin Maarif Davası*, 25.

¹⁵³ Gündoğan, *Arafta Bir Düşünür*, 18; Topçu, *Milliyetçiliğimizin Esasları*, 70; Topçu, *Kültür ve Medeniyet*, 20; Topçu, *Yarınki Türkiye*, 148-140, 166-167, 170, 179.

Although Topçu is critical of Westernization in Türkiye, he has a positive regard for Western cultural values regarding science, philosophy, art, and even religion. The key criticism he has of *modern* Western civilization *per se* is that it prioritizes matter over spirit, with industrialization fuelled by colonialism enslaving humanity to material concerns. According to Topçu, this civilization, which glorifies materialism and is driven by a thirst for technology, has also eroded the spiritual and moral foundations inherited from previous civilizations across the world, ground under the steel wheels of Western scientific colonialism. Despite these negative aspects, Topçu observes that there is an ongoing struggle between materialism and Christian spiritualism within Western civilization. This tension leads him to criticize the tendency to turn to the West in non-Western cultures, becoming trapped in positivism and materialism due to being unable to distinguish the various strands that comprise the reality of “the West,” particularly the difference between science and technology on one hand, and metaphysical claims on the other.¹⁵⁴

In 1944, after Topçu was appointed as a teacher in Denizli, he met the renowned exegete Said Nursi (1877-1960) through mutual acquaintances. Topçu then regularly met with Nursi at the Şehir Hotel, after Nursi’s trials had concluded, engaged in discussions with him on topics such as religion, faith, morality, youth, and society.¹⁵⁵ Many of Nursi’s ideas had a profound influence on Topçu. Nursi held the view that Turkishness and Islam are intrinsically linked, claiming that if a Turkish person abandons Islam, they will lose their Turkish spirit and spiritual values as well.¹⁵⁶

Topçu evaluates the concept of democracy through the lenses of his “morality of revolt.” From this perspective, he argues that the fundamental nature of democracies, favouring quantity and capital over quality and service, leads to unqualified individuals

¹⁵⁴ Gündoğan, *Arafta Bir Düşünür*, 19; Topçu, *Kültür ve Medeniyet*, 68; Topçu, *Türkiyenin Maarif Davası*, 21-22; It is necessary to express here that, while evaluating the West, Topçu describes the Western nation and nationalism as two forces competing with each other. He defines these as material and spiritual forces, with the industrial capitalism and colonialism on the one hand, and the remnants of Christian spirituality on the other. Movements such as the Renaissance, Reformation, Romanticism, and Humanism are the products of this spiritual front. Apparently, Topçu was not in conflict with this wing of the West, and even spoke with praise of its contributions to humanity, art, and morality. However, he described the materialist wing, which he describes as the rival of spiritual front, as colonialist and responsible for moral destruction. To us, Topçu’s criticizing against the West should generally be understood as being directed towards this group, and not “the West” in general. See Nurettin Topçu, *Sosyoloji*, 80-82.

¹⁵⁵ Işık, *Nurettin Topçu Çağdaş Bir Dervişin Dünyası*, 93-94; Kara, *İsyan Ahlakı Peşinde*, 81; Kara, *Müslüman Kalarak Avrupalı Olmak*, 494; Kılıç, 65.

¹⁵⁶ Kılıç, 196.

gaining power and rule over society. The relationships between the press, politics, and capital politics lead to moral and societal degradation. However, in a society made up of scholars and virtuous individuals, many of these issues can be avoided. In contrast, in a society lacking well-educated and virtuous people, the consequences of democracy are often negative. One of the fundamental drawbacks of democracy, according to Topçu, is the disparity in maturity levels among individuals. He points out that since the number of uneducated, self-interested people will always outnumber the virtuous, the “bad” will often end up ruling society. Additionally, Topçu criticizes the idea of determining truth through elections, arguing that for democracy to be truly beneficial, there must be unity in national feelings and moral maturity within society.¹⁵⁷

In his original thoughts, Topçu also addresses the issue of education. He believes that every nation should have a national school, which he defines as a school that distinguishes itself from others through its unique mentality, customs, methods, curriculum, educational principles, psychological foundations, and even the architecture of its buildings. For the school to become a true “temple of the love of Truth,” it must be grounded in a philosophical worldview, which Topçu argues is the cornerstone of a school. Without a grounding philosophy, a nation cannot have a true educational institution. In contrast, nations without an underlying philosophy integrated into their institutions will simply be imitative. In such an imitation society, the youth will lack ideals, and become individuals driven by pleasure, devoid of emotion and ideals, and they will ultimately embrace positivism and a morally nihilistic life.¹⁵⁸

Fearful of nihilism and moral anomie associated with positivism, Topçu was also highly critical of the education institutions of his time, which he considered to be increasingly positivist and pragmatist. He believed that the education system of his era was overly focused on science and technology, neglecting deeper philosophical and spiritual inquiry. Describing his time as one where “studentship is no longer a journey of knowledge, but a hunt for diplomas,” Topçu argues that modern education systems do not encourage deep thinking.¹⁵⁹

¹⁵⁷ Gündoğan, *Arafta Bir Düşünür*, 23-24; Topçu, *İradenin Davası Devlet ve Demokrasi*, 117, 124-125, 136; Topçu, *Sosyoloji*, 104-106; In fact, these statements are similar to the basic criticisms of classical philosophers about democracy. See Plato, *The Republic*, translated from Greece by Tom Griffith (Cambridge: Cambridge University Press, 3rd Publ, 2018), 185-190, 266-70, 275-79.

¹⁵⁸ Gündoğan, *Arafta Bir Düşünür*, 32, 33; Topçu, *Türkiyenin Maarif Davası*, 14-15, 81.

¹⁵⁹ Gündoğan, *Arafta Bir Düşünür*, 34, 38; Topçu, *Türkiyenin Maarif Davası*, 86.

Topçu seeks a basis for religious culture in philosophy, synergized with and permeating the arts, drawing examples from religious life throughout history. He views this as necessary because the source and basis of religious truths are related to the metaphysical part of philosophy, and this topic should be included in the programs in a major way.¹⁶⁰

In every Renaissance movement, there is the reign of reason, free thought, and surrender to love.¹⁶¹ Science is an indispensable element in Topçu, but for him, knowledge/science includes the *love* of knowing. The Anatolian Renaissance that Topçu offers is the combination of the metaphysical and idealistic inspiration received from the Qur'an and the bundles of reality experienced from the gardens of Anatolian culture.¹⁶²

2.7 CHAPTER CONCLUSION

Topçu lived through the Ottoman period, was educated in the institutions of that period, and as someone who witnessed the establishment of the Republic of Türkiye, he personally experienced the sociological, political and mental transformation process. He is one of the rare figures who can look at the influences of the West on Turkish society both from the inside, as a member of that society, and from the outside, as someone who received a higher education in the West (which was a relatively unusual opportunity for people of his generation, offering him unique insights). He does not reject the West and its science; on the contrary, he does not hide his admiration for it, and the spiritual values and mysticism of the West. What he is against is the exclusion of metaphysics in the modern Western philosophy of knowledge. The transition process and his experiences during that period undoubtedly influenced his rejection of positivism, or rather the materialist philosophy and understanding of science that excludes metaphysics, both from a philosophical perspective and in terms of cultural/socio-political reality. In his system of thought, intuition and *Irādah* are not just an intellectual acceptance, but a phenomenon that guides his life from his childhood to his entire life, from science to Sufism.

¹⁶⁰ Gündoğan, *Arafta Bir Düşünür*, 26; Topçu, *Türkiyenin Maarif Davası*, 141.

¹⁶¹ Gündoğan, *Arafta Bir Düşünür*, 27; Topçu, *Yarınki Türkiye*, 83.

¹⁶² Gündoğan, *Arafta Bir Düşünür*, 29, 30; Topçu, *Kültür ve Medeniyet*, 24; Nurettin Topçu, *Yarınki Türkiye*, 102.

CHAPTER THREE

INTUITION IN NATURALIZED EPISTEMOLOGY

“Our knowledge is an island in the infinite ocean of the unknown.”
(Victor Weisskopf)

This chapter examines fractures in epistemology before and after the Enlightenment, particularly the transition process from metaphysical rationality to positivism in the approach to how knowledge is investigated. Then, “naturalized epistemology” is researched, as a unique school of its own that developed within the logical positivism movement. The analysis identifies the ways in which it diverges from classical positivism. The epistemological analysis of both movements is examined within their historical course, followed by consideration of how the concept of “intuition” is understood in the naturalized epistemology school, and various differences in interpretation.

3.1 CRISIS IN EPISTEMOLOGY

For the context of this study of Topçu’s thought, it is important to explain what kind of a break there was in the approach to knowledge between the classical and modern period. This is necessary in order to understand the importance of intuition (which is explored later) as a metaphysical element in the acquisition of knowledge. The divisions within the history of philosophical thought are not strictly separated; transitions occur gradually, and not abruptly. There is extensive overlap and interconnectedness, and successive systems are not distinctly isolated from one another.¹⁶³ In this respect, a holistic perspective will be necessary in examining philosophical concepts when making these distinctions even if we occasionally point to specific events and discussions.

Epistemology, a subdivision of philosophy, focuses on the authenticity of knowledge, addressing inquiries regarding how we attain knowledge and how we

¹⁶³ Frederick Copleston, *History of Philosophy: Medieval Philosophy Medieval and Renaissance Philosophy from Augustine to Duns Scotus*, (New York: Doubleday, Vol. 2, 1993), 2.

ascertain its truthfulness.¹⁶⁴ All the discussions around ontological-epistemological breakthroughs in the history of philosophy have had a guiding function for humankind regarding “reality” itself (i.e., ontology), and our *knowledge of reality* (epistemology). In terms of the effects on the age we live in, we can say that the fracture in the approach to knowledge during the transition to modernity caused a crisis, initially in the West, and then radiating to non-Western societies. This crisis is generally characterized by the chasm between the “traditional” world, in which metaphysics was the dominant approach to knowledge; and the “modern” *Weltanschauung*, which excludes traditional metaphysics and has a materialist, secular tendency in thought and action. Anti-traditionalist trends arising from the “Aufklärung,” including crude materialistic interpretations of sciences exploring the human mind and psychological processes, were more common among certain French thinkers than among their British contemporaries during the late 18th century.¹⁶⁵ During the Enlightenment era in France, there was a growing animosity towards the Church and religion, particularly among philosophers. Although Enlightenment philosophers were uniformly anti-clerical, they were not all atheists. However, most of them promoted a bold form of atheism in the name of science, alongside a strong belief in the abilities of reason and the advancement of humanity.¹⁶⁶ It is seen that the West experienced a transition in knowledge from “medieval” to “modern,” and the increasing domination of “science” as the preeminent concern of public affairs and societal life.

One of the most important features of this new period is that, unlike the “traditional” period, authority was primarily derived from intellectual legitimacy (i.e., as per the “Age of Reason”), and was not sacred or even governmental *per se*.¹⁶⁷ Bolstered by scientific breakthroughs such as Newton’s principles of motion and gravity, which appeared to rule over everything, from tiny particles to faraway planets, men of affairs envisaged applying “scientific” doctrines to everything, including the

¹⁶⁴ Henry Plotkin, *The Nature of Knowledge: Concerning Adaptations, Instincts and the Evolution of Intelligence*, (London: Allen Lane, 1994), 1-2.

¹⁶⁵ Herlihy, ix; Copleston, *History of Philosophy: Medieval Philosophy*, 2; Frederick Copleston, *Modern Philosophy: From Descartes to Leibniz*, (New York: Double Day, Vol., 4, 1994), 1, 32, 34-35, 36, 56-57.

¹⁶⁶ Barbour, *When Science Meets Religion*, 71; Anthony Kenny, *Ancient Philosophy: A New History of Western Philosophy*, (New York: Oxford University Press, Vol., 1, 2004), 178, 310; Anthony Kenny, *The Rise of Modern Philosophy: A New History of Western Philosophy*, (New York: Oxford University Press, Vol., 3, 2006) 93, 330-331.

¹⁶⁷ Bertrand Russell, *History of Western Philosophy* (New York: Simon and Schuster, 1945), 491-492.

organization of production, social life, and governance. The ideas of Newtonian physics were remarkably effective in clarifying various occurrences, leading to the assumption that they could account for all happenings. They were expanded to create a comprehensive philosophy of materialism, supported by certain Enlightenment thinkers. An understanding emerged that if we could determine the position and velocity of every particle in the universe, we would be able to predict all future occurrences. However, this inference is regarded as reductionist, as it presumes that the actions of all things are dictated by the behaviour of their tiniest elements.¹⁶⁸

When we delve into the origins of the debate, we find that it was not a fundamental leap forward in the evolution of man (as supposed by Enlightenment philosophers themselves and their successors), but the resurgence of one trend over another than had long been embedded in civilization, particularly in the Mediterranean World. The dichotomy between spirit and matter and thus between spiritual and materialist ontology can ultimately be traced in philosophy back to classic Platonic philosophy. For centuries Europe adhered to the conclusions reached by St. Augustine (354-403): influenced by Plato and Neoplatonist philosophy, he proposed the concept that ontological existence is divinely structured (i.e., spiritual), originating from God's creation, rooted in the concepts within His mind; essentially, the blueprint of material existence consists of patterns and ideas conceived by God. Therefore, it can be argued that existence fundamentally resides within the concepts of God's mind, implying that their essence is abstract and distinct from their material manifestation, which are mere outward forms of spiritual realities.¹⁶⁹

St. Augustine believed that Christianity served as the source of truth, and could be apprehended through both faith and reason, theology and philosophy, which he viewed as inseparable. In his epistemic theory, Augustine proposed that discovering truth relied on delving into the inner essence and spiritual reality of phenomena, rather

¹⁶⁸ Barbour, *When Science Meets Religion*, 71; Barbour, , *Religion in an Age of Science: The Gifford Lectures*, (New York: Harper San Francisco, Vol. 1, 1989-1991), 4-5; Copleston, *Modern Philosophy: From Descartes to Leibniz*, 8, 32, 34-35, 56-67; Frederick Copleston, *A History of Philosophy: Late Medieval and Renaissance Philosophy* (New York: Double Day, Vol., 3, 1993), 284, 288, 290-291; See also; Schlick, *The Turning Point in Philosophy*, in Ayer, *Logical Positivism*, passim; Carnap, *The Old and the New Logic*, in Ayer, *Logical Positivism*, 143-145; Hans Hahn, *Logic, Mathematics and Knowledge of Nature*, in Ayer, *Logical Positivism*, 160-161.

¹⁶⁹ Christoph Delius et al., 20.; Kenny, *Ancient Philosophy*, 114, 256; Copleston, *History of Philosophy: Medieval Philosophy*, 14-15, 38, 39, 48, 52, 54-55, 57, 58, 60, 62, 66-67; Stephen Brown, *The Intellectual Context of Later Medieval Philosophy: Universities, Aristotle, Arts, Theology* in John Marenbon, *History of Philosophy: Medieval Philosophy* (New York: Routledge, Vol., 3, 2004) 189-190.

than focusing solely on their superficial attributes because the physical world is inferior to the eternal realm. According to this theory, individuals who delve into their deeper selves are closer to uncovering truth.¹⁷⁰ Yet, this perspective did not resolve debates regarding the comprehension of the physical realm, as there remained a necessity for a rational foundation for faith. Accordingly, the rational basis should not be separate from the immaterial soul. This is because the human being, who is composed of material and immaterial elements (i.e., body and soul), knows how to think and understand not through his material existence, but through his immaterial existence. However, the immaterial being (soul) cannot exist in this temporal world without a material being (body). Moreover, it was believed that the scholastic approach could address these concerns by drawing upon Aristotelian science, recognizing that theology and philosophy should be assessed using their respective methodologies of faith and reason, as articulated by Thomas Aquinas (1125-1274).¹⁷¹ This established the prevailing philosophical framework of medieval Western science. As also Stumpf Samuel Enoch (1918-1998) suggests, knowledge was predominantly controlled by the Church and Christian authorities, influencing moral theory, political doctrine, societal institutions including family and labour, as well as the realms of arts, literature, and science; prior to the active onslaught of Protestantism and the Enlightenment, all aspects of culture in European nations were under the dominion of the Church.¹⁷²

As can be seen, in epistemology, there was an inevitable process moving from church domination to science domination in Western thought, especially in academia and the political realm, reflecting and shaping societal development. Moreover, this change and transformation was not only in epistemology.

In a nutshell, from the 15th to the 20th centuries, empirical positivism emerged as the dominant intellectual paradigm in Western science, technology, and political

¹⁷⁰ Christoph Delius et al., 21; Stumpf Samuel Enoch, *Philosophy, History & Problems*, (New York: McGraw-Hill, Inc. 5th ed., 1994) 135; Copleston, *History of Philosophy: Medieval Philosophy*, 48-49, 52, 54-55, 57-58, 60, 62, 66-67; Russell, *History of Western Philosophy*, 354, 358; John Herman Randall, JR., *The Making of the Modern Mind*, (New York: Columbia University Press, 1976), 98.

¹⁷¹ Christoph Delius et al., 23; Enoch, 180; Kenny, *Ancient Philosophy*, xiv; Paul Johnson, *The Renaissance: A Short History*, (New York: Modern Library, 2000), 10-11, 28.

¹⁷² Enoch, 216; Mehr Afroz Murad, *Intellectual Modernism of Shibli Nu'mānī and Exposition of His Religious and Political Ideas*, (New Delhi: Kitab Bhavan, 1996), 6; Copleston, *History of Philosophy: Medieval Philosophy*, 2; Russell, *History of Western Philosophy*, 395; Brian Davies OP, *Thomas Aquinas*, in John Marenbon, *History of Philosophy*, 257-259, 261, 262; Brown, *The intellectual context of later medieval philosophy*, in John Marenbon, *History of Philosophy*, 192; John Henry, *The Scientific Revolution and the Origins of Modern Science*, (New York, Palgrave, 2nd ed., 2002), 10, 68; Norman Hampson, *A Social History of the French Revolution*, (London: Routledge, 1995), 28-29.

philosophies. During the same period, the Church increasingly lost its doctrinal and ideological grip over universities, retaining an increasingly symbolic and platitudinous presence in academia, despite establishing the majority of major universities in Europe. This shift ultimately overthrew traditional methods of acquiring true knowledge, causing transcendent philosophical and religious thought to lose almost all their claims in underpinning human life and society. Consequently, this led to the decline of both religious and philosophical thought, as Western thought assumed that knowledge and the nature of the universe were solely material and deterministic, based on the aftermath of “epistemological differentiation.”¹⁷³

Edmund Husserl maintains that positivism, by grounding knowledge exclusively in sensory data and measurable observation, leads to a profound loss of meaning. This is because it dismisses the subjective and intentional dimensions of consciousness that give coherence to human experience. In Husserl’s view, such a “scientific” outlook disregards the constitutive role of the knowing subject—the transcendental ego—and consequently ignores the very foundation of scientific knowledge itself. By reducing reality to what can be empirically observed and quantified, positivism fails to acknowledge the pre-scientific world of lived experience from which all scientific inquiry ultimately arises. Husserl interpreted Descartes’ philosophical importance in a distinctive manner; he saw the *Meditations* as a crucial turning point in philosophical method, seeking to ground the sciences in a foundation centred on subjectivity. For Husserl, genuine philosophy must begin with the ego’s act of self-reflection. In this Cartesian procedure, the thinker suspends or “brackets” the existence of the external world, regarding the self as a conscious ego while understanding the body and material entities as phenomena that appear in relation to that subject. Intentionality thereby signifies our receptivity to the world and our ability to relate to it beyond mere consciousness.¹⁷⁴

One of the earliest philosophers to fundamentally critique classical positivism in the 20th century was Martin Heidegger (1889-1976), who stated that when its notions

¹⁷³ Herlihy, ix, 3, 68-71; Edwin, 10,11; Randall, JR., 271-273, 478; Husserl, *The Crisis of European Sciences and Transcendental Phenomenology*, xxvi, xxvii, 289-290. *The Encyclopaedia of Philosophy*, “Logical Positivism.”

¹⁷⁴ Husserl, *The Crisis of European Sciences and Transcendental Phenomenology*, xxvii-xxviii, 3-7, 10, 13-15, 18, 25-28, 36-37, 47-48, 152-153, 187-188; Richard Cobb-Stevens, *The Beginnings of Phenomenology Husserl and His Predecessors*, In Richard Kearney, *Twentieth-Century Continental Philosophy*, (New York: Routledge, Vol., VIII, 2005), 5; Copleston, *A History of Philosophy*, Vol. 4, 150.

are under debate concerning abstractions, philosophy is undervalued, while the experimental sides of concepts are regarded as secured.¹⁷⁵ According to him, “the natural sciences and technologizing sciences appeared to possess genuine knowledge, but in fact, science is the denial of all true knowledge.”¹⁷⁶ Moreover, acquiring knowledge is still an ambiguous issue, because there is a cognition process even in positivist methodology (e.g., conducting an experiment). According to Heidegger, Christian theology underwent a complete transformation due to various metaphysical shifts, starting from the time of Galileo Galilei (1564-1642). This transition moved away from the medieval focus on the relationship between humanity and God (such as salvation), towards a renewed confidence centred on the pursuit of truth during the Enlightenment.¹⁷⁷ “Science” persisted as the revered doctrine of the emerging secular ideology, and Heidegger recognized the rise of “science,” as commonly understood today, as one of the most pivotal developments of the modern era. Technology and mechanization have been the most important components of this process. Machine technology utilized mathematical and physical sciences in production, displacing traditional forms of labour. In later stages, consumers themselves might be viewed as part of this process. Furthermore, Heidegger identified machine technology as the core of modern technology, presenting it as the essence of contemporary metaphysics.¹⁷⁸

On the other hand, in the context of the discussion of strict determinism in knowledge, Heidegger considered research to be the core of modern science, with each research endeavour tied to its specific domain, requiring a characteristic of precision. He argued that all sciences, including the human sciences related to life and nature, are fundamentally imprecise because research is a perpetual process. “Science” never arrives at a final conclusion, due to the unattainable nature of absolute truth, which is a necessity inherent in this framework (i.e., a metaphysical claim of materialism).¹⁷⁹ There is a direct parallel between a world characterized by constant change and flux,

¹⁷⁵ Martin Heidegger, “*The Age of the World Picture*”, In Martin Heidegger, *The Question Concerning Technology, and Other Essays*, translated from German by William Loviitt, (Harper & Row: New York, 1977), 4-5.

¹⁷⁶ Heidegger, 5.

¹⁷⁷ Heidegger, xxv; Henry, *The Scientific Revolution and the Origins of Modern Science*, 1-2, 14-15, 85-86.

¹⁷⁸ Ibid, 116, 120; Heidegger’s criticism of this new period with his emphasis on “contemporary metaphysics” may be considered exaggerated or ironic, but we think this emphasis should be examined separately in terms of discussions concerning the postulate that “humans might also be a kind of machine” (i.e., reducing humans to a purely materialist understanding).

¹⁷⁹ Ibid, 117-118, 120, 124.

where nothing remains permanent, and the mindset of individuals who seek reality solely within this realm of change, rejecting the knowledge of the truth and the transcendental and universal principles that underpin it.¹⁸⁰ Starting from the Renaissance, there was a shift in the understanding of knowledge, moving away from Christian authority and adopting a new character that increasingly leaned towards empirical, materialist, positivist, scientific, and secular worldviews.¹⁸¹

To give an example, Henry Plotkin (1940-2021), who critically discusses the approach of science and philosophy to knowledge, states that the only way to know about daily events, such as the results of a football match, or the interaction of a plant with water, is to be informed of them empirically. He says that in such cases, philosophical reasoning will not contribute to our knowledge (e.g., one cannot pontificate about who will win the football match and arrive at a satisfactory answer without hearing the actual result; one can only use such reasoning to predict, but not to confirm). However, he actually establishes limits in terms of the problematic nature of the function of the human mind, which is the receiver of knowledge in both types of knowledge; he asks whether it is “abstract” or “concrete,” which he describes as the “justification problem,” which is not a matter of debate in terms of evolutionary epistemology.¹⁸²

Accordingly, after the belief that there was no longer any need for philosophy in reaching knowledge, epistemology also became a subject of science under psychology, due to the fact that a prevalent and recurring theme in recent philosophical thought is

¹⁸⁰ Guénon, 34-35.

¹⁸¹ Henry, *The Scientific Revolution and the Origins of Modern Science*, 2, 10, 34-35, 58, 95; Thomas L. Hankins, *Science and the Enlightenment*, (New York: Cambridge University Press, 1985), 6, 11, 41, 141.

¹⁸² Henry Plotkin, 228-234; Randall, JR., 272-272, 614-615. The term “Evolutionary Epistemology” was first coined by Donald T. Campbell, an American psychologist. This is a theory that studies knowledge in terms of biological structure. See Henry Plotkin, 2; The tendency to transform philosophy into a factual science under the branch of psychology began in the 1900s, and is generally referred to as “Psychologism.” See Husserl, *The Idea of Phenomenology*, x-xi. Edmund Husserl, the founder of phenomenology, significantly influenced 20th-century philosophy. His main contribution was the development of the concept of intentionality. Husserl revived the premodern thesis that our cognitive acts are intentional, meaning they extend beyond mere sensory experiences to engage with actual things in the world. When we think, speak, or perceive, we interact directly with the objects themselves, not with mental intermediaries. Intentionality represents our openness to the world and our transcendent mode of being. See Cobb-Stevens, 5. At the same time, Husserl viewed Descartes’ significance in a unique way. He believed that Descartes’ “Meditations” marked a pivotal shift in philosophical methodology, aiming to unify the sciences with a subjectivist foundation. According to Husserl, philosophy must begin with the self-reflective meditations of the ego. In this process, Descartes “brackets” the existence of the material world, treating the self as a conscious ego and considering the body and material objects as phenomena in relation to that subject. See Copleston, *A History of Philosophy*, Vol. 4, 150. We think that this intentionality has a connection with Topçu’s concepts of *Irādah* (the will) and intuition.

the belief that philosophy is not a factual science. It cannot be based on the findings of the factual sciences, nor can it utilize the investigative methods typical of these sciences.¹⁸³ This is very important for our study because areas such as mind, perception, sensation, consciousness, self-consciousness, and intuition, which were left abstract even in classical positivism, are trying to be proved to be concrete in this new developing plane. Thus, we will return to these concepts frequently.

On the other hand, the modern scientific paradigm led to social anomie and individual alienation, a phenomenon referred to as “the crisis of the modern man” in Europe. European thinkers like Kierkegaard (1813-1855), Dostoevsky (1821-1881), Kafka (1883-1924), and Nietzsche (1844-1900) sensed the imminent decay of society due to an underlying “spiritual crisis” that scientific data alone could not resolve. This crisis stemmed from the “new and unlimited perspectives” provided by modern science, which introduced the concept of “an infinite universe with indefinite limits,” leaving “no definite place for a finite man.” Kierkegaard saw this as central to modern existentialism, emphasizing the need for “transcendence into the realm of faith.” Both Kierkegaard and Dostoevsky distinguished Christianity from “Christendom,” with Kierkegaard arguing that the “true community” could only be found in the “Eternal and invisible Church” through the “individual’s encounter with God.” In contrast, Nietzsche and later nihilists considered the remnants of Christianity to be a drain on spiritual resources.¹⁸⁴ Against this deeper philosophical milieu, it can be summarized that the backbone of modern approach to sciences in praxis is to independently establish a knowledge from metaphysics in empirical way, denying transcendent elements in it, or labelling them as “unknowable” and deeming them to be of no practical usage.¹⁸⁵

Another approach to epistemology pertains to the contention that we create truth by discovering the principles that govern our perceptions. Adhering to the “principle of experience,” which posits that experience defines the limits of truth and knowledge, reality cannot be meaningfully discussed as existing independently of our cognitive abilities. This approach equated reality with actual truth, suggesting that the most accurate depiction of reality is one that provides the greatest number of lawful

¹⁸³ Plotkin, 2, 5, 17, 20; Husserl, *The Idea of Phenomenology*, 1; Ayer, *Logical Positivism*, 9-10; Carnap, *Psychology in Physical Language*, in Ayer, *Logical Positivism*, 165.

¹⁸⁴ William Hubben, *Dostoevsky, Kierkegaard, Nietzsche & Kafka*, (New York: Touchstone, 1997), 40, 41, 48, 164-65, 173.

¹⁸⁵ Guénon, 40-41.

connections in experience. Such connections are validated when a causal explanation consistent with a specific theory can be provided for the phenomena in question.¹⁸⁶

The validity of scientific realism depends on whether it uniquely unifies and harmonizes our cognition and if it is consistently supported as science advances. Realism upholds the principle of natural causes, explaining nature through itself, with particulars of nature caused by other particulars. In contrast, idealism explains phenomena by principles outside the natural realm, suggesting that the mind produces particulars. The key difference lies in their approach to accounting for experience: idealism attributes it to the mind of the knower, while realism attributes it to natural causes.¹⁸⁷ It is precisely at this point that the observer's position plays the most critical role in revealing or describing what we call truth, in both respects. At least, in the context of Einstein's findings on general relativity, the following maxim emerged: the observer's situation affects the interpretation of the outcome of an experiment.¹⁸⁸

It is worth remembering once again that, in quantum physics, which Einstein never accepted, the observer himself is effective in the results of the findings, apart from the observation.¹⁸⁹ Quantum theory has also shown that "reductionism" and "ineffectiveness of the observer to the observation," which are the dominant paradigms in the methodology of natural sciences, are not possible. In this theory, causality is not rejected, but it does reject absolute determinism.¹⁹⁰ In addition, when we talk about the

¹⁸⁶ Jan Faye, *Niels Bohr: His Heritage and Legacy Anti-Realist View of Quantum Mechanics*, (London: Kluwer Academic Publishers, 1991), 211.

¹⁸⁷ Faye, 212.

¹⁸⁸ Albert Einstein, "*Relativity: The Special and General Theory*," translated from German by Robert W. Lawson, (London: Routledge, 2006), xii, xiii, xiv, 14, 27-29, 63-65, 73-75; Holton, 368, 386-387. Polanyi, 10-11; Barbour, *Religion in an Age of Science*, 109-110. It should be noted that until 1911, when others began to express it this way, Einstein did not (probably deliberately) choose the expression "*Relativity*" in his works, but rather the opposite expression "*Invarianten theorie*," but the debates would lead him to the acceptance of "General Theory of Relativity." See, *Ibid*, 380-381. To see an example of how an observer's reference frame or perspective might influence their interpretation of physical phenomena, which indirectly touches upon the role of the observer's individual situation (and subjectivity), see Øyvind Grøn and Sigbjørn Hervik, *Einstein's General Theory of Relativity with Modern Applications in Cosmology*, (New York: Springer, 2007) 192; Rainer Dick, *Advanced Quantum Mechanics: Materials and Photons*, (AG: Springer International Publishing, 2nd ed., 2016), 588.

¹⁸⁹ Bohr, 1-2; To see the result of the mirror experiment as an example, R. Shankar, *Principles of Quantum Mechanics*, (New York: Springer, 2nd ed., 1980) 299-300; Rainer Dick, 587-588; Holton, 378; Barbour, *When Science Meets Religion*, 78-80; Barbour, *Religion in an Age of Science*, 115. On the case of having exaggerated and erroneous analogies in the connection established between quantum theory and Eastern mysticism, see John Polkinghorne, "*The Quantum World*," in, Robert J. Russell, William R. Stoeger, S. J., and George V. Coyne, S. J., "*Physic, Philosophy and Theology: A Common Quest For Understanding*," (Vatican: Vatican Observatory, 3rd ed., 1997), 340-341.

¹⁹⁰ Taslaman, 9; Barbour, *Religion in an Age of Science*, 113; Arthur Peacocke, *Creation and the World of Science: The Re-Shaping of Belief*, (Oxford: Oxford University Press, 2004), 57.

role of the observer, the subject inevitably comes back to the abstract concepts such as mind, consciousness and self-consciousness. When we remember the concept of strong determinism is closely associated with the idea of predictability, which is the essence of science: the effort to present the concepts such as mind and consciousness, which we have previously expressed, in a material sense that can be better understood.¹⁹¹

Moreover, ironically, W. V. Quine contributes here. According to him, each person actually perceives the universe differently from each other. Thus, he says he had to deal with the question: How can minds come together and communicate with each other in a harmonious way in concepts, theories, and more obviously, in external occasions, despite these differences?” After asking these questions, he gives the answer, which we can call quite debatable regarding to our dissertation, as “instincts and natural selection.”¹⁹² In the context of these abstract concepts, does this predictability have to be material or is there any predictability in this area? Do they operate in a deterministic manner or are they non-algorithmic in nature? We examine these concepts comparatively later, both in the context of Topçu, and in the light of scientific data.

3.2 POSITIVISM AND NATURALIZED EPISTEMOLOGY

There is a clear relationship between classical philosophy and classical positivism in the sense that the latter is influenced by the former. In order to see this relationship, it is useful to briefly look at the transition from classical philosophy to positivism, and later on logical positivism and naturalized epistemology, focusing on intuition and its role.

3.2.1 Methodological Differences

It would be appropriate to recall how and on what basis the positivist methodology was needed in the Western tradition, which was the precursor to its global acceptance during the last two centuries. Descartes is considered the initiator of this new/modern philosophy in Europe, especially his prioritization of “objectively valid results,” which

¹⁹¹ Peacocke, *Creation and the World of Science*, 57.

¹⁹² W.V. O. Quine, *I, You, and It: an Epistemological Triangle in Knowledge, Language and Logic: Questions for Quine*, ed. Alex Orenstein and Petr Kotatko, (Dordrecht: Kluwer Academic, 2000), 1-6; W.V. O. Quine, *From Stimulus to Science*, (Massachusetts: Harvard University Press, 1995), 19-21, 69-72, 89; W.V. O. Quine, *Word and Object*, xix-xxi.

became the priority in *natural* philosophy and philosophy *per se*. In his work “*Discourse on Method*,” Descartes sardonically remarked:

I shall not say anything about Philosophy, but that, seeing that it has been cultivated for many centuries by the best minds that have ever lived, and that nevertheless no single thing is to be found in it which is not subject of dispute, and in consequence which is not dubious, I had not enough presumption to hope to fare better there than other men had done. And also, considering how many conflicting opinions there may be regarding the self-same matter, all supported by learned people, while there can never be more than one which is true, I esteemed as well-nigh false all that only went as far as being probable.¹⁹³

The process that began with Descartes questioning how successful or unsuccessful classical philosophy (mainly based on Plato and Aristotle) had been in revealing the truth, or the possibility of a method of knowledge that everyone would agree on, evolved over time into “the scientific paradigm” that has taken its current form.¹⁹⁴ As alluded to previously, we see similar criticisms of classical philosophy in Al-Ghazālī. In the Islamic world, Al-Ghazālī is still frequently regarded as the man who blocked the activity of philosophy and reason.

If we look beyond modern stereotypes and look at Al-Ghazālī’s own actual words, he criticized the classical philosophers’ methods with their own methodology, and tried to show that they could not present any definitive evidence on the issues they argued as they claimed; consequently, he continued or critiqued philosophy and philosophical methods, rather than closing the doors of the Muslim mind, as his detractors attempt to claim.

¹⁹³ René Descartes, *Discourse on Method and Meditations*, translated from French by Elizabeth S. Haldane and G. R. T. Ros (New York: Dover Publications, 2003), 7-8.

¹⁹⁴ Descartes, *Discourse on Method and Meditations*, 7-8; René Descartes, *Principles of Philosophy, translated from Latin* by Valentine Rodger Miller and Reese P. Miller, (Dordrech: D. Reidel Publishing Company, 1982), xvii, xviii, xix-xx, 8-9; Edmund Husserls, *Cartesian Meditations: An Introduction to Phenomenology*, translated from German by Dorion Cairns (Boston: Martinus Nijhoff Publishers, 1982), 4-5; Auguste Comte, *Positive Philosophy of Auguste Comte*, translated from French by Harriet Martineau, (New York: Cambridge University Press, Vol. II., 2009), 315-316, 425, 464, 510; Auguste Comte, *A General View of Positivism*, translated from French by J.H. Bridges (New York: Cambridge University Press, 2009), 10-11. Comte argues that it is difficult to assign an exact date to the revolution in science, acknowledging that scientific progress has always been ongoing, particularly since the contributions of Aristotle, the Alexandrian school, and the introduction of natural science by the Arabs into Europe. However, he identifies a pivotal period about two centuries ago, during which the scientific revolution gained momentum through Bacon’s principles, Descartes’ ideas, and Galileo’s discoveries. In his words, this era marked the rise of positive philosophy, challenging the dominant superstitious and scholastic approaches that had previously obscured scientific inquiry. See Comte, *The Positive Philosophy of Auguste Comte, Vol. II.*, 157-158; Auguste Comte, *The Positive Philosophy of Auguste Comte*, translated from French by Harriet Martineau, (Kitchener: Batoche Books, Vol., I, 2000), 32.

This issue is very important to the framing of modernity, as analogous ideas promulgated by Descartes are heralded as the harbingers of modern science in the West and in the Muslim world, while they are held to be reactionary impediments to material civilization in modernist doctrines when they come from a Muslim philosopher. Aside from the issues of how the discussion is framed, the actual issues are open to discussion, including the degree to which classical philosophy being problematically inadequate in revealing the truth led to positivism.

As described by Auguste Comte, overcoming the metaphysical paradigm of Platonic and Aristotelian reasoning is the most important building block of modern thinking. In this case, while Al-Ghazālī was explaining the solar eclipse event, in his justification for why we should trust scientific and mathematical data, and how rejecting them would harm both science and faith, he expressed the inadequacy of the method of classical philosophy used by Ibn Sīnā and Fārābī in revealing the truth, approximately 500 years before Descartes.¹⁹⁵ Moreover, as described previously, the concept of explaining natural events with the sciences of mathematics and astronomy was alien to the West, even 500 years after Al-Ghazālī, which was the fundamental reason why Descartes was considered so revolutionary.¹⁹⁶

¹⁹⁵ Akdogan, 35, 37, 39; Comte, *A General View of Positivism*, 34-35; Comte, *The Positive Philosophy of Auguste Comte, Vol. II.*, 157-158; Comte, *The Positive Philosophy of Auguste Comte, Vol. I.*, 28; Descartes, *Principles of Philosophy*, xix-xx; Al-Ghazālī, *Tahafut Al-Falasifah*, translated from Arabic by Sabih Ahmad Kamali, (Lahore: Pakistan Philosophical Congress, 1974), 6, 133; For the same justification, see Al-Ghazālī, *Al-Munqidh Min Al-Dalal*, translated from Arabic by R. J. McCarthy, S. J., (Louisville: Fons Vitae, 2000), 30-33. For example, according to Al-Ghazālī, the philosophers are incapable of providing a valid and obvious rational proof that the human soul is a spiritual essence that exists by itself, does not occupy a place, is not a body, does not enter the nature of a body, is not attached to the body and is not separate from it. Also, according to philosophers, the soul consists of the living force (Nafs-i Hayawānī) and the rational force (Nātika). Nafs-i Hayawānī is divided into two parts: the motive power and perceptive the power. Contrary to the philosophers' definitions of the soul, Al-Ghazālī states that one of these two forces is related to the nervous system and the other to the brain system, and that these matters can only be known through the science of medicine, not through the philosophers' method of reasoning, and he states that when there is a malfunction in the brain, these forces do not work. See Al-Ghazālī, *Tahafut Al-Falasifah*, 197-199.

¹⁹⁶ The question arises of why Al-Ghazālī's theories, which foreshadowed the "modern" scientific methodology 500 years before Descartes, did not turn into a scientific paradigm, while the reiteration of such ideas by Descartes did. In our opinion, the answer to this question should be examined in detail sociologically, philosophically, and historically. Another issue is that Al-Ghazālī emphasizes that these issues should not be opened to the public (reflecting that the idea that unqualified people should not be allowed to access such information and engage in such intellectual disputations is one of the most criticized issues in Al-Ghazālī). Al-Ghazālī's abhorrence of populist metaphysical speculations reflects his social beneficence, whereby he anticipated that the uncontrolled spread of this methodology would lead to a strict materialism and a rejection of spiritual values, with the domination of a science in which religions, values, and social harmony would disappear, as empirically demonstrated by the West since the early modern period.

Nevertheless, the political implications of the “Scientific Revolution” crystallized in the writings of Descartes was germane to the ascending political and socio-economic doctrines of individualism and materialist exploitation, which laid the foundation for a new effort to organize the world, where the order became more mathematical and mechanical, based on “apparent certainty of mathematic and Newtonian physics.”¹⁹⁷ The mathematical sciences, along with the use of experience and experiment, existed before the Scientific Revolution among dabblers who might be consider experimental scientists, especially during the Middle Ages. However, such practices were kept separate from formal natural philosophy as taught in universities; indeed, they often occurred in the realm of the occult (e.g., alchemists trying to transmute metals into gold, which later evolved into modern chemistry). The key development during the Scientific Revolution was not the *invention* of new methods, but rather social and cultural changes that elevated the status of mathematical and practical sciences (i.e., the methods were deemed to be expedient for the emerging merchant class).¹⁹⁸

This allowed for their integration with the elite natural philosophy of medieval universities. This amalgamation, closer to what we now recognize as modern science, led later generations to view this period as a Scientific “Revolution” due to the development and establishment of what is typically considered the defining methodology of science. This scientific method is primarily composed of two key elements: the application of mathematics and measurement to provide accurate descriptions of how the world and its components function, and the use of observation, experience, and, when required, carefully designed experiments to achieve a deeper understanding of nature.¹⁹⁹

Once considered the gateway to understanding nature’s enigmas, “pure” mathematics underwent a distinct segregation from the practical application of mathematics in formulating empirical laws. With the “Age of Reason” and experimental science, mathematics began to denote all rational thought that seemed inherently true; whereas reality was encapsulated in the occurrences of the world, perceived as contingent, meaning they were simply what happened to be the case. By the end of the

¹⁹⁷ Randall, JR., 112; Copleston, *A History of Philosophy, Vol.1.*, 8; Copleston, *A History of Philosophy, Vol. 3.*, 288-290.

¹⁹⁸ Henry, *The Scientific Revolution*, 14.

¹⁹⁹ *Ibid*, 14.

19th century, a fresh positivist ideology emerged, challenging the notion of inherent rationality within scientific theories, dismissing such assertions as metaphysical and even mystical. Ernst Mach (1838–1916), who established the Vienna school of positivism, spearheaded this notion, advocating that scientific theory serves merely as a practical abstraction of experience.²⁰⁰

According to Comte, human development progressed through three main stages. Initially, humans perceived nature through a supernatural, mythological lenses. Next, a metaphysical stage emerged, where nature was understood as the result of obscure forces. Finally, in the positivist era, nature is viewed in a phenomenological sense rather than as abstract and vague forces. It should be noted that Comte did not completely abandon metaphysics; rather, he tried to adapt it to the new period in which he found himself, and he accepted that all sciences that have passed through theological and metaphysical stages bear traces of their legacies. He labelled these stages as “Ancient, Mediaeval, and Modern,” respectively and believed that this three-stage law could be applied to understand all aspects of reality (and even the understanding of ethics).²⁰¹

Unlike classical positivists such as Comte, the Vienna Circle was not concerned with abstract philosophical discussions, and instead focused on creating a unified, universal concept of science, prioritizing the rejection of all metaphysical ideas. They argued that philosophical questions, including those related to ethics, morals,

²⁰⁰ Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Theory*, (London: Routledge, 2005), 8; Schlick, *Positivism and Realism*, in Ayer, *Logical Positivism*, 85-86; Otto Neurath, *Sociology and Physicalism*, in Ayer, *Logical Positivism*, 295; Russell, *Logical Atomism*. 31-36; Carnap, *The Old and the New Logic*, 135-136; Cobb-Stevens, 22; Babich, *Philosophies of Science: Mach, Duhem, Bachelard*, In Kearney, *Twentieth-Century Continental Philosophy*, 147-148, 152-153; Polanyi, 8, 11. There is a point we would like to draw attention to here; while these developments were taking place in the West, the use of mathematics in science was not a new situation in the Islamic world. In John Herman’s words, amid the expanding geographical world, the people of the Middle Ages sought scientific knowledge in the scholarly libraries and universities of the Arabs. As the West began to emerge during the early Middle Ages, the centre of Muslim culture shifted from the Eastern Caliphate, where it was displaced by fervent reformers, to Moorish Spain, whence the initial knowledge of Aristotle’s major works seeped into Europe via monks and other Christian pupils of Muslim teachers. However, the Muslims had also preserved something from the ancient world in which Aristotle, despite his brilliance, was lacking—mathematical and mechanical sciences. The Christian tradition embraced Neo-Platonic mysticism while neglecting its mathematical aspects, whereas the Muslims valued both equally. Consequently, when universities emerged in Christendom, they discovered that Alexandrian science had not only been preserved in Spain, but also significantly advanced. See Randall, JR., 208-209; Aygun Akyol, ‘Jabir Ibn Hayyan’s Classification of Science and Its Place in Islamic Epistemology’, *Marife*, Vol. 18, No. 1, (Summer, 2018): Passim.

²⁰¹ Comte, *A General View of Positivism*, 13-15, 34-35, 41-44; Comte, *Positive Philosophy of Auguste Comte, Vol., I*, 27-28; Comte, *Positive Philosophy of Auguste Comte, Vol., II*, 28-29, 157-158, 218, 525-526; Marjorie Silliman Harris, *The Positive Philosophy of Auguste Comte*, (PhD. Thesis, Cornell University), 30; James Fieser, Samuel Enoch Stumpf, *Philosophy A Historical Survey with Essential Readings*, 355-356; *International Encyclopaedia of the Social Science*, 2nd ed., “Positivism.”

epistemology, and particularly metaphysics, should be excluded, since they cannot be verified through experimentation. From the perspective of knowledge theory, they viewed assumptions about the reality of the external world as meaningless, along with ideas of absolute and self-sufficient entities, since these cannot be proven to exist independently of external experiences.²⁰² Although neo-positivism claims to advocate for a purely objective and rigorous positivism, its doctrines are reminiscent of an esoteric sect. For instance, clear distinction is drawn between science and metaphysics, logical and factual truths, and verified and unverified facts and theories, which can or may not be revised.²⁰³

According to Thomas S. Kuhn (1922-1996), if we consider history apart from “anecdote or chronology,” even our current perception of science may undergo a radical transformation through inquiring history of science. In regard to this, he distinguished between “science” and “the history of science,” pointing out the importance of the latter in establishing the methodology of the former. Today’s science methodology (i.e., positivism), which has already become an established paradigm, was originally only one among many competing scientific schools. Viewed from a historical perspective, alternative schools of science, such as metaphysical traditions, originally stood alongside positivism, and may be considered at least as scientific as positivism in themselves. Therefore, while we customarily define positivism as the accepted or agreed-upon pattern, this does not necessarily mean that the schools outside the paradigm are unscientific. Indeed, certain schools are more successful in solving certain scientific problems than others, and the success of a paradigm in addressing a certain facet of a certain problem does not mean that the problem has been completely resolved. According to Kuhn, as in other schools, metaphysics is an integral part of the methodology of science. However, positivism has not been successful in integrating metaphysics into the new paradigm, by trying to reduce science itself the field of

²⁰² Barbour, *Religion in an Age of Science*, 4-5; Ayer, *Logical Positivism*, 9-10; Babich, 147-149; James Fieser, Samuel Enoch Stumpf, *Philosophy A Historical Survey with Essential Readings*, (New York: McGraw-Hill Education, 9th ed., 2015), 362, 366; Comte, *A General View of Positivism*, 13; *The Encyclopaedia of Philosophy*, “Logical Positivism.”

²⁰³ Ayer, *Logical Positivism*, 3, 10, 14, 16-17; See also, Russell, *Logical Atomism*, in Ayer, *Logical Positivism*, 31-32; Carnap, *The Elimination of Metaphysics Through Logical Analysis of Language*, in Ayer, *Logical Positivism*, 60-61; Schlick, *The Turning Point in Philosophy*, in Ayer, *Logical Positivism*, 54, 56-57. *The Encyclopaedia of Philosophy*, “Logical Positivism”; Thomas S. Kuhn, *The Structure Of Scientific Revolutions*, (Chicago: The University of Chicago Press, 3rd ed., 1996), 11, 18, 24.

mathematical experimentation and observation,²⁰⁴ whereby quantitative research based on numerical data comprises “hard” science, while other epistemologies concerned with different types of data and insights are contemptuously deemed to be of less worth by a materialist, capitalist culture. Besides, according to Kuhn, mere experimentation and observation cannot determine scientific belief or stance, as even a haphazard element is always a formative component of the beliefs held by a particular scientific community at a particular time:

Normal science is predicated on the assumption that the scientific community knows what the world is like. It often suppresses fundamental novelties because they are necessarily subversive of its basic commitments.²⁰⁵

In this context, Kuhn defines what he describes as “scientific revolutions” as “science” itself destroying a theory it formerly put forward, by constructing another theory that is incompatible with it. In this case, it can be said that what is called “truth” depends on what a particular group considers or does not take into consideration as a problem. According to him, since “both fact collection and theory articulation became highly directed activities,” the work of men who are not from the approved paradigm is usually ignored. Kuhn sees this scientific paradigm as an “attempt to force nature into the preformed and relatively inflexible box provided by the paradigm.”²⁰⁶

Between the 1920s and 1940s, logical positivist philosophers asserted that scientific discourse sets the standard for all meaningful language. They claimed that the only meaningful statements apart from abstract logical relations are empirical propositions verifiable through sensory data (i.e., experimental outcomes). According to them, statements in ethics, metaphysics, and religion are not “true” or “false,” but are meaningless pseudo-statements, being merely expressions of emotion or preference, without cognitive significance. This perspective excluded whole areas of human language and experience from serious discussion, since they could not be verified by scientific means. However, critics argued that sense-data do not provide an

²⁰⁴ Kuhn, 8, 10-12, 15-17, 20-21, 23-24; Akdogan, 5-7, 28; Ayer, *Logical Positivism*, 8, 10-12.

²⁰⁵ Kuhn, 5.

²⁰⁶ Kuhn, 1, 3, 5, 6, 8, 15-17, 18-19, 23-24; The knowledge we gain through experimentation and observation is not the whole truth of things. On John Locke’s explanation, see Douglas A. Ollivant *The Politics of Realism, Locke, Maritain, and Hallowell on Liberalism and Knowledge*, [in Douglas A. Ollivant, *Jacques Maritain and the Many Ways of Knowing* (Washington: American Maritain Association, 2002)], 167; John Locke, *An Essay Concerning Human Understanding* (Oxford: Oxford University, ed., Peter H. Nidditch, 1975), 539.

unquestionable foundation for science, as they are already conceptually organized and influenced by existing theories. Furthermore, while the positivists dismissed metaphysical questions (and traditional or religious answers), they frequently assumed a materialist metaphysics themselves.²⁰⁷

3.2.2 Empiricism-Positivism and Intuition

Galileo, Descartes, Boyle, Newton, and other early modern scientific thinkers supported a key distinction between primary (objective, measurable) and secondary (subjective, unmeasurable) qualities, which became foundational for modern philosophy. This dualistic distinction helped shape science into an objective, universal, and secular pursuit, by stripping away notions of purpose and life from the natural world and removing any notion of animism from nature. They argued that primary qualities (i.e., which “represent the original properties of matter or external world”), like geometric properties, inherently exist in nature, and have an objective existence. Conversely, they contend that secondary qualities—such as colour, pain, hardness, tickling sensations, and bitterness—are purely mental constructs that exist only in the human mind, interpreted subjectively. Through these lenses, nature was seen as a mechanical and purposeless “cosmos,” which contrasted sharply with Aristotle’s organic and purposeful universe. Also, main target of philosophy changed through aiming to correctly analyse primary qualities to be compatible with science. This led to “the turning point of philosophy” with the new scientific methodology.²⁰⁸ In this case, the approach to abstract concepts such as mind perception and intuition would also change in this direction.

On the other hand, as we have already stated, classical positivism did not completely deny the metaphysical elements in the process of acquiring knowledge. Descartes, who laid the foundations of today’s scientific methodology, gave a special place to the mind when explaining the principle of acquiring knowledge. He emphasized the role of intuition in the functioning of the mind and the ability to make deductions. For example, understanding the true nature of a piece of wax cannot be achieved

²⁰⁷ Ian G. Barbour, *Religion in an Age of Science*, 5-6.

²⁰⁸ Schlick, *The Turning Point in Philosophy*, in Ayer, *Logical Positivism*, 54-56; Akdoğan, ix-x, 51, 99-100, 109; Robert N. Proctor, *Value-Free Science* (Massachusetts: Harvard University Press, 1991), 7, 39-40, 54-56, 59, 263; Albert Einstein, *Ideas and Opinions*, translated from German by Sonja Bargmann (New York: Crown Publishers, 1954), 268.

through the senses (e.g., vision, touch, and imagination) alone, but through the mind. Although the wax may seem familiar and its various properties can be perceived through sensory experiences, its essence is only grasped by the intellect. This mental perception can vary in clarity, depending on how focused one's attention is on its elements. The understanding of the wax is an intuitive act of the mind, not only a sensory experience.²⁰⁹

As can be seen, Descartes gave a clear place to the mind's power of drawing conclusions and the function of intuition in his approach to mathematics and acquiring knowledge. According to him, the act of gaining knowledge is a combination of intuition and deduction. Concerning any topic we intend to explore, we should not focus on what others have believed, or what we speculate ourselves; instead, we must rely on what we can clearly and distinctly grasp through intuition or deduce with certainty, as this is the only way to obtain true knowledge. Intuition, as described here, is not based on the unreliable senses or deceptive imagination (i.e., the popular connotations of "intuition" as an intangible perceptual power), but rather on a clear mental focus that leaves no room for doubt (i.e., the cognitive way in which one derives meaning from stimuli encountered). The result is an undeniable understanding that comes from reason, even more certain than deduction because of its simplicity. For instance, intuition allows us to grasp truths like our own existence or the properties of shapes (e.g., a triangle has three sides, a globe has one surface).²¹⁰ We can say that the meaning Topçu attributes to intuition is similar to that of Descartes, and in fact what is meant here is "consciousness." It is something to which the mind is subject, and which cannot be doubted.²¹¹ Descartes emphasizes the importance of clear and distinct intuition, especially in mathematical inferences.²¹²

Mathematical objects are merely concepts, mental idealizations created by mathematicians, often inspired by the apparent order in the world around us. Despite being mental constructs, these mathematical concepts often seem to possess a profound

²⁰⁹ Descartes, *Discourse on Method and Meditations*, 76-77.

²¹⁰ René Descartes, *Rules for the Direction of the Mind*, translated from Latin by Elizabeth Anscombe and Peter Thomas Geach, in Elizabeth Anscombe and Peter Thomas Geach, *Descartes Philosophical Writings*, (Upper Saddle River: Prentice Hall, 1971), 153, 155-157, 162; Harold H. Joachim, *Descartes's Rule For the Direction of the Mind*, (London: George Allen & Unwin Ltd., 1957), 25, 27-28, 32.

²¹¹ Joachim, 29; Unlike Topçu, he differentiates the faculty through which the intellect perceives and understands from the one that makes judgments by affirming or denying, and in this case, will and intuition are separated.

²¹² Descartes, *Rules for the Direction of the Mind*, 162-163; Joachim, 31-33.

reality beyond the thoughts of individual mathematicians. It is indeed “meaning,” not just blind algorithmic computation, that gives mathematics its substance.²¹³

When it comes to mathematics, we can talk about John Locke and his approach to intuition. According to Locke, in geometry, there are “ways” that allow us to display the relationships among the involved ideas. The ability to represent our geometrical ideas through “visible and lasting marks” refers to the intuitive nature of the science. Diagrams on paper are faithful representations of ideas in the mind, free from the ambiguity that words might carry. A drawn angle, circle, or square is clear and unchangeable, allowing for careful examination and repeated review without altering the underlying ideas. Locke maintains that mathematical knowledge is part of our broader understanding of idea relations. Although mathematical ideas are formed without direct reference to actual existence, the knowledge they provide is still “real.” Locke reconciles this by asserting that the objective reality of space is guaranteed by the simplicity of the idea, which we did not create ourselves. Geometers focus on the properties of figures in space, which are ideals rather than merely ideas. Propositions proved about perfect shapes, like perfect circles or rectangles, remain true even if these perfect shapes do not exist in reality. This knowledge is “true and certain even of real things” because real things correspond to the archetypes in the mind. Therefore, we do not need to find a perfect circle to validate our geometrical knowledge; we just need to show its real possibility. Our ideas of geometrical figures are so complete and self-contained that their consistency in reality is assured when they are consistent as ideas.²¹⁴

We see that, similar to Descartes, Kant, as an “Enlightenment” thinker, who built a bridge between rationalism and empiricism, looks for a method “on which everyone will be obliged to agree” and “its essential demand is certainty and clarity,” instead of emphasizing the value of speculative reasoning for its own sake. Also, he describes metaphysics as a battlefield of endless debates.²¹⁵ He brought up for discussion the difficulty of talking about pure metaphysics in this case, since the mind cannot be independent of the phenomenal world, which is the field it operates on, and therefore

²¹³ Roger Penrose, *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics*, (New York: Penguin Books, 1991), 97, 105, 110.

²¹⁴ Gibson, 40-41, 43-44.

²¹⁵ Kant, *Critic of Pure Reason*, 99, 102, 109-110.

even the metaphysical knowledge it produces will ultimately originate from the material world.²¹⁶

Kant, who does not eliminate the role of metaphysics in understanding the material world, underlines here the mathematics he mentions within the scope of metaphysics, as Descartes and Locke did. According to him, mathematics and physics are the two theoretical forms of knowledge derived from reason that aim to determine their objects *a priori*. All transcendental cognition focuses not primarily on external objects but on the *a priori* concepts that shape our understanding of objects in general. Mathematics does this entirely in a pure manner, while physics does so partly in a pure way but also relies on sources of knowledge beyond reason. However, he underlines the change in the approach to mathematics, which was previously characterized as purely metaphysical, was something revolutionary. What we understand from Kant is that, as a result of this development, reason and nature became dependent on each other.²¹⁷

Therefore, Kant proposes a way to use metaphysics effectively in natural science. Here, like his predecessors, he does not ignore the role of intuition. Kant speaks of “intuition of objects” when he grounds *a priori* cognition. According to him, in this case there must be complete harmony between intuition and object. He logically concludes that, if knowledge is completely operated in the object, it becomes difficult to speak of the *a priori*. The *a priori* must be compatible with objects, and this means, in a sense, that we cannot go beyond objects in our knowledge of the world.²¹⁸

Kant sought intuition in the harmony of the *a priori* and sensation and rejected the idea that “we would gain knowledge of things solely through pure reason,” he asserted instead that knowledge is only possible by applying categories to pure or empirical data, which are organized by the forms of intuition. There is a subtle detail here pertaining to *the self*. Our abilities for intuition and conceptualization follow

²¹⁶ Ibid, 101.

²¹⁷ Ibid, 107, 108-110, 130-134; Like Locke, Kant also underlines the relation mathematic and intuition. He says, mathematics provides an excellent illustration of how far we can advance with *a priori* knowledge, independent of experience. While it deals with objects and knowledge only to the extent that they can be presented in intuition, this fact is often overlooked. This is because the intuition involved can also be given *a priori*, making it difficult to differentiate from a purely abstract concept. See *ibid*, 129.

²¹⁸ Kant, *Critic of Pure Reason*, 111-112, 115, 144; The intuition that Kant generally talks about is sensory intuition, but Kant also accepts the existence of “intuitive cognition” as a type of immediate knowledge. However, according to him, this is not a faculty that humans can acquire, it is a faculty that can only be attributed to God. Nevertheless, he underlines the existence of pure intuition. In mathematics, the synthesis is guided by *a priori intuition*, allowing all inferences to stem directly from pure intuition; *Ibid*, 665.

distinct forms, principles, or laws that we can understand, and these serve as the foundation for metaphysical knowledge. This is really important, because we can talk about how things are reflected to us, not what they really (objectively) *are*. Therefore, in his understanding, reality can be different from what is reflected to us.²¹⁹ This is, in a way, the philosophical basis for adopting the principle of constantly searching for reality rather than completely surrendering to determinism.²²⁰

As for Auguste Comte, firstly, he highlights the core principle of Positive Philosophy: that all phenomena follow unchanging natural laws. Rather than searching for the causes or purposes (first or final), which cannot resolve questions about origins, the focus should be on discovering and understanding these natural laws and minimizing their number. Positive Philosophy emphasizes analysing the conditions and relationships of phenomena through patterns of succession and resemblance. It also provides a rational way to understand the logical processes of the human mind, which have been previously sought through unsuitable methods (like metaphysics).²²¹

According to Comte, Positive Philosophy offers the only rational method for understanding the logical laws governing the human mind, by examining intellectual functions both in their static (organic) and dynamic (action-based) aspects. Comte criticizes traditional psychology, which attempts to understand the mind by observing it in isolation from causes and effects. He argues that such introspective methods are flawed because the mind cannot observe itself accurately while active. Positive Philosophy, building on the work of pioneers like Bacon and Descartes, emphasizes observation and experimentation in understanding human cognition, opposing speculative introspection. Comte concludes that true knowledge of intellectual processes comes from studying the practical application of scientific methods, not abstract theorizing although stating that metaphysics has an aspect that leads to positive science. However, Comte talks about deduction and induction, which Descartes also associates with intuition, as a necessity of the nature of obtaining knowledge²²² and he divides mathematics, which is the basis of all sciences, into abstract and concrete. This

²¹⁹ Kant, *Critic of Pure Reason*, 13, 19, 36, 112, 115, 144.

²²⁰ In conclusion, we can say that the quantum theories that has deserved the Nobel Prize have become scientific fact as a result of such an effort, because if we had surrendered completely to determinism, accepted it absolute, such a path would not have been sought.

²²¹ Comte, *Positive Philosophy of Auguste Comte, Vol., I*, 31, 35, 228.

²²² Comte, *Positive Philosophy of Auguste Comte, Vol. I.*, 35-37, 61-64, 220, 126, 224-225; Comte, *A General View of Positivism*, 26-27, 41-42, 46-47, 53, 238, 330.

abstract character maintains its existence in all situations and is completely independent of the existence of objects. The “Concrete” process is specific, focusing on experimental, physical, and observable phenomena, while the “Abstract” process is general, a combination of transcendental analysis in the “rational base of all sciences/all positive knowledge,” involving purely logical and rational thinking. In mathematics, the Concrete aspect is based on analysing elements from the external world, while the Abstract aspect revolves around a sequence of logical and rational deductions. From a historical perspective, Mathematical Analysis emerged from the study of geometrical and mechanical facts; however, logically, it operates independently of these sciences. Analytical ideas are universal, abstract, and simple, forming the foundation upon which geometrical and mechanical concepts are based.²²³

On the other hand, Comte believes that human experience does not encompass all that occurs in the universe, and suggests that there might be phenomena beyond the understanding of even more advanced minds. However, he does not contribute significantly to developing the idea of the relativity of human knowledge, which acknowledges the limits of what we can know.²²⁴ The progression of an individual’s mind reflects, and indirectly supports, the development of humanity’s collective intellect. Comte asserts that both individual and societal thinking start from the same point, with each stage in a person’s mental growth corresponding to a significant era in human intellectual history. A person typically begins with theological thinking in childhood, transitions to metaphysical thinking in youth, and matures into a natural philosopher in adulthood. This pattern, observed in many, is both evident from experience and backed by theoretical reasoning.²²⁵

The heart, which has a significant effect on the mind, and directs it in the theological period, is not completely ignored in the positive period. The intellect should guide and support the heart, rather than be completely controlled by it. When these two aspects of our nature—intellect and the heart—are balanced in this way, true harmony can finally be achieved.²²⁶ Both individual happiness and societal well-being depend more on emotional well-being (the heart) than on intellectual prowess. True harmony

²²³ Comte, *Positive Philosophy of Auguste Comte, Vol. I.*, 61-64; Auguste Comte, *Positive Philosophy of Auguste Comte, Vol. II.*, 525-526.

²²⁴ Harris, 12; Comte, *Positive Philosophy of Auguste Comte, Vol. I.*, 63-64.

²²⁵ Comte, *Positive Philosophy of Auguste Comte, Vol. I.*, 29.

²²⁶ Comte, *A General View of Positivism*, 19-21.

in human nature can only be achieved when affection takes precedence over reason and even over action. This balance highlights the importance of emotions in guiding life, more so than pure intellect or activity.²²⁷

Comte views reality as being composed of isolated objects existing outside the reach of human thought. For him, the true essence of what lies beyond observable phenomena is not a central concern. Instead, Comte is focused on understanding the function and regularities of these phenomena rather than their ultimate nature. He asserts that we can only truly understand nature in terms of simple phenomena, while complex entities remain beyond our full comprehension. His approach emphasizes the limits of human knowledge and the importance of studying observable functions over speculative metaphysical inquiries. Nevertheless, once we systematically organize abstract laws that describe different types of activity, our understanding of each specific system of existence moves beyond mere empirical knowledge, even though many concrete laws may remain unknown. This transition marks a shift from purely observational understanding to one grounded in theoretical principles, although some specific details may still elude us.²²⁸

Comte, who places analytical thought (and in fact Descartes' deductive method) at the basis of his positivist theory of knowledge, does not try to describe or justify this place, like Kant or Descartes, but merely states that human reason is incapable of doing so. We would have liked to hear something from Comte about the mainland of epistemology, which is place of perception, consciousness, self-consciousness, intuition, but it is also quite sufficient to admit that this cannot be done with pure positivism. This part is very important for our study, because the classical positivist approach changes exactly here. Naturalist epistemologists did not stop there, and claimed that the area of these concepts was also "concreted" or, to put it more clearly, *could be concreted*.

As stated before, with Mach, modern positivist methodology began to put a clear distance between itself and metaphysics. Unlike his predecessors, Mach (d. 1916), who laid the foundations of scientific methodology in its current sense, completely rejected abstract elements in knowledge such as the *a priori*. Mach's elementalism, also referred

²²⁷ Comte, *A General View of Positivism*, 14-15.

²²⁸ Harris, 12; Comte, *A General View of Positivism*, 14-15, 42; Auguste Comte, *Positive Philosophy of Auguste Comte, Vol., II*, 70-72, 218, 525-526, 531-532, 542-543.

to as his “sensationalism,” rejects traditional notions of “the self” or subject as separate entities experiencing “sensations.” Instead, Mach’s view dissolves the distinction between the subject and the sensations, aligning the two in a continuous framework of perception and experience. He argues that *the self* is not a distinct, underlying substrate but a collection of elements that combine both physiological and psychological processes with the physical world.²²⁹ An organic connection can be discerned between this approach of the intellectuals of logical positivism and the doctrine of naturalized epistemology. Therefore, we need to look at the theory of naturalized epistemology and its relationship with intuition and the basic concepts of epistemology since classical philosophy.

3.2.3 Naturalized Epistemology and Intuition

Albeit he was from a later generation, W. V. O. Quine (1908–2000), the founder of naturalized epistemology, was a close associate of Vienna Circle intellectuals (as with Mach), and the new scientific analytical method he pioneered can be evaluated as a continuation of this cultural movement.²³⁰ Quine, like the logical positivists, held that knowledge is based on experience and empirical observation. However, he disputed the distinction between “analytic truths” (those that are true by virtue of meaning alone) and “synthetic truths” (those that depend on facts about the world), relating to epistemological issues discussed above (especially with regard to Descartes, Comte, and Kant). Quine argued that this separation was vague and untenable, thereby challenging a fundamental idea of logical positivism. His criticisms, especially of the analytic-synthetic divide, are considered a turning point that contributed to the decline of logical positivism and helped pave the way for modern approaches in the philosophy of science. This is examined in detail in the following section.

²²⁹ Babich, 152-153. This understanding’s role in the theoretical basis of naturalized epistemology, as previously introduced, is discussed in detail in section 3.6.

²³⁰ Babich, 147.

3.3 GENERAL VIEW ON NATURALIZED EPISTEMOLOGY

3.3.1 Overview

In her preface to Quine's book "*Word and Object*," Patricia Smith Churchland opines that the discussion is about: "conceptual analysis" in the necessary truth about the way the things are, the way the mind works and if there is any *a priori* truth. If scientific progress continually reshapes our understanding of concepts, could this apply to fundamental, personal ideas such as knowledge, free will, consciousness, self-consciousness and intuition? Should we view metaphysics as merely a set of questions science has yet to resolve—and perhaps, in the same way, reconsider epistemology and philosophy of mind?"²³¹

Certain theological doctrines or philosophical concepts, such as free will and self-consciousness, have a direct or indirect impact on research in the neurosciences and social sciences. Regarding this, advances in neuroscience have improved understanding of how the brain constructs perceptual images from retinal input, how it learns and retains information, and how it makes decisions—developments that align with what Quine anticipated it would eventually accomplish. From this perspective, concepts such as self, essential self, intuition, and mind, whose "reality" is on completely slippery ground, can arguably be reduced to the empirical field.²³² It must be stated clearly that this view entails the vanishing the essence of philosophy, in other words, the "hara-kiri of the philosophy."²³³ Thus, these issues cease to be solely a problem of philosophy, and instead bring theological and philosophical problems face-to-face with science, as has been the case from the very beginning. More specifically, "Philosophy of Mind" and "Cognitive Psychology" intersect as two distinct fields with unique historical backgrounds and analytical methods, yet they share the same central focus of studying the mind.²³⁴

²³¹ Quine, *Word and Object*, xi.

²³² Philip Clayton, "Neuroscience, The Person, and God: An Emergentist Account," *Zygon*, Vol. 35, No. 3 (September 2000), 614-615; W. V. O. Quine, *Word and Object*, xii-xiii.

²³³ Paul T. Sagal, *Naturalistic Epistemology and the Harakiri of Philosophy*, In Abner Shimony and Debra Nails (ed.), *Naturalistic Epistemology: A Symposium of Two Decades*, (Dordrecht: Reidel Publishing Company, 1987), 321; If empirical science relies on induction, then, because induction itself lacks justification, natural science cannot be established as true knowledge. In this case, we can say, due to its nature, science cannot make a claim about ontological reality. We can say that due to its method, instead of examining "Being" as a whole, it can examine it one by one in innumerable sections and make claims about the parts it examines; *Ibid*, 322.

²³⁴ James Hamptaon, "Epistemology and Cognition: A Review," *Mind & Language*, Vol. 2, N0. 3 (January 1987), 264; *Word and Object*, xiii.

However, let us state that there has been a difference in approaches to naturalized epistemology. Contrary to the doctrine of its founder, Quine, naturalized epistemology is categorized into three forms: “replacement naturalism,” “substantive” or “moderate naturalism,” and “cooperative naturalism.” They define the connection between empirical science and epistemology in different ways.²³⁵

3.3.2 Replacement Naturalism

According to this categorization, *Replacement Naturalism* associates with Quine, suggesting completely replacing traditional epistemology with scientific disciplines like psychology, viewing epistemology as entirely empirical. In this case, the study of human cognition should focus not on an abstract concept of the “human mind,” whether viewed as a blank slate or as filled with innate ideas. Instead of this, it should focus on the rich, varied domain of human practices—social, technological, artistic, and scientific. This approach suggests understanding cognition by examining embodied actions and the artifacts that express these actions, rather than internal mental or brain-based representations. Cognition, then, is seen as arising through external symbols, like artifacts, rather than primarily through mental representations.²³⁶ According to this replacement thesis, epistemology, or something similar, naturally becomes a part of psychology and, therefore, a branch of natural science. Hilary Kornblith (b.1954) describes this as the most radical view in naturalistic epistemology.²³⁷

In the previous section, we stated that in the basis of classical empiricism, there was the acceptance of the existence of a process such as “*a priori*,” understanding and perception that is independent of phenomena, of matter of fact. Since Kant, this situation has been considered that analytical judgment (based on *a priori*) and synthetic judgment (based on *a posteriori*) are two fundamentally separate areas. However, he offers the third way, namely synthetic judgment, based on “synthetic *a priori*,” gained by pure

²³⁵ Richard Feldman, “Naturalized Epistemology,” *Stanford Encyclopedia of Philosophy*, (Jul 5, 2001), 1, 4-7; Kornblith, *What Is Naturalistic Epistemology*, In Kornblith, *Naturalizing Epistemology*, 3; Huaping Wang and Xiaoming Sheng, “Cooperative naturalism,” *Frontiers of Philosophy in China*, Vol. 2, No. 4 (October 2007), 608; Rysiew, 9; Amirah Albahri, *A Framework Understanding Naturalized Epistemology*, (Ph.D. Thesis, The Florida State University, 2011), 11-12.

²³⁶ Albahri, 18-20; Feldman, 81, 168; Antony, *Naturalized Epistemology and the Study of Language*, In Abner Shimony et al., 235, 243-244, 249; Wartofsky, *Epistemology Historized*, In Abner Shimony et al., 357-358.

²³⁷ Kornblith, *Introduction: What Is Naturalistic Epistemology*, In Kornblith, *Naturalizing Epistemology*, 3-4.

intuition and pure reason.²³⁸ Before moving on to Quine's criticisms of modern empiricism, it is useful to briefly touch upon modern empiricism's understanding of these elements in knowledge.

Up to logical positivists, judgments have been categorized as "analytic" or "synthetic" based on the relationship between the subject and predicate. Analytic judgments occur when the predicate is already contained within the concept of the subject, revealing inherent connections through analysis without adding new information. Synthetic judgments, in contrast, connect a predicate to the subject that lies outside its concept, thereby expanding knowledge by introducing new information. Analytic judgments clarify and order concepts already given, while synthetic judgments amplify them. Analytic judgments are those where the predicate is already contained in the subject's concept. For example, the statement "All bodies are extended" is analytic, because the idea of extension is inherent in the concept of "body." Conversely, synthetic judgments introduce new information not contained in the subject's concept. For instance, "All bodies are heavy" is synthetic because heaviness is not inherently part of the concept of "body" and adds new knowledge.²³⁹

We can say that the most important element that changed in the transition from classical positivism to modern positivism was the approach to the definition of *analytic-synthetic* and *a priori-a posteriori*. Although analytical propositions are propositions that we can verify or falsify in nature, without the need for experimentation and observation, they have been begun to be understood as propositions that are not purely rational and intuitive, and which can be shown as factual propositions, unlike Kant.

Logical positivism's critique of philosophy begins with rejecting the metaphysical claims that philosophy provides knowledge about a reality that transcends the realms of science and common sense. In this understanding, metaphysical statements, even those related to the phenomenal world, cannot be verified or falsified. Although Kant stated that human understanding was inadequate in metaphysical matters and determined the limits of reason, he made the impossibility of transcendental

²³⁸ Kant, *Critique of Pure Reason*, 13, 19, 62, 131-132, 157-260, 665; W. V. O. Quine, *From A Logical Point of View Logico Philosophical Essays*, (New York: Harvard University Press, 2nd ed., 1961), 20; Moritz Schlick, *General Theory of Knowledge*, translated from German by Albert E. Blumberg (New York: Springer, 1974), 73-74.

²³⁹ Kant, *Critique of Pure Reason*, 107, 109, 127, 129-133, 136-137, 140-141.

metaphysics a matter of empirical reality, not of logic as modern positivists claimed.²⁴⁰ In this sense, modern positivists redefined Kantian terms such as the analytical-synthetic expressions and *a priori–a posteriori* expression patterns that are the basis of today's science in a different format.

From this point of view, a proposition is considered meaningless (either as a tautology or pseudo-proposition) if its truth or falsehood does not influence or conflict with any possible experience. It has no empirical significance and lacks practical value in determining knowledge. Thus, metaphysical propositions do not mean anything because they are not phenomenally, through observation and experiment, verifiable or falsifiable statements. However, in the matter of fact, theoretical propositions that we cannot yet verify or falsify due to limited possibilities are different from this because the possibility of empirical verification or falsification is open when the conditions are met.²⁴¹

In this new understanding, it was thought that philosophy should be separated from metaphysics. The whole task of philosophy is to clarify concepts. Physics is at the forefront of all sciences because it involves subject-matter and quantitative certainty. All statements with factual significance are empirical hypotheses, whose purpose is to establish guidelines for predicting and anticipating future experiences. This implies that every empirical hypothesis must relate to some actual or potential experience. If a statement has no connection to any experience, it cannot qualify as an empirical hypothesis, and thus lacks factual content. This aligns directly with the principle of verifiability. The nonsensical nature of metaphysical utterances (as viewed by the naturalized epistemologist) arises not just because they lack factual content, but also because they are not *a priori* propositions. The *a priori* propositions that philosophers consider as important criteria for claims of certainty are nothing but tautologies. Thus, modern positivism defines metaphysical sentence as one that claims to present a

²⁴⁰ A. J. Ayer, *Language Truth and Logic*, (London: Penguin Books, 1936), 13-15; Rudolf Carnap, *Logical Syntax of Language*, (London: Routledge, 2001), 278-279; Moritz Schlick, *Philosophical Papers*, ed. Henk L. Mulder and Barbara F. B. Van De Velde-Schlick, (Dordrecht: D. Reidel Publishing Company, Vol, II, 1979), 95-97.

²⁴¹ Ayer, *Language Truth and Logic*, 16-17; Carnap, *Logical Syntax of Language*, 282-284; Moritz Schlick, *General Theory of Knowledge*, 74-78; Richard L. Mendelson, *The Philosophy of Gottlob Frege*, (New York: Cambridge University Press, 2005), 135-139.

meaningful proposition but, in reality, does not qualify as either a tautology or an empirically testable hypothesis.²⁴²

Any word or proposition, a sentence or a word as a part of sentence, has no meaning if that is not factual. For a word to be factual, it must refer to the thing or proposition that expresses it and it must have sensible appearance. The idea that non-sensible substances are separate from their sensory appearances is merely a matter of linguistic and grammatical expression. What philosophers call “substance” is thought of as something that has a separate existence independent of sensory appearance. However, this is the mistake resulting from the belief in the existence of non-existent entities arises from the mistaken assumption that every word or phrase used as the subject of a sentence must correspond to a real entity.²⁴³

We can know geometric axioms by pure reasoning, independent of experimentation; this knowledge can be falsified or verified; and we can use this knowledge in experimental methods. Nevertheless, this is not secure, because this ability cannot provide us with certain and necessary information about the factual propositions. Thus, according to this understanding, there is no *a priori* knowledge of reality. Truths of pure reason, valid independently of experience, lack factual content, and are merely tautologies. While tautologies can guide empirical knowledge-seeking, they do not themselves provide information about matters of fact or reality. This means that such propositions, being tautologies, do not provide information about actual matters of fact but instead serve as formal guides in the pursuit of empirical knowledge.²⁴⁴

Therefore, analytical statements (i.e., sentences expressed *a priori*) are materially based on linguistic and logical systems, not on metaphysical and abstract mental processes. The sole business of philosophy is to clarify thoughts and propositions.²⁴⁵ Although epistemology itself is not a science, it is still a functional activity in that it analyses scientific theories and concepts. In this activity, Moritz

²⁴² Ayer, *Language Truth and Logic*, 23-26, 64-65; Schlick, *General Theory of Knowledge*, 81-83; Moritz Schlick, *Philosophical Papers*, 91, 93-95; Carnap, *Logical Syntax of Language*, 277-278.

²⁴³ Ayer, *Language Truth and Logic*, 24-27; Schlick, *Philosophical Papers*, 95; Carnap, *Logical Syntax of Language*, 278.

²⁴⁴ Ayer, *Language Truth and Logic*, 77-80, 83; Carnap, *Logical Syntax of Language*, 279; Schlick, *Philosophical Papers*, 95-97.

²⁴⁵ Ayer, *Language Truth and Logic*, 64, 73, 75-76, 83-85; Carnap, *Logical Syntax of Language*, 2, 8, 39-40, 101-102, 281-283; Schlick, *Philosophical Papers*, 168-170, 172.

Schlick also acknowledges the function of intuition.²⁴⁶ In this case, we can say that logical positivists are not interested in the first principle of knowledge. Even though they accept “intuition” as the starting point of knowledge, they consider it unreliable because it cannot be demonstrated factually.²⁴⁷ This situation is very important for our thesis, because, as we will see in detail in Topçu, in our opinion, intuition is the starting point of knowledge and guides all our processes of knowledge.

The abandonment of metaphysics eliminates the notion that philosophy’s role is to construct a deductive system based on first principles. While deductive reasoning remains essential, philosophers cannot justify positing such principles as the foundation for a complete depiction of reality, as the existence of such “first principles” cannot be substantiated. The rejection of metaphysics liberates philosophy from the idea that its role is to construct a deductive system based on assumed “first principles.” It would be not consistent to derive all our knowledge about the universe from a system of knowledge based on “first principles,” and *a priori* truths, because these are tautologies, and the laws of nature are merely hypotheses that can be refuted by experiment not by necessary truths or general propositions.²⁴⁸

However, Ayer states that the issue of how logical and mathematical truths can be known independently of experience is a matter of epistemology, not of historical discovery or psychology. He expresses that their truths can be known without the need for experimental verification.²⁴⁹ Does this lead us to an “*a priori* intuition,” as in Auguste Comte’s statements about calculus? Quine, the most important figure of Replacement Naturalism, claims that modern empiricism holds two dogmas whose one of them the distinction between analytic and synthetic propositions, which has been handed down since Kant, is a dogma.²⁵⁰

To put it briefly, an analytic proposition that is considered logically true can be written as “no unmarried man is married.” However, it is also possible to write the proposition using synonyms, such as “No bachelor is married.” The important point here is that the dictionary meaning of the expression bachelor as “unmarried man” is the result of a lexicographer’s work. In other words, it is the result of a scientific

²⁴⁶ Schlick, *Philosophical Papers*, 172-174.

²⁴⁷ Moritz Schlick, as a member of logical positivism, supports this inferring, Moritz Schlick, *General Theory of Knowledge*, 81-83; Schlick, *Philosophical Papers*, 91.

²⁴⁸ Ayer, *Language Truth and Logic*, 28, 64-65; Carnap, *Logical Syntax of Language*, 171-172, 274-278.

²⁴⁹ Ayer, *Language Truth and Logic*, 68.

²⁵⁰ Quine, *From A Logical Point*, 20.

experimental activity. That is, in this case, the analytical proposition “no unmarried man is married” can also be written in synthetic terms as “no bachelor is married.” In a way, synthetic propositions can be transformed into analytical propositions by using synonymous expressions. To Quine, this synonymy is an important element here because what we call analytical expression is based on these pre-existing synonyms and despite not entirely and not always, these are interchangeable. In this case it is difficult to determine the boundaries of analytic and synthetic propositions. Moreover, the acceptance of such a distinction is a matter of metaphysical belief rather than an extra-empirical dogma.²⁵¹ Here, a Kuhnian question comes to mind. If such a distinction is a matter of metaphysical belief, then, in one way or another, scientific activities until Quine included metaphysical elements. Would this situation harm the scientific value of the scientific activities carried out until then?

The verification theory of meaning is one of the most important foundations of logical positivism. The meaning of a proposition is explained by the empirical or logical conditions of how it is verified. In this context, Quine evaluates reductionism, which refers to the approaches that “all kinds of meaning can be reduced to sense data, experiment and observation,” as another dogma of modern empiricism.²⁵² The verification theory of meaning suggests that the meaning of a statement lies in its method of empirical confirmation or refutation. An analytic statement is a special case that is confirmed regardless of circumstances. The theory defines cognitive synonymy of statements as their equivalence in empirical confirmation methods. From this, synonymy of other linguistic forms can be derived, based on their interchangeability in statements without changing meaning. Analyticity, then, can be defined in terms of a statement’s synonymy with a logically true statement, without needing to reference synonymy of other linguistic forms.²⁵³

To reduce all meaning to experiment and observation, that is, to sense data, is to claim that meaning or verification is based on individual propositions. However, according to him, language and the knowledge system operate as a holistic manner. A single proposition cannot be verified in isolation; instead, it can be evaluated together with the rest of our entire theoretical and conceptual knowledge system. He states that

²⁵¹ Ibid, 20, 22-25, 27-28, 31-32, 36-37.

²⁵² Ibid, 20,

²⁵³ Ibid, 37-38.

no proposition can be expressed entirely in terms of sensory data. For example, the meaning of a physical theory depends not only on observations but also on the theory's mathematical structure, conceptual framework, and relationship to other theories. In a holistic manner, Quine argues that the dogma called the "Analytic-Synthetic Distinction" is a consequence of radical reductionism. He argues that this distinction is untenable and therefore it is impossible to establish a clear hierarchy of verification among propositions in language. Quine questioned the distinction between the analytic and the synthetic, claiming that the boundary between these two categories was untenable. According to him, even analytic statements are in fact dependent on our linguistic and conceptual frameworks and are not completely independent of experience, whereas synthetic expressions are not expressions that can be completely reduced to sense data; and are meaningful with theories and concepts.²⁵⁴

Expressing this in this way means that knowledge obtained through sense data cannot be verified again through sense data, or rather, it cannot be reduced to sense data for verification. Here, a conceptual and cognitive knowledge operation process emerges. Even in empirical knowledge, there is a theoretical conceptual process, it is not pure empirical knowledge. However, the conceptual, cognitive, theoretical framework that Quine relies on in empirical knowledge is not independent of experience unlike Kant's metaphysical conceptual foundation. According to him, this conceptual foundation emerges experientially through an evolutionary natural selection process, which he grounds it with Darwin's plausible explanation to him. Theories, language, logic, mathematics, concepts are pragmatic tools derived from experience but functioning beyond experience. In Quine's metaphor, the epistemological foundation is like a network. While the central points in this network are relatively more stable (not absolute, but variable), synthetic expressions express the peripheral points and interact more with empirical data. No synthetic expression is completely isolated from this conceptual basis; with experience, synthetic expressions become meaningful through its relation to other cognitive systems and other propositions.²⁵⁵ This issue is very

²⁵⁴ Quine, *From A Logical Point*, 20-23, 28-30, 37-38, 41-42, 44; Quine, *Word and Object*, 62-66, 227, 230-236; W. V. O. Quine, *Theories and Things*, (Cambridge: Harvard University Press), 67, 70-72; W.V. O. Quine and J.S. Ullian, *The Web of Belief*, (New York: McGraw-Hill, 1970), 20-34; W.V. O. Quine, *Ontological Relativity and Other Essays*, (New York: Columbia University Press, 1969), 92-95, 106-107.

²⁵⁵ Quine, *From A Logical Point*, 42-44, 46; Quine, *Word and Object*, 2-4, 10, 51, 62-66, 68-69, 112, 145-147, 227, 230-236; Quine, *I, You, and It: an Epistemological Triangle*, 1-6; W.V. O. Quine, *Pursuit of Truth*, (Cambridge: Harvard University Press, 1992), 13-16, 47-52; Quine, *Theories and Things*, 20-

important for our thesis, because, this section contributes to the point that, based on Topçu, even the knowledge obtained through sense data and experimentation-observation is not entirely empirical, but contains analyticity in the logical positivist context and, in our opinion, contains an abstract, conceptual, especially intuitive functioning.

However, we can state that, while Quine seems to be proposing to eliminate the analytic-synthetic distinction and reduce philosophical activity to the realm of purely scientific activity, our humble suggestion is that, in the context of intuition, philosophical activity should not be confined to boundaries. Moreover, there is a contradiction in that Quine claims that all expressions (even synthetic ones) cannot be reduced to experience, and that these somehow contain elements separate from pure experience, such as conceptualization and theories, yet he ultimately accepts that these concepts and theories are also formed through pure experience. Does this not mean experiential basis that cannot be reduced to experience? In addition, from the perspective of our thesis, is the conceptual ground mentioned by Quine formed solely pure experientially?

It is certain that it is cumulative, but to characterize the contributions of divine religions and especially Islam in terms of Quine's conceptualization of "concept, theory" is problematic. Viewing the Qur'an (especially metaphysical concepts that exceed the limits of empirical language) as entirely empirical is not based on scientific evidence but on underlying metaphysical (i.e., materialist, anti-spiritual) assumptions (in other words, belief). In our opinion, Quine's difference with classical philosophers pertains to the choice between the belief that the conceptual ground consists entirely of pure concrete experience, and the belief that it is formed on a ground that additionally includes pure non-concrete experience. The related "non-pure concrete experience," whether it is revelation or intuition, is ultimately an "experience," since such experiences are manifest in the physical world (i.e., in language and meaning).

In fact, Quine does not reject the functionality of metaphysical concepts if they provide a benefit and within the framework of scientific rationality.²⁵⁶ This situation is also compatible with Quine's grounding in the pragmatic nature of his epistemological

21, 28, 67, 70-72; Quine, *From Stimulus to Science*, 20-21, 47, 50; Quine and J.S. Ullian, *The Web of Belief*, 20-34; Quine, *Ontological Relativity and Other Essays*, 86-87, 92-95, 106-107, 126-127, 134.

²⁵⁶ Quine, *From A Logical Point*, 44-46; Quine, *Word and Object*, 112, 251-254.

framework. Another issue, as we will discuss with regard to Topçu, is that in the process of gaining experience and gaining knowledge through this, there is a preference and acceptance process based on intuition. To give a rudimentary example of this, the Ottomans were a pre-eminent naval power for centuries, yet but their sense of being a maritime people or nation did not develop to the same extent as Polynesians or the British.

Moreover, with this new naturalized epistemology system, Quine aimed to clarify the explanation of the formations belonging to the field of mathematics and calculus and modern crisis between “Logisim” and “Intuitionism,” whose existence and truth we cannot deny cognitively, even though they are not empirical. According to him, Rudolf Carnap (1891-1970) aimed to solve this problem by reducing these formations that exist metaphysically to empiricism, but the ultimate solution to this is the naturalization of epistemology.²⁵⁷ Just as Quine criticizes that analytical expressions are reduced to empiricism, he also criticizes a similar reduction in mathematics. Abstract mathematics and geometric theories *exist* mentally (as axioms), but do not exist empirically; nevertheless, we are still sure of their truth. This causes epistemological confusion.

As described previously, for Kant, this field is purely intuitive, which guides us in making sense of synthetic expressions. This issue is very important for scientific epistemology, because mathematics itself is the basis of all sciences and for logical positivists, thus the need for a metaphysical basis for the reality of mathematics while denying the essential metaphysical nature of reality itself (as traditionally understood) was problematic for “scientism.” Put simply, anti-theist scientism (e.g., logical positivism) seeks to deny the ontological and epistemological claims of religion and traditional metaphysics on the basis of scientism, but the latter itself is based on fundamental metaphysical assumptions that are baseless according to the nature of scientism *per se*. The solution proposed to eliminate this confusion is again reductionism. The form of this problem in modern mathematics reappears with the dual nature of mathematics. Described by Quine as “conceptual” and “doctrinal” mathematics, the former relate to meaning, while the latter relate to facts. Conceptual

²⁵⁷ Quine, *Ontological Relativity and Other Essays*, 92, 93; Quine, *From a Logical Point of View*, 14-15; To see the term ‘intuitionism’ used to denote the attitude of conceptualists in their discussion of the “foundation of mathematics,” Quine, *From a Logical Point of View*, 125; Quine, *Ontological Relativity and Other Essays*, 108.

studies are more explanatory and clarifying in character, while doctrinal studies are probative. It was thought that if this abstract conceptual mathematics could be successfully reduced to doctrinal mathematics, the problem would disappear. However, Quine emphasizes that these two dimensions are interconnected: conceptual mathematics cannot be considered to be completely separate from doctrinal mathematics, nor the latter from the former (i.e., the bifurcation of two different kinds of mathematics is a conceit). According to Quine, conceptual mathematics can only be successfully reduced to set theory, and its complete reduction to logic is again problematic. Quine thinks that his naturalized epistemology theory will solve this problem clearly and successfully.²⁵⁸ This foundation culminates in his famous judgment: “philosophy of science is philosophy enough, and the refashioned logical underpinnings of science do not engender new philosophical problems of their own.”²⁵⁹

In our opinion, in a sense, reducing these metaphysical entities to empiricism means accepting the existence of metaphysical entities, even if indirectly. The same question comes to mind again: has the assumption that the field to which the concepts belong is a metaphysical field harmed the scientific nature of the scientific activities carried out until Quine? Or, from a Kuhnian perspective, is the epistemology that includes metaphysical elements, for example, the science produced by classical positivism, less *science* than today’s science?

Quine says, with clear and precise expressions, that science can *replace* philosophy, or rather, that it can meet all philosophical needs. According to him, the theory of naturalized epistemology includes philosophy into science. In addition, he says deductive, *a priori*-based philosophy cannot replace scientific certainty. There is no place for these in naturalized epistemology, and there is no need for them. But he establishes this justification in a rather subjective manner (i.e., in the form of “in my opinion, according to me”), without convincing or robust philosophical reasoning.²⁶⁰ Moreover, to better understand his approach, the following excerpt is illustrative:

I urged that objectual quantification, more than substitutional quantification, is in a sense parochial. Then so is the idea of being; for objectual existential quantification was devised outright for ‘there is.’ But still one may ask, and Hao Wang has asked, whether we do not

²⁵⁸ Quine, *Ontological Relativity and Other Essays*, 69-74.

²⁵⁹ W. V. O. Quine, “Mr. Strawson on Logical Theory,” *Mind*, Vol. 62, No. 248. (Oct., 1953), 446.

²⁶⁰ Quine, *Ontological Relativity and Other Essays*, 126-127; *Ibid*, 108.

represent being in an unduly parochial way when we equate it strictly with our own particular quantification theory to the exclusion of somewhat deviant quantification theories. Substitutional quantification indeed would not serve as an account of being, for reasons already noted; but what of intuitionistic quantification theory, or other deviations? Now one answer is that it would indeed be a reasonable use of words to say that the intuitionist has a different doctrine of being from mine, as he has a different quantification theory; and that I am simply at odds with the intuitionist on the one as on the other. When I try to determine the universe of someone else's theory, I use 'being' my way. In particular thus I might come out with a different inventory of an intuitionist's universe than the intuitionist, with his deviant sense of being, would come out with. Or I might simply see no satisfactory translation of his notation into mine and so conclude that the question of his ontology cannot be raised in terms acceptable to me.²⁶¹

The effort of scientific persuasion that empirical knowledge cannot be independent of the conceptual, cognitive, and theoretical field is not seen in the substantiation of Quine's claim that this field developed through evolution, and was ultimately formed concretely and empirically. Furthermore, must *a priori*-based justification necessarily replace science? Is it necessary to make a choice as "this or that" in the discussion?²⁶² As Quine himself often states, "this abstract conceptual field contributes to scientificness," which we mainly focus on. However, is not how that field was formed another issue apart from that?

For example, we can explain the conceptual field that Quine says is formed by natural selection in the context of Darwin, with Hegel's philosophy of history. In this context, in the historical process, the development of reason proceeds in the form of dialectical moment (i.e. contradiction-reconciliation, thesis, antithesis, synthesis in infinite progress under the control of the Absolute Spirit), as per Hegel. Or, from the perspective of the Islamic thought tradition, Ibn Sina and Al-Farabi referred to the "emanation theory" (*Nazariyyat al-Sudur*), whereby an explanation can be put forward

²⁶¹ Ibid, 108.

²⁶² Kuhn's revolutionary insight was that the "essential tension" between conservative and innovative scientific approaches is best maintained across a professional community, rather than within individual scientists. While individual scientists may exhibit both traditionalist and iconoclastic traits, Kuhn later emphasized that these traits are distributed among different members of the scientific group. Conservatives ensure that foundational concepts are thoroughly tested and not prematurely discarded, while innovators challenge these concepts with new ideas. This symbiosis fosters sustainable scientific progress, as communities adapt gradually and effectively to anomalies by integrating promising alternatives introduced by innovators. See the explanation the balancing "the essential tension between conservation and innovation in science for the collective advantages"; Fred D'Agostino, *Naturalizing Epistemology: Thomas Kuhn and the 'Essential Tension'*, (New York: Palgrave Mac Millian, 2010), 11-16.

that the conceptual field in which *a priori* knowledge and empirical knowledge may be formed by the influence of the “active intellect,” or is not formed *independently* of the influence of the active intellect (*al-’aql al-fa’al*). This theory explains the connection between the human mind and the cosmic order and how knowledge is transferred to the human mind with ontological and epistemological consistency.²⁶³

In addition, Allah (ﷻ) says in the Qur’an that He taught Adam (عليها السلام) to name objects, which has always been a fundamental archetype in Islamic and other Abrahamic epistemology.²⁶⁴ In other words, *naming* objects is a distinctive feature of human beings. Although the particular names given to things differ among languages (e.g., mountain, stone, tree etc.), the tendency and ability to name these objects *per se* is a feature granted to man by Allah (ﷻ), which is unique among carbon-based lifeforms. In this case, we can say that what is *a priori* is not the naming of an object individual but human’s urge and ability to name it. In addition, if natural selection positively influences our psychological mechanisms, it is more probable that it enhanced our receptivity to ‘common sense’ rather than to theoretical reasoning.²⁶⁵

More than this, even if we take natural selection as the basis in epistemology, it is also possible to position it ontologically in a different way than the one Quine borrowed from Darwin. The fundamental problem is about where one stands ontologically. In his treatise “*Tahdhib Al-Akhlaq and Al-Fawz Al-Asgar*,” the Islamic thinker Ibn Miskawayh, almost a millennium before Darwin, stated that the emergence of man on earth was the result of a process of evolution, which was not independent of

²⁶³ George Wilhelm Friedrich Hegel, *The Philosophy of History*, translated from German by J. Sibree, (Kitchener: Batoche Books, 2001), 22-36, 458-467; Ibid, *The phenomenology of Spirit*, translated from German by Terry Pinkard, (Cambridge: Cambridge University Press, 2018), 40-42, 57-59, 77-79, 120-122, 136-142, 204-205, 324-325, 388-389, 455-465; Ibid, *The Science of Logic*, translated from German by George di Giovanni, (New York: Cambridge University Press, 2010), 10-11, 45-55, 120-121, 196-201, 511-519, 602-606, 626-627; Al-Farabi, *Al-Madina al-Fadila*, translated from Arabic by Richard Walzer, (Oxford: Clarendon Press, 1985), 45-56, 89-105, 197-211, 219-228, 243-245, 277-286; Ibid, *Al-Farabi’s Philosophy of Plato and Aristotle*, translated from Arabic by Muhsin Mahdi, (New York: Free Press of Glencoe, 1962) [It is the part of translation of *Kitab al-Jam*], 13-25, 71-92, 127-129; Ibid, *The Political Writings Selected Aphorisms and Other Texts*, translated from Arabic by Charles E. Butterworth, (Ithaca: Cornell University Press, 2001), 29-31, 62-63; Ibn Sina, *Al-Shifa Al-Ilahiyat*, translated from Arabic by Michael E. Marmura, (Utah: Brigham Young University Press, 2005), xxi-xxiv, 11-13, 109, 145-147, 233-235, 276-278, 291-296, 315-318, 324-334; Ibid, *Avicenna’s Psychology: An English Translation of Kitāb Al- Najat, Book II Chapter VI*, translated from Arabic by Fazlur Rahman, (London: Oxford University Press, 1952), 33-35, 37-40, 95-99.

²⁶⁴ Al-Baqarah: 31-33; Al-Rahman: 4.

²⁶⁵ Huaping Wang and Xiaoming Sheng, 608.

God's knowledge. His final assessment on this issue is "Since this type of creation is more complex, it is more worthy of God's glory."²⁶⁶

Naturalized epistemology has different approaches. We examined Quine's approach, which is the most stringent of these, in detail. In fact, this was the most important part related to our thesis. However, in order to create a holistic perspective, it is useful to consider other approaches, albeit briefly.

3.3.3 Other Approaches

3.3.3.1 Substantive-Moderate Naturalism

Alvin Goldman (1938-2024), as the representative of Substantive or Moderate Naturalism, finds Quine's naturalized epistemology theory, which he says he does not support, radical, describing it as "scientific naturalism." According to him, this view treats epistemology as a branch of science in itself, and argues that epistemological statements are part of scientific discourse, which should be addressed using scientific methods. He then comes up with a more moderate form of "epistemological naturalism" that he advocates.²⁶⁷

Moreover, while Quine's naturalism embraces "methodological monism," treating epistemological questions as inquiries into the processes behind scientific beliefs, Goldman addresses criticisms by endorsing "methodological dualism" in the analysis of knowledge. He seeks to balance rejecting purely *a priori* approaches to

²⁶⁶ Ibn Miskawayh, *Tahdhib Al-Akhlaq*, translated from Arabic by Constantine K. Zurayk, (Beirut: Centennial Publications, 1968), 32-33, 57-65; Ibid, *Al-Fawz Al-Asghar*, (Beirut: Dar Al-Maktabah Al-Hayat, 1901) 20-21, 29, 32, 85-101, 116-117. Also, to see a system of thought that establishes a link between divine order and evolutionary development in examining the development of organisms from simple to complex, see Al-Farabi, *Al-Madina al-Fadila*, 107-109, 113, 135-144. We have determined that this work is preserved as a manuscript in the University of Michigan Library with the record number "3 9015 03946 4055." According to the findings of Dr. Elvira Wakelnig from the department of Classics and Ancient History in University of Warwick, in 2009, the oldest identified edition of Miskawayh's work named "*Fawz al-Asghar*" is this text. There is no information about who published this copy, which only has the year of publication and the note 'Beirut 1901.' Again, according to her findings, Ş. 'Udayma's edit (Tunis, 1987) generally refers to Esad Efendi's edit (Istanbul, Süleymaniye Kütüphanesi, 1933). That work is a compilation text under the title "Kitab Al-Hikma," which also includes "Fawz al-asghar," and contains summaries in some sections. Although this text is dated to the 17th or 18th century, it is stated that its fundamentals can be dated to the end of the 13th century. For instance, the Oxford, Bodleian, Marsh 539 version seems to be an incomplete text, dating back to the 13th century. For details, see, Elvira Wakelnig, "A New Version of Miskawayh's Book of Triumph: An Alternative Recension of Al-Fawz Al-Asghar, or the Lost Fawz Al-Akbar," *Arabic Sciences and Philosophy*, vol. 19, (2009), 84, 86-90, 92.

²⁶⁷ Alvin I. Goldman, "A Priori Warrant and Naturalistic Epistemology: The Seventh Philosophical Perspectives Lecture," *Philosophical Perspectives*, Vol. 13, (1999), 2; Ibid, *Epistemology and Cognition*, 181-184; Rysiew, 9, 39-41; Albahri, 5.

epistemic concepts while preserving uniquely philosophical methods distinct from scientific ones whereas he does not completely reject the *a priori* basis in knowledge. Contrary to Quine's integrated approach, Goldman views naturalized epistemology as a collaboration between two separate forms of inquiry namely epistemology and natural science, with philosophy offering an independent contribution to understanding knowledge.²⁶⁸

Goldman's main inclination to epistemology is that epistemology should involve multiple disciplines rather than being solely the domain of pure, *a priori* philosophy. While philosophy serves as the primary coordinator or leader in epistemology, various other fields, including empirical sciences, play significant roles in the overall effort. In this regard, epistemology has two branches: individual and social. Individual epistemology which he calls "primary epistemology" (with some sort of objective criterion) benefits from cognitive science, which explores the structure of the human mind/brain, crucial for understanding primary epistemology. Social epistemology (partly objective and partly socially subjective) draws on social sciences and humanities for models, facts, and insights into scientific, educational, and cultural systems.²⁶⁹ In a nutshell, Goldman's substantive naturalism is a middle-ground approach that blends traditional epistemological tools with empirical sciences. It is a restricted form of naturalism asserts that scientific methods are not involved in clarifying the meaning of epistemic terms or determining the appropriate norms for epistemological investigation.²⁷⁰

Goldman's moderate naturalism is divided into three branches: *Primary Epistemology*, which merges *a priori* conceptual analysis with empirical science; *Scientific Approach*, which redefines justification based on empirical (a posteriori) investigation; and *Epistemics (Rules)*, which employs empirical methods to examine various epistemological concepts. In primary epistemology, the main focus is

²⁶⁸ Paul Roth, The Epistemology of "Epistemology Naturalized," *Dialectica*, Vol. 53, No. 2, (1999), 88-90.

²⁶⁹ Goldman, *Epistemology and Cognition*, 1, 5-7, 9, 17-20, 68-76, 95-96; Ibid, "A Priori Warrant and Naturalistic Epistemology," 1-2; Ibid, *Knowledge in A Social World*, (New York: Oxford University Press, 1999), 4-11; Ibid, "The Relation between Epistemology and Psychology" *Synthese*, vol. 64, no. 1, (1985), 31-32; Paul Roth, 88-89.

²⁷⁰ Goldman, *What Is Justified Belief*. In Kornblith, *Naturalizing Epistemology*, 105-107; Jerry A. Fodor, *The Dogma that Didn't Bark (A Fragment of a Naturalized Epistemology)*, In Kornblith, *Naturalizing Epistemology*, 193-194, 212; Goldman, *Epistemic Folkways and Scientific Epistemology*, In Kornblith, *Naturalizing Epistemology*, 291; Roth, 90; Albahri, 25-27.

to develop theories that reflect and explain our intuitive, pre-theoretical understanding of knowledge.²⁷¹ This is achieved through the formulation of a justification theory called “process reliabilism,” which is initially grounded in *a priori* conceptual analysis. Subsequently, primary epistemology integrates process reliabilism with empirical insights from cognitive psychology. For Goldman, this plays an important role in explaining the connection between knowledge and truth, because knowledge is defined as a true belief generated through reliable processes, and justified belief is understood as a belief produced through similarly reliable means within time.²⁷²

From classical philosophy to the present day, the main elements of the theory of knowledge, that is, epistemology, have been belief, justification, truth, and rationality.²⁷³ In this context, Goldman examines the processes of knowledge formation, focusing these notions, from the perspective of both traditional epistemology and cognitive science. Thus, his primary epistemology both aligns with naturalistic approaches (i.e., scientific psychology), and it retains similarities to traditional epistemology. For instance, it relies on *a priori* conceptual analysis to construct the theories of primary epistemology and considers “pre-theoretic intuitions” as the ultimate standard for judgment.²⁷⁴

Social networks and relationships also have an important place in Goldman’s naturalistic epistemology. More precisely, he states that social interactions should not be kept separate from epistemology. One of the basic elements of epistemology is judgment. In this context, he claims that “journalism, law, politics, education, communication are crucial domains for accuracy of judgment.” Thus, in his criteria, Individual Epistemology ought to connect with cognitive sciences, while Social

²⁷¹ Goldman, *Epistemology and Cognition*, 7, 9, 44-48, 95-96, 103-104, 131-137, 157, 163-164, 172, 181-184, 378-380; Ibid, “*A Priori* Warrant and Naturalistic Epistemology,” 1-2, 4; Kornblith, *Beyond Foundationalism and the Coherence Theory*, In Kornblith, *Naturalizing Epistemology*, 142; Ibid, *Knowledge in A Social World*, 7, 15-7, 26-33, 44-45; Ibid, “The Relation between Epistemology and Psychology,” Passim; Ibid, “Epistemics: The Regulative Theory of Cognition,” *The Journal of Philosophy*, Vol. 75, No. 10, (Oct., 1978), 509-511; Albahri, 5-6.

²⁷² Goldman, *What is Justified Belief*, In Kornblith, *Naturalizing Epistemology*, 119-120; Ibid, “Epistemic Folkways and Scientific Epistemology,” In Kornblith, *Naturalizing Epistemology*, 293-295, 302-304; Ibid, *Epistemology and Cognition*, 26-27, 40, 44-49, 104; Ibid, “The Relation between Epistemology and Psychology,” 32-34; Ibid, *Discrimination and Perceptual Knowledge*, In Sven Bernecker, Fred Dretske, *Knowledge Regarding in Contemporary Epistemology*, (Oxford: Oxford University Press, 2000), 86-87.

²⁷³ Matthias Steup and Ram Neta, “Epistemology,” *Sandford Encyclopedia of Philosophy*, 6-9; Richard Feldman, *Epistemology*, (New Jersey: Prentice Hall, 2003), 3-5, 12-23; Edmund L. Gettier, “Is Justified True Belief Knowledge?,” *Analysis*, Vol., 23, Issue, 6, (June 1963), 121-123.

²⁷⁴ Goldman, *Epistemology and Cognition*, 4-9, 58-59, 66, 163, 170-173, 197-198, 284-285, 357; Ibid, “The Relation between Epistemology and Psychology,” 30; Ibid, “*A Priori* Warrant and Naturalistic Epistemology,” Passim; Ibid, “Epistemics: The Regulative Theory of Cognition,” 509-511; Albahri, 6.

Epistemology should integrate with social sciences and policy fields that examine knowledge within social and institutional frameworks, because for both of them, we have two basic needs that come with being human for acquiring knowledge; “curiosity and practical concerns.” With the method he calls “*veritistic* epistemology” (i.e., “orientation toward truth determination”), he examines the processes of deciding on reality that constitute knowledge in both individual and social epistemology. Regarding Social Epistemology, social practices gain importance in this sense.²⁷⁵

As can be seen, Goldman, unlike Quine, focuses on the psychological and sociological *context* of epistemology, rather than fundamental theory *per se*. We do not see the analytic-synthetic distinction here as in Quine. Goldman rather focuses on the concepts of belief, perception, reasoning, and justification, which are the basic elements of knowledge, and in this context, he does not reject *a priori*. But there is an important point here. While Quine openly challenges Kant’s metaphysics, he clearly shows where he stands ontologically. Although Goldman occasionally criticizes some of the claims of metaphysicians, and sometimes the views of scientists on metaphysics, he avoids these discussions, and focuses on the contribution of both metaphysics and science to epistemology.

3.3.3.2 *Cooperative Naturalism*

This branch uses psychology’s empirical results to address evaluative questions in epistemology and begins with insights from leading scientific theories, supposed as the modest form of naturalism to collaborate with hermeneutics to address epistemic problems. This approach focuses on adequacy for all possible cases rather than how people actually form beliefs, and on evaluating goals of epistemology necessarily with incorporating empirical findings from psychology.²⁷⁶

²⁷⁵ Goldman, *Knowledge in A Social Work*, viii-ix, 3-7; Ibid, *A Guide to Social Epistemology*, In Alvin Goldman and Dennis Whitcomb, *Social Epistemology Essential Readings*, (New York: Oxford University Press, 2011), 11-14, 30-31, 33.

²⁷⁶ Richard Feldman, “Naturalized Epistemology,” 1, 4-5; Huaping Wang and Xiaoming Sheng, 601, 608-609; Amirah Albahri, 62-64. In her doctoral thesis, Amirah Albahri divides Cooperative Naturalism under three subtitles: *Strategic Reliabilism*, represented by Michale Bishop and J.D. Trout; *Pragmatism*, by Stephen Stich; and *Natural Kind Theory*, by Hilary Kornblith. This classification shows different interpretations of how empirical science relates to epistemological inquiry in both traditional and natural approach. In our opinion, although there are differences of interpretation among these three approaches, they basically adopt the following view: cognitive science and psychology can contribute to the fundamental problems of epistemology such as belief, justification, perception, and reasoning in acquiring knowledge. However, as Kornblith himself stated, this categorization is shaped according to the relationship of naturalized epistemology with the science of psychology, the main purpose is to

When investigating the nature of knowledge, Kornblith focuses on two distinct and evident sources: perception and reasoning. Epistemologically, he first evaluates these two concepts regarding the nature of knowledge in the light of scientific data and then presents his philosophical attitude in this context. He highlights that the understanding of knowledge may need adjustment as new discoveries emerge because they might significantly pressurize on us to review our understanding knowledge. However, he thinks that the available data are sufficient to make a philosophical and scientific description of knowledge. It means that his approach to knowledge and epistemology is quite clear without needing any adjustment. Like Goldman, Kornblith describes knowledge as “true belief which is the product of a reliable process.” According to him, knowledge cannot precede our contact with the phenomenon. While Goldman prefers a traditional philosophy-based understanding of knowledge that can be tested by intuition, Kornblith, closer to Quine, prefers a scientization of knowledge, the knowledge as natural kind. To him, intuitions are essential for developing and applying epistemological theories, but they are not treated as an *a priori* or the ultimate authority for assessing these theories. In regard to cognitive science, evolutionary perspective has a significant role in explaining to acquire knowledge not only “human being” but also “nonhuman animals,” he says. From this perspective, the primary motivation for species to acquire knowledge is the “survival instinct.”²⁷⁷ However, as we said for Quine, he puts forward very subjective propositions about why we should accept this theory.

In Kornblith, intuitions remain a part of philosophical inquiry, even as theories progress. While earlier philosophical discussions, such as in the philosophy of mind, heavily relied on intuitions without reference to empirical data, modern approaches integrate empirical research while still involving intuitions about complex or

determine the position of psychology in naturalized epistemology. Nevertheless, since there is no need for such a category for our purpose, we will evaluate the subtitle of cooperative naturalism through Hilary Kornblith and his theory of natural kind, due to the fact that, to us, it is closer to Quine’s theory of naturalized epistemology. Basically, to Quine, knowledge is “natural kind,” which implies that it should only be a subject of “science,” and not subject to metaphysical speculation. See Hilary Kornblith, *Knowledge and Its Place in Nature*, 61-62 and *Ibid*, *Scientific Epistemology: An Introduction*, (New York: Oxford University Press, 2021), 137-144. Also, see Amirah’s categorization of Cooperative Naturalism, Albahri, 62-65, 84-87, 95-97.

²⁷⁷ Kornblith, *Scientific Epistemology: An Introduction*, 57-58, 129-130, 132, 137-144; *Ibid*, *Second Thoughts and the Epistemological Enterprise*, (New York, Cambridge University Press, 2019), 3-8, 14, 19-21, 65, 84-85; *Ibid*, *Knowledge and its Place in Nature*, (New York: Oxford University Press, 2002), 11-12, 61-63, 65-66; Albahri, 9.

unexplored matters. Concerning intuitions, he considers that they evolve into *theoretical judgments* as theories develop, but continue to play a role *as intuitions* in areas not yet fully understood. Differing from Goldman, Kornblith considers that the use of intuition is not tied to non-natural or *a priori* faculties, but is consistent with a naturalistic perspective. Moreover, against the argumentation that accepting justification in knowledge is implicitly to approve *a priori*, he puts forward that *a priori* standards of inference are often impractical or hindered by computational complexity, making them irrelevant to proper epistemic practice. To support the idea, he puts forward the statement “our judgments, feelings, and behaviours can be influenced by factors that we have never been aware.” In other words, he says that the fact that we cannot track it due to complexity does not mean that it has an unnatural structure. Besides, a naturalistic approach to belief acquisition, to him, rejects reliance on *a priori* intuitions about inference principles, treating the recognition of valid inferential patterns as an empirical matter. Furthermore, justified belief, according to naturalistic accounts, depends on reliable belief production and does not require explicit recognition of that reliability.²⁷⁸

On the other hand, Kornblith’s approach to *philosophy* is not entirely negative. To him, philosophy in modern time has consistently been shaped by scientific advancements, as these raise new philosophical questions and also deepen our understanding of key *philosophical* topics, such as the theory of knowledge. This interplay between science and philosophy is a recurring theme throughout history. Based on these statements, as we stated in Chapter 1, the contribution of philosophy to the development of science should not be ignored, and metaphysical-based traditional philosophy paved the way for today’s science, and still contributes to it. However, for naturalists, because *philosophy* is traditionally approached through *a priori* methods, this disjoins *philosophy* from (modern) science on account of naturalists that they reject it.²⁷⁹ Kornblith expresses the main argument for defending the normative aspect of knowledge: epistemology is that the criteria of knowledge are not things we discover that exist independently of us in the world such as water, gold etc. they are frameworks

²⁷⁸ Hilary Kornblith, *Scientific Epistemology: An Introduction*, 19-2; *Ibid*, *On Reflection*, (New York: Oxford University Press, 2012), 22-23.

²⁷⁹ Kornblith, *Scientific Epistemology: An Introduction*, 145-146; *Ibid*, *In Defense of Naturalized Epistemology*, In John Greco, Ernest Sosa, *The Blackwell Guide to Epistemology*, (Massachusetts: Blackwell Publishers, 1999), 164.

we construct and apply ourselves. Thus, accordingly, the methodology of philosophy at least in investigating knowledge (i.e., normative subjects about “how things ought to be,” not “subjects about how things are”) must be different from proper methodology in the sciences, because the characteristic of knowledge is that it is normative, and it would not be proper to put into operation the methods we use in science. However, Kornblith adds that knowledge is a “natural” (i.e., material) phenomenon, which can be studied using scientific methods. Indeed, it is already explored across various cognitive sciences, including psychology, neuroscience, linguistics, cognitive anthropology, cognitive ethology, and sociology.²⁸⁰

Additionally, he says, our inferential mechanisms are specifically designed to align with the fundamental characteristics of our world, functioning effectively because of this precise adaptation. Rather than revealing a flaw in our reasoning, this demonstrates how our inferences function effectively due to their shared structure with our perceptual mechanisms, being specifically adapted to the environments we commonly inhabit.²⁸¹ Human beings, from childhood to adulthood, reliably infer properties of natural kinds (i.e., way of conceptualizing natural kind), because these kinds are inherently uniform in specific ways. While it might seem that this sensitivity arises from extensive experience with the natural world, research by the developmental psychologists demonstrates that this responsiveness to the uniformity of natural kinds is innate, not learned. The natural world contains categories of objects that exhibit profound, law-based regularities typical of natural kinds, and we are inherently attuned to these patterns through our interactions with the world. Humans are innately attuned to these regularities, with a psychological makeup that reflects the structure of natural kinds.²⁸² In our opinion, Kornblith very carefully avoids using the concept of *a priori*, but while what classical philosophy defines as *a priori* he himself expresses as “innate, but natural kind,” which means the thing “prior to us” at least “prior to our birth.” Of course, what he emphasizes here is that it is “natural,” not “non-natural,” whether it is innate or *a priori*.²⁸³

²⁸⁰ Kornblith, *Scientific Epistemology: An Introduction*, 141; Ibid, *Knowledge and its Place in Nature*, 11-12, 16; Ibid, *In Defense of Naturalized Epistemology*, In John Greco, Ernest Sosa, 163, 166.

²⁸¹ Kornblith, *Scientific Epistemology: An Introduction*, 65-66.

²⁸² Kornblith, *Scientific Epistemology: An Introduction*, 75-76; Ibid, *On Reflection*, 55-66.

²⁸³ Kornblith, *The Role of Intuition in Philosophical Inquiry: An Account with No Unnatural Ingredients*, In Michael R. DePaul and William Ramsey, (ed.), *Rethinking Intuition: The Psychology of Intuition and Its Role in Philosophical Inquiry*, (Boston: Rowman & Littlefield Publishers, 1998), 129, 133-135.

Furthermore, Kornblith discusses the “replacement thesis,” which considers the relationship between psychology and epistemology. “Strong” replacement argues that psychology fully replaces epistemology, as Quine suggests, similar to how chemistry replaced alchemy. In contrast, “weak” replacement sees the two fields as complementary, preserving epistemology’s autonomy by addressing different questions with distinct methods. Kornblith rejects full Psychologism for its failure to connect descriptions of belief formation with epistemological guidance. Instead, he supports a moderate “ballpark Psychologism,” where epistemology identifies desirable belief-forming processes, and psychology investigates whether actual processes meet those standards. This approach assumes anti-scepticism, accepting that we already know many things.²⁸⁴

Amirah Albahri states that Kornblith should not be evaluated in the category of “replacement naturalism” like Quine. However, Kornblith clearly explains, especially in the “6.2 *What Is Knowledge*” section of his “*Scientific Epistemology*,” that there is no aspect of the norms of epistemology that cannot be explained by science; in other words, science can actually *replace* philosophy. To him, “it is a natural category, rooted in the world itself, rather than merely reflecting our thoughts or preferences about it.”²⁸⁵

In summary, Kornblith states that the basis of epistemology is the “survival instinct.” Here, the explanation of issues such as the issue of art, moral-ethic, synthetic-analytic truth, and the truth of abstract mathematics that we accept as existing in the mind but not in the external world, is the “survival instinct.”

Contrary to this, Richard Feldman highlights the importance of this type of methodology (i.e., involving scientific inputs in epistemology, which he calls “methodological naturalism”), and criticizes epistemologists who deny the scientific inputs on occurrence of knowledge, belief and justification. This epistemological method, which he calls “armchair epistemology,” involves evaluating counterexamples based on reflective judgments about knowledge or justified belief in hypothetical scenarios. However, Feldman, who puts forward “justification is internal” on the contrary to “justification is not internal,” expresses that internal factors determine some epistemic facts. It means “epistemological questions are questions of logic or justification, not causal or genetic questions.” Justification, understood in the traditional

²⁸⁴ Kornblith, *What Is Naturalistic Epistemology*, 3-11; Roth, 90.

²⁸⁵ Kornblith, *What Is Naturalistic Epistemology*, In Kornblith, *Naturalizing Epistemology*, 147-148.

sense, continues to be a crucial and necessary requirement for knowledge, which is sufficient to support internalism.²⁸⁶

We have seen that intuition has a place more or less in all kinds of knowledge methodologies, from metaphysicians to logical positivists, and the debate is about its nature, rather than its existence and importance. Is the nature of intuition an ontological or epistemological? In this case, it would be appropriate to evaluate the place of intuition in knowledge and its nature from different perspectives.

3.4 GENERAL VIEW ON INTUITION

There is no doubt that Quine has opened up a great area for philosophy and science consensus, albeit perhaps unintentionally, and has made great contributions to both science and philosophy. From the perspective of naturalized epistemology theory, Ernest Sosa states that the intuition that develops in every society will differ from each other. He even states that the intuition that develops in every individual living in a society will also differ from each other.²⁸⁷

3.4.1 Empirical and Philosophical Debates on Intuition

From a philosophical and scientific perspective, intuition has the property of being a point of reference for defending or attacking a particular philosophical view. For many thinkers, relying on intuition is the sole method available to explore the true nature of the various subjects that concern philosophers.²⁸⁸ We have previously discussed how the *self*, *consciousness* and *intuition* played a philosophical role in the history of philosophy since Descartes. However, when looked at more broadly, the involvement of intuition in reasoning goes back to a much earlier period in the history of philosophy.

In a holistic manner, an intuitive substructure is also seen in Socratic questioning. His approach is part of the “method of cases,” where a philosopher

²⁸⁶ Feldman, *Methodological Naturalism in Epistemology*, In John Greco, Ernest Sosa, 170; Ibid, *Justification Is Internal*, In Matthias Steup, John Turri, Ernest Sosa, *Contemporary Debates in Epistemology*, (Oxford: Wiley Blackwell, 2014), 337-339, 350; Also, to see about the internal nature of justification, Ibid, Richard Feldman. “Modest Deontologism in Epistemology,” *Synthese*, Vol. 161, No. 3, (2008), 339-355.

²⁸⁷ Ernest Sosa, *A Defense of the Use of Intuitions in Philosophy*, In M. B. Murphy, *Stich and his Critics*, (Oxford: Blackwell Publisher, 2009), 101-106; and to see the explanation of the limited role of intuition in epistemology, Bishop, *Reflections on Cognitive and Epistemic Diversity: Can a Stich in Time Save Quine*, in M. B. Murphy, 123-125.

²⁸⁸ Michael DePaul and William Ramsey, viii.

examines various scenarios to determine when an action or belief aligns with concepts like justice or knowledge. His method relies on intuitive judgments—spontaneous and non-theoretical responses to situations—and seeks to align these intuitions with broader theories. A mutual alignment between intuition and theory is seen in his method.²⁸⁹ In traditional epistemology, *common sense intuitions* are used as the ultimate standard to evaluate epistemological theories. George Bealer refers to this approach as the *standard justificatory procedure*. The process involves creating a theory of knowledge and justification, followed by thought experiments designed to test the theory against intuitive judgments. These intuitions, or *pre-philosophical beliefs*, serve as the final measure to either accept, modify, or reject the theory, with most core intuitions left largely unchanged throughout the evaluation.²⁹⁰

Regarding *a priori* or abstract concepts linking to intuition, some experimental findings are put forward by psychologists, which they think undermines the authority of philosophy. Accordingly, contrary to the view in traditional philosophy that concepts are represented by a set of “simple, necessary and sufficient conditions” and that concepts and categories have an *a priori* basis independent of experience, it is concluded that concepts are formed through widespread use and will change according to context, and contrary to what is believed in traditional philosophy, they are not necessary and definitive. However, here again, “mathematical and geometric” concepts are excluded. Nevertheless, an objection has been made to the experimental findings regarding philosophical concepts, stating that “psychologists have reached this conclusion with their own reliable data.”²⁹¹

Topçu states that the measurements of psychological events made by psychophysicists on mental area do not show the psychological (spiritual) sensation itself created by the mental event, but the intensities of the stimulations and the relationships between these intensities. For example, “remorse” itself cannot be measured, but the commensurate stimulation/excitation with discernible associated

²⁸⁹ Serena Maria Nicoli, *The Role of Intuitions in Philosophical Methodology*, (London: MacMillan, 2016), 3-7; Michael DePaul and William Ramsey, vii-viii.

²⁹⁰ Michael DePaul and William Ramsey, vii; Albahri, 14.

²⁹¹ DePaul, viii-ix, In Michael DePaul and William Ramsey; William Ramsey, “Prototypes and Conceptual Analysis,” *Topoi*, Vol. 11, No. 1. (1992), 61-66, 69; However, for the explanation of the nature of abstract mathematic in terms of Kantian intuition, see, Janet Folina, “After Non-Euclidean Geometry: Intuition, Truth and the Autonomy of Mathematics,” *Journal for the History of Analytical Philosophy*, Vol. 6, No. 3, (2018), passim.

physiological effects (e.g., electromagnetic activity in the brain or nervous system) *can* be measured.²⁹²

However, it should also be noted that this philosophical debate is completely related to the dynamics of the Western world of thought. If we go even deeper, we face the issue that the traditional Christian interpretation of Aristotle was different to that of the Islamic thinkers from whom they adopted classical philosophy. In Islamic philosophy, these debates also present a different picture, as discussed in detail in Chapter 5.

Although Michael R. DePaul points out that empirical research in cognitive psychology has introduced what seem to be significant new challenges to how intuitions are utilized, he uses “Reflective Equilibrium” to explain the conflict between scientific data and intuitive judgment as a means of maintaining balance between them. For example, if a well-established epistemic principle deems certain moral judgments irrational, those moral judgments are typically discarded. However, if a tentative epistemic principle conflicts with strongly held moral judgments, the epistemic principle itself may need revision. This is because epistemic principles are developed through reflective processes, partly based on judgments about what beliefs are rational.²⁹³

Alvin Goldman states that the process of deciding whether to accept or reject a hypothesis is not a purely mental process, but is closely tied to the researcher’s abstract mental world and psychological state.²⁹⁴ Therefore, he draws attention to the connection between intuition and psychology. However, Goldman presents a counter argument to the empirical approach to intuition, arguing that the angle from which we approach intuition is one of the areas where the difference between philosophical and scientific methodology emerges. The question if the concepts of knowledge, reference, identity, or causation are compatible with intuition is the main activity in philosophical practice, and this method enabled many philosophical discoveries. Besides, the use of intuition is not limited to epistemology; it is prevalent throughout analytic philosophy, although philosophers specializing in this field did not typically use the term “intuition.” Even 20th-century philosophers used to reflect their “intuition.” Thus, by distinguishing

²⁹² Nurettin Topçu, *Psikoloji*, (İstanbul: Dergâh Yayınları, 2020), 122.

²⁹³ DePaul, viii, 294, 296-298, In Michael DePaul and William Ramsey. This approach reminded us of the concept of ta’wil (interpretation) in Islamic thought.

²⁹⁴ Goldman, *Epistemology and Cognition*, 131-137, 271-273.

between “physical intuition” and “rational intuition,” which has epistemic value, he implies that scientific data on intuition are mostly related to “physical intuition.” Moreover, he criticizes the experimental data about intuition. To extend, one’s intuitive evaluation or response to a situation may seem to conflict with that of another in the same situation. Although these “intuitions” seem to be in conflict with each other, it is also possible that there is no substantial conflict at all. Moreover, Goldman counters the argument that empirical data question how reliable intuition can be as a basis for knowledge, and that it should ultimately be distrusted because no experimental verification can be made. He counters that there are primary sources for presenting evidence accepted by epistemologists such as perception, memory, introspection, deductive reasoning, and inductive reasoning, so intuition can also be one of these.²⁹⁵

George Bealer, whose ideas Goldman cites on this subject, also states that intuition makes philosophy autonomous because of its unique feature and its natural connection with philosophy. To him, the claim that intuitions possess a strong connection to truth is a philosophical assertion, grounded in conceptual reasoning and not subject to empirical validation or disproof. Its justification relies fundamentally on intuition itself. The strong connection of intuition with the truth is an important support for his thesis of the autonomy and authority of philosophy. On the other hand, Bealer claims that modern discussion about the nature of knowledge, referring implicitly to “Gettier Problem,” gives us clear reason why we should take intuition as evidence in knowledge, because in such a problem, we can only realize the justification mistake via intuition. Moreover, as with such an abstract analogy, the effort to create a balance between beliefs derived from concrete, empirical sources are also an intuitive process. To extend, in Bealer, we also see the distinction between physical intuition and rational intuition. Accordingly, while physical intuition covers hypothetical situations, rational intuition covers the logical adaptability of concepts to situations. He likens this situation to the relationship between pure mathematics and doctrinal mathematics.²⁹⁶

²⁹⁵ Alvin Goldman, ‘Philosophical Intuitions: Their Target, Their Source, and Their Epistemic Status,’ *Grazer Philosophische Studien*, 74, (2007), 1-5, 7; Ibid, ‘Philosophical Naturalism and Intuitional Methodology,’ *Proceedings and Addresses of the American Philosophical Association*, Vol. 84, No. 2 (November 2010), 117, 120-121, 133-134, 139.

²⁹⁶ George Bealer, Intuition and the Autonomy of Philosophy, In Michael DePaul and William Ramsey, 202-204, 206-211; For a reference similar to the Gettier problem, Goldman, ‘*Philosophical Intuitions: Their Target, Their Source, and Their Epistemic Status*,’ 2, 7, 14; Ibid, ‘Philosophical Naturalism and Intuitional Methodology,’ 130, 136-137.

On the other hand, we have previously stated that even classical positivists, especially in abstract mathematics, gave place to the phenomenon of “intuition.” The importance of this subject continued to show itself in later periods. We can even say that Quine’s effort to naturalize epistemology is largely an attempt to find a solution to this problem, although his contemporaries’ tendencies towards this were different. To him, Kurt Gödel (1906-1978) showed that the axiom of choice and the continuum hypothesis can be added to the standard axioms of set theory without contradiction. These principles remain undecidable based on current mathematical axioms, serving as striking examples of Gödel’s incompleteness theorem, which states that some mathematical questions will always be undecidable within any consistent proof system. This raises questions about the nature of mathematical truth and the limits of human understanding. Gödel, however, believed in the reality of abstract mathematical objects and the human mind’s ability to intuitively grasp them. He suggested that future insights into the nature of sets might eventually resolve these undecidable issues, implying that the mind could transcend formal proof systems.²⁹⁷

In addition, mathematics, unlike other sciences, does not describe objects or facts but operates as a system of conventions about the use of symbols. Mathematical propositions derive solely from these conventions and are compatible with all possible experiences, rendering them void of empirical content. This perspective aligns the *a priori* validity of mathematics with strict empiricism, as conventions about symbols cannot be disproved by experience. However, proving the consistency of mathematics requires intuition as strong as that needed to discern the truth of its axioms. Abstract concepts like “infinite sets” or “functions” cannot be validated without relying on other abstract ideas, beyond finite symbol combinations. The intuitive content of mathematics cannot be disregarded or treated as merely psychological without consequence. This is because: (1) intuition is largely necessary for syntactical considerations that replace mathematics, (2) without intuition, mathematical theorems lose applicability, and (3)

²⁹⁷ Quine, *Ontological Relativity and Other Essays*, 92, 93, 108; Quine, *From a Logical Point of View*, 14-15, 125; Quine, *Theories and Things*, 146-147; Juliette Kennedy, “Kurt Gödel,” *Stanford Encyclopedia of Philosophy*, (2020), 4, 15, 37-45; Also see, Kurt Gödel, “What is Cantor’s Continuum Problem?,” *The American Mathematical Monthly*, Vol. 54, No. 9 (Nov., 1947), 518-524; *Ibid*, *Collected Works: Volume III Unpublished Essays and Lectures*, ed. Solomon Feferman, (New York: Oxford University Press, 1995), 354, 356-361, 367, 370-371; *Ibid*, “The Consistency of the Axiom of Choice and of the Generalized Continuum-Hypothesis,” *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 24, No. 12 (Dec. 15, 1938), 556-557; *Ibid*, *The Consistency of the Continuum Hypothesis*, (Princeton : Princeton University Press, 1940), 1, 3, 69-70.

consistency, essential for applying theorems, cannot rely solely on empirical induction. Intuition-based consistency proofs, especially in finitary and intuitionistic mathematics, are far more convincing, not because intuition stems from subconscious induction or evolutionary adaptation, but due to its inherent reliability.²⁹⁸

Moritz Schlick discusses that if complete fusion or absolute identity with objects is unattainable, there still exists a process that establishes a uniquely close connection between subject and object: intuition. Through intuition, the entity being known seems to enter into the consciousness of the observer. For instance, when looking at a “red” surface, the experience of red becomes part of one’s consciousness, and it is only through this immediate intuitive experience—not through conceptual understanding—that one can truly grasp what “red” is. Similarly, hearing a musical note, like “A,” requires someone to play the note, as this direct experience allows one to know it. Intuition alone reveals the nature of sensations such as pleasure, pain, cold, or heat. Thus, it is reasonable to consider intuition as a form of knowledge. Albeit he accepts intuition as unreliable in terms of scientific systemization, the intuition Schlick mentions is not only sensory, but also philosophical.²⁹⁹

However, to emphasize the usage of intuition, Laurence Bonjour (b. 1943) argues that even those who reject substantive *a priori* justification still rely on reasoning that seems *a priori* if it is justified at all. This creates a dilemma for naturalists, as rejecting all *a priori* justification undermines the basis for reasoning and argumentation, leading to what Bonjour terms “intellectual suicide”.³⁰⁰

On the other hand, although Kornblith emphasizes that importance of intuition is not only for philosophers but also for scientists, he accepts intuition as phenomenological, contrary to what is understood in traditional philosophy, and even claims that this is also the case in philosophical thought. According to him, philosophical practice fundamentally conflicts with the principles of a naturalistic approach to epistemology. As an example to this, he says that inductive knowledge is achievable because our innate psychological abilities align with the world’s causal structure. Thus, the processes that lead us to the truth can only be known empirically

²⁹⁸ Gödel, *Collected Works Volume III*, 354, 356-357.

²⁹⁹ Schlick, *General Theory of Knowledge*, 81-83.

³⁰⁰ Laurence Bonjour, *The Structure of Empirical Knowledge*, (New York: Harvard University Press, 1985), 195; Laurence Bonjour, *In Defense of Pure Reason: A Rationalist Account of A Priori Justification*, (Cambridge: Cambridge University Press, 1998), xi, 5; Kornblith, *Knowledge and its Place in Nature*, 21.

although he puts forward that the faculty of psychological abilities, which comes from birth, has a connection with the intuition mentioned in traditional philosophy.³⁰¹

Moreover, unlike the general tendency of naturalistic epistemology, Kornblith puts forward that there is a strong relationship between the questions “How *ought* we to arrive at our beliefs?” and “How *do* we arrive at our beliefs?” It is accepted that while the first question is the subject of philosophy, the latter is referred to psychology as a part of natural science. However, he says, for psychology to fully replace epistemology, the ways we actually acquire beliefs must perfectly align with the ideal ways we *ought* to acquire them. Without this exact match, psychology can only partially answer epistemological questions, leaving epistemology to address the gaps. Similarly, Kornblith claims that philosophy can only weakly answer psychological questions. In this scenario, psychology would greatly inform epistemology and support a naturalistic approach to it, but it would fall short of fully replacing epistemology as suggested by the replacement thesis. People form beliefs in various ways, related to psychological factors. Despite its lack of precision, psychology can have significant implications for how philosophy and psychology relate to each other.³⁰² We can say that, when we look at his views on the relationship between psychology and philosophy, as we have stated before, it would be more accurate to evaluate Kornblith in the category of cooperative naturalism rather than replacement naturalism, because he clearly rejects Psychologism as a sole base of epistemology.

Overall, contrary to scientific approach to epistemology, traditional epistemologists argue against using empirical science within epistemology, as it risks circularity: trying to validate natural science through the same science being examined. They maintain that epistemology’s role is to establish the foundations of knowledge without relying on the empirical methods. It seeks to justify, leading to the conclusion that epistemology should remain as an *a priori* discipline, independent of empirical methods.³⁰³ Besides, René Guénon draws attention to the difference between sensory and intellectual intuition, and states that the second one is superior, emphasizing its connection with reality. He states that one crucial point to emphasize is that the

³⁰¹ Kornblith, *The Role of Intuition in Philosophical Inquiry*, In Michael R. DePaul and William Ramsey, 129-130, 133-134; Hilary Kornblith, *Inductive Inference and Its Natural Ground an Essays in Naturalistic Epistemology*, (London: MIT Press, 1993), 1-5; Albahri, 12.

³⁰² Kornblith, *Introduction: What Is Naturalistic Epistemology*, In Kornblith, *Naturalizing Epistemology*, 1, 3-4, 5-6, 9-10.

³⁰³ Albahri, 14.

intellectual intuition necessary for obtaining metaphysical knowledge is distinctly different from the sensory intuition discussed by certain modern philosophers. The latter is associated with the realm of the senses and is essentially sub-rational, while the former, inherent to pure intellect, is indeed supra-rational.³⁰⁴

On the other hand, the relationship between science and philosophy and even religion has always been the subject of discussion since the 16th and 17th centuries, and the commencement of modernity. For example, Rupert Hall argues that science was able to proceed only after it had rescued itself from “philosophical and religious ideas.” Whereas Bertrand Russell considers philosophy to address the grey zone between science and theology, John Losee emphasizes the term “philosophy of science,” and the differences between “science” and “philosophy of science.” While scientists tend to be “mechanical and deterministic,” the philosophers of science operate in a “statistical and teleological” manner. The philosophy of science seeks to formulate a worldview through significant scientific theories, providing “an exposition of the presuppositions and predispositions of scientists” by analysing “the concepts and theories of the sciences.”³⁰⁵ Science could not be imagined without philosophy, because science is cumulative, and philosophy has played a big role in getting science to where it is today, and will continue to play a role in its progress. John Losee also stated that the philosophy of science contributes to building procedures that scientists follow and determine the cognitive status of scientific laws and principles. Whereas philosophy analyses the procedures and logic of scientific explanation, science explains facts. As Losee said:

Developments in science proper, especially the introduction of new types of interpretation, subsequently may provide grist for the mill of philosophers of science.³⁰⁶

In this regard, science and philosophy are inextricably intertwined. On the other hand, as Rupert Hall said:

³⁰⁴ Guénon, 36.

³⁰⁵ John Losee, *A Historical Introduction to the Philosophy of Science*, (New York: Oxford University Press, 4th edn., 2001), 1-4; Bertrand Russell, “*A History of Western Philosophy and Its Connection with Political and Social Circumstances from the Earliest Times to the Present Day*,” (New York: Simon & Schuster, 1945), 22; Rossi, 249-250.

³⁰⁶ Losee, 3.

If the history of science is concerned with rational discourse between men, then the study of alternative modes of discourse is certainly of auxiliary interest.³⁰⁷

In recent years, a contemporary otherness came into being “between the ‘subjective’ world of everyday experience based on the senses and the ‘objective’ reality of corpuscles moving according to definable laws.”³⁰⁸ Rene Taton mentions that “mystical thought played an important role in the development of today’s mathematics,”³⁰⁹ so we can also mention the relation between mystic thought systems and scientific knowledge. As Kuhn pointed out, this relationship was nothing new, for those prepared to suspend classical positivist dogmas and look at the actual history of science, where it can be seen that metaphysical thoughts had a significant effect on scientific methodology. Also, separating metaphysics from science is a desired choice of a particular school of science, rather than a requirement of “science” itself.³¹⁰

For instance, Descartes and Leibniz, claimed as intellectual forebears by modern secularists, were deeply embedded in what can be considered mystical debates and activities, and their work echoes the much earlier pontifications of Islamic thinkers, especially Al-Ghazālī. George Henry Lewes observed that Descartes’ *Discours de la Méthode* is so similar to Al-Ghazālī’s *Revivification of the Sciences of Religion*, and that if Al-Ghazālī’s book had been translated into French at that time, everyone would have complained of plagiarism.³¹¹

3.4.2 Some Scientific Justifications for Intuition

As we have already mentioned, explanations regarding the nature of intuition and its place in epistemology vary depending on where you stand ontologically. In fact, differences of opinion take shape along this axis. Throughout history, as the ontological perspective on existence changed, epistemic approaches also changed. The natural world was once seen as largely static, showing little novelty, essentially complete, unchanging, and closed. Now, it is understood to be dynamic—constantly evolving, a

³⁰⁷ A. Rupert Hall, *Magic, Metaphysics and Mysticism in the Scientific Revolution*, in Maria Luisa Righini Bonelli and William R. Shea, 276.

³⁰⁸ Rossi, 249.

³⁰⁹ Taton, 288, 290.

³¹⁰ Kuhn, 8, 10-12, 15-17, 20-21, 23, 24.

³¹¹ George Henry Lewes, *The History of Philosophy from Thales to Comte* (London: Longmans Green and Co, Vol. 2, 1867) 49.

network of changing forms, fundamentally incomplete, limitless in its potential for change, and open to the future.³¹² Briefly, two main approaches come to the fore.

Classical natural science (derived from ancient Greek philosophy) lacked an empirical focus, because it prioritized understanding objects through their ideal forms, viewing sensory perception as incomplete. This emphasis led to an intellectual focus on geometry, where form was the primary concern. Material aspects, like matter and its nature, were seen as created, and not fully comprehensible through reason alone.³¹³ In this context, physics has long been linked with philosophical idealism, the view that reality is fundamentally mental in nature. The Pythagoreans believed that mathematical relationships constitute the core reality of nature, while the Platonists considered nature to be an imperfect copy of a realm of perfect, eternal forms. In the 18th century, Kant and his followers argued that the frameworks of time, space, and causality are constructs of human thought imposed on nature, preventing us from ever knowing things as they truly are.³¹⁴

Contrary to this, in classical physics, there is, as *common sense* suggests, an objective world “out there.” This world evolves in a clear and deterministic manner, governed by precisely formulated mathematical equations. Physical reality is assumed to exist independently of us, and the state of the classical world is unaffected by our observation. Additionally, our bodies and brains are considered part of this world, evolving according to the same precise and deterministic classical equations. According to these ontological claims, all our actions are determined by these equations, regardless of how much we feel our conscious will influences our behaviour.³¹⁵

We can say that the ontology of this approach is materialism, and its epistemology is scientism, which is bound with modern positivism. In this regard, scientific materialism makes two claims:

1. The scientific method is the sole dependable way to gain knowledge.
2. Matter (i.e., mass and energy) constitutes the fundamental reality of the universe.

The first claim is an epistemological or methodological assertion concerning the nature of inquiry and knowledge, while the second is a metaphysical or ontological

³¹² Peacocke, *Creation and the World of Science*, 62.

³¹³ Ibid, 9-10.

³¹⁴ Barbour, *Religion in an Age of Science*, 114.

³¹⁵ Penrose, 225.

assertion regarding the nature of reality and the world. These two claims are connected by the belief that only the entities and causes addressed by science are real, and only science can progressively reveal the nature of reality.³¹⁶ Therefore, the way of evaluating intuition will not be independent of these “beliefs.” As pointed out previously, in any case, when intuition comes to the fore, an ontological dualism occurs. Thus, we think that what the universe is ontologically is a matter of “belief” for both views. More than this, when “consciousness” and “intuition” enter the agenda of theories of strict determinism in scientific knowledge, as we see in Quine, explanations of both its ontology and epistemic position remain quite “subjective.”

Referring to the dualist nature of intuition, we see two main approaches in the scientific method: the debate between the “Sufficiency Thesis” and the “Insufficiency Thesis,” which concerns whether neuroscience alone will ultimately explain all aspects of the human being. The Sufficiency Thesis predicts that neuroscience will eventually be sufficient, while the Insufficiency Thesis argues that certain aspects of personhood, such as consciousness, original intentionality, or caring, will always lie beyond its scope. The debate is not resolved by current empirical evidence and remains future-oriented, akin to a speculative wager influenced by both scientific progress and metaphysical assumptions.³¹⁷

However, neuroscience has demonstrated that specific types of mental experiences correlate with particular brain functions, and explained how these correlations occur.³¹⁸ In this case, can we know how a perception is represented? Even if neuroscience succeeds in this manner, it will not prove that everything that exists is physical, nor that the conscious self is an illusion. Clayton sees this as strict reductionism. According to him, the studies of John Eccles and Roger Penrose, as neuroscientists, support the existence of a conscious substance, which is ontologically distinct from physical phenomena, and also the idea that there is an essential non-algorithmic component to conscious thought processes. There is a subjective experience of the world that differs from physical inputs, and this subjective experience contributes to the various outputs that constitute our actions in the world.³¹⁹

³¹⁶ Barbour, *Religion in an Age of Science*, 4-8.

³¹⁷ Clayton, 621-623.

³¹⁸ *Ibid*, 623.

³¹⁹ Clayton, 623-624, 626, 630; John C. Eccles, *Evolution of the Brain: Creation of the Self*, (New York: Routledge, 1989), 185, 192, 197, 214, 239, 243-245; Penrose, 97, 105, 405, 407, 411, 412, 416.

Michael Polanyi describes intuition in scientific activity as follows: while each heuristic decision is subjective, it is shaped by the researcher's responsibility to the situation. Ultimately, the personal judgments made by competent individuals align with a commitment to the universal truth they are striving to reveal. No scientist can avoid choosing evidence based on heuristic expectations. A mental effort has a heuristic impact by naturally incorporating any relevant aspects of the situation that aid in achieving its goal.³²⁰ At the level of advanced intelligence, heuristic actions clearly stand apart from routine applications of existing knowledge. These are the acts of inventors and discoverers, requiring creativity and allowing for brilliance, distinguishing them from engineers who implement known methods, and teachers who demonstrate established scientific results. Heuristic intellectual acts contribute new knowledge and are therefore irreversible, whereas routine tasks operate within the bounds of known knowledge and can be repeated or reversed.³²¹

In addition, "consciousness," which is equal to intuition for Topçu, holds a central position in the contemporary "Anglophone" philosophy of mind, primarily because it challenges naturalist theories of mind. Most philosophers in this field believe that social, linguistic, and psychological facts are dependent on and determined by objective, non-mental, causal facts studied by natural sciences like physics, chemistry, and biology. Although there is a consensus that consciousness presents a problem for this naturalistic view, there is significant disagreement about the nature of consciousness itself.³²²

The choice of positivism, even logical positivism, as the dominant paradigm has more to do with the nature of the society in which it emerges than with the nature of knowledge. When explaining this situation, Polanyi elucidates why intuitive reasoning is not among the fundamental elements of scientific knowledge as being expedient rather than metaphysically valid. According to him, modern society has established the ideal of knowledge as viewing natural science as a collection of statements considered to be "objective" because their content is solely derived from observation, although their presentation may be influenced by convention. This perspective, deeply ingrained in

³²⁰ Polanyi, 38, 64-65, 326-329.

³²¹ Ibid, 79.

³²² Neil Manson, *Contemporary Naturalism and the Concept of Consciousness*, In *Studies in the History of Philosophy of Mind-Consciousness: From Perception to Reflection in the History of Philosophy* (Dordrecht: Springer, Vol. 4, 2007), 287.

Western (and thus global) culture, would be undermined if the recognition of rational intuition in nature were deemed a valid and crucial component of scientific theory.³²³ Therefore, as per Quine and Kornblith, genetic interpretations were seen as a way to rescue intuition/consciousness from this impasse pointed out by Polanyi.

According to this interpretation, consciousness is explained in a way that is compatible with the naturalized epistemology perspective: “chance” alone is the origin of all newness and creation in the biosphere; it is considered “blind” and “absolute,” because random mutations occur without regard to the organism’s needs; and the causes of individual variations are entirely separate from the environmental forces of natural selection. Everything can be reduced to straightforward, mechanical interactions. In this perspective, the cell is viewed as a machine, and humans (including their cognition) are machines, thus their behaviours are mechanistic outcomes. Thus, consciousness is seen as a secondary phenomenon that will ultimately be explained through biochemistry. In this case, human action is accepted as genetically deterministic.³²⁴ For example, E. O. Wilson claimed that the mind is considered as a secondary phenomenon arising from the brain’s neural machinery, with all human behaviours reducible to and explainable by their biological origins and current genetic makeup. He argued that: it might not be an exaggeration to say that sociology, the other social sciences, and the humanities are the final branches of biology to be incorporated into the Modern Synthesis. Moreover, morality arises from fundamental impulses encoded in our genes, asserting that “the only provable function of morality is to preserve the genes.”³²⁵ Wilson, like Topçu, draws attention to the importance of intuition and *Irādah* in the evolutionary

³²³ Polanyi, 16.

³²⁴ Barbour, *Religion in an Age of Science*, 4-7. For instance, the holism demonstrated by the “Aspect” experiments has supported macro-level ‘emergence’ theories using evidence from the micro-world. Proponents of materialist reductionism aimed to explain the mind by reducing it to the brain, the brain to cells, cells to chemical structures, chemical structures to atoms, and atoms to subatomic components like protons. However, they found that the atom cannot be fully explained by its components, such as electrons and protons, or by parts interacting in the same place. The discovery that an atom is more than the sum of its parts, and that these parts can influence each other even when separated by kilometers supports the “emergence” approach, which posits that the whole has its own unique laws. This situation calls for a holistic understanding of existence (ontology) and knowledge (epistemology) that does not derive the knowledge of the whole from its parts. These adjustments in our understanding will be significant for many philosophical disciplines, including the philosophy of religion, science, physics, existential philosophy, and philosophy of mind. See Taslaman, 89-90; See also, Clayton, 627, 630, 632; Eccles, 213; Penrose, 226; George FR. Ellis, *Quantum Theory and Macroscopic World*, in Robert John Russell, Philip Clayton, Kirk Wegter-McNelly, John Polkinghorne, *Quantum Mechanics Scientific Perspectives on Divine Action* (Vatican: Vatican Observatory, 2001) 278-279, 290; Arthur Peacocke, *Path from Science to God: The End of All Our Exploring*, (New York: One World, 2001) 60-61.

³²⁵ Barbour, *Religion in an Age of Science*, 6-7; Wilson, 4-5, 67, 171, 175-178, 195.

development of humanity, but still gives priority to empirical knowledge based on our biological nature. While human progress can be driven by intuition and willpower, achieving the best outcomes among various criteria for progress requires hard-earned empirical knowledge of our biological nature.³²⁶

While this still does not answer all questions definitively, it at least makes it clear that given the scientific perspective, we inevitably merge the issues of the universe's intelligibility and personal meaning. We do this by framing our questions about the cosmos in ways that include ourselves, thus implicitly incorporating our quest for meaning and our existence within the universe.³²⁷ In other words, the intelligible meaning of a cosmos lies in the fact that the initial assembly of fundamental particles eventually developed the potential to organize into forms that are conscious and self-aware. Human consciousness, which seeks intelligibility and meaning in the world, transcends the physical world. From a scientific perspective, the emergence of human consciousness is both a problem and a clue. The problem is why the universe would generate structures that seek meaning. The clue is that self-conscious beings represent a mode of self-integration that transcends the basic units of which they are composed.³²⁸

This section points out an important point for our study, because Topçu also underlines this point when describing intuition and the movement/action arising from it. According to him, there is an effort and intention to transcend a universe in the movement.³²⁹ The situation that is astonishing from our own perspective is that when we look at Topçu's works, his description of intuition, humanity and its action is very compatible with these discussions. However, he never explicitly mentions these arguments. Again, as we mentioned before, he was aware of these discussions because he studied psychology.³³⁰

Besides this, the genetic information amassed by entire populations through the "primary heuristic," acting as the predictor, can perform this function due to the repeated occurrence of changes within the cycle, extending far beyond the generational lifespan of any organism species. This continual repetition of past events has led to the

³²⁶ Wilson, 7.

³²⁷ Peacocke, *Creation and the World of Science*, 74.

³²⁸ Ibid, 75-76.

³²⁹ Topçu, *Conformisme et Révolte*, 29-30, 52-54, 118-124.

³³⁰ Kara, *Müslüman Kalarak Avrupalı Olmak*, 484; Kara, *Bir Ahlak Davası Nurettin Topçu*, 58, 61, 73, 86; Kara, *Nurettin Topçu'nun Hayatı*, In Kara, *Nurettin Topçu* (Kültür Bakanlığı), 15; Mehmet Birgül, 125, 167-169; Ali Birinci, *Hareket Mecmuası*, in İsmail Kara, *Nurettin Topçu* (Kültür Bakanlığı), 107; Gündoğan, *Arafta Bir Düşünür*, 13.

gene pool acquiring, through the inductive reasoning of the primary heuristic, genetic instructions that are passed down through generations, thereby projecting into the future as adapted organisms.³³¹ All adaptations represent types of knowing/understanding.³³² Intelligence produces adaptations provided by the primary heuristic, manifesting as forms of knowledge.³³³ It is not a coincidence that Topçu criticizes these kind of inferences in his work, in which he systematized intuitive knowledge, because he was a thinker who also studied psychology and was probably aware of these discussions. He criticizes this in the following excerpt:

Our first 'self,' spread across space and time, will realize the entire history of our individuality. We get it from our ancestors. Were the elements of our hereditary self-prepared in them, or were they determined in our ancestors? We do not think it is so. As the hereditary self passes into my own self, the organism plays its role. and the birth of our own self is, in a sense, a true creation. Through birth, in the transition from one consciousness to another, from one body to another, we do not know the changes undergone by the nervous system and cells well enough to make a definitive judgment and establish the laws of heredity. It is a fact that the more changes there are, the more creation there will be. However, our knowledge admits its inability to grasp its secret. Can we hope that one day all the laws of organic structure will be revealed; that the science of biology will recognize the nature of the structures that give life to certain vital cells, determine the nervous system, and thus enable us to grasp to some extent the traces of the spiritual life within the organic life, which has never completely severed its roots throughout the entire development of consciousness?³³⁴

For the same inquiry, Clayton thinks that it will never be like that, because, he says, the discussion between physicalist and non-physicalist perspectives on the person is not solely a scientific issue; it also concerns the nature of what truly and ultimately exists. It is important to distinguish between the ontology of the world we experience and the ontology of the knower and his/her experience that best explains phenomena.³³⁵

While Topçu draws attention to such a possibility, he is also undoubtedly underlining its impossibility in a sense. On the discussion of “primary heuristic,”³³⁶

³³¹ Plotkin, 140-141.

³³² Ibid, 181, 206.

³³³ Ibid, 207.

³³⁴ Topçu, *Conformisme et Révolte*, 62-63.

³³⁵ Clayton, 631-632.

³³⁶ The word “heuristic” originates from Greek, and signifies “serving to find out or discover, it is a kind of intuitive activity.” See Francis Jeffrey Pelletier and Marc H. J. Romanycia, “What is Heuristic,” *Computational Intelligence*, (January 1985), 48; Gerd Gigerenzer and Wolfgang Gaissmaier, 452.

Einstein incorporated this term into his Nobel Prize-winning paper in 1905 on quantum physics, suggesting that the perspective he offered was not exhaustive but immensely practical, giving an examination of how science and epistemology interact.³³⁷ Contrary to negatively take the term,³³⁸ Einstein, known for his remarkably clear logical thinking, also advocated for a strong trust in his own aesthetic instincts in science, advising against fruitless searches for “logical bridges” between experience and theory, but rather encouraged taking the significant “leap” towards fundamental principles when required. In a famous passage, he wrote, “to these fundamental laws, there is no logical route, only intuition, bolstered by a deep connection with experience.”³³⁹

The same standards influence the individual decision-making process of a scientist when selecting the most likely theory, when the evidence supporting and opposing two theories appears evenly matched, or when the evidence appears to contradict the theory that is still favoured.³⁴⁰ Our conceptual processes possess a “heuristic potency,” equipped to classify, categorize, and juxtapose when confronted with new experiences. Mathematical heuristics, which seeks to reorganize concepts independently of fresh experiences, further illustrates in its own manner that intellectual endeavour involves a belief in predicting reality. While grappling with a mathematical problem and contemplating it repeatedly, we might witness the solution emerging unexpectedly. Throughout this entire process, the investigator’s intuitive faculties remain paramount and definitive.³⁴¹

To extend this explanation, our comprehension of the universe is based on how we grasp of its physical laws. Thus, experimental evidence from high-precision physics

³³⁷ Gerd Gigerenzer and Wolfgang Gaissmaier, 454; Gerald James Holton, *Thematic Origins of Scientific Thought*, (Massachusetts and London: Harvard Univ. Press. 2nd ed., 1988), 112, 206-208, 264, 378.

³³⁸ Over the discussion of how decisions occur, from the opposite aspect, principles of logic and statistics have been associated with rational decision-making, while heuristics have been associated with fallible intuitions or perceived irrationality. See Gerd Gigerenzer and Wolfgang Gaissmaier, “Heuristic Decision Making,” *Annual Review of Psychology*, (January, 2011), 452; However, According to Roger Penrose, materialistic phenomena considered to fall within the purview of the “Newtonian” universe, such as the existence of solid bodies, the strength and physical properties of materials, the nature of chemistry, the colors of substances, the phenomena of freezing and boiling, and the reliability of inheritance, all in fact require *quantum* theory for their fully explanations. Similarly, the phenomenon of consciousness cannot be fully understood using classical concepts alone. To gain the philosophical insights we seek, we must understand the world as depicted by current quantum theory. See Penrose, 226, 414-417.

³³⁹ Holton, 375; Einstein, “*Relativity: The Special and General Theory*, xii, ix-x.

³⁴⁰ Holton, 363;

³⁴¹ Polanyi, 136, 138. For the same approach over the discussion of *subjective* and *objective* probability, see Wolfgang Spohn, *A Survey of Ranking Theory*, in Horacio Arló-Costa & Vincent F. Hendricks & Johan van Benthem, *Readings in Formal Epistemology: Source Book*, (AG: Springer, 2016), 324-327; Roger Penrose, 417, 419-420.

or observational data, such as gravitational waves or cosmology findings, could at any moment offer crucial insights that guide us towards the correct theory.³⁴² However, it should not be forgotten that, as Michael Polanyi points out, the conventional depiction of relativity found in textbooks was a discovery that strict positivists ignored, stemming from a philosophical (i.e., metaphysical, materialist) bias. Einstein uncovered the rationality inherent in nature without relying on any observations, of a type that would not be possible for at least half a century, and his inferences were subjected to the attacks of strict positivists.³⁴³

Einstein's most famous theory eponymously demonstrates that everything is relative, and thus that there are no absolutes (in knowledge). This assertion was questionable at the time, even in physics. Nevertheless, many former supposed absolutes (in knowledge) concerning space, time, and mass have been discarded, and the new absolutes have emerged (i.e., findings in quantum sciences). Additionally, Einstein emphasized that phenomena differ across frames of reference, though the laws of physics remain unchanged. To him, there is a core of relationships that is not dependent on the observer, albeit described from various perspectives. However, on the human scale, it does not seem possible to know the universe holistically. Relativity brings about a new type of separateness and isolation. It emphasizes that connections require time to become effective, leaving us temporarily alone in each present moment. Some areas of space are so far away that it takes billions of years for signals to travel from them to us, isolating us from most of the universe for incredibly long periods.³⁴⁴ This situation itself makes it impossible to know all the variables about the universe and to produce absolute knowledge.

Scientism, rooted in Enlightenment rationalism, was developed in the field of philosophy by key thinkers such as Comte and Kant, while its intersection with "science" can be characterized by the key junctures of Newtonian science and Darwinism, Einstein, and more recent unsettling developments in quantum science. At the current juncture, the societal implications of scientific paradigm pose the question

³⁴² Bernard F. Schutz, *A First Course in General Relativity*, (Cambridge: Cambridge University Press, 2nd ed., 2009), 361, 369; Also, for the idea of "indeterminacy is an objective feature of the nature" see; Barbour, *When Science Meets Religion*, 65-70, 72-73; Barbour, *Religion in an Age of Science*, 101-104; Peacocke, *Creation and the World of Science*, 62.

³⁴³ Polanyi, 11; Holton, 369.

³⁴⁴ Barbour, *Religion in an Age of Science*, 111-112; Also see, Peacocke, *Creation and the World of Science*, 63-64; and also, for the example of musicians, see, Penrose, 445-446.

of whether a method be developed in which the modern and the traditional can be utilized for public utility and harmonization.

In our opinion, this is possible in the context of the concept of intuition, which offers an intersection between both scientific knowledge and metaphysical-based traditional knowledge. We can say that the essence of the debate between these two is about the nature of intuition. While one tends to consider it as a material structure, the other accepts that it is an abstract faculty.³⁴⁵ When we look at Topçu's general approach, we can say that it can meet this need.

3.5 CHAPTER CONCLUSION

In our study, we found that discussions in epistemology were shaped by changing ontological concepts throughout the historical process. In this context, it can be seen that the discussions on modern and traditional understanding of knowledge were shaped in the Western tradition by the authority of the church and its opponents. In connection with this, aiming "objectively valid results" in knowledge, which began with Descartes, became the main motivation that guided modern knowledge paradigms (i.e., classical positivism, logical positivism and naturalized epistemology). In classical positivism, metaphysical elements such as intuition were present in epistemology, despite not being predominant, but in the logical positivism movement, the exclusion of all metaphysical statements from the theory of knowledge was an indispensable necessity. However, it was still a problem to provide epistemological clarity in explaining the nature of analytic statements, especially in mathematics, that were independent of experience.

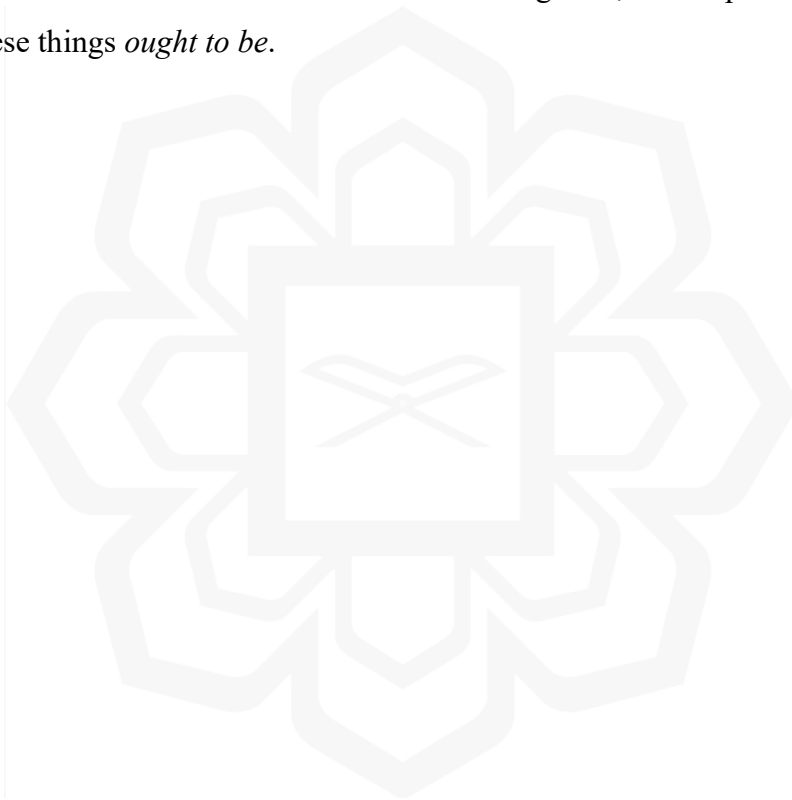
Quine, representing replacement naturalism, thought that he could completely solve this problem by creating the naturalized epistemology movement. According to him, metaphysical elements in knowledge, such as intuition, are material elements that come with evolution. He argued that there is no non-material element in knowledge, therefore there is no need for abstract reasoning to understand the nature of knowledge, and that natural sciences meet this need.

For Alvin Goldman, as a substantive naturalised epistemologist, intuitive and *a priori* elements are authoritative in knowledge. Epistemology should neither be based solely on abstract reason nor on experimentation and observation, which are entirely

³⁴⁵ Onbasi, *passim*.

independent of abstract reason. Science and philosophy should be viewed as two important fields that contribute to each other, but philosophy serves as the primary coordinator in epistemology.

Kornblith, a representative of Cooperative Naturalism, acknowledges the existence of intuition in the process of knowledge formation, but argues that it is not a metaphysical faculty but a purely natural kind. Like Goldman, he argues that philosophy and science should remain two separate fields that contribute to each other, but argues that the nature of epistemology can only be known through science. He also rejects full Psychologism (the replacement of epistemology with “science”); instead of this, he contends that science is interested in what the things *are*, while epistemology concerns what these things *ought to be*.



CHAPTER FOUR

NURETTİN TOPÇU’S APPROACH TO INTUITION

In this chapter we evaluate Nurettin Topçu’s understanding of intuition from an epistemological perspective. In addition, the chapter assesses the basic claims of the naturalized epistemology movement in comparison with Nurettin Topçu. Moreover, it also expresses Topçu’s similarities and differences with epistemologists in the debates between epistemologists and naturalist epistemologists about the nature of knowledge. In our assessment of epistemology from Topçu’s perspective, the concepts that stand out are consciousness, the self, and *Irādah*. Within the context of these concepts, the concept of intuition is examined. We will try to present from Topçu’s perspective how science and philosophy can come together through the concept of intuition.

4.1 TOPÇU’S UNDERSTANDING OF INTUITION

Flowing from the previous points, the discussion is about if there is a foundation in knowledge, and if there is *a priori* or indeed anything *before* knowledge. The approach to this matter touches on the main differences between “science” and “philosophy.” To begin with, Topçu is not interested in the discussions about whether there is an *a priori* foundation or not, although he accepts the existence of “first principles” in thought. However, we can clearly state that what is abstract in Topçu is not *a priori* based in knowledge, but *Irādah/Niyyah*, which triggers intuition. We can say that Topçu’s *a priori* is *Irādah*.³⁴⁶

In addition, when we examine Topçu holistically, in the process of acquiring knowledge, he neither focuses solely on awareness (consciousness) nor solely on continuity (self). Topçu does not evaluate these two processes on a completely separate ground; the process of knowing is a process in which the self and consciousness are active together. In this process, the momentary awareness provided by consciousness

³⁴⁶ Erverdi, “Hocasız Hareket,” *Hareket*, 4; On the definition of Topçu’s philosophy as “the idealism of *Irādah*.” In Topçu’s thought system, *Irādah* manifests itself in the *self* as curiosity and inner distress. See Topçu, *Conformisme et Révolte*, 33-34; Ibid, *İradenin Davası Devlet ve Demokrasi*, 106-107; Ibid, *Varoluş Felsefesi Hareket Felsefesi*, (İstanbul: Dergah Yayınları, 2020), 18; Yusuf Kaplan, “İnsana Ne Olduğunu Hatırlatan Bir Düşünür Olarak Nurettin Topçu İrade Metafiziği,” *Hece*, No., 109, (January 2006), 62-67.

comes together with the continuity provided by the self. We see that he uses the concept of *Irādah* very consciously, being aware of the difference between these two concepts. It is very likely that the self is thought of as a subject shaped by *Irādah* and carrying continuity; consciousness is thought of as the condition for this *Irādah* to take action. For this reason, since we do not see a clear distinction in the use of these two concepts, they are used interchangeably in this thesis.

The main difficulty in revealing Topçu's epistemic system is that he himself has not attempted such an endeavour. We will try to establish where Topçu stands exactly in terms of an epistemological system, from a holistic perspective, based on his ideas. However, the fact that he has not explained the approaches we see in him in terms of epistemology in a single place, and that he has explained some approaches in different ways in different places, has made it seriously difficult for us to do this.

Topçu made a similar criticism for his teacher Bergson. According to him, the difficulty of understanding Bergson's works is that he did not explain the philosophical theses he wrote clearly in one place but dealt with them from different perspectives in different places. As we have stated, we encounter a similar difficulty in Topçu's handling of the concept of intuition in scientific knowledge. Moreover, here we must clearly state that although Topçu was influenced by Bergson's intuitionism, he himself states that Bergson's intuitionism is completely different from the philosophical/intellectual intuition that we know from history of philosophy. Also, we can say that it is different from that we have discussed in the context of Naturalized Epistemology. In our opinion, Bergson's intuitionism is mostly related to his own "ontology" that he tried to systematize. In this system, the epistemic value of intuition is meaningful in the context of the systemized ontology. In other words, Bergson constructed an ontology that was based on the idea of *absolute durée*, *real durée* and *pure durée*. Topçu criticizes him because his system eliminates the distinction between matter and essence and systemized an epistemology based on intuition, as the identification of the object and the self. The knowledge about matter passes to humans through evolutionary instinct together with matter. This is also the case with other living beings, such as animals. For example, an insect instinctively knows how to hunt, but in Bergson, this is not a materialist phenomenon; evolving matter is not separate from the metaphysical process of existence. In our opinion, the relationship of this ontological and epistemological basis with naturalized epistemology deserves to be the subject of a separate study. For

this reason, although we occasionally mention his connection with Bergson's intuitionism, we will evaluate Topçu's understanding of intuition separately.³⁴⁷

To extend, in his doctoral thesis "*Conformisme et Révolte*," he states that the event of sensation is not the reflection of the object in the mind as it is, and that consciousness steps in here and sensation is mixed with the consciousness, intelligence. He states that intuition is active here because "belief" that is the main part of epistemology³⁴⁸ occurs in this way. Intuition operates through the effort of *Irādah*, which is to detach from survival interests, and is the beginning of the thought. Moreover, when explaining the subject of sensation in his book *Felsefe*, he also emphasizes that our sensation is in integrity with our spiritual structure and that these are not independent of each other. However, in his book "*Psikoloji*," while explaining how sensation turns into understanding with consciousness, he almost never mentions intuition throughout the book. Moreover, while explaining the role of intuition in revealing scientific knowledge, he explains Archimedes' discovery of the "buoyancy force" and Newton's discovery of the law of gravity with the concept of "*ilhām*," which has a very metaphysical structure in Islamic thought, in *Psikoloji*, he accepts that this happens with "intuition" in his books "*Mantık*" and "*Bergson*." From here, we get the idea that he uses the concept of intuition interchangeably with the concept of *ilhām*. Moreover, he explains *ilham* in his "*Var Olmak*" as the crown of the mind, the source of *hikmah*, and a thing that seeks the absolute, by throwing out partial measurements, and consisting of internal desire and tension. In his book "*İslam ve İnsan Mevlana ve Tasavvuf*," he describes *ilham* as an element superior to reason, a divine element that gives direction to reason.³⁴⁹

³⁴⁷ Topçu, *Bergson*, 19-20, 44-59, 77-78, 83, 86, 89-92; Topçu, *Conformisme et Révolte*, 63-64; Henri Bergson, *The Creative Mind: An Introduction to Metaphysics*, translated from French by Mabelle L. Andison, (New York: Philosophical Library, 1946)12-13, 33-41, 87-90, 145-150, 175-176, 216-218, 227-229, 234-236; Mabelle L. Andison has brought together Bergson's articles "Philosophical Intuition" and "Introduction of Metaphysics," which Topçu frequently references, and other important titles in this book. Ibid, *Creative Evolution*, translated from French by Donald A. Landes, (London: Routledge, 2025), xvi-xvii, xv, 1-7, 48, 124, 127-128, 130-139, 156-166, 170-180, 209-212, 234, 239, 297-305; Henry Bergson, *An Introduction to Metaphysics*, 30-39, 43, 46-50, 55-59.

³⁴⁸ Classical definition: "knowledge is justified true belief," see Edmund Gettier, *passim*.

³⁴⁹ Topçu, *Conformisme et Révolte*, 29-30, 114-115, 118-122, 128-133; Ibid, *Psikoloji*, 193; Ibid, *Mantık*, (İstanbul: Dergah Yayınları, 2021), 74-75; Ibid, *Bergson*, (İstanbul: Dergah Yayınları, 2019), 68; Ibid, *Felsefe*, 18, 28-30, 35-36; Ibid, *Var Olmak*, (İstanbul: Dergah Yayınları, 2021), 31-34; Ibid, *İradenin Davası Devlet ve Demokrasi*, (İstanbul: Dergah Yayınları, 2020), 90-92; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, (İstanbul: Dergah Yayınları, 2020), 20; Ibid, *İradenin Davası Devlet ve Demokrasi*, 90-92; Penrose, 421.

Nevertheless, when describes psychological events as spiritual ones, he clearly opposes understanding these spiritual events only as “*natural kind*” as claimed by naturalized epistemologists. Therefore, while trying to determine the epistemic position of intuition in Topçu based on his ideas, we will have to interpret it from a holistic perspective. In addition, we must immediately state that Topçu is not an anti-rationalist. Reason is the most important feature that distinguishes human beings from other living beings, but according to him, thought is something left over from the action of self-object encounter. Reason comes into play after this.³⁵⁰

Topçu does not deny the role of reason in knowledge. However, in our opinion, the most important element that distinguishes him from rationalists (epistemologists who claim that the basis of knowledge is *a priori*) is the *value* he attributes to self/consciousness. According to him, consciousness is in a state of formation/existence, and cannot be limited by categories (such as *a priori*). In this context, he criticizes Ibn Sina and Al-Farabi for accepting Aristotelian logic and philosophy as the sole source of truth. In fact, according to him, thanks to Ibn Sina and Al-Farabi, Aristotelian logic and philosophy gained such authority that an effort was born to understand and interpret the Qur’an according to Aristotelian thought. In connection with this, he describes Al-Ghazālī’s criticisms of this innovation as a groundbreaking attempt against scholastic thought. However, we should also point out that Topçu did not undertake a systematic critique of Al-Ghazālī.³⁵¹

While defining philosophy, Topçu says that it encompasses all our knowledge theories. He says that while each branch of sciences may reach different results in its own fields, philosophy combines these results, and emphasizes that it has more generality than the composite fields. As a method, philosophy combines the results obtained by sciences through experimentation with reason. From here, we can say that, similar to Goldman’s attitude, Topçu thinks that science and philosophy contribute to each other in an interactive way, unlike replacement naturalists who claim that science can replace philosophy, or epistemologists who think that science cannot contribute to philosophy. To him, the field of philosophy is abstract, independent of experience, but its influence continues in the experimental field as well. For example, when we examine the existence and circulation of living organisms and the relationships between species,

³⁵⁰ Topçu, *Conformisme et Révolte*, 30, 113-119, 125-127; Ibid, *Felsefe*, 56-57, 60, 65-66.

³⁵¹ Topçu, *İslam ve İnsan Mevlana ve Tasavvuf*, 56-57; *Conformisme et Révolte*, 55, 125-127.

we use the data of biology. However, we can *understand* the occurrence of all these processes, such as through our knowledge of the divine realm, and the values of the society we live in.³⁵²

While discussing the phenomenon of knowledge, Topçu critiques empiricists and rationalists. He argues that empiricism, which views consciousness as merely a mirror reflecting objects, fails to adequately explain knowledge. Rationalism, relying on the notion of *a priori* knowledge or inherent intelligence, also falls short. Then, Topçu criticizes the *a priori* theory, as according to experimental data, there is no knowledge of things in the mind at birth (we obtain these through experience). Children have to be taught language and behaviour, including things and their meanings, during their development. Otherwise, if the concepts of things existed in the mind *a priori*, the blind would have to have knowledge of light or colours. Also, the claim that knowledge of the absolute can be obtained by starting from *a priori* is also wrong. Human knowledge is always relative to the knowledge of Allah (ﷻ); only Allah (ﷻ) knows the absolute. However, Topçu does not claim that the principles of reason that allow us to produce knowledge are completely evolutionary and material. According to him, these principles that govern reason are “first principles.” They are the obvious basic truths on which our reasoning is based. They are abstract, their existence cannot be denied, they have not been proven, and they cannot be proven. He briefly summarizes them as follows; the principle of identity (includes sameness and non-contradiction) and the principle of sufficient reason (includes elements such as causality, purposefulness, absolute, time existence). These principles are universal and necessary.³⁵³

These concepts are very important in terms of determining what kind of attitude Topçu adopts in the context of naturalized epistemology. He emphasizes that just as physical elements of the human species, such as impulses and perceptions, are effective in our knowledge process, the spiritual structure of the human being is also

³⁵² Topçu, *Felsefe*, 10-16, 25-26. Like Goldman, Topçu states that the society we live in has an important role in establishing a philosophical system. His approach is quite similar to the “social epistemology” theory that Alvin Goldman later systematized. See *Ibid*, 20-31.

³⁵³ Topçu, *Conformisme et Révolte*, 114-115; *Ibid*, *Felsefe*, 49-51, 56-57, 64-66; Bergson, *The Creative Mind*, 172-173. And when thy Lord said unto the angels: Lo! I am about to place a viceroy in the earth, they said: wilt Thou place therein one who will do harm therein and will shed blood, while we, we hymn Thy praise and sanctify Thee? He said: Surely I know that which ye know not. (Qur’an, 2:30). We believe this verse guides us in understanding nature of absolute knowledge. Even the angels who personally witnessed the creation process remain incapable of absolute knowledge, that is, even their knowledge is incomplete when compared to the knowledge of Allah.

fundamentally effective in the process of acquiring knowledge. Topçu's criticism of empiricism is that knowledge is not an object; a mirror's reflection of an object does not generate anything unique to itself. For rationalists, he contends that knowledge is not simply a mind construct, nor is the object of knowledge entirely external to it. Instead, knowledge involves a process of adaptation, which is a mental action, contemplating making the object part of itself (i.e., thought—constructed by the *Irādah*).³⁵⁴

According to Topçu, here, it is necessary to separately address the formation of self and personality and the role of *Irādah* in this process, because these are important elements that affect our knowledge process. Accordingly, the elements that constitute the selfness/consciousness are observed in three parts: material, spiritual, and social. In early childhood, the self consists of the body, while as we age, the self consists of the whole of the spiritual life. Our imaginations, desires, passions and *Irādah* (i.e., inner world), are the columns of our spiritual structure. We interact with our social environment with these elements that form the *self*. Those whose spiritual *self* is weak are forced to adopt the personality imposed by society. Topçu uses the expression of the self of society/social self in this regard, whereby the concept of *Irādah* has a very important place. In addition, *Irādah* determines our direction both in the course of our inner world and in social life/environment, because it is our reaction to the data coming from outside through our consciousness. *Irādah*, like consciousness, needs our physiological existence to exist, therefore, it has a side that is shaped by our physiological needs, but it is not in a structure that is completely determined by them because this type of reaction such as a reflex does not involve thought. If that were the case, we would be no different from animals that act only with their instincts. However, through *Irādah*, humans also create conscious reactions to data coming from society and the environment with spiritual desires, values and needs.³⁵⁵ This also forms the basis of Topçu's criticism of positivism. Epistemological events are not solely intelligence

³⁵⁴ Topçu, *Conformisme et Révolte*, 114-115; Bergson, *The Creative Mind*, 172-173.

³⁵⁵ Topçu, *Psikoloji*, (İstanbul: Dergâh Yayınları, 2020), 156-157, 159-166, 216-221; Topçu, *Conformisme et Révolte*, 30, 117-127, 140; Bergson sees the relationship between consciousness and the brain as the relationship between a coat hanging on the wall and a nail, whereby the coat continues to hang as long as the nail exists. In this sense, examining the connection between the nail and the coat is not the job of science but of philosophy. This is necessary because science cannot present the connection between these two as a fact, and it can only postulate a theoretical interpretation, which means entering the field of philosophy. Henry Bergson, *Matter and Memory*, translated from French by Nancy Margaret Paul and W. Scott Palmer, (New York: Zone Book, 1990), 12-13.

events, in this process our *Irādah* (through our spiritual self/consciousness) are also active. Inasmuch as, the love and desire for knowledge, like artistic desires, largely come from this characteristic of man.³⁵⁶

While explaining the process of gaining knowledge, Topçu first states that there are two ways to gain knowledge, namely sensation and spirit. This area, which he refers to as spiritual knowledge and where intuition also operates, is conventionally known as consciousness. For example, some emotions, such as conscience and remorse, are not physiological, but occur in this abstract area. While the knowledge obtained through sensation is gained through the functions of sensation, perception and learning, the knowledge of our inner world is given directly (i.e., intuitively). However, sensory knowledge is not independent of consciousness, we obtain knowledge from sensation through our consciousness, or rather, sensory data gains the characteristic of knowledge through consciousness. Therefore, knowledge has a spiritual characteristic due to its connections to consciousness and our sensations are intertwined with our *Niyyah/Irādah*.³⁵⁷

We are passive against the effects that come and will come from outside; this dimension is the field of destiny. In our opinion, the function of the “philosophy of action” that he defends in knowledge emerges here, because action plays an important role in determining the “self” and action exists before man, the “*self*” joins it, but it continues after the “*self*.” According to Topçu, knowledge begins after this meeting. Via our consciousness/our selfness, we create imaginations, concepts with the data that the external environment brings to us. Imagination/concept is the process by which things acquire “meaning” in us. Imagination/concept is both *intelligible*, due to *belonging to* things, and *comprehensible* due to *describing* things. So, in this case, “meaning” is found both in the mind and in things. However, here the *self* and *consciousness* become active. Topçu describes imagination as the shadow of intuition. Each person’s imagination and understanding of concepts, their interpretation, storage and later unification of what they have stored are different.³⁵⁸

³⁵⁶ Topçu, *Felsefe*, 71-72; *Ibid*, *Psikoloji*, 89-90; *Ibid*, *Bergson*, 23-24; *Ibid*, *Conformisme et Révolte*, 113-127.

³⁵⁷ Topçu, *Psikoloji*, 118-124, 153-158; Although Topçu does not explicitly express intuition here, as we have stated before, consciousness is a field of intuition. Topçu, *Conformisme et Révolte*, 118-127.

³⁵⁸ Topçu, *Psikoloji*, 67-69; *Ibid*, *Bergson*, 89; *Ibid*, *Conformisme et Révolte*, 46, 52-55; *Ibid*, *Var Olmak*, 32, 35. For similar statements by Quine on this subject, See, Quine, *I, You, and It: an Epistemological Triangle* in *Knowledge*, 1-6.

The final stage of spiritual life is the stage of action. The sensational impressions we receive from the external world not only give rise to endless imagination and dreams within us but also transform into forces that generate movement/action. These movements/actions, which are subordinate to human thought, are referred to as acts of *Irādah*. At this stage, humanity begins to assert its control over the external world. The external world, which once stirred and awakened us through sensations, now submits to human authority. In this dynamic, humans become active agents, while the external world becomes passive. It is here that we transcend the boundaries of our physical existence and experience a sense of freedom. This is where the greatness of humanity and the true value of life are revealed.³⁵⁹

For Topçu, who also considers thought to be a form of action, the elements that set us into action are ego/selfness/consciousness and *Irādah*. We see that our self/consciousness, which needs physiological existence throughout our worldly life, is united with the events of sensation, the events of knowledge and the events of action-*Irādah*. Topçu evaluates our encounter with the external world as fateful and passive. In other words, the data we obtain during our encounter with the external world simultaneously passes through our ego/consciousness filter, and this time the external world becomes passive in the face of our action that reaches the field of existence through our *Irādah*.³⁶⁰

In this respect, in our opinion, a question arises as follows: the action that originates from the intuition and *Irādah* of the human being and bears the trace of his self/consciousness now spreads throughout the universe and participates in a cycle of billions of years. In this case, how can we still maintain our belief that the cycle of the universe operates solely with deterministic laws? In relation to the functioning of the external world, what do our actions, which are positive or negative, *mean* in terms of their outcomes?

There is a counter argument that the objects of perception are directly presented *to* us, and are not created *by* us. They appear in their entirety to the mind, and are not part of consciousness itself. What we experience are physical phenomena: these are specific entities we encounter, making them objects of experience. They are considered part of reality as long as they are perceived to be causally linked with other physical

³⁵⁹ Topçu, *Psikoloji*, 67-69.

³⁶⁰ Topçu, *Psikoloji*, 67-68; *Ibid*, *Conformisme et Révolte*, 16-17, 116-119; *Ibid*, *Var Olmak*, 28, 32, 37.

phenomena.³⁶¹ However, Topçu thinks opposite; according to him, self/consciousness plays key role on acquiring knowledge. This is the most emphasized issue in Topçu. He also explains the concepts of emotion, perception, subconscious and analysis which naturalists often refer to.

Self/consciousness plays an important role in Topçu's definition of knowledge. To him, our mental process of acquiring knowledge during our encounter with the object does not develop independently of our emotions. Although emotion (subjective) and knowledge (objective) are in different structures, there are connections between them. If we briefly summarize the effect of emotions on knowledge; emotions strengthen or weaken knowledge (here he probably means the effect of emotion on belief, which is one of the factors of knowledge). Emotion directs the flow of imagination and is active in determining inclinations/tendencies (here again, we can recall Al-Ghazālī's explanation about the inclination of the heart).³⁶²

Perception combines the sensations that we acquire piece by piece and creates information about the external world. Perception and sensation differ from each other. When perception is in operation, it uses the sensations coming from objects and the perceptions we have acquired before. Our sensations which is not independent of intuition and consciousness play an active role in perception, therefore perception without sensation is an illusion. We know the world through perception. However, the more active our self/consciousness is during the encounter with the object, the higher the quality of the union of perception with sensation and our acquisition of knowledge. Knowledge is the influence of the self/consciousness on the phenomenal world. During the union of sensations, the self/consciousness through *niyyah*, *Irādah* acts selectively here. Sensations do not combine randomly in the mind, this process leading to the formation of knowledge gains integrity with intuition in consciousness.³⁶³

Topçu also touched upon the importance of subconscious/unconscious states in the act of knowledge. Subconscious events, although they bear the traces of consciousness, are events that consciousness distances itself from. Unconscious events, on the other hand, are events that occur in consciousness, but cannot be realized at that

³⁶¹ Faye, 212; Also see, Clayton, 623.

³⁶² Topçu, *Psikoloji*, 116-118; Ibid, *Conformisme et Révolte*, 125.

³⁶³ Topçu, *Psikoloji*, 116-117, 134-135; Ibid, *Conformisme et Révolte*, 30, 118-125, 129-134, 137. We can give Newton as an example here. Apples have fallen on many people's heads throughout history, as in the apocryphal example, but it was Newton who discerned that this was due to gravity.

moment. According to Topçu, this has great importance in the knowledge. Our conscious actions are nourished from here. The discoveries of a genius are prepared here, our *Irādah* are strengthened here, our reasoning that directs our beliefs, our subjective inferences are the product of here. According to what we understand from these statements, this field, like consciousness, is an abstract field, although it is not independent of our physiological existence. Put simply, it directly affects our *selfness*. What happens behind unconsciousness rises to the field of consciousness and is experienced consciously. These elements behind consciousness become ideas, morality, art, religious life in the form of conceptions. A mathematician reaches a solution to problems that he could not solve in his conscious state, with a sudden inspiration that comes from within at a moment he does not expect. An artist makes art with this inspiration (*ilhām*). Topçu defines the inspiration he uses here as follows. It is the sudden birth of a long preparation that was made behind consciousness. Another area where the role of inspiration is seen is creative imagination. Traces of inspiration can be seen in the inventions of great geniuses and the art of artists that has been influential for centuries. According to Topçu, this ability in the self is inherent comes from birth. Topçu states that there is an effort in the emergence of intuition and that it is a necessity. Therefore, the development of our intuition is directly proportional to our efforts (*Jahd*) in this direction.³⁶⁴

Analysis is essentially a process of translation and symbolic representation, capturing an object from multiple perspectives to establish connections with known concepts. However, this approach remains incomplete, leading to an endless cycle of refining viewpoints and symbols in an attempt to perfect the representation. In contrast, intuition, if attainable, is a singular and direct act of understanding, bypassing the infinite regress of analysis.³⁶⁵ While defining intuition, Topçu states that although the imagination/concepts that enable intuition to be active change at any moment, intuition

³⁶⁴ Topçu, *Psikoloji*, 153-158, 193-196; Ibid, *Bergson*, 85-86, 90-92; Topçu, *Conformisme et Révolte*, 118-122; While Topçu does not use the concept of intuition here, preferring instead the concept of inspiration (*ilhām*), in his book on *Mantık*, he uses the concept of intuition for the same examples. In our opinion, he uses these concepts and terms interchangeably. See Topçu, *Psikoloji*, 193; Ibid, *Mantık*, (İstanbul: Dergah Yayınları, 2021), 74-75; Besides, naturalized epistemologists accept the concept of intuition in this event, but state that its complex structure is not a phenomenon of ontology, but rather a problem of lack of knowledge.

³⁶⁵ Bergson, *The Creative Mind*, 162-163.

remains unchanged, that it manifests itself in the stages of every thought and dominates every system, and that no criticism can deny its existence.³⁶⁶

In addition, Topçu, while examining the subject of method in experimental sciences, states that it has three stages consisting of observation, hypothesis and experiment. Accordingly, hypothesis is the starting point in the emergence of a scientific judgment. While describing the factors that are effective in the emergence of the hypothesis, he includes intuition that emerges suddenly in the mind in addition to factors such as observation and the experience of the observer. As examples of this, he mentions Archimedes' discovery of the buoyancy force of water and Newton's presentation of the law of gravity. He also states that the emergence of the intuition he mentions in the hypothesis is related to the intensity of the observer's research.³⁶⁷ Since the process of formation of the hypothesis cannot be considered independently of the formation of "belief," the existence of intuition is particularly emphasized here.

Topçu criticizes determinism harshly. However, in the presentation of scientific judgments, which are a mind activity, it is done with the assumption that there is a determinism and objectivity in the universe. He says that this assumption is needed to utilize from the universe, otherwise our activity of presenting scientific judgments would be meaningless. However, he also clearly states the following postulate: the existence of a strict order in the universe always means that the same events occur due to the same conditions. Nevertheless, we cannot know whether the conditions that exist today will exist in the future. It cannot be proven that the conditions that cause events will always remain the same, but it is assumed that they will.³⁶⁸

Compared to Bergson's intuitionism, he criticizes it because of the possibility that it might lead to a foundation for determinism. While criticizing Bergson's intuitionism, Topçu criticizes his identification of intuition with intelligence which is related to the survival interests of man, and which is bound with matter. Furthermore, he argues that accepting that intuition evolved from instinct would lead to the danger of Psychologism and that identifying the self with the object would lead to pure metaphysics. As the reader may recall, Psychologism is the view that claims that

³⁶⁶ Topçu, *Bergson*, 89-90, 116, 118.

³⁶⁷ Topçu, *Mantık*, 65, 72-75. In our opinion, this issue is consistent with classical Islamic philosophy, because the general opinion is that the observer's ability to absorb knowledge is directly proportional to the person's effort.

³⁶⁸ Topçu, *Mantık*, 79; *Ibid*, *Felsefe*, 10.

knowledge is only about psychological states, which can completely replace philosophy; for this view, intuition is defined as a kind of psychological event called “natural kind (instinct).” In this case, Topçu asks how the intuition related to abstract areas and spiritual values such as art, religion, science and morality can arise from the instinct related to the material interests of man. Moreover, Topçu puts forward that, according to a materialist/ evolutionary (i.e., natural kind) perspective, if the principles of reason were transmitted to humans experimentally from nature, this means that they must have existed in nature *before* they reached our minds. How do the principles of reason emerge solely from objects? Conversely, he argues that the principles of reason are necessities of thought, not elements of nature or objects.³⁶⁹

Topçu evaluates the intelligence, which he also calls “scientific intelligence,” and its relationship with science, as follows. Science produces a truth that is in accordance with reason, but these are not spiritual truths and are not completely real. Therefore, intelligence searches for results that are suitable for use, always tending towards simple elements. Science is pragmatic in this sense, whereby it aims to bring us into harmony with nature and to elevate us to the sovereignty of nature. However, each branch of science has its own technique, and it does not approach existence holistically, nor does it approach man holistically.³⁷⁰

On the other hand, close to Goldman’s approach; knowledge is neither a completely reflection of the object in the mind, nor is it a completely mind activity. It is an activity in which both are involved. In the first step, the mingling of the object with the self, the second step reveals the “belief,” the basic principle of epistemology by separating the object from the self and analysing it by the mind. Thus, the occurrence of “belief” is intuitive. *Irādah* and *Niyyah* actively operate in both steps via self/consciousness. *Niyyah* is a subjective state, an intuition, and the intuition is the first

³⁶⁹ Topçu, *Bergson*, 25-29, 80-85, 102-109, 114, 127, 130; Ibid, *Felsefe*, 64-66, 81-82; Ibid, *Psikoloji*, 89-94; Bergson, *The Creative Mind*, 33-39, 47, 62, 82-83, 87-93, 216-217; Ibid, *Creative Evolution*, 133, 159-166, 234, 297-305, 327; Ibid, *Introduction to Metaphysic*, 30-39, 55-59, 61-70, 78-80. For similar criticism by Nurettin Topçu’s teacher, Hilmi Ziya Ülken, about Bergson’s intuitionism in Topçu’s docent thesis report, see, Hilmi Ziya Ülken, *Hilmi Ziya Ülken’in Raporu*, In Ezel Erverdi, *Nurettin Topçu Düünden Kalanlar ve Geleceğe Umutlar* (İstanbul: Dergah Yayınları, 2019), 1253-1254. However, we should state the following: Topçu clearly states that intuition is not a faculty that comes with evolution, unlike intelligence, which is related to the material interests of man; but in his *Conformisme et Révolte*, on page 54, he says that intuition is a *concrete* form of intelligence. Nevertheless, although this is confusing, when viewed from a holistic perspective, we cannot claim that there is an inconsistency in his approach to intuition, because this expression only appears in one place in his works and not detailed.

³⁷⁰ Topçu, *Conformisme et Révolte*, 52-54, 126-128.

thought, so there is *Niyyah* and *Irādah* in intuition.³⁷¹ To Topçu, as one's underlying belief deepens, intuitive judgment becomes more potent. Those with a well-developed intuitive capacity differ from others in their ability to step back from ordinary sensory inputs and detach from perceptions shaped by practical or survival-oriented concerns.³⁷²

We see two different approaches to the issue of *Irādah* determining our tendencies and the epistemological effects of this situation: (1) that these tendencies, and our *Irādah*, are essentially formed experientially; and (2) that these tendencies are metaphysical abilities specific to human nature. For example, Robert Audi offers a naturalistic epistemological approach to the concepts of intention (*Niyyah*) and human tendencies, whose epistemological significance we have often emphasized, particularly regarding their role in shaping the self's motivations and dispositions. In contrast, Nurettin Topçu presents a view that elucidates the metaphysical dimension of these concepts, and which details their relation to the Divine.³⁷³

As far as we understand from Topçu, there is an action that is independent of us, and which proceeds (i.e., in *action*) outside of us, in the process of knowledge formation. We cannot evaluate knowledge independently of this. However, this is not a final point in the formation of knowledge, because the human being is involved in this action with *Irādah* and *Niyyah*. With the reflection of this action in the mind, in which we are passive, this reflection is rebuilt in our being with *Irādah* and *Niyyah*. *Irādah*, which triggers intuition, exists before our action and thought, like *a priori*. It is a state of consciousness, and it manifests itself in consciousness. It guides us in our acquisition of knowledge. In our opinion, the expression "action is a combination of man and God" also means, in a way, "knowledge is a combination of God and man." By including the concept of effort/*Jahd* in intuition, we can infer that we can have an intuition as much as our effort, because he himself stated that everyone's knowledge construction is unique to themselves. The point we will draw attention to here is that *will (Irādah)* is something different from reflex or instinct, because while the former is superior to the material and emerges by stripping off the physiological interests of man, the latter is related to physiological interests and does not provide us with any "virtue" (e.g.,

³⁷¹ Topçu, *Conformisme et Révolte*, 79-82, 97-100, 102-106, 114-127, 207; Alvin Goldman and Brian P McLaughlin, 1-2, 5-6; Jonathan Schaffer, *Cognitive Science and Metaphysics: Partners in Debunking*, In Alvin Goldman and Brian P McLaughlin, 38-40.

³⁷² Topçu, *Conformisme et Révolte*, 30, 120, 140.

³⁷³ See, Audi, 122-125.

knowledge, art, morality, and religion). The thing that makes this possible is *Irādah*. As Penrose says, aesthetic criteria are crucial in shaping our judgments. It is evident that no significant discovery or invention can occur without the desire to find. From this, two conclusions can be drawn: invention involves choice, and this choice is fundamentally guided by a sense of scientific beauty.³⁷⁴

Here we must clearly state that this intuition that Topçu mentioned is related to the phenomenal world and is essentially related to the object and its truth. In this case, the intuition he describes resembles the concept of “philosophical intuition” [immediate/direct knowledge that appears in the mind] discussed in naturalized epistemology. However, since this form of intuition is related to the object and the process of existence, as stated before, it is necessary to seek the knowledge of the absolute not here but in mystical intuition. Mystical intuition is superior to this type of intuition, as it provides the knowledge of truth. However, probably, since the existence of man in the phenomenal world requires his physiological existence, Topçu states that the way to obtain mystical intuition is also through this intuition. More precisely, this intuition is the first step of mystical intuition. In this case, Topçu adds a distinction of “mystical intuition” to “the concept of intuition,” which is divided into “sensory and intellectual” in the field of philosophy. We will examine the context of intuition and mystical intuition in Chapter 5.³⁷⁵

Like Bergson, Topçu also avoids defining and explaining intuition in detail. While explaining the “Types of Intuition” in his book *Bergson and Felsefe*, Topçu does not make detailed explanations which one is closer to his own intuition. In addition, it is interesting that he does not dwell much on the concepts of “mathematical intuition” and “philosophical intuition,” as examined in detail in Chapter 3. In fact, after explaining these types of intuition, he does not specify which of them the “intuition” he examined in his doctoral thesis is suitable for; on the contrary, he approaches these types

³⁷⁴ Penrose, 421; Topçu, *Conformisme et Révolte*, 117-124, 129-132, 140; Topçu, *Psikoloji*, 71-76, 89-94, 216, 221.

³⁷⁵ Albeit Topçu sometimes appears to use the concepts of “sensory intuition” and “intellectual intuition” interchangeably, intuition is expressed as a virtue that purifies *Irādah* from all survival interest and purpose; it is also described variously by Topçu as “pure sensation,” and a “concrete form of intelligence,” as well. In addition, he states, the effort to purify *Irādah* from survival interests (intuition) gives us “pure sensation.” That’s why the person who can do this is called an artist, and why everyone’s ability of intuition is different. In our opinion, he refers to two types of intuition accordingly. See Topçu, *Conformisme et Révolte*, 54, 120-124.

of intuition critically. However, as far as we understand from his statements, he is not against these types of intuition even describes “intuition is a light from eternity to us.”³⁷⁶

The intuition he expresses in his doctoral thesis is in fact different from these, and the fact that he only associates it with sensation and clearly associates it with the natural field, not metaphysics, reminds us of the naturalists’ acceptance of intuition as a “natural kind,” albeit we can evaluate his intuition as a metaphysical faculty. Accordingly, if intuition is to purify the sensation with the effort of *Irādah*, then in this context, the fact that intuition emerges as a result of “*Irādah*,” which is an abstract structure that starts from infinity and extends to infinity, means that intuition is metaphysical. However, there is the most critical point that separates Topçu from all intuition theorists. In the context of the definition of “knowledge is justified true belief,” we see Topçu accepts that all knowledge/belief begins with intuition, as all naturalists do. However, Topçu is not in fact interested whether the intuition is metaphysical or natural – more accurately, he does not focus on its *nature*. Intuition, whether metaphysical or “natural kind,” emerges as a result of an “effort of *Irādah*.” He describes *Irādah*, which gives us intuition, as an effort to detach from survival interest/material benefit or from carnal desires (we can call it “*nafs*”). He says if there were no survival interest in sensation, all our sensations would be intuitive. *Irādah* is a spiritual faculty, which comes from Allah (ﷻ) Himself, and its main purpose is to reach Allah (ﷻ) in eternity. All the virtues/values produced by humanity, such as science, art, religion, and morality, emerge thanks to this faculty. Although everyone has this ability, not everyone is at the same level in making this leap. To be able to get rid of material interests with an effort of *Irādah* and to continue this throughout life is something that only people (mystics) with a rigorous spiritual discipline can achieve, by the grace and favour of Allah (ﷻ). Great philosophers (also “scientists” for us), artists, and Sufis are examples of such people. Even avowedly atheist artists or philosophers produce their art and science from divine *Irādah*, because with that “effort of *Irādah*” they have moved away from survival interest/material benefit and taken a step towards an infinite metaphysical field. The existence of such a person does not create a contradiction in Topçu’s thought, since it means that, even if that person steps into the infinite

³⁷⁶ Topçu, *Bergson*, 20-21, 50-56, 63-76; Ibid, *Felsefe*, 35-36, 79-82; Ibid, *Var Olmak*, 39-40, 135-136; Ibid, *İradenin Davası Devlet ve Demokrasi*, 90-92; Ibid, *Psikoloji*, 193; Ibid, *Mantık*, 74-75.

metaphysical field, he cannot forward there, because his effort of *Irādah* remains insufficient to reach infinity.³⁷⁷

Topçu talks about the function of *Irādah*, which selects and throws away vital interests and creates intuition. In his book *İslam ve İnsan, Mevlana ve Tasavvuf*, he states that it is possible to get away from egoistic/bodily desires and wishes (i.e., demands of the lower *nafs*) and reach the light of reason and guidance through inspiration (*ilhām*), also stating that the light of reason and wisdom is found in man through inspiration (*ilhām*). He even clearly states that it is a mistake to describe the “human mind” as a superior version of the “monkey mind,” whereby he actually puts the clearest distance between himself and naturalists. Also, he underlines that religious life has an effect on our physiology in this sense. The sensation needed by consciousness for the emergence of intuition is not needed in religious states, rather consciousness experiences these states directly. This situation contributes to the abilities of imagination and imagining in consciousness, as previously mentioned, and at the same time prepares the ground for distancing from vital interests that enable intuition to emerge.³⁷⁸

Indeed, a philosopher, scientist, artist or even a university student, in order to gain knowledge and skill, will at least for a while distance themselves from entertainment and pleasures, and will accept that long, tiring and even painful *spiritual* process of sacrificing for their quest. What provides this spiritual commitment is *Irādah*, and this *Irādah* attitude opens the door of intuition and inspiration.

4.2 TOPÇU AND NATURALIZED EPISTEMOLOGY

Philosophers traditionally have been concerned with exploring questions about concepts such as substance, mind, intelligence, consciousness, sensation, perception, knowledge, wisdom, truth, identity, infinity, divinity, time, explanation, causation, freedom, purpose, morality, virtues, love, life, and happiness. Answers to these types of questions typically share three key characteristics: universality, generality, and

³⁷⁷ Topçu, *Conformisme et Révolte*, 29-32, 35-36, 54, 79-82, 98-105, 117-124, 128-140, 142-144, 153-159, 162-163, 172-174, 179, 183-185, 191-192, 199-200, 207-208, 212-213; Ibid, *Bergson*, 85-86, 89-92; Ibid, *Psikoloji*, 153-158; Ibid, *Varoluş Felsefesi Hareket Felsefesi*, 37-40, 55-61; Ibid, *Var Olmak*, 18, 20, 22-23, 25, 29-30, 37-38, 64-67; Ibid, *İradenin Davası Devlet ve Demokrasi*, 15-18, 26-35, 65-80, 97-101; Ibid, *Ahlak*, (İstanbul: Dergah Yayınları, 2021), 123-126; Ibid, Mehmet Akif, (İstanbul: Dergah Yayınları, 2021), 88-92; Ibid, *Millet Mistikleri* (İstanbul: Dergah Yayınları, 2019), 63-75, 80-93.

³⁷⁸ Topçu, *İslam ve İnsan, Mevlana ve Tasavvuf*, 17-22, 201-202.

necessity. Unlike scientists, philosophers are not necessarily concerned with what these things *are*, but with what they *ought to be*.³⁷⁹ Topçu also builds a system around these concepts using philosophical reasoning, based on philosophical intuition in our opinion (as defined in the previous section). However, in his thoughts, concepts such as *Irādah*, intuition, consciousness, and *action* come to the fore.³⁸⁰

As we have already stated, Topçu is not indifferent to the science of psychology, which is at the centre of modern philosophical discussions. In Topçu's assessment, psychology uses the experimental method, but it differs from the experimental sciences in terms of recognizing events: subjective (inner observation), covering the direct appeal to consciousness; and objective, appealing to the objective information that our senses give us about spiritual events.³⁸¹

While introducing the science of psychology, Topçu mentions the impossibility of presenting clear and distinct data like other physical sciences. Because the *observed* consciousness and the *observing* consciousness are the same, how can consciousness look at itself as an observer from the outside? Moreover, how objective can it be to *itself*? This becomes even more complicated when examining someone else's inner world – how much can we know about someone else's inner world? What else can we obtain other than what it presents to us? In addition, consciousness is in a constant state of flux, the events there are changing at every moment, if we separate a certain moment from it and make it the subject of examination, we will be evaluating a separate part from the whole, which does not present us with clear and distinct data. In addition, spiritual events or events that are the subject of psychological research are in a mixed state with the faculties coming from our being/selfness (i.e., psychic faculties) and environmental factors (both the traces of the situations we have experienced in the past and the society we grew up in). How much can we distinguish these with scientific clarity? Science works with mathematical precision; how much can we describe these inputs mathematically and with what precision can we perform the operations?³⁸²

³⁷⁹ Bealer, In Michael DePaul and William Ramsey, 204-205. Hilary Kornblith, In Hilary Kornblith, *Naturalizing Epistemology*, 1, 5, 10.

³⁸⁰ Topçu, *Conformisme et Révolte*, passim.

³⁸¹ Topçu, *Psikoloji*, 23.

³⁸² Topçu, *Psikoloji*, 24-27, 64. This section reminds us of the criticisms of philosophers like DePaul about the objective nature of psychology-based experiments, which they thought undermined the foundations of philosophy. Additionally, the influence of external factors such as society and family is reminiscent of Goldman's interpretations.

However, for Topçu, although psychology cannot be considered to be the province of “scientific” certainty (as he conceptualized it), he does not consider the introspection method to be invalid. If we compare the human mind to a city, science can perhaps show us exactly and precisely what the structure of that city is, street-by-street and house-by-house. However, trying to understand people’s moods from changes in their cerebral neurons is like a taxi driver who knows all the streets and houses of a city very well, but is unaware of what is going on in them. Nevertheless, he says, it is possible to gain knowledge, even if not certainty, at least about our own *self* by using introspection and objective methods such as survey, psychophysiology, behavioural research, physical and psychological examining (based on age, gender etc.) and so on.³⁸³

In this context, Topçu focuses on the partial results of psychology in a pragmatic way. Accordingly, he attaches importance to the application of psychology in the field of medical suggestion and psychoanalysis, in the choice of career, in the organization of business life, in the determination of talents in education, in the selection of the field of education and in the organization of schoolwork.³⁸⁴ We can draw the following conclusion for Topçu of psychology: he considers that its main purpose is to describe and explain the inner life of man, and this cannot replace epistemology.³⁸⁵

While using expressions such as our spiritual life and our soul structure, Topçu also refers to our consciousness and self in a veiled way. The starting point of a person’s spiritual life is shaped by the biological functions that the person possesses. This spiritual structure needs our biological existence for its existence in material world and this connection always exists as long as we live. This connection manifests itself with tropism, irritability, reflex, instinct. Similar to Kornblith, Topçu opines that, during the early stages of human life, physiological needs and the reactions to them, as well as the immediate environment, accompany us in our spiritual formation. The awakening in consciousness begins in their (tropism, irritability, reflex, instinct) pressure on us.³⁸⁶ According to Alvin Goldman, some epistemologists propose that we directly perceive only sense data and infer information about physical objects from this data. This interpretation aligns with his analysis: physical-object facts produce sense data, which individuals perceive directly and then use to infer the nature of physical objects. This

³⁸³ Topçu, *Psikoloji*, 27–29.

³⁸⁴ Topçu, *Psikoloji*, 37–47.

³⁸⁵ Topçu, *Psikoloji*, 37.

³⁸⁶ Topçu, *Psikoloji*, 27-29, 64-66, 70-73.

inference-based approach to knowledge is very important in terms of Topçu's explanation of intuition.³⁸⁷

As we mentioned before with regard to Quine, in the context of naturalized epistemology, each person's connection with the world is unique, and the acquisitions from here are reproduced by being processed in the conceptual, theoretical field, which is cumulative. However, we think that the point to be noted here is that our acquisitions from the conceptual field are unique, just like our sensory acquisitions from the world. In the context of Topçu, here the self, consciousness, intuition play the most important role.

Einstein states that a conceptual process in the mind begins with sensory experience, which is the starting point of imagination, feeling, understanding etc. In our thinking, we assign to bodily objects a significance that goes beyond the initial sense impressions they create. This added significance is what we consider as "real existence." The reason we do this is practical: it helps us navigate the complex array of sensory experiences. Although these concepts are created by our minds, they feel more stable and reliable than our individual sense experiences, which could always be deceptive. However, the validity of these mental concepts, and our notion of a "real world," depends on their connection to our sense impressions, which they help organize and make sense of.³⁸⁸

However, in the context of Topçu, there is an intuitive readiness during this sensation. We determine an orientation towards this sensation with a self/consciousness that has not yet been contaminated by sensation.³⁸⁹ Nevertheless, Einstein describes the transformation of sense data into something comprehensible/meaningful in the mind through the concepts as a miracle. The term "comprehensibility" here means simply creating some order among sense impressions by developing general concepts and relationships that connect these concepts to our experiences. This ordering makes the sensory world "comprehensible," which is remarkable. According to him, the link between basic concepts of everyday thinking and groups of sense experiences can only be understood intuitively, and it cannot be strictly defined by scientific logic.³⁹⁰

³⁸⁷ Goldman, *A Causal Theory of Knowing*, In Sven Bernecker, Fred Dretske, 20.

³⁸⁸ Einstein, *Ideas and Opinions*, 291.

³⁸⁹ Topçu, *Conformisme et Révolte*, 118-121.

³⁹⁰ Einstein, *Ideas and Opinions*, 292.

At any given moment, the entirety of complex neuronal processes is potentially displayed before it. According to attention, choice, interest, or drive, it can select from this vast array of activities in the “liaison brain,” exploring different areas and integrating the results. This is how the self-conscious mind unifies experience.³⁹¹ Whatever exactly intuitions are, they are definitely not products of empirical science.³⁹²

Arthur Eddington attributed a decisive role to the human mind in all knowledge. He presumes that we impose our own patterns on the laws of nature, such that “the mind may be regarded as regaining from Nature that which the mind has put into Nature.” In the theory of relativity, fundamental properties of objects like length, time, and mass are relative to the observer. This has sometimes been interpreted as evidence that the mind takes precedence over matter.³⁹³

According to Deborah Brown, the mind plays an active role in structuring the patterns of salience between sensory stimuli. Here, she talks about the process of selecting sensory stimuli and these sensory data for attention by the mind. Here, she refers to the concept of “selective attention.” She explains the formation of thought and empirical knowledge by filtering sensory data through a certain attention filter by the mind, basing it on Descartes and Augustine. In a way, she examines how the abstract consciousness/intuition, which we often talk about, works in empirical knowledge and thought, within the context of “attention/selective attention,” which we think is again related to consciousness, because in Topçu’s context, *Niyyah*, *Irādah*, desire, acceptance, rejection are all related to this area.³⁹⁴

She refers to “primary concepts/principles” as those concepts that are directly and intuitively linked to typical groups of sense experiences. Even from a material perspective, all other concepts are meaningful only if they are connected to these ‘primary concepts’ through propositions. These propositions either define the concepts (and the statements that logically follow from them), or are additional propositions, which establish at least indirect relationships between the primary concepts and, therefore, between sense experiences, as we see in Quine’s “modern dogma”.

³⁹¹ Eccles, 214.

³⁹² Alvin Goldman and Brian P McLaughlin, *Metaphysics and Cognitive Science*, In Alvin Goldman and Brian P McLaughlin, (New York: Oxford University Press, 2019), 2.

³⁹³ Barbour, *Religion in an Age of Science*, 114; Peacocke, *Creation and the World of Science*, 56; Holton, 378.

³⁹⁴ Brown, *Augustine and Descartes On the Function of Attention in Perceptual Awareness*, In Sara Hemämad, Vili Lähteenmäki, Paulina Remes, 154-158; Topçu, *Conformisme et Révolte*, 114-124, 129-130.

Additional propositions are “statements about reality” or natural laws, meaning they must prove their validity when applied to sense experiences associated with primary concepts (which does not seem possible).³⁹⁵ In this regard, we may observe that the role of knowledge is ultimately left to intuition.

From another perspective, according to constructive realism which is contrary to static concept of truth, a principle is true if it helps us advance our understanding and if it consistently appears when *reflective consciousness* identifies regular patterns in organizing phenomena. Harald Høffding (1931) argued against a static concept of truth for two reasons. First, it is contradictory because it requires a match between a subject’s belief and independent objects, but cognition is always an interaction between thoughts and phenomena. Second, reality itself cannot be directly known, making it impossible for the *reflective consciousness* to compare it with thoughts. Therefore, the dynamic concept of truth, which involves continuous interaction and adaptation, is the only viable approach.³⁹⁶ We see a parallel here with Topçu’s ideas. According to Topçu, reality does not present itself to us as it is; rather, it is given to us in a form mixed with mind and *self*/consciousness. This aligns with Høffding’s notion of reflective consciousness and the constructive nature of realism. For Topçu, both *self*/consciousness and existence are in a constant state of becoming, this situation manifests through action in the phenomenal world.³⁹⁷ In this context, both human action and its mode of enactment, as well as becoming, remain in motion within an infinite cycle. In our opinion, the epistemological emphasis of the philosophy of action lies here.

Regarding the reality of material objects, one can adopt either a realist or anti-realist position. Realists claim that descriptive statements about material objects have a determinate truth-value, not based on a condition, regardless of whether we can prove them true or false. In contrast, various forms of non-realism argue that not all statements about material objects must be “true” or “false” and reject the idea that our understanding of these statements relies on conditions that does not give an opportunity to determine their truth-value. Material-object statements are typically assumed to be those arising from our perceptual experience. Reductive anti-realists, such as

³⁹⁵ Brown, 293.

³⁹⁶ Faye, 214; Barbour, *Religion in an Age of Science*, 4-5. See also the notion of the “intuitionist constructive existence for the mathematical objects,” which Penrose finds too extreme. Penrose, 113-114.

³⁹⁷ Nurettin Topçu, *Conformisme et Révolte*, 29-30, 54-55, 116-124, 153-155; *Ibid*, *Varoluş Felsefesi Hareket Felsefesi*, 37-40, 52-56,

phenomenalists, believe that the meanings of material-object statements can only be explained through statements about sense-data. Outright anti-realists, we can give idealists as an example for this, argue that sense-datum statements cannot fully characterize our perceptual experience, which is deeply embedded in a material-object vocabulary.³⁹⁸ In general, all these approaches can be associated with determinism. In fact, from Topçu's perspective, we can say that the starting point in all cases is self/consciousness and there is no determinism in human action, whether realist or idealist. In other words, neither material existence in the realistic sense nor the essence behind matter in the idealist sense take an exact control over consciousness, so this gives facility to function of *Irādah*. Thus, there is a very important point that needs to be stated here: while Topçu opposes a realist determinism, he does not accept an idealist determinism.³⁹⁹

In addition, one can observe surprising evaluations suggesting that the concept of consciousness may play an active role in the acquisition of knowledge within quantum physics. Physicist Eugene Wigner asserts that quantum outcomes become definite only when they are observed by a "somebody's consciousness." He argues, "It is not possible to formulate the laws in a fully consistent way without reference to consciousness." Wigner believes that the unique aspect of human consciousness that causes the wave function to collapse is introspection or self-reference, allowing consciousness to describe its own state and thus break the chain of statistical correlations.⁴⁰⁰

Roger Penrose talks about the difficulty of defining consciousness and tries to define it as follows:

I do not think that it is wise, at this stage of understanding, to attempt to propose a precise definition of consciousness, but we can rely, to good measure, on our subjective impressions and intuitive common sense as to what the term means and when this property of consciousness is likely to be present. I more or less know when I am conscious myself, and I take it that other people experience something corresponding to what I experience. To be conscious, I seem to have to be conscious of something, perhaps a sensation such as pain or warmth or a colorful scene or a musical sound; or perhaps I am conscious of a feeling such as

³⁹⁸ Jan Faye, 218.

³⁹⁹ From a scientific point of view, to see Karl Popper's assessments of the non-determinism of the universe and physical theories; Karl R. Popper, 13-25.

⁴⁰⁰ Barbour, *Religion in an Age of Science*, 115.

puzzlement, despair, or happiness; or I may be conscious of the memory of some past experience, or of coming to an understanding of what someone else is saying, or a new idea of my own; or I may be consciously intending to speak or to take some other action such as get up from my seat. I may also ‘step back’ and be conscious of such intentions or of my feeling of pain or of my experiencing of a memory or of my coming to an understanding; or I may even just be conscious of my own consciousness.⁴⁰¹

Can neuroscience alone explain everything we understand about the human as a knowing person? Philip Clayton uses the term “Insufficiency Thesis” as an answer to this question. Accordingly, there are parts of what it is to be a human being that are in principle inaccessible to neuroscientists. He explains these as consciousness, intentionality and caring.⁴⁰²

A metaphysical or theological approach could encompass a theory of human nature where conscious life is rooted in biology. While such alignments do not prove the validity of metaphysical or theological theories, they do argue against the notion of a conflict between neuroscience and theology/metaphysics. Scientific results need to be interpreted metaphysically, and their underlying assumptions made explicit before they can be used to support or refute theological assertions.⁴⁰³

If we look at the issue from an evolutionary perspective, it will be necessary to give a consistent answer to the question Penrose asks:

Consider the ruthless process of natural selection. View this process in the light of the fact that, not all of the activity of the brain is directly accessible to consciousness. Indeed, the ‘older’ cerebellum -with its vast superiority in local density of neurons- seems to carry out very complex actions without consciousness being directly involved at all. Nature has chosen to evolve sentient beings like ourselves, rather than to remain content with creatures that might carry on under the direction of totally unconscious control mechanisms. If consciousness serves no selective purpose, why did Nature go to the trouble to evolve conscious brains when non-sentient “automaton” brains like cerebella would seem to have done just as well? and why should natural selection bother to favour such a race of individuals when surely the relentless free market of the jungle should have rooted out such useless nonsense long ago?⁴⁰⁴

⁴⁰¹ Penrose, 407.

⁴⁰² Clayton, 621.

⁴⁰³ Clayton, 619.

⁴⁰⁴ Penrose, 408, 409.

On the other hand, according to Penrose, the terminology we use to distinguish conscious from unconscious mental activity suggests a non-algorithmic versus algorithmic distinction. Consciousness involves “common sense,” “judgment of truth,” “understanding,” and “artistic appraisal,” while unconscious activity is associated with “automatic,” “mindlessly following rules,” “programmed,” and “algorithmic” processes. Although these distinctions can blur, as unconscious factors influence conscious judgments through experience, intuition, prejudice, and logic, Penrose argues that the judgments themselves are manifestations of consciousness. He suggests that while the brain’s unconscious actions follow algorithmic processes, the actions of consciousness are fundamentally different and cannot be described by any algorithm. The judgments one continuously makes while in a conscious state involve integrating all relevant facts, sensory impressions, and remembered experiences, weighing them against each other, and occasionally making inspired decisions.⁴⁰⁵

If we assume that the human brain’s actions, conscious or otherwise, are just the execution of a complex algorithm, we must then question how such an effective algorithm originated. The typical explanation is “natural selection,” which has some truth since much of the brain’s activity is algorithmic. However, how could natural selection evolve algorithms capable of making conscious judgments about other algorithms’ validity? Consider a computer program: it might be created by another “master” program, which itself is a product of human ingenuity, or it might be assembled from parts made by other programs. Ultimately, the validity and conception of any program stem from human consciousness. Deciding the validity of an algorithm requires insights, not merely another algorithm. For example, when one “discovers” a mathematical truth, their consciousness breaks through into the realm of ideas, making direct contact with it, which is “accessible via the intellect (in Penrose’s words, this is the contacting with Platonic world)” and brings this reality from the ideal world to the physical world. This activity of the brain via consciousness happens in a non-algorithmic way, so Penrose also talks about the ability of consciousness for intuition.⁴⁰⁶

This section points to a very important point in terms of our study, as Topçu also states that beings do not reflect on our consciousness as they are, and that an intuitive, abstract (non-algorithmic, as Penrose puts it) process occurs here. In our opinion,

⁴⁰⁵ Penrose, 411-412.

⁴⁰⁶ Penrose, 412, 414-415, 422, 428-431.

Topçu's words, as cited from Bergson, "If we perceived being as it is, everyone would be a poet or an artist" emphasizes this point. A mental process flows but this sensation goes together intuition, and intuition manifests itself within sensation.⁴⁰⁷

On the other hand, Topçu's evaluation of the survival "instinct," which is the argument frequently used by naturalist epistemologists, is as follows. Topçu is contrary to the evaluation of the ability to know, which has evolved in humans, as a kind of adaptation. First of all, instinctive action and conscious action that is the product of an intelligence are completely different from each other. Instinct is an orderly action towards a target, but here neither the order nor the target is noticed. Instinct is innate; remains fixed and does not undergo development, and is the same in all members of a species. For example, each of the spiders weaves its web in the same way and does it in the same way when young and when older. In addition, instinct is specific to certain actions. A bee that resembles an architect in its hive is an ordinary fly outside its hive. However, intelligence is in a constant state of change and development and progresses differently in all individuals. A human being who is capable of understanding everything does not know anything at first. Unlike instinct, the action of intelligence is conscious; an animal instinctively knows only "to do," while conscious intelligence knows "how to do."⁴⁰⁸

Topçu, similar to naturalist epistemologists, states that the need for knowledge comes to humans from birth. However, according to him, this need is guided by tendencies rather than the "survival instinct." These tendencies may occur as personal tendencies that come from the self, even if they are partly physiological, or as love of truth, love of beauty/ aesthetic, love of goodness and in the form of a search for absolute existence love of Allah (ﷻ). Rather than physiological tendencies, these abstract tendencies are inherent in human nature from birth, without any contact with the outside world. Topçu express that these tendencies exceed reason, does not state it explicitly but we can say that the tendencies are intuitive, and their functioning is related to *Irādah*.⁴⁰⁹

In Topçu, intuition cannot be considered separately from the concept of *Irādah*. To him, *Irādah*, revealing intuition, is the area where a person can establish a direct

⁴⁰⁷ Topçu, *Conformisme et Révolte*, 118-122; Topçu, *Psikoloji*, 118-120, 128-130; On free will (*Irādah*), see Penrose's explanation of the non-algorithmic functioning of consciousness; Penrose, 431-432.

⁴⁰⁸ Topçu, *Psikoloji*, 75; Popper, *A World of Propensities*, 34-40.

⁴⁰⁹ Topçu, *Psikoloji*, 85-95, 105; Topçu, *Felsefe*, 118-120.

connection with Allah (ﷻ).⁴¹⁰ Topçu’s intuitionism can be also evaluated as a moral foundation. However, as DePaul points out, “moral inquiries are conducted in a similar way to philosophical inquiries into other issues such as knowledge, causality, reference or the nature of belief.”⁴¹¹

Philip Clayton approaches the notion of consciousness from a Christian theological perspective, whereby, with the understanding of will, freedom and spiritual being comes consciousness. On this understanding, God is viewed as a conscious agent, similar enough to human agents that the term “person” can be analogously applied to the divine. In this view, both humans and God are moral agents, with humans exercising their agency in consideration of genuine obligations to other people, the world as a whole, and to God.⁴¹² We can say that Topçu may have been influenced by such trends, albeit his own view was original and was rooted in his Islamic beliefs.⁴¹³

In Topçu’s approach to intuition, the effort to establish a foundation through *a priori*, the epistemically authority of intuition or the defence of the opposite, such as an attitude that we are accustomed to seeing in naturalist epistemologists, do not come to the fore. However, he definitely rejects knowledge systems that exclude metaphysics, such as modern positivism, materialism. According to him, what is independent of experience in knowledge is not concepts but *Irādah* itself. We can say that in Topçu’s system of thought, what is *a priori* in epistemology is *Irādah*. However, for the intuition to transform into knowledge, a connection with the phenomenal world is required. *Irādah* exists in us before we come into contact with the world. The motivation that moves us is *Irādah*. As a result of this action, we gain acquisitions regarding the world. However, this acquisition process does not occur in a deterministic manner. Here, intuition comes into play again, the world does not reflect on us as it is, it is given to us

⁴¹⁰ Topçu, *Conformisme et Révolte*, 16-17, 19-21, 30, 118-122, 126-134, 136-137; On the interaction of consciousness with the divine field, see Peacocke, *Path from Science to God*, 118, 123-124; Ibid, *Varoluş Felsefesi Hareket Felsefesi*, 56-64.

⁴¹¹ DePaul, *Why Bother with Reflective Equilibrium?*, In William Ramsey and Michael R. DePaul, 294-295.

⁴¹² Clayton, 615.

⁴¹³ Topçu, *Conformisme et Révolte*, 12-13, 19; Kara, *Müslüman Kalarak Avrupalı Olmak*, 484; Kara, *Bir Ahlak Davası Nurettin Topçu*, 58, 61, 73, 86; Kara, *Nurettin Topçu'nun Hayatı*, In Kara, *Nurettin Topçu* (Kültür Bakanlığı), 15; Mehmet Birgül, 125, 167-169; Birinci, *Hareket Mecmuası*, in Kara, *Nurettin Topçu* (Kültür Bakanlığı), 107; Gündoğan, *Arafta Bir Düşünür*, 13. We can express the most basic difference as follows: according to the understanding that Clayton mentioned, religious concepts of community stress the unity among humans through the divine presence and the covenant that binds us as “one in the context of *society*.” However, Topçu is clearly against this, according to him, no element, including society and the state, should surround free will. See Topçu, *Conformisme et Révolte*, 12-19, 34-37, 84-87, 105; Also see, Ibid, *Varoluş Felsefesi Hareket Felsefesi*, 47-48.

in a mixed form with our self/consciousness and takes shape according to our intuition ability.

In Topçu's critique of scientific knowledge devoid of metaphysics, as in Quine, the process of the *self's* unique interaction and inference with both the sense object and the (metaphysical) conceptual field is seen in making sense of sense data. Quine believes that this conceptual interaction field emerged through natural selection in an evolutionary process, whereas according to Topçu, this is an interaction with the divine field. In his world of thought, this field is not a purely concrete field, completely independent of God's influence. This field is a field that the individual takes action and that God and the individual construct together, contrary to the evolutionists' assumption that it emerged randomly, but we can still say that even accepting this as such does not pose a problem in Quine's philosophy. With his principle of pragmatism, he would focus only on the benefit that could be derived from it.

To evaluate it from another perspective, Outb al-Din Shirazi, a classical Islamic philosopher (d. 1311), also highlights the concepts of self/consciousness in knowledge. To him, we can say something about hypothetical mathematical figures, but they have no concrete existence. Therefore, since something has to be present to the soul, there has to be a form imprinted in the soul. Self-consciousness, on the other hand, requires no imprinted form. For any sort of knowledge that changes, in fact, there has to be an acquired form of some sort occurring in us corresponding to the thing perceived. Perception is not merely a relational process between the perceiver and the perceived, though such a relation is involved. Ultimately, all perception relies on the notion of presence—there must be a moment in which knowledge is immediate rather than mediated by representational forms. While the forms of perceived objects may exist as states within the soul, the act of perceiving itself rests on the subject's direct awareness of those forms. Shirazi presents an original approach by stating that the object that consciousness needs during perception can be abstract as well as concrete, but this abstract "object of perception" is expressed as the subject of perception, as an "acquired form," which evokes a kind of *a priori*.⁴¹⁴

From another dimension, Mutahhari argues that the acquisition of knowledge about the phenomena occurs through the mind's abstraction of concepts. According to

⁴¹⁴ Walbridge, 104-106.

him, this abstraction does not occur through the mind's purely material functioning; rather, similar to Kant's view, it occurs through categories that enable abstraction in the mind, which are innate to humans. In other words, it occurs through the blending of concepts reflected from the world into the mind with abstract categories in the mind. The acquisition of belief in knowledge also occurs in this way. Unlike the Kantian *a priori*, knowledge exists in the mind directly and independently, through abstraction as a manifestation of existence itself. Mutahhari departs from Topçu's view by asserting that the categories (in fact a kind of *a priori*) are innate. Nevertheless, like Topçu, he rejects the materialist argument that knowledge has a structure reflected in the mind as the object is.⁴¹⁵

In discussing intuition, Mutahhari argues that, despite some viewing intuition as a faculty unique to Prophets, the intuition of Prophets is completely flawless; while it is the same in *essence* as that of other human beings, it differs in *degree*. Such intuitions are the kinds of hypotheses and inspirations that suddenly appear in the mind, and analyses and proofs occur in this way. However, he also mentions the existence of a process that prepares the formation of this intuition. The mind acquires knowledge of the depths of things; this knowledge does not reach it through the senses; rather, the senses provide signs and indicators that point to it. Our senses are like arrows pointing to the existence of something internal and cannot penetrate the essence of things. Mutahhari cites internal consciousness as an example. We cannot experience internal consciousness perceptually; it has an existence beyond perception. We can say that this is the consciousness that Nurettin Topçu frequently points out and that is abstractly active in knowledge.⁴¹⁶

Moreover, Naquib Al-Attas, from another point of view, examines the destruction of this paradigm (i.e., positivism in the nature of knowledge). He describes the knowledge methodology that has originated and spread around the world by the West as problematic and chaotic, since it "pretends to be real," but produces "confusion and scepticism." Methodologically, the result of this is that doubts and assumptions are brought to a scientific level, which is regarded as "the truth" (*haqīqah*). However, rather than being "the truth," this is an *interpretation of* "the truth" (typically seen through the

⁴¹⁵ Mutahhari, *Durūs Falsafīyyah fī Sharḥ al-Manzūmah*, 207-212, 214, 220.

⁴¹⁶ *Ibid*, 216-217, 222, 227-229.

eyes of a selective Western “science”).⁴¹⁷ In this respect, in order to present a different dimension from the same point, Al-Attas highlights the importance of the nature of the one who perceives positivist, scientific knowledge. Like Topçu, he also expresses that there is no bare knowledge even in physical science.⁴¹⁸

Furthermore, in the light of Islamic thought tradition, we can say that Topçu’s perspective has some similarities with the ones developed by the classical philosopher Al-Ghazālī, who considered that there are two types of knowledge: that *revealed* by revelation, and that *acquired* by reason. In addition to the fact that “religious knowledge and rational knowledge” do not contradict each other, “intellectual sciences” contribute to knowing Allah (ﷻ) and drawing closer to Him (e.g., appreciating manifestations of His attributes in creation). Also, Al-Ghazālī commensurately divides “intellectual sciences” into worldly and other-worldly sciences.⁴¹⁹

Epistemologically, to Al-Ghazālī, we need to state that the source of “intellectual sciences,” that is, the main element in acquiring knowledge, is the heart, both in the sciences of this world and in the sciences of the other world. Al-Ghazālī divided the heart itself into spiritual and material dimensions, and stated that it is not only the locus of the soul in the world, and starting point of all our bodily actions, but also the centre of desiring to know Allah (ﷻ) and approaching Him. This is the place that perceives, experiences, understands, and *knows*. In this regard, comprehension means nothing but the presence in the heart of an image in accordance with the truth of what is intelligible.⁴²⁰ According to Al-Ghazālī, whatever the heart (*qalb*) is busy with, the knowledge of that subject is revealed to it:

The heart of the righteous and obedient man, although being bright, might not have the clear statement of reality, for he does not seek reality, nor does he have his mirror opposite to the direction of the thing sought. Perhaps all of his attention is taken up by the details of bodily submission or arranging the means of his livelihood, and his thought is not free to contemplate the Lordly Presence and the hidden divine realities. So, there is revealed to him only that which he thinks about, whether it is the minute defects of his religious works or the hidden faults of the soul if it

⁴¹⁷ Al-Attas, *Islam and Secularism*, 133-134.

⁴¹⁸ Al-Attas, *Islam and Secularism*, 133; Al-Attas, *Prolegomena to the Metaphysics of Islam*, 14-15.

⁴¹⁹ Al-Ghazālī, *Revival of Religion’s Sciences Ihya’ Ulum Ad-Din V. I.*, translated from Arabic by Mohammad Mahdi Al-Sharif, (Lebanon: Dar Al-Kotob Al-Ilmiyah, 2011), 24-25, 26, 27-28, 31; Al-Ghazālī, *Revival of Religion’s Sciences Ihya’ Ulum Ad-Din Vol. III*, translated from Arabic by Mohammad Mahdi Al-Sharif, (Lebanon: Dar Al-Kotob Al-Ilmiyah, 1971), 28-30; Osman Bakar, *Classification of Knowledge in Islam*, (Kuala Lumpur: ISTAC, 2006), 205, 209, 217-218.

⁴²⁰ Al-Ghazālī, *Revival of Religion’s Sciences Ihya’ Ulum Ad-Din Vol. III*, 3, 5, 22, 23, 29, 32.

is these which occupy his mind, or the interests of gaining a livelihood if he thinks of them.⁴²¹

As Al-Ghazālī stated, apart from the context of unmediated knowing, knowledge, whether worldly or otherworldly, emerges in the heart through a kind of intuition. Topçu had similar beliefs on the starting point of knowledge. While the basis of obtaining any knowledge for Al-Ghazālī is the tendency of the heart (*qalb*), this basis in Topçu is will (*iradah*), intention (*niyyah*), and *tension* in the sense of effort towards objects. Intuition is the key factor here, but Topçu’s vision is distinguished from that of Al-Ghazālī by the fact that while intuition in the latter arises in the heart (*qalb*), Topçu distinguished this thought by arguing intuition in consciousness, which is the key factor for his model.

Turning to the model of knowledge in the West, which Kuhn referred to as a “paradigm,” is loaded with Western historical, cultural, religious, and philosophical values (albeit these themselves arose from interactions with other cultures and civilizations). The modern Western paradigm, and its assumption of dualism in knowledge, the exclusion of metaphysics from science, and taking natural sciences as deterministic, are the consequences of the Western evaluation of the physical world and the application of its own values.⁴²² In this regard, another similarity between Topçu and Al-Attas is seen in the role that intuition plays in empirical knowledge.

Al-Attas also emphasizes the importance of intuition in understanding both the nature of Allah (ﷻ) and the material world He created. Like Topçu, he expresses the intuition we use *when understanding the material world* separately from the concept of intuition itself. The point to note here is that, for Muslims, empirical intuition is created by Allah (ﷻ) through revelation. Conversely, while a Western thinker understands and interprets the material world with the worldview formed by his cultural, social, traditional, and philosophical values throughout history, a Muslim thinker does this with a *Weltanschauung* created by revelation.⁴²³

We see that as a subject receiving knowledge, it is out of the question for a person to receive pure knowledge from the material world. In Topçu, we see an occurrence in the process of acquiring knowledge, whereby *intention (niyyah)*, *will (iradah)*, *intuition*

⁴²¹ Al-Ghazālī, *Revival of Religion’s Sciences Ihya’ Ulum Ad-Din Vol. III*, 23-24.

⁴²² Al-Attas, *Islam and Secularism*, 134-135.

⁴²³ Al-Attas, *Prolegomena to the Metaphysics of Islam*, 3-4, 6, 7, 14.

(*hads*), *intelligence (aql)*, and *tension* as a sense of effort create motion, an action that determines our knowledge and thoughts. As for Al-Attas, the consciousness of the person receiving the knowledge is not passive in the face of the object. Rather, knowledge is a kind of fusion of the human spirit and object, which is how what we call understanding takes place. However, unlike Topçu, Al-Attas questions whether the consciousness tends towards the knowledge of the object with the values it is loaded with.⁴²⁴

The systematic exclusion of Islamic contributions to the development of Western civilization is something that has long been acknowledged, and which continues to be perpetrated. Even nowadays, the conflation of “science” and “civilization” with “Western civilization” is so pervasive that many authors may even be unaware that they are perpetrating such stereotypes, as in the following examples from Rupert Hall:

Of course, I do not deny that at the beginning of human intellectual history the number of doubtful propositions was large; certain progress in geometry must be made before the search for a rational value of π becomes irrational, and, of course, although the criteria of rationality are unchanging, their application to changing sets of facts ensures that propositions irrational in one period become rational in another. In Greek antiquity, it would have been irrational (that is, more precisely, counterfactual) to claim that the number of planets was greater than five, while, for us (with better observations) the opposite is true. On the other hand, the assertion: ‘There are more planets than we see or shall ever see’ has always been irrational. I merely make the point that science, for all the shocks of quantum theory, has preserved more of the rationality of *our* [emphasis added, i.e., Western] civilization than any other aspect of it.⁴²⁵

Although Hall claimed that “science,” by which he means Western “Newtonian” science, offers a rational foundation for his civilization (i.e., Western civilization), science and rationality are the cumulative and common heritage of humanity. Al-Ghazālī was one of the most important figures of the Islamic thought tradition, and re-activating the intuitive knowledge which he tried to systematize, and which also influenced the important names of the Western Enlightenment, can contribute to contemporary Islamic thought in many ways. For example, by its very nature, the possibility of intuitive knowledge will provide us with an ontological basis in line with

⁴²⁴ Ibid, 14, 15, 32.

⁴²⁵ Hall, 28, 277, 278.

the tradition of Islamic thought, instead of capitulating to Western intellectual domination.

4.3 CHAPTER CONCLUSION

When we look at the issues discussed in the naturalized epistemology school and Topçu's ideas on these issues in a holistic way, we can say that Topçu presents a very original approach. In the context of Replacement theory, while he argues that philosophy and science can never replace each other and that the autonomous structure of philosophy should be preserved, he is close to Epistemologists, while he is close to Cooperative Naturalism and Substantive/Moderate Naturalism with the idea that science can contribute to philosophy just as philosophy contributes to science. On the other hand, he is close to psychologists when he states that psychology has an important place in epistemology, but like Kornblith, he opposes the thesis that it can replace epistemology. Another issue is that he clearly rejects the "*a priori* basis in knowledge" approach that we are generally used to seeing among naturalists.

While Topçu is in line with Replacement and Cooperative naturalism with this view, he displays a stance close to Substantive/Moderate Naturalism by emphasizing the concepts of self/consciousness and intuition, the metaphysical dimension in knowledge, and their connection with Allah (ﷻ). He also clearly rejects a positivist understanding of science that is free of metaphysics. We can say that Topçu's original structure emerges here. While he strongly emphasizes the need for science in order to recognize the truth, he underlines the need for metaphysics and philosophy in making sense of the data obtained from science. According to him, metaphysical philosophy has always been a necessary phenomenon that has opened the way for science throughout history.

CHAPTER FIVE

NURETTİN TOPÇU AND ISLAMIC THOUGHT IN THE CONTEXT OF INTUITION

This chapter analyses the concept of intuition in the context of Islamic philosophy, and its status in terms of our thesis. However, the concept of intuition is not adequate to be explained even in terms of schools such as *Ishrāqīyyah* (Illuminationism) and *Mashshāīyyah* (Peripateticism), each of which would provide ample substance for a separate thesis for each Islamic philosopher in the context of their own systems. To avoid exceeding the scope of this study, we undertake to discern general framework of the traditional Islamic philosophical position with regard to intuition, mainly with regard to Ibn Sina, Al-Farabi, and Al-Ghazālī. This chapter discusses Al-Ghazālī's approach to intuition in terms of his association with the heart (*qalb*), in general, in the context of the *qalb*'s function in knowledge. It also evaluates intuition in general in terms of knowledge, and scientific knowledge in particular within the framework of Islamic thinkers. In addition, it appraises Topçu's understanding of intuition in the context of Islamic thought, and in terms of "mystical intuition" in his own words.

5.1 THE PLACE OF INTUITION IN ISLAMIC THOUGHT FROM TOPÇU'S PERSPECTIVE

In Topçu's understanding of intuition, there is a progression from intuition to mystical intuition. Although mystical intuition is closely related to religious thought, it does not actually express it entirely. In addition, his mystical intuitionism has a close relationship with Sufism in the context of Islam, so we will need to examine these parts. Since in Topçu's thought, *Irādah* is an inseparable part of the human being's self/consciousness, the concept of *Irādah* comes to the fore in the concept of mystical intuition as well as in the concept of intuition.

Building on the preliminary discussion unpacked in previous chapters, Topçu underlined that the concepts of "intuition" and "mystical intuition" are two different things. He uses the term "mystical" in the expressions "mystical intuition" and "mystical faith" (*īmān*). Although the *Irādah* in both intuition and mystical intuition is

the same, there is a difference in nature between these two kinds of intuitions. The concept of “faith” (*īmān*) that he used is related to the concept of “belief” (*al-ītiqad*), which he explained as corresponding to the concept of “belief” in the basic definition of epistemology (i.e., knowledge is *justified, true* “belief”). According to him, in order to have beliefs, one has to have intuition, and intuition reduces sensation to its pure form through *Iradah*. Thus, Topçu states that the fields of knowledge and belief cannot be separated from each other. As belief is at the foundation of thought, so *Iradah* /intuition is at the very beginning of the act of thinking.⁴²⁶ Topçu says that it is possible to come up with the knowledge of the thing in the context of causes and effects or to recognize the thing with the causes and effects, and similarly, to recognize the same thing in the context of “confirming words.” In other words, when he says that belief is present in every thought, he actually means that acquiring these two types of knowledge is also a “belief.” Then, Topçu also talks about the imitation of belief, saying that the vast majority of people imitate belief, otherwise civilizations, cultures and societies would not have formed. However, Topçu’s mention of the effect of “words” in the formation and imitation of belief reminds us of Quine. While Topçu, like epistemologists, emphasizes intuition (with *Iradah*) when explaining the formation of belief, Quine uses the concept of “empathy,” which also enable us to communicate. But isn’t it a kind of intuition either? Here, Topçu emphasizes the importance of *Iradah* because while those with weak *Iradah* easily imitate faith, which leads to compliance, those with strong *Iradah* cannot be easily led.⁴²⁷

When Topçu defines faith (*īmān*), he means the continuity of a belief (*al-ītiqad*) in a person. It should be emphasised that “belief” here does not refer to the conventional meaning of “religious belief,” but to an epistemic phenomenon, because he defines belief as “knowledge,” which means the unification of consciousness with the object. His definition of knowledge as the representation of the object in the self/consciousness, as a strong belief about it, once again leads us to the definition of “knowledge” as “a justified true belief.” In this sense, faith (*īmān*) is a belief (*al-ītiqad*) that is established, sustained and dominates the life of a person. There is a difference of degree between faith (*īmān*) and belief (*al-ītiqad*), not of essence and there is a voluntarily submission

⁴²⁶ Topçu, *Conformisme et Révolte*, 128-140, 157-158; Ibid, *Bergson*, 70; Ibid, *İradenin Davası Devlet ve Demokrasi*, 104-110.

⁴²⁷ Topçu, *Conformisme et Révolte*, 141-146; Quine, *Pursuit of Truth*, 42- 43, 67-71.

in faith (*īmān*). Topçu, who has always kept the function of the *self* in the foreground from the beginning, sacrifices the *self* here. At this point, faith (*īmān*) becomes the same as love and the transition from intuition to mystical intuition begins.⁴²⁸ Topçu explains the abandonment of the self as follows. The human *self* brings us closer to the door of infinity through our *Irādah* and conscious efforts. There is another “*self*” granted to us from infinity that can open this door. Thanks to this divine trust that takes us from the finite world of existence to infinity, the jealousies, ambitions, pleasures of domination, desires and appetites that constitute the “old self” are abandoned one by one. We move away from luxury and pleasures. We only enjoy divine joy. We abandon all the lust, wealth and fame that constitute the old self. Serving all beings becomes a passion in us. This transition does not happen all of a sudden, it happens gradually, step by step.⁴²⁹

In fact, the self’s self-sacrifice is the self’s effort to find itself, because the process begins with the reflection of “being” (i.e., the things on the self/consciousness gradually turns into the self’s search for “Being”). In order to investigate Being by starting from objects, Topçu gives the example of Ibn Tufayl’s “Hayy Bin Yaqzan” from the Islamic thought tradition. According to Topçu, this stage takes on a mystical form. He reminds that *the self* emerges in the realm of “being,” or rather, “being” creates *the self* within itself. In the encounter of *the self* with being, *the self* was separating itself from being (things), but at this stage, an effort to holistically get closer to being and to become “one” emerges. Topçu calls this being “the Only Necessary” and “Necessary Being.” When the self reaches the stage of searching for it, it tries to resemble it, in this sense, in every experience of faith in contact with being, there is a religious state. Self/consciousness begins to increase the powers of the transcendent *Irādah* that are imprisoned and limited in *the self*. At this stage, *Irādah* reflects on the self/consciousness like a mirror. For this reason, according to Topçu, faith (*īmān*) has a mystical character. In fact, the Divine Being cannot be reached through the senses and the mind, but through the heart (*qalb*) and *Irādah*. In this case, religion is essentially and necessarily mystical.⁴³⁰

⁴²⁸ Topçu, *Conformisme et Révolte*, 149-151, 157-158, 166, 204, 212; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 144-145, 149-150. Ibid, *İradenin Davası Devlet ve Demokrasi*, 78-80. Ibid, *Bergson*, 74-75.

⁴²⁹ Topçu, *Var Olmak*, 66-67; Ibid, *Bergson*, 70-74, 136. Also see, Topçu, *Conformisme et Révolte*, 172-173, 177; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 148-151.

⁴³⁰ Topçu, *Conformisme et Révolte*, 151-152, 154-155, 183-184, 204, 207, 212; Ibid, *Bergson*, 70-72; Ibid, *Var Olmak*, 91-92; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 148-152, 182-184.

The connection that Topçu expressed between the self and knowing the mystical truth is an archetypal concept in Islamic thought, articulated by Al-Ghazālī in *The Alchemy of Happiness* thus: “knowledge of self is the key to the knowledge of God. He who knows himself knows God.” Al-Ghazālī states that to know oneself, one must know that one is created from the apparent form (i.e., the material body), and the inward “soul” (i.e., spirit and heart). While the former can be assayed by the physical eye (i.e., an experimental observation in the world of form), the latter can only be known with the eye of truth. The reality, the *essence* of man, and his fundamental reality, lies in the *inward* sense, in the faculty conventionally called the heart, which directs the other senses. The essence of the heart is not from the phenomenal world; it has come to this world like a traveller from the transcendent world.⁴³¹ In fact, Al-Ghazālī calls *Irādah*, which Topçu defines as a divine faculty coming from God, and which determines our inclination/intention, as the *qalb* (heart).

Accordingly, for Topçu, there is another reason why faith has a mystical character. When belief is advanced to the point of faith, which he equated with love, there is a feature in faith that transcends the accustomed limits of the mind and carries it to a higher level. However, here, a situation like faith-reason dichotomy does not arise, because in Topçu’s thought, epistemic knowledge is formed through contact with “being” in the self/consciousness, and faith/love is also formed through contact with “being.” In fact, he clearly states that the faith (*īmān*) he speaks of is something other than fideism. Therefore, his ‘mystical knowledge’ is related to the knowledge of Necessary Being as well as the knowledge of “concrete being.” This means that with mystical knowledge, the self/consciousness rises to a level of complete perfection in nature and the supernatural. One reaches this divine presence not through the senses and mind, but through the heart (*qalb*) and *Iradah*.⁴³² The point we will draw attention to here is that Topçu’s concept of mystical knowledge is not related to natural events, but is entirely related to the fields of art, morality, and religion and engenders love of truth. In his thought, we see this level of competence of the self/consciousness in its action in the fields of art, religion, philosophy and morality.⁴³³

⁴³¹ Al-Ghazālī, *The Alchemy of Happiness*, translated from Arabic by Claud Field, (New York: Routledge, 1991), 5-7.

⁴³² Topçu, *Conformisme et Révolte*, 152-155, 164-171; *Ibid*, *Bergson*, 70-71, 74; *Ibid*, *Ahlak*, 24-27; *Ibid*, *İradenin Davası Devlet ve Demokrasi*, 26-30, 68-74, 111-116.

⁴³³ Topçu, *Conformisme et Révolte*, 162-164; *Ibid*, *Bergson*, 76; *Ibid*, *İslam ve İnsan Mevlana ve Tasavvuf*, 218-219; *Ibid*, *İradenin Davası Devlet ve Demokrasi*, 90-92.

Topçu claims that there is a great similarity between the mystical states experienced by artists and by religious devotees. Indeed, he even points out that the same spiritual maladies (e.g., obsessions, solicitude, doubts, grief, etc.) experienced by the suffering mystic during ascetic experience are also experienced by artists. According to him, artists inherently resemble suffering ascetics; in both cases, this is a process that leads to the abandonment of natural and supernatural pleasures, leading to the destruction of *Irādah*. Here, the artist does not necessarily have to be religious, and Topçu gives Titus Lucretius Carus (Lucretius) (BC 99–55) and Johann Wolfgang von Goethe (1749–1832) as examples of this. Topçu also gives the contrasting example of Michelangelo Buonarroti (1475–1564); while captivated by the search for eternity, he was also suffering from existential pain and suffering, like a religious mystic. However, while the soul of the religious mystic can break away from himself and throws himself to Allah (ﷻ), surrendering his *Irādah* between love and death to the absolute, Michelangelo, who is surrendered by the ‘desire for life’, could not overcome it in any way and could not be a complete mystic. Topçu explains this event of the mystic state as “the death before death,” and he does not limit this experience only to Michelangelo. While comparing the state of the artists to the state of the mystic, for example, like a Buddhist mystic, Topçu states, in the artist, first of all, an indifference to every desire begins. Subsequently, the pursuit of the life of the intellect begins to disappear, until finally, a state of absolute insensitivity and apathy takes hold. According to Topçu, this description of Indian yoga and the indifference to the outside world and to oneself seen in an artist like Beethoven are exactly the same. Once this state, like hypnosis, is reached, the person carries it with him in every area of daily life, while walking, talking, working. However, at this stage, the artist remains incapable of achieving union with Allah (ﷻ), because the help of the Absolute *Irādah* is now required. This union is not something that a person can achieve himself.⁴³⁴

While the *Irādah* must ask for help from the Absolute *Irādah*, the artist cannot abandon his artistic passion, cannot give up his *self*. The union of the soul with Allah (ﷻ) occurs through an inspiration (*ilhām*) given by Allah (ﷻ), and from then on, there is no more bustle/occupation such as affirmation and denial. What remains for the mystic is a pleasant state of peace, a state of ecstasy and observation/witnessing, contemplation.

⁴³⁴ Topçu, *Conformisme et Révolte*, 158-171; *Ibid*, *İslam ve İnsan Mevlana ve Tasavvuf*, 149-150; *Ibid*, *İradenin Davası Devlet ve Demokrasi*, 72. Also see, Al-Zunaydī, 237, 239-240.

Topçu describes this state as the drop merging into the sea. This is a state of unity, *Tāwhīd* and unification. The artist cannot achieve the unity because he cannot escape from multiplicity. The faith of the religious is faith in unity, faith in the one and Only *Irādah* that all *Irādah* yearn to reach. It is to surrender voluntarily to the Absolute *Irādah*, to accept to give up one's own *Irādah*. This final stage will be possible thanks to the light (*Nūr*)/inspiration (*Ilhām*) sent by Allah (ﷻ). This *Tawhīd*, the unity of being, is very clearly expressed in Topçu's Islamic mysticism through the theory of "*Wahdat al-Wujud*" ("Unity of Being").⁴³⁵

Topçu summarizes the course of thought as follows: from intuition to belief; from belief to faith; and from faith to mysticism. At this stage, thought begins to bifurcate. As the difference between self-knowledge and the knowledge of Allah (ﷻ) becomes apparent. The knowledge of "self" is aware of its own inadequacy and calls for help from the power that will save it from this inadequacy. The *Irādah* attached to the body wants to completely strip off the egoistic and animal self and surrender to *Irādah* of Allah (ﷻ). This is a complete renunciation of the desires of the primitive "self." This is also a renunciation of the desires of our soul in order to reach the *Irādah* that gives us existence, independent of our awareness, and gives us the *Irādah* to want ourselves. By wanting a supernatural being that transcends his humanity, man actually wants himself and ultimately, this "self" disappears in Allah (ﷻ) and becomes identical with Him. In the words of the Sufis, this is to attain the secret of unity, to become one with the truth. Topçu brings Mansour al-Hallaj (858 CE- 922 CE) and Mawlānā Jalāl al-Dīn Muḥammad Rūmī (1207-1273) as paragons who attained this ascent into negation, demonstrating the "annihilation of the ego" (*Fanaa*).⁴³⁶

⁴³⁵ Topçu, *Conformisme et Révolte*, 158-171, 212-213; Ibid, *Bergson*, 73-76, 131-136; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 135-146, 150-152, 158-159, 173, 181-186; Ibid, *İradenin Davası Devlet ve Demokrasi*, 70-72. During a conversation, Topçu said that understanding "*Wahdat al-Wujud*" (the Unity of Being) seems easy, but in order to understand and know it, it must be lived. In history, it has been seen that some people who had the understanding of the Unity of Being went astray. The need for the Sheikh arises here, and Sufism cannot be known without being experienced, he says. As an example, he states that he had this experience in the following way with his sheikh. "Abdulaziz Efendi would preach according to the issues that passed through the hearts of each disciple and would answer each of the questions in their mind separately before they would ask." To see, Dursun Özer, *Nurettin Topçu'dan Bazı Hatıralar*, In *Nurettin Topçu'ya Armağan*, 197. He also refers to Al-Ghazālī, and says that the realities of Sufism can only be known through [mystical] experience by the self. Nurettin Topçu, *Bergson*, 76. Also see, İbrahim Kalın, 2.

⁴³⁶ Topçu, *Conformisme et Révolte*, 208-209, 212; Ibid, *Var Olmak*, 91; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 126, 141-146, 150-152; Ibid, *Var Oluş Felsefesi Hareket Felsefesi*, 59-63; Ibid, *Kültür ve Medeniyet*, 186-187.

When Topçu describes idealism, he does not see it as a situation completely disconnected from realism; on the contrary, in his understanding of idealism, there is a process from reality (realism) to ideality (idealism). Individually, after taking steps in reality, man turns towards the ideal transcendent eternity through *Irādah*.⁴³⁷ It should be noted once again that *Irādah* is the key factor in the transition from the realm of realism to the realm of idealism. Topçu had stated that the first steps of sublimation in man occur with the abandonment of vital interests and pleasures in the material world and the emergence of spiritual riches by turning to higher spiritual pleasures. In fact, Topçu underlines that this is the case even from a naturalist perspective, because he mentions the principle accepted even in Freudian thought that “vital tendencies that change shape by undergoing sublimation are filled with spiritual richness and complexity” in this context. This part is very important because without this, art, philosophy and religion cannot emerge. At this point, Mehmet Birgül asks whether it is contradictory for Topçu, whom he regards as an idealist thinker, to accept this naturalist interpretation. In our opinion, this is actually a very consistent explanation from Topçu’s perspective. In fact, Topçu merely notes that this is accepted as a truth even from a naturalist perspective, even though he did not arrive at it from the naturalist episteme. The difference here can be explained as follows. As in Freudian thought, naturalists accept that this tendency is a “natural kind.” However, Topçu states that naturalists somehow ignore the role of “*Irādah/Niyyāh*,” because pleasures and vital interests can only be given up with *Irādah/Niyyāh*, and spiritual pleasures and values can be obtained only with *Irādah*. This part is the most important point in terms of our thesis. To some extent, Topçu resembles naturalist epistemologists in some places, but with the concept of *Irādah*, he completely separates himself from them and achieves his own unique position.⁴³⁸

From another perspective, we have already mentioned that Topçu constantly emphasizes the need for our physiological existence in the context of the human self/consciousness. He also makes a similar reminder in the cases of religious life/mystical state/introspection. For example, since religious life and the mystical state are a deepened form of introspection, it is necessary to make some physiological

⁴³⁷ Topçu, *Kültür ve Medeniyet*, 42-43; Ibid, *Var Olmak*, 20-23, 28-30, 36-38, 82; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 126-127; Ibid, *Conformisme et Révolte*, 174, 183-184, 207; Ibid, *İrâdenin Davası Devlet ve Demokrasi*, 104-105; Ibid, *Bergson*, 70-72.

⁴³⁸ Topçu, *Conformisme et Révolte*, 81, 179, 183-185.

preparations (such as fasting and asceticism) in order to achieve this state. He even says that the Prophet Muhammad (ﷺ) went through a similar preparation stage when he received the first revelation in the cave of Hira.⁴³⁹

In this context, although Sufism/mystical intuition appears as the ultimate point that can be reached in Topçu, this point is a whole with the processes that preceded it (i.e., part of a continuum), in contrast to knowledge produced by highlighting only pure “Sufi” knowledge, detached from this context, which would resemble magic and superstition, as Topçu emphasizes.⁴⁴⁰

Topçu says that the traditions of Sufism and its unifying force have been the reason for the unshakable continuity of Anatolian history. Also, he expresses that the underlying reason for the breakdown of Islamic unity and the collapse of the Islamic world is the abandonment of the determination to struggle against the lower self (i.e., desires), which is the specialty of ascetics. During the formation of Islam, the first ascetics, the Companions (*Ashāb*), were fighting against external influences, including on the battlefield, and also fighting a great war against their own *Nafs*. Obeying Allah (ﷻ) is revolt against one’s own *Nafs*. In addition, Topçu states that the only way for the people of Anatolia to be saved from the negative situations they have fallen into is through this holy jihad, which can be declared in the heart of man and in the country, and that the Islamic world can only be saved from this period of stagnation (and political, economic, and moral crises) in this way, and he calls this path that will lead consciences to the path of universal unity “spiritual renaissance.”⁴⁴¹

The aim of mysticism is to create unity in the universe in love. Only through mystical contact is it possible for the human *Irādah* to unite with Allah (ﷻ) to create universal love among people.⁴⁴² Mystical effort is the most powerful work of intuition, and the deepening of philosophical intuition (which is base of science) is made possible by mystical intuition. It is the highest level that the human spirit can experience. In other

⁴³⁹ Ibid, *İslam ve İnsan Mevlâna ve Tasavvuf*, 137, 201-202.

⁴⁴⁰ İhsan Fazlıoğlu, *Bilen Bir’i Bilir*, In İsmail Kara (ed.), *Nurettin Topçu*, (Ankara: T.C. Kültür ve Turizm Bakanlığı, 2009), 214-215.

⁴⁴¹ Topçu, *Conformisme et Révolte*, 178–179, 209; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 123-124; Ibid, *İradenin Davası Devlet ve Demokrasi*, 73-74, Ibid, *Kültür ve Medeniyet*, 67-69. To see Louis Massignon’s quotation from Topçu for the same explanation, Louis Massignon, *La Passion de Husayn Ibn Mansur Hallaj: Martyr Mystique de l’Islam, Vol.2*, translated from French by Herbert Mason, (New Jersey: Princeton University Press, 1982), 429; Nurettin Topçu, *Büyük Fetih*, 25–26, 32-35.

⁴⁴² Nurettin Topçu, *Bergson*, 135; Ibid, *Kültür ve Medeniyet*, 157, 182; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 218-220.

words, the reality of the mysticism can be *experienced* by the *self*. In this case, we should state again that Topçu derives mysticism from the natural living space of man (i.e., from the nature of man). According to him, mysticism is a situation related to human nature (*Fitrah*) rather than being related to a religion. In this case, while mysticism takes a different form as manifest in Christianity and Buddhism, it attains its highest level in Islam. According to Topçu, In Islam, mysticism (i.e., Sufism) constitutes the essence and real structure of Islam. In addition, it is useful to remember Al-Ghazālī's observation concerning Sufism as a universal and necessary phenomenon. Al-Ghazali stated that it is certain that a mystical community that knows Allah (ﷻ) has existed in every age, that Allah (ﷻ) has never left the world without them, and that these Sufi groups existed even in very ancient times when formal monotheism had fallen into abeyance among the generality of people, as attested by the Qur'an and hadiths. Philosophers and thinkers were influenced by the words of the prophets, and Sufis and incorporated them into their own thoughts.⁴⁴³

Moreover, Topçu states that Islamic mysticism originates from the Qur'an itself. When viewed holistically, he says that the Qur'an contains the idea of mystical union between the human soul and the Creator.⁴⁴⁴ In order to indicate the originality of Islamic

⁴⁴³ Al-Ghazālī, *Al-Munqidh Min Al-Dalal*, 37. Nurettin Topçu, *Bergson*, 71-74, 131-132, 137; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 126-127, 135-138, 144, 150, 174, 195-196; Ibid, *Conformisme et Révolte*, 166-171; Similarly, religious states, unlike physiological states that are recognized through the senses, are directly acquired through the consciousness of the individual who experiences them. Consciousness is the field of convergence for these two different sensations (physiological and non-physiological), and these two sensations, although different from each other, have effects on each other. See Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 201-202.

⁴⁴⁴ Topçu, *Bergson*, 74; Ibid, *İslam ve İnsan Mevlana ve Tasavvuf*, 168; Ibid, *Conformisme et Révolte*, 177-178; Ibid, *İradenin Davası Devlet ve Demokrasi*, 73; Although Topçu occasionally points out the similarities of Islamic mysticism with that of other cultures and religions, and expresses the possibility that there may be transitions from these to Islamic mysticism, he emphasizes the originality of Islamic Sufism by occasionally referring to Louis Massignon; see Louis Massignon, *La Passion de Husayn Ibn Mansur Hallaj: Martyr Mystique de l'İslam, Vol.1*, translated from French by Herbert Mason, (New Jersey: Princeton University Press, 1982), xxx-xxxii, 18-28, 76-79, 143-155, 198, 217-219, 224, 271-274; Louis Massignon, *La Passion de Husayn Ibn Mansur Hallaj: Martyr Mystique de l'İslam, Vol.3*, translated from French by Herbert Mason, (New Jersey: Princeton University Press, 1982), 3-14, 18-20, 27-32, 242-244; Louis Massignon, *La Passion de Husayn Ibn Mansur Hallaj: Martyr Mystique de l'İslam, Vol.2*, 57-59, 89-92, 401-402, 429. Also see Massignon's explanation of the effect of Hallaj on the Islamization of Java and Malaysia, Ibid, 9, 72-73, 90-91, 289-295; Other supporting sources to see the originality of Islamic mysticism, Murtaza Mutahhari, *'Irfān Sufism A Short Introduction*, (Kuala Lumpur: Islamic Book Trust, 2016), 24-41, 47-48; Arthur J. Arberry, *An Introduction to the History of Sufism*, (Kuala Lumpur: Islamic Book Trust, 2011), 64-65, 69-76; Semantically, about the use of monotheist terminology such as "Prophet, Nābī" in Plato, see, Martti Nissinen, *Ancient Prophecy Near Eastern, Biblical, and Greek Perspectives*, (Oxford: Oxford University Press, 2017), 24-42; In addition, Platonism and Neo-Platonism are not completely homogeneous, and were constructed under the influence of civilizational connections and encounters across the Mediterranean and ancient Near East. See, Peter

mysticism and its unique method of divine intuition, he highlights as-Suhrawardī's (1155-1191) *Ishrāqīyyah* school (Illuminationism) and his teaching of *Ishrāq* ("The Wisdom of Illumination"). He summarizes his teaching as follows:

The path of reason and vision does not lead a person to the truth. Truth is perceived by experiencing it firsthand. The path of discovery ensures that a person gradually ascends from darkness to light. The light where all lights unite is none other than Eternal Being, Allah (ﷻ). By training his soul, a person passes these stages and gains high spiritual powers that ordinary people cannot reach. Extreme transparency occurs in their hearts, and they gain the opportunity to penetrate the spiritual world without any intermediary or observation, into the events of nature and spirit. In this way, not only prophets, but every soul that gains divine power comes into contact with the spiritual world, hears sounds from there and sees realities. These exceptional people attain 'Ishrāq' as a result of a high attraction. This 'Ishrāq' occurs through the light of Allah (ﷻ).⁴⁴⁵

However, Topçu still reminds us that mystical intuition creates transcendent knowledge in the context of its own subject, in terms of its relevance to religious truths and morality etc.⁴⁴⁶ If we want to start a revival in Islam, he says, this awakening will never happen unless we criticize the rules and methods of tradition with Islamic thought, human logic, and the mentality of modern science and philosophy, even (or rather particularly) in religious education. However, according to Topçu, this is not enough. The mistake of the rationalization of morality was born as a result of the effort to understand Islam with Aristotelian logic (isagogic), which Topçu describes as scholasticism. Moreover, this mistake reduced the magnificent morality of the Qur'an to the formalism of a set of logical rules. Morality was ultimately reduced to the domain of matter due to this approach, when in fact it is based on faith (*imān*) and love, not on reason. The path to moral experience was thus through mystical intuition, as per Sufism. Although Topçu believes that Sufism tried to keep the spirit of Islam alive in all times and places, it always had an uneasy relationship with the ruler-makers (secular powers in modern time), who frequently tried to remove manifestations of and allusions to Sufism from life as an art system, thereby "heart" was condemned by them. However,

Kingsley, *Ancient Philosophy, Mystery, and Magic: Empedocles and Pythagorean Tradition*, (Oxford: Clarendon Press, 1995), 79-96, 233-248.

⁴⁴⁵ Topçu, *Bergson*, 74.

⁴⁴⁶ Topçu, *Bergson*, 76; *Ibid*, *İslam ve İnsan Mevlana ve Tasavvuf*, 218-219; *Ibid*, *Conformisme et Révolte*, 162-164.

Sufism is the science of man; it represents the effort of man to turn his self from the material world to his own spirit to reach God, and the door to human truths. The “Sufi” is an idyllic archetype who understands the Qur’an, lives its high morality, and experiences it as the true path of faith. The awakening age of Islam will be with the establishment of Sufism in our moral world, which will open the way for us to return from matter to spirit in this age where materialism and vital interests surround us on all sides. This awakening will be declared with the morality and faith of the age of the prophets, under the flag of Sufism at the summits that world science and philosophy can reach.⁴⁴⁷

Topçu generally emphasizes the importance of Sufism (i.e., Islamic mysticism) for the Muslim world, and specifically for the people of Anatolia. He always emphasized that the biggest mistake that the people of Anatolia in particular had made was to imitate the West. He recommends Sufism as a way of salvation in returning to the essence of both the Turkish spirit and the essence of Islam, and states that in Mawlānā Jalāl al-Dīn Muḥammad Rūmī and Yūnus Emre (1238–1320) the entire spirit of the Muslim Turkish world is encapsulated.⁴⁴⁸

Topçu points out a very important point regarding the issue of reason in religion/faith, in terms of our thesis. He characterizes the effort to rationalize religion in the period we live in, to make it suitable for the “reason” of the age (i.e., with logical positivism) as “the unreason of reason.” This is so because advocates of this view on the one hand accept that the Qur’an came by a kind of inspiration (*ilhām*) (i.e., the highest level of inspiration, *revelation*), while on the other, they try to explain the principles of religion only by reason. Topçu continues by stating that when it comes to how they explain miracles, they are forced to accept the existence of inspiration (*ilhām*). In Topçu’s time, this problem was perhaps overcome in this way, but today we clearly see that these Qur’anic truths are either directly rejected, or interpreted in a way that is compatible with the reason of the age, which is an action of materialist positivism. However, the contradiction they present remains as it is. So how do we explain

⁴⁴⁷ Topçu, *İslam ve İnsan Mevlana ve Tasavvuf*, 15-16, 61-62, 66-67; Ibid, *Conformisme et Révolte*, 178-179, 209; Ibid, *Ahlak*, 168-170; Ibid, *İradenin Davası Devlet ve Demokrasi*, 73-74.

⁴⁴⁸ Topçu, *İslam ve İnsan Mevlana ve Tasavvuf*, 124-126; Ibid, *Conformisme et Révolte*, 177-179; Ibid, *İradenin Davası Devlet ve Demokrasi*, 73-74; Ibid, *Kültür ve Medeniyet*, 63-64; Ibid, *Büyük Fetih*, 32-35.

revelation in this case? Then we see the only way out for them is Fazlur Rahman's (1919-1988) contrived attempt to explain revelation as a kind of natural phenomenon.⁴⁴⁹

When we look at Topçu's harmony of thought and practice, it can easily be said that he lived a life that *was* quite harmonious with his thought. In this context, the question of how his thoughts about Sufism were reflected in practical life may come to mind. We can say that those who knew him personally agreed on this issue. His life was like the embodiment of his thoughts, as he said himself: "I was a teacher for 40 years, and I entered the classroom the same way I entered the mosque." We see the connection between Sufism and his daily life most clearly in his devotion to the Naqshbandi Sheikh Abdulaziz Bekkine Efendi (1895-1952), of whom Topçu said "If I did not know him, I would not be able to recognize Prophet Muhammad (ﷺ)." In another place, Topçu introduces him as follows:

He is my teacher who took me from the pits of doubt and took me to the heights of faith. When a question came to my mind, my sheikh would know my state. I would find the answers I could not find in science or philosophy in him.⁴⁵⁰

As can be assumed, Topçu's devotion to him was not coincidental. His childhood friend, Mehmet Sırrı Tüzeer, mentions that Topçu was experiencing an existentialist crisis after coming from France, and that he first mentioned Abdülaziz Efendi to him.

⁴⁴⁹ Topçu, *İslam ve İnsan Mevlana ve Tasavvuf*, 162; Fazlur Rahman, *Islam and Modernity: Transformation of an Intellectual Tradition*, (London: University of Chicago Press, 1982), 3-5, 8-9; Also see accordingly Fazlur Rahman's interpretation of *Hadith*, Fazlur Rahman, *Islamic Methodology in History* (Islamabad: Islamic Research Institute, 3rd Reprint 1995), 12, 18, 19, 27, 31, 74-76, 68; Fazlur Rahman, *Islam*, (Chicago: University of Chicago Press, 2nd edn. 1979), 67; Fazlur Rahman, *Islamic Methodology in History*, (Islamabad: Islamic Research Institute, 3rd Repr., 1995), 7, 12, 27, 28, 31; Fatma Kızıl, "Fazlur Rahman's Understanding of the Sunnah/Hadith -A Comparison with Joseph Schacht's Views on the Subject-," *Hadis Tetkikleri Dergisi (HTD)*, VI/2, (2008), 33, 38-39; For similar efforts of modernists like Abduh Sir Seyyid, see, A.N. Amir & A. O. Shuriye & A.F. Ismail, "Muhammad Abduh's Scientific Views in the Qur'an," *International Journal of Asian Social Science*, 2 (11), (January, 2012), 2034-2044, A.N. Amir, A. O. Shuriye, & A.F. Ismail, "Muhammad Abduh's Contributions to Modernity," *Asian Journal of Management Sciences and Education*, Vol. 1. No. 1., (April 2012): 63-75; Ismail F. Alatas, 'Circumlocutory Imperialism: Watan in the Thoughts of Syed Shaikh bin Ahmad al-Hady,' *Studia Islamika*, Vol. 12, No. 2, (2005), 247-297; Aziz Ahmad, *Islamic Modernism*, 37-38, 77-79; Ahmad, Aziz, "Sayyid Ahmad Khan and the Aligarh Movement," In M. Ikram Chaghatai, *Sir Sayyid Ahmad Khan: A Prominent Muslim Politician and Educationist* (1817-1898), (Lahore: Sang-E-Meel Publications, 2005), 352-366. To see Oliver Leaman's critical approach to treating revelation as a natural species, Oliver Leaman, *Islamic Philosophy an Introduction*, (Cambridge: Polity Press, 2009), 61.

⁴⁵⁰ Mehmet Birgül, 351; Hüseyin Karaman, 22-23; Emin Işık, *Nurettin Hoca ve Din Adamları*, In *Nurettin Topçu'ya Armağan*, 174-175; Muzaffer Civelek, *Yadımda Kalanlar*, In İsmail Kara (ed.), *Nurettin Topçu*, (Ankara: T.C. Kültür ve Turizm Bakanlığı, 2009), 385; Yusuf Turan Günaydın, "Bağlanma: Abdülaziz Bekkine ve Nurettin Topçu İlişkisi," *Hece*, No., 109, (January 2006), 95; Kılıç, 119. Also attending Abdülaziz Efendi's conversation circle with Topçu was Necmettin Erbakan, who was still a university student at that time, but who would later become the Prime Minister of Türkiye. See *Ibid*, 120.

According to Tüzeer, when Topçu and Abdülaziz Efendi first met, they chatted until 3 a.m., and when they were leaving, he said that Topçu's confusion was completely gone, and that Topçu had become a completely different person in one night.⁴⁵¹

After Topçu became attached to his sheikh, he had a great love for him, and with this influence, in a conversation where Islam and the soundest path within Islam were discussed, he said, "The soundest path is the path of the Naqshbandi."⁴⁵² Again with this effect, while defining Murshid (guide, Sheikh), he said:

[A] Murshid is the most advanced door of mercy. A person who collects mercy from a handful of soil and watches it in a drop of water has reached perfection and has become the mirror of divine mercy. No natural element can bring the mercy that Shams Tabrizi (1185-1248) brought to Mawlana Jalāl al-Dīn Muḥammad Rūmī.⁴⁵³

Just as Topçu has a characteristic that is different from the religious people of his time, he also has a Sufism that is unique to him and different from the Sufis of his time. His devotion to the sheikh is in the form of consciously pursuing the cause of Islam and taking a high moral life as an example. Therefore, he is neither an ordinary philosopher nor an ordinary Sufi.⁴⁵⁴ He describes the grief he felt upon the death of his Sheikh Abdulaziz Efendi through a character in his novel as follows:

I lost that great being who walked before our souls. My pain was too vast to be embraced by the arms of time and fate. In his last look, which was now an enigma to me, it was as if the innocence of an angel and a divine command were combined. I had never seen shying and warning combined in one look in my life. After above his beard looking like that of a prophet, his blue eyes that easily dived into the infinite closed, I was left forlorn/alone. It was as if I had been thrown out of the world of truth and love and taken refuge in the world of shadows and poor criminals.⁴⁵⁵

5.2 INTUITION IN ISLAMIC PHILOSOPHY

In this section we examine the concept of intuition in general in Islamic philosophy, and evaluate it in detail from the perspective of Al-Ghazālī. As we mentioned in Chapter 3, we examined the concept of intuition from the perspective of both Topçu and naturalist

⁴⁵¹ Karaman, 21-22; Tüzeer, *Nurettin Topçu*, In *Nurettin Topçu'ya Armağan*, 178-180; Kılıç, 110-114; Yusuf Turan Günaydın, 93.

⁴⁵² Özer, 199; Kılıç, 196.

⁴⁵³ Topçu, *Var Olmak*, 128; Kılıç, 128.

⁴⁵⁴ Kılıç, 128.

⁴⁵⁵ Topçu, *Taşralı*, 262; Kılıç, 128.

epistemologists. We wrote about the complex nature of intuition and why and how such a faculty could exist in humans, and how Quine put forward the theory of evolution in intuition and claimed that this phenomenon was a completely natural kind in a very subjective way.

We stated that Kornblith also saw intuition as a completely Natural Kind, with similar foundations. We expressed that among the naturalist epistemologists, Goldman takes intuition as a metaphysical faculty, and that he has a similar aspect to Topçu in this respect. However, we pointed out that Topçu has similarities to Kornblith and Quine, in that he accepts existence as a process of formation, rejects *a priori*, and accepts the continuously developing and changing effects of physiological elements such as self-consciousness in knowledge. We put forward that Topçu accepts the phenomenon of evolution, but never sees it as separate from Divine Authority. However, we see that Topçu's groundings on evolution are not centred on Islamic philosophy, but are heavily based on his teachers Blondel and Bergson. First of all, we would like to say a few things about the grounding of evolution from the perspective of Islamic philosophy, albeit briefly.

Ibn Miskawayh (932-1030) brings a unique understanding of evolution, and while explaining the transition from plant to animal, from animal to human, he emphasizes that this process has a purpose and a divine order. Its fundamental difference from the modern biological theory of evolution is that the process is not a random or "self-operating" mechanism, but a process guided by Allah's (ﷻ) infinite knowledge and wisdom. This distinction shows how an evolutionary understanding can be explained within a divine framework, within Islamic thought. Ibn Miskawayh's approach to beings in interconnected stages is reminiscent of the idea in modern evolutionary theory that organisms gradually become more complex. By mentioning a transition from plant to animal, from animal to human, he points to an interconnected and sequential development process of living things. In Ibn Miskawayh's understanding, evolution is not a chaotic or random process; on the contrary, it is a conscious and purposeful change guided by Allah's (ﷻ) wisdom. This is different from the concepts of random mutations and natural selection in modern biological evolution. According to him, every being evolves towards a purpose determined by Allah (ﷻ). Ibn Miskawayh sees nature as an order that operates based on Allah's (ﷻ) wisdom. The different degrees of existence of plants, animals and humans are included in the order

of Allah (ﷻ). The concept of “natural selection” in modern theory can be thought of as “divine selection” here, because it is Allah’s (ﷻ) *Irādah* that makes the selection. Ibn Miskawayh states that humans can shed animalistic characteristics and reach a higher level of existence. This encompasses not only a physical but also a moral and spiritual evolution process. Humans go through this process to realize their potential to be Allah’s (ﷻ) caliph (i.e., vicegerent in the earth). In Ibn Miskawayh’s system, biological evolution and metaphysical evolution are intertwined. The plant-animal-human sequence does not only express a physical transformation, but also the soul’s progress towards perfection. In this respect, it completes biological evolution with a spiritual perspective.⁴⁵⁶

Moreover, some Islamic scholars advocate a form of theological humanism, in which living involves becoming one with the universe, by attaining a certain level of harmony, balance, purification, and ultimate perfection within a divinely guided order. To achieve this, the human intellect must be refined by divine law, enabling it to distinguish between good and bad, and develop a comprehensive understanding of the universe. Human beings are expected to adhere to Divine Law as revealed in the Qur’an and exemplified in the sunnah, as only through this adherence does human nature gain a distinct perceptive ability and intuitive capacity.⁴⁵⁷

The picture becomes even more blurred when we look at the claims of naturalized epistemologists in the context of Qur’anic revelation, which is a supernatural state like intuition. If we examine the issue particularly in the context of the Qur’an, the discussions on how the “the realm of concepts” was formed, whether it contains *a priori* elements, or whether it is a situation that only comes from the material environment and is formed through evolution as claimed, become more interesting. So much so that, - whether it is considered in the context of revelation or in a positivist manner as a text that emerged at y time by x person - with the advent of the Qur’an and Prophet Muhammad (ﷺ), the conceptual framework that the Qur’an evaluates the events was completely different from that of the society.

⁴⁵⁶ Ibn Miskawayh, *Tahdhib Al-Akhlaq*, 32-33, 57-65; Ibid, Al-Fawz Al-Asgar, 20-21, 29, 32, 85-101; For the similar explanation, see, Al-Farabi, *Al-Madina al-Fadila*, 45-56, 89-105, 197-211, 219-228, 243-245, 277-286; Ibid, *Kitab al-Jam*, 13-25, 71-92, 127-129; Ibid, *The Political Writings Selected Aphorisms and Other Texts*, 29-31, 62-63; Ibn Sina, *Al-Shifa Al-Ilahiyat*, xxi-xxiv, 11-13, 109, 145-147, 233-235, 276-278, 291-296, 315-318, 324-334; Ibid, *Avicenna’s Psychology*, 33-35, 37-40, 95-99.

⁴⁵⁷ John Peter Radez. *Ibn Miskawayh, the Soul, and the Pursuit of Happiness the Truly Happy Sage*, (London: Lexington Books, 2019), 57.

Even though it used the source language that the society used materially – after all, we exist materially in a material universe –the meaning it contained embedded a content that exceeded the consciousness of the society in which it was revealed (or was precipitated). Even from a positivist perspective, it can be seen how much the surrounding society changed from before to after the text, forming a belief system, way of life, legal system, and a state. Consequently, disparate traders and Bedouin herdsmen formed states and civilizations within this system. The progression beginning with the Umayyads and Abbasids continued with the Seljuks and the Ottomans. The process that started with a “Text” and a “Person” (the Prophet Muhammad (ﷺ)), and created a huge universe of meaning that affected political maps, culture, conceptual world, worldview, and – directly or indirectly – even today’s states and societies.

Therefore, it is possible to interpret and give meaning to the phenomenal world we are in in a “different way” from how it is even now, even if all the available data is the same. In fact, this “difference” is what enables change and development. In the material environment we live in, the data coming from outside does not manifest itself in the same way in everyone. In the context of Topçu, the “meaning” in everyone - both worldly and transcendent - is as much as the size of their intuition. This is why he gives many Western thinkers as examples, who have changed their societies. In Topçu, our interaction with matter does not reflect it on us in a “deterministic” way. This reminds us of Quine’s principle that “everyone’s perception of the world is different.”

Furthermore, we have examined the connection between intuition and perception/sensation in detail in both Topçu and naturalists. In the process of acquiring knowledge, sensation is at the starting point in both different perspectives. We see that this discussion is also examined in Islamic philosophy, but as can be understood from the expressions, in Islamic philosophy, the faculties related to sensation are presented as a function of the soul. In this part of the research, we need to examine the concept of intuition and the processes of acquiring knowledge in terms of classical Islamic philosophy. For this reason, we will briefly touch upon two important names of Islamic philosophy, Al-Farabi and Ibn Sina.

According to Al-Farabi, when a person comes into the world, he firstly has a nutritional faculty. Later, the ability to perceive tangibles, tastes, visible things, and scents develops. Humans develop different faculties over time. First, alongside the senses, an appetitive faculty emerges, leading them to desire or dislike perceived

objects. Then, a faculty of representation arises, allowing them to retain sensory imprints in the soul, connect or disconnect them, and form both true and false associations. This faculty is also accompanied by an appetite toward represented objects. Finally, the rational faculty develops, enabling the understanding of intelligible, the distinction between good and evil, and the acquisition of arts and sciences, along with an appetite toward reasoning.⁴⁵⁸ As can be seen, in contrast to the thought developed by Topçu, in Al-Farabi, the faculties of man, perception, appetite, that is, vital interests, are expressed as the faculty of the soul.

As for the process of acquiring knowledge, it involves the interaction of various faculties of the soul, organized hierarchically. At the highest level is the rational faculty, which governs all other faculties and serves as the final form in the hierarchy. It enables practical reasoning, deliberation, and deduction, allowing for understanding and decision-making. Knowledge is attained through careful examination and the discovery of appropriate means using rational thought. The faculty of representation acts as an intermediary between sense perception and reason. It represents things based on memory, imagination, or inputs from other faculties. This faculty helps form desires or apprehend knowledge, either through sensory input or rational analysis. Below this is sense perception, which involves both bodily actions and acts of the soul. For instance, directing attention toward an object might require physical actions such as raising eyelids or moving closer, while the act of sensing itself belongs to the soul. The appetitive faculty motivates action and focuses desires toward acquiring knowledge. It directs bodily acts, such as using limbs to achieve sensory access, and works in tandem with other faculties to guide attention and effort toward understanding. This faculty is essential for initiating the *will* to seek knowledge. All these faculties are structured hierarchically, whereby the faculty of nutrition supports the sense faculty, which in turn supports the faculty of representation. The rational faculty synthesizes inputs from all preceding faculties, forming the ultimate stage in acquiring knowledge. Each faculty depends on and elevates the preceding one, contributing to the overall process of understanding and learning.⁴⁵⁹

⁴⁵⁸ Al-Farabi, *Al-Madina Al-Fadila*, 165. For the similar explanation see, Ibn Sina, Avicenna's *De Anima: Being the Psychological Part of Kitab al-Shifa*, translated from Arabic by Fazlur Rahman, (London: Oxford University Press, 1959), 278, 289, 293-295.

⁴⁵⁹ Al-Farabi, *Al-Madina Al-Fadila*, 169-175; Ibid, *Risalat Fi'l 'Aql*, translated from Arabic by Maurice Bouyges, (Beyrouth: Imprimerie Catholique, 1938), 8-11. For similar explanations about sensation and perception, see, Ibn Sina, *Al-Ishārāt Wat-Tanbīhāt: (Remarks and Admonitions: Part One: Logic)*,

As for Ibn Sina, the mind is a faculty of the soul that enables it to acquire knowledge. Sensation perceives only individual particulars, while memory and imagination preserve these perceptions—imagination retains the form, and memory retains the extracted meaning. Repeated sensations lead to memory, and repeated memories lead to experience. Sensation, imagination, and memory deal with particulars, whereas intellectual thinking abstracts universals. Since sensation and imagination cannot encompass all particular forms of “man,” they cannot grasp universals. Universals, along with their causes, are apprehended only through intuition or experience, which aid the intellect. In conceptualization, sensation provides mixed objects to imagination, which then presents them to the intellect. The intellect distinguishes, abstracts, and organizes them into essential and accidental aspects, forming primary meanings and definitions. Assent, or intellectual agreement, is supported by sensation and imagination through experience, intuition, and induction.⁴⁶⁰

Drawing on Mulla Sadra, Moris defines intellectual intuition as the sudden emergence of the essence of the known in the consciousness of the knower. From Topçu’s perspective, this explanation is problematic, because knowing essences as they *are* is impossible, since only God can know Absolutes. Another reason is that, for Topçu, knowing is not the unity of the knower and the known, but rather the reflection of the known within the *self*. Here, the following situation arises: the reflection of things in the self is different for each person, and we cannot fully assess how much of the truth our reflection reflects.⁴⁶¹

Furthermore, Mulla Sadra also states that it is impossible to know things as they are, and that the act of knowing is shaped through the knower’s experience. However, Moris offers a different explanation, drawing on Mulla Sadra, for the act of knowledge in Islamic philosophy, which is explained as the unity of the knower and the known. Accordingly, when explaining knowledge, there is a unity between the knowing subject and the abstract form of the object, not with the object itself. This unity, he states, is achieved by a kind of soul that adapts the intelligible form to its own formalization.⁴⁶²

translated from Arabic by Shams Constantine Inati, (Wetteren: Universa Press, 1984), 119-128; *Ibid*, 278, 293.

⁴⁶⁰ Ibn Sina, *Avicenna’s Deliverance: Logic*, translated from Arabic by Asad Q. Ahmed, (New York: Oxford University Press), 134-135; *Ibid*, Avicenna’s *De Anima*, 274-277, 283-286. Regarding the fact that the mind is a spiritual faculty in Islamic philosophy (and not a physical one), see Ibrahim Kalin, 12-13.

⁴⁶¹ Moris, 4.

⁴⁶² *Ibid*, 99-101.

On the other hand, Al-Ghazālī objects to the explanation of physical faculties from spiritual perspective. According to him, philosophers fail to provide a valid and clear rational proof that the human soul is a spiritual essence that exists independently, does not occupy space, is not a body, does not become part of a body, is neither attached to nor separate from the body. Furthermore, philosophers define the soul as comprising the vital force (*Nafs-i Hayawānī*) and the rational force (*Nātika*). *Nafs-i Hayawānī* is further divided into two aspects: the motive power and the perceptive power. In contrast to the definitions of classic philosophers' definitions, Al-Ghazālī argues that one of these forces is linked to the nerve system and the other to the brain, asserting that such matters can only be understood through medical science rather than philosophical reasoning. He also emphasizes that when the brain is impaired, these forces cease to function.⁴⁶³ He continues by arguing that, human being's nature is originally created in a pure and unknowing state, without any prior knowledge of the various realms created by God. A person gains awareness of these realms through perception. Each type of perception has been created to help humans come to know a particular category or level of existence — and by “realms” or “worlds,” what is meant are the different classes of beings that exist, known by the sense of touch, sight, hearing and taste. Later, the faculties of discretion (*tamyiz*) and reason are added to these.⁴⁶⁴

Outb al-Din Shirazi, like Al-Ghazālī, states that our actions such as perception and imagination do not originate from the spiritual faculty, but are processes related to the functioning of the brain. Unlike Nurettin Topçu, Outb al-Din Shirazi accepts that the source of our reasoning and deduction processes is mystical intuition.⁴⁶⁵

In short, as can be seen in the philosophical explanation of cognitive processes, Al-Ghazālī exhibits a different attitude from the two main pillars of Islamic philosophy, Al-Farabi and Ibn Sina. We can even say that his approach is close to that of naturalist epistemologists, and specifically to Goldman.

Besides, in classical philosophy, ontology serves as the foundation of metaphysics, shaping the problem of being as inherently linked to the problem of knowledge. In contrast, contemporary Western philosophy separates ontology, epistemology, and theology into distinct disciplines, generating debates about the

⁴⁶³ Al-Ghazālī, *Tahafut Al-Falasifah*, 197-199. It would not be an exaggeration to say that these statements of Al-Ghazālī are surprisingly very similar to the claims of naturalized epistemologists.

⁴⁶⁴ Al-Ghazālī, *Al-Munqidh Min Al-Dalal*, 59-60.

⁴⁶⁵ Walbridge, 36, 104-105.

ontological basis of epistemology. Modern epistemology differentiates between inquiries into natural and human sciences, a distinction not traditionally found in classical thought, except perhaps in Al-Ghazālī. His classification of rational and religious sciences, however, did not reflect the Western-style division of disciplines. Instead, his approach focused on methodological differences, outlining how religious and rational sciences should be evaluated within a broader framework of values.⁴⁶⁶

In Islamic philosophy, theories on acquiring knowledge cannot be evaluated independently of the ontology of Islamic philosophy itself. If existence is the broadest of all concepts and the most fundamental of all realities, then every philosophical issue must be reconsidered through the lens of a well-defined ontology. If existence is the foundation of all meaning and reality, then knowing becomes a cognitive interaction with existence in its various forms. Knowledge unveils aspects of existence, and by defining it as a “mode of existence” (*nahw al-wujud*), epistemology becomes an extension of ontology. Asserting that true knowledge occurs when the knower merges with the intellectual form of the known removes the knowing subject from a central role and situates all meaning and cognition within a broader framework of intelligibility.⁴⁶⁷

From here, we can say that, like Topçu, those who put consciousness and self in the primary position in acquiring knowledge is the most obvious difference from the understanding of knowledge in Islamic philosophy. Thus, in the understanding of knowledge in which the known/being is in the foreground, meaning and reality come from the object, while in the understanding of knowledge in which the knower is in the foreground, meaning and reality come from self/consciousness.

However, based on Mulla Sadra’s thinking, Kalın contradicts this approach. To him, while knowledge as correspondence explains certainty in external facts, it fails to account for self-awareness, like knowing one is in pain. Past philosophers made mistake for assuming a single theory of knowledge applies to all phenomena, but different levels of being require different forms of understanding. By grounding philosophy in *existence* as the sole reality, meaning no longer flows from a knowing subject to the external

⁴⁶⁶ İsmail Hanoğlu, “Hakikatin Formları: Peygamberler, Filozoflar ve Ârifler,” *Journal of Islamic Research*, (2017), 28(2), 138-139. Osman Bakar’s explanations about the Western tendency to knowledge are useful in this regard. See Bakar, *Classification of Knowledge in Islam*, xi-xii.

⁴⁶⁷ İbrahim Kalın, xiv, xv, 10.

world; instead, both the self and the world derive meaning from their shared existence.⁴⁶⁸

In order to understand the subject of knowledge in Islamic philosophy, it is necessary to explain the ontology on which this epistemic ground is based; therefore we will need to talk about the theory of emanation (*Sudur*). In traditional Islamic thought, as Osman Bakar points out, both the subject and object of knowledge are viewed hierarchically. At the top is Allah (ﷻ), the Absolute Reality, followed by the angelic realm, the imaginal world, the jinn and humans, and finally the natural world. The Qur'an refers to these different realities, including the heavens and earth. This hierarchical structure contrasts with modern educational systems, where disciplines like theology, psychology, and geology are treated as equals. In Islam, sciences relating to God are considered far superior to those concerning the human soul or the natural world.⁴⁶⁹

The emanation theory in Islamic philosophy describes creation as a structured and hierarchical process originating from Allah (ﷻ). Influenced by Neoplatonism, thinkers such as Al-Farabi and Ibn Sina expanded on this idea. In this framework, God is the Primary (*Al-Awwal*) and Necessary Being (*Wājib Al-Wujūd*), from whom existence unfolds axiomatically and systematically. The first intellect emerges from God, followed by successive intellects. These lower intellects lead to the formation of souls and the material world. Avicenna identified ten intellects, with the final one, the active intellect (*al-'aql al-fa'al*), playing a crucial role in human understanding and the natural order. Unlike the concept of creation from nothing, emanation is considered an ongoing and inevitable process starting from God. In connection with this ontology, epistemic explanations are explained with the concepts of potential intellect (*al-'aql bi'l-quwwah*), actual intellect (*al-'aql bi'l-fi'l*), acquired intellect (*al-'aql al-mustafad*) and active intellect (*al-'aql al-fa'al*).⁴⁷⁰

Human intellectual development follows a hierarchical process. Initially, every person possesses a natural disposition (*fitrah*), which serves as the foundation for

⁴⁶⁸ Kaln, xvii.

⁴⁶⁹ Bakar, *Classification of Knowledge in Islam*, xi-xii.

⁴⁷⁰ Ibn Sina, *Avicenna's Psychology*, 134; Al-Farabi, *Al-Madīna Al-Fādila*, 11, 89-109; Ibid, *Risalat Fi'l 'Aql*, 12-13. See also, John Peter Radez, 71-72; Dimitri Gutas, *Avicenna and the Aristotelian Tradition Introduction to Reading Avicennas Philosophical Works*, (Leiden: Brill, 2014), 280, 371-372; A.C. Sparavigna, "The Ten Spheres of Al-Farabi: A Medieval Cosmology," *International Journal of Science*, Vol. 3 n. 6, (2014), 37-38; Walbridge, 59-61.

intellectual growth. This disposition (*fitrah*) allows the emergence of the “passive intellect” (*al-’aql bi’l-quwwah*), which, when perfected through the apprehension of *intelligibles*, becomes the “actual intellect” (*al-’aql bi’l-fi’l*). At this stage, the intelligibles within a person become identical with their thinking process. Once the passive intellect (*al-’aql bi’l-quwwah*) reaches this state, it gives rise to the “acquired intellect” (*al-’aql al-mustafad*), which is superior, more immaterial, and acts as an intermediary between the passive intellect (*al-’aql bi’l-quwwah*) and the active intellect (*al-’aql al-fa’al*). The passive intellect (*al-’aql bi’l-quwwah*) serves as the foundation for the acquired intellect (*al-’aql al-mustafad*), just as the acquired intellect (*al-’aql al-mustafad*) does for the active intellect (*al-’aql al-fa’al*). The journey to full intellectual realization involves two key stages between the natural disposition (*fitrah*) and the active intellect (*al-’aql al-fa’al*): the passive intellect (*al-’aql bi’l-quwwah*) attaining “actuality” (*bi’l-fi’l*), and the emergence of the acquired intellect (*al-’aql al-mustafad*). When the perfected *passive intellect* [which means the acquired intellect (*al-’aql al-mustafad*)] and natural disposition (*fitrah*) merge as one, only the final step—the connection to the active intellect (*al-’aql al-fa’al*)—remains. Ultimately, when all stages align as a unified whole, the person achieves the highest intellectual state, becoming fully illuminated by the active intellect (*al-’aql al-fa’al*).⁴⁷¹

As for the study of the nature of intuition, the concept of intuition and its place in knowledge has also been an important subject for Islamic philosophers. According to Ibn Sina, intelligible matters are acquired by obtaining the middle term in a syllogism. This can happen in two ways: through intuition, where the mind discovers the middle term on its own, or through instruction, which ultimately traces back to intuition, as initial discoveries are passed down by those who first grasped them. Ibn Sina describes intuition as follows:

It is such that if the object sought is presented to the mind, the middle term is also presented without search... sensing without the use of rational processes... an action towards correctly hitting upon the middle term when the problem has been posited. Or [it is an action towards] correctly hitting upon the major term when the middle [term] has been correctly targeted.⁴⁷²

⁴⁷¹ Al-Farabi, *Al-Madīna Al-Fādila*, 241-245; Ibn Sina, *Avicenna’s Psychology*, 68-69. Also see, Kalin, 42-43.

⁴⁷² Ibn Sina, *Remarks and Admonitions: Part One: Logic*, 29; Dimitri Gutas, xiii; Ibn Sina, *Avicenna’s Deliverance: Logic*, 134.

Ibn Sina also divides intuition into mystical intuition and philosophical intuition,⁴⁷³ and states that while gaining knowledge, we acquire necessary and universal knowledge through syllogism. However, he says that the principles of syllogism and the first principles to use syllogism, are not known to us by a proof, and we can only know them through intuition. Moreover, he indicates that this feature comes to us from birth. Ibn Sina gives mathematical propositions as an example here, abstract mathematical facts can be proven rationally, we do not need a phenomenal data input for this verification; rather, this is provided by intuition. The intelligible does not arise from the mental image; rather, it enters the intellect through intuition, originating from the active intellect (*al-'aql al-fa'al*), so forms are conveyed to the mind through intuition. This is related to human being nature and every person possesses a measure of the prophetic gift in accordance with the depth of their aptitude.⁴⁷⁴

Al-Farabi's explanation of intuition is almost the same as Ibn Sina's. In Al-Farabi, intuition is the first element in gaining knowledge and is the basis of all theoretical sciences. He refers to the Qur'anic concept of *fitrah*, or the innate nature with which God has created human beings. Al-Farabi mentions this faculty as *fitrah*, that is, the natural element, but even though it is natural, he qualifies it as a force of the soul. He connects this understanding of intellect to Aristotle's *Posterior Analytics*

⁴⁷³ Ibn Sina, *Selections on Psychology from the Cure, "The Soul,"* Translated from Arabic by Jon McGinnis and David C. Reisman, In Jon McGinnis and David C. Reisman, *Classical Arabic Philosophy an Anthology of Sources*, (Indianapolis: Hackett Publishing, 2007), 205; Syamsuddin Arif, "Intuition and Its Role in Ibn Sīnā (Avicenna)'s Epistemology," *Al-Shajarah*, January 2000, 5(1): 96-99. Syamsuddin Arif emphasizes that Ibn Sina divided intuition into two as philosophical and mystical and states that philosophical intuition is related to the cognitive nature of man. In this case, the question comes to mind whether Ibn Sina also sees the faculty of intuition as natural kind (i.e., *fitrah*, innate cognitive disposition) like naturalist epistemologists. However, both forms of intuition that we understand from Ibn Sina are not natural kind, since they are not a faculty independent of active intellect. In our opinion, this is consistent with his understanding of ontology. Albeit, the Arabic term "shu'ūr" primarily relates to intellectual awareness and rational understanding which is abstract phenomena, rather than sensory experience or mere emotional feeling. Also, referring to Ibn Sina's "Flying Man" thought experiment, Syamsuddin Arif emphasizes that Ibn Sina holds our existence (self-consciousness) to be an essential, foundational concept—one that we comprehend intuitively and *a priori*, without reliance on external experience. Just as the subject-predicate, primary concepts and middle term are fundamentally known intuitively, the self from which these arise is also known intuitively. That is, it means that the occurrence of the "justification" that we have previously described in detail is intuitive. Syamsuddin Arif, 105-107, 113-114, 117-119, 121-126. Also see, Ibn Sina, *Kitāb Al-Najāt*, 36-37, 94, 116-117. Unlike Syamsuddin Arif, Al-Zunaydī considered Ibn Sina's intuition and inspiration (i.e. philosophical intuition and mystical intuition) together. He saw Inspiration as the Infusion of Active Intellect into the human soul, and intuition as the reception of this inspiration by the human soul. Abd al-Raḥmān Ibn Zayd al-Zunaydī, 267.

⁴⁷⁴ Syamsuddin Arif, 102-108; Ibn Sina, *De Anima*, 282, 286, 292; Ibn Sina, *Selections on Psychology from the Cure, "The Soul,"* 204-205; Abd al-Raḥmān Ibn Zayd al-Zunaydī, 229-231.

(*Kitab al-Burhan*) and asserts that these intuitive, non-discursive principles serve as the basis for all theoretical sciences.⁴⁷⁵

The acquisition of knowledge varies in degree, whether it comes from external sources or from within oneself. Some individuals, possessing a highly developed potential intellect, acquire knowledge almost as if by direct perception. When knowledge arises from within, this strong capacity is called “intuition.” In certain people, intuition is so powerful that they require little effort or instruction to connect with the active intelligence. Their innate ability is so great that they may appear to possess knowledge entirely from within themselves.⁴⁷⁶

Al-Zunaydī, based on Ibn Sina, argues that intuition (*hads*) and inspiration (*ilham*) are different. He argues that intuition is related to intellect-senses and is a fruit of inspiration, while inspiration is an abstract insight attained through spiritual discipline. He says, illuminative knowledge (*al-ma'rifah al-ishrāqiyyah*) i.e. inspiration, according to the Illuminationists, is superior to sensory knowledge, which does not go beyond the appearances of things, and to rational knowledge, which depends on sensory perceptions and is incapable of grasping ultimate realities. Illuminative knowledge, by contrast, is a form of certain knowledge of the truths of the higher realm, the world of archetypes, or the essence of being itself. However, it cannot be attained easily; it requires purification of the soul, detachment from material ties, suspension of sense and reason, and complete withdrawal from the worldly realm to engage in pure contemplation—through which the lights of true knowledge are revealed. One of the fundamental principles of this ascetic approach is the necessity for the seeker of spiritual guidance to choose a sheikh, who will be his guide and mentor, and who will be one of the Sufi sheikhs who have experienced the path.⁴⁷⁷

⁴⁷⁵ Al-Farabi, *Risalat Fi'l 'Aql*, 8-9; Kalm, 43.

⁴⁷⁶ Ibn Sina, *Kitāb Al- Najat*, 35; Dimitri Gutas, 181-182.

⁴⁷⁷ Abd al-Rahmān Ibn Zayd al-Zunaydī, 231, 237-238, 245-247, 251, 260, 267. Al-Zunaydi mainly evaluates inspirational knowledge in terms of Islamic law, and he also states that it is not possible to be sure whether every inspiration comes from God. See, *ibid*, 250-258, 260-261. Nevertheless, the claim that like revelation, inspiration can also directly come from God is susceptible to confusion with revelation. In our opinion, as we've stated before, inspiration/intuition/kashf is similar in nature to revelation; it has a metaphysical structure and is not independent to God. However, while revelation comes directly from God, inspiration/intuition/kashf involves a state of striving (*Jahd*). Consequently, the clarity of this type of knowledge may vary depending on the striving (*Jahd*). Revelation, on the other hand, is pure and clear and it directly comes from God in a bare form. This thesis focuses on the existence and the nature of this faculty, in which regard it should be noted that its functional relevance to Islamic law falls outside our scope of study. Besides, Al-Zunaydī explains Bergson's understanding of intuition and its relationship to existence in detail. In the chapter four where we examined Topçu's perspective on intuitionism and Bergson, his criticisms of Bergson's association of intuition with intelligence and

While Al-Zunaydī's distinction between inspiration (*ilham*) and intuition (*hads*) seems analogous to Topçu's distinction between (philosophical) intuition and mystical intuition, Al-Zunaydī emphasizes that intuition is a faculty that allows us to reach intellectual abstraction levels through the senses. Accordingly, he says, it has been addressed the question of whether intuition is a function of the mind that enables us to attain knowledge or whether it is an independent source. While some have viewed it as a mental/perceptual action, others viewed intuitive knowledge as distinct from rational knowledge and emphasizing its status as a separate faculty. Al-Zunaydī states that intuition is a non-material spiritual faculty and is the interaction of the self with abstract concepts.⁴⁷⁸

We can state that in general, although intuition is seen as a faculty related to human nature in *Mashshāi* philosophy, it is not considered as Natural Kind because this event is not only related to the physical existence of man. In addition, when viewed holistically, in terms of the ontological conception of Islamic philosophy, this faculty is evaluated as a capability of the soul and is not independent of Necessary Being and active intellect.

When we look at it from Al-Ghazālī's perspective, we see that this ability is related to the heart (*qalb*) and its tendencies. Indeed, based on his own experience, Al-Ghazālī states that gaining knowledge, no matter what kind it is, will not eliminate doubt in the absolute sense. As we recall, Ibn Sina said that in gaining knowledge and reasoning, the basic principles must be accepted from the beginning and that this acceptance is intuitive. Al-Ghazālī states that he found the basic principles of reasoning doubtful and that he went through a kind of crisis in accepting this and that he finally came to accept these basic principles, but not with any evidence but with the help of a light (*kashf*, inspiration) that Allah (ﷻ) poured into his heart.⁴⁷⁹

As we mentioned above, Al-Ghazālī states that our knowledge of the universe, and even our own minds, which offer the ability to evaluate and make sense of this knowledge, develops with our acquisitions in this world. However, according to him, this development process, which begins with sense perception and progresses towards

instinct were previously mentioned. See *ibid*, 267-281, 288, 293. Also, for Mutahhari's explanations that action does not have a substance in itself, but is an accident related to matter, see, Murtaza Mutahhari, *Durūs Falsafīyyah fī Sharh al-Manzūmah*, 198, 206-207.

⁴⁷⁸ *Ibid*, 267-268, 281-282.

⁴⁷⁹ Al-Ghazālī, *Al-Munqidh Min Al-Dalal*, 23-24; *Ibid*, *The Alchemy of Happiness*, 5-11.

the faculty of reason through discernment, does not end here. Another faculty develops *beyond* reason: the ability of (divine) inspiration (*kashf/ilhām*), which he describes as a prophetic power, seen by another “eye.” With this, man grasps the unknown things that reason is inadequate to grasp and perceives the phenomenon of unseen world (*Al-Ghayb*). This faculty is the faculty of prophecy (*Nubuwwah*). Almighty Allah (ﷻ) has given mankind a sample that bears the characteristics of this faculty. During sleep, this faculty of man becomes active, and he becomes aware of the unseen. This example shows that Allah (ﷻ) has granted only a part of this ability to humanity so that we can understand the high level of the ability found in the Prophets. In addition, Al-Ghazālī states that the similar situations can be experienced more or less during the first steps taken towards Sufism, again as an example to understand this kind of phenomenon.⁴⁸⁰ The example of the dream state raised by Al-Ghazālī is an interesting phenomenon. According to some scientific researches, perceptual functions of the brain, such as seeing, hearing, touching are activated in dreams, just like when awake, and moreover, they serve as a source of creative problem solving and artistic inspiration.⁴⁸¹

Al-Ghazālī also has the view that this ability is more or less present in every human being. In our analysis so far, we have discussed the concepts of philosophical intuition and mystical intuition. We have mentioned that philosophical intuition is also accepted by Naturalists, but there are differences of opinion regarding its ontological status (i.e., whether it is metaphysical or not). Again, based on Topçu, we have mentioned that philosophical intuition and mystical intuition are interconnected. Interestingly, Al-Ghazālī also contributes to these discussions. He states that this ability, which he does recognize as prophetic power, is active not only in divine matters but also in the fields of medicine and astronomy. For example, Al-Ghazālī states that an event that occurs once in a thousand years and is impossible to experience in the field of astronomy can be calculated and known, thanks to this ability (e.g., the return of a

⁴⁸⁰ Al-Ghazālī, *Al-Munqidh Min Al-Dalal*, 59, 62, 73-74; To see every human being has the ability of intuition, Ibid, *The Alchemy of Happiness*, 10. Also, Al-Qaradawi discusses the epistemological value of dreams and his division of dreams into *Ru'yā Ṣāliha* (Righteous dream), *Aḍghāth Aḥlām* (Confused dreams) and *Ru'yā min al-Shayṭān* (Dream from Satan). However, these evaluations discuss the value of dreams from a religious perspective i.e. the sharia. Yusuf Al-Qaradawi, 117-126. Also see, Abd al-Raḥmān Ibn Zayd al-Zunaydī, 264-265.

⁴⁸¹ Yuval Nir and Giulio Tononi, Dreaming and the Brain: From Phenomenology to Neurophysiology, “*Trends in Cognitive Sciences*,” Vol.14 No.2, (February 2010), 88-89; Deirdre Barrett, The Committee of Sleep, (New York: Crown Publishers, 2001), ix-x, 4-10, 44, 84-93; Also see, Aron W. Hughes, Imagining the divine: Ghazali On Imagination, Dreams, and Dreaming, “*Journal of the American Academy of Religion*,” Vol. 70, No.1, (March 2002), 33-53.

comet). Again, there are similar situations in the field of medicine. Thanks to this ability, which we can also call the prophetic eye, not only divine matters but also material matters that require high understanding effort can be comprehended. He also underlines that wisdom, which can only be obtained through this ability, and cannot be grasped by reason alone, is only one of the characteristics of prophethood. Prophethood has many more characteristics than this, and these are only a drop in the ocean of prophethood. Al-Ghazālī then reminds us of the Prophet’s own advice on strengthening this prophetic faculty, for Al-Ghazālī states that only after experiencing this faculty and gaining definite knowledge of its existence will we be able to experience strengthening this acquisition through worship purifying the heart.⁴⁸²

In other words, thanks to this ability, to Al-Ghazālī, we have the opportunity to understand the phenomenon of prophethood, it becomes possible to comprehend events that cannot be known through experience, and this ability is a faculty beyond reason and experience. What is important for our thesis is that he expresses this as “divine inspiration.” From this point of view, we can say that the ability of inspiration (*Ilham*)/intuition, which is a divine/metaphysical element that complements the intellect/reasoning, exists in human nature, just like the ability to sight and hearing. As can also be seen, while Naturalists and philosophers associate this faculty with mental activities, Al-Ghazālī associates it with the heart (*qalb*).⁴⁸³ This assessment of Al-Ghazālī is undoubtedly in line with the Qur’an, because there is a direct reference to it in the Qur’an, and as it is understood, Allah’s (ﷻ) intervention in every human being through this faculty is in question.⁴⁸⁴ For example:

“He it is Who bestowed inner peace on the hearts of the believers so that they may grow yet more firm in their faith.” (The Holy Qur’an, 48:4)

“But Allah (ﷻ) has endeared faith to you and has embellished it in your hearts and has made unbelief and evil-doing and disobedience abhorrent to you.” (The Holy Qur’an, 49:7)

“But [the decree of] Allah (ﷻ) came upon them from where they had not expected, and He cast terror into their hearts.” (The Holy Qur’an, 59:2)

⁴⁸² Al-Ghazālī, *Al-Munqidh Min Al-Dalal*, 60, 62.

⁴⁸³ Al-Ghazālī, *The Alchemy of Happiness*, 9.

⁴⁸⁴ On the subject of intuition in every living being, see Popper, *A World of Propensities*, 34-37. The fact that consciousness and intuition exist not only in humans and animals, but also in all living beings, makes us think that intuition is a faculty that governs the universe, and that the unity of God and existence might be inferred from this. More accurately, it is a faculty by which Allah manages the universe.

“And We made firm their hearts when they stood up and said, “Our Lord is the Lord of the heavens and the earth. Never will we invoke besides Him any deity. We would have certainly spoken, then, an excessive transgression.” (The Holy Qur’an, 18:14)

Besides, the Qur’an frequently mentions that Allah (ﷻ) guides those who believe to the right path. We have mentioned before that this faculty can be found to a more or less extent in all orders of existence. When we look at the Qur’an again from this perspective, we see the following expressions.

“Your Lord inspired the bee, saying: ‘Set up hives in the mountains and in the trees and in the trellises that people put up.’” (The Holy Qur’an, 16:68)

“For He sent against them flocks of birds, that pelted them with stones of baked clay, leaving them like chewed up straw.” (The Holy Qur’an, 105:3-5)

“Then Allah (ﷻ) sent a crow digging ‘a grave’ in the ground ‘for a dead crow’, in order to show him how to bury the corpse of his brother. He cried, ‘Alas! Have I ‘even’ failed to be like this crow and bury the corpse of my brother?’ So, he became regretful.” (The Holy Qur’an, 5:31)

“Then He turned to the heaven while it was all smoke. He said to the heaven and the earth: ‘Come (into being), willingly or unwillingly.’ They said: ‘Here we come (into being) in willing obeisance.’” (The Holy Qur’an, 41:12)

“Then He made them seven heavens in two days and revealed to each heaven its law.” (The Holy Qur’an, 41:11)

Many examples from hadith literature could be added to expand these examples, such as spiders weaving their webs over the mouth of the cave in which the Prophet Muhammad (ﷺ) took shelter while migrating to Medina. Additionally, the normative functions of living animals themselves attest to the divine order of nature (e.g., the great social communities and infrastructure built by ants and bees).

Returning to Al-Ghazālī, he relates the functionality of this faculty to the heart. The heart has the most important place in Al-Ghazālī’s thought system; he even expresses that the human being *consists of* body and heart, noting that how and where the heart will use that faculty depends on its tendencies. Al-Ghazālī distinguishes between the spiritual and physical aspects of the heart, and explains that the heart is not only the seat of the soul and the source of bodily actions, but also the centre of one’s yearning to know and draw closer to Allah (ﷻ). It is the faculty that perceives, feels,

understands, and gains knowledge. According to him, understanding occurs when the heart contains a representation that aligns with the true nature of the intelligible.⁴⁸⁵

According to Al-Ghazālī, whatever occupies the heart (*qalb*) becomes the subject of knowledge inspired to it. Even a devout and obedient person’s heart, though spiritually luminous, may not reflect the truth clearly if he is not actively seeking it or directing his inner focus toward it. If his soul is absorbed with physical acts of worship or concerns about his livelihood, and not freed for contemplating divine realities, then he will only come to know what he is focused on—whether it is the subtle flaws in his religious practices, the hidden faults of his soul, or matters related to worldly affairs. Also, the heart uses the other senses as servants.⁴⁸⁶ According to Al-Ghazālī, the point in this regard is that the motivation for action will change according to the inclination of the heart. Topçu expresses the value he places on Al-Ghazālī’s *Ihya* as follows: “The morals of Kant and Spinoza could not go further than the *Ihya* of Al-Ghazālī as the science of man.”⁴⁸⁷

From another perspective, Al-Attas emphasizes the epistemic importance of the heart’s inclination in choosing one of two propositions that are close to each other or in remaining distant from both and indecisive/doubtful. While yet intent on truth, the possibility of attaining to the truth-like what the Sophists held—is denied because of the sceptic doubts. Doubt is often seen as a method of gaining knowledge and reaching truth. However, the actual attainment of truth—whether in religion, philosophy, or science—comes through guidance, not through doubt itself. Doubt is merely a state of hesitation between two opposing views, where the individual remains stuck between them, without leaning towards or favouring either side. When the heart leans more toward one side but does not entirely dismiss the other, this is called conjecture. However, when the heart fully rejects the other side, it has reached a state of certainty. This rejection does not stem from uncertainty about the other view, but from a clear recognition that it is false. Such clarity is considered guidance. Doubt—whether it is temporary or persistent—only leads to guesswork or further uncertainty, but never to truth itself, “and conjecture avails naught against truth.” (The Holy Qur’an 10:36). There seems to be an intellectual abhorrence for simple truth, but that simplicity must

⁴⁸⁵ Al-Ghazālī, *Ihya*, Vol. III, 3, 5, 22, 23, 29, 32; Ibid, *Al-Munqidh Min Al-Dalal*, 64; Ibid, *The Alchemy of Happiness*, 5-9.

⁴⁸⁶ Al-Ghazālī, *Ihya*, Vol. III, 23-24; Ibid, *The Alchemy of Happiness*, 6.

⁴⁸⁷ Nurettin Topçu, *Yarınki Türkiye*, 182.

needs be first made complex and sophisticated before it can possibly be deemed worthy of attaining to the dignity of truth, he says. But as the Holy Qur'an says: and what is there beyond truth but error? (The Holy Qur'an 10:32).⁴⁸⁸ From this perspective, the removal of doubt in the formation of "justified true belief," which we have frequently mentioned before, and the formation of a conviction about justification, seem to be a matter of the disposition of the heart.

It is useful to recall in Topçu's thought that *Irādah* determines our inclinations, and that these decide our acquisition of knowledge. According to Topçu, in the past, it was believed that distinct faculties, such as seeing, hearing, and smelling, each operated independently within our spiritual life. The term *faculté* refers to the ability or power to perform a specific function. The ancients assumed these faculties worked separately, within isolated compartments. However, this perspective was recognized as flawed because it failed to account for the continuous nature of conscious life and the interconnectedness of various spiritual phenomena within this continuity. In reality, it is impossible to compartmentalize our spiritual experiences in this way. Our inner life (which we can call the life of the *qalb*) is a dynamic and continuous flow of interconnected events, but it is essential to acknowledge the significant role that our physiological life plays in shaping this integrated whole.⁴⁸⁹

As for inclination, to Topçu, ideal tendencies are defined by their focus on infinity, transcending human relations with oneself and others, and their connection to reason—qualities unique to humanity. A person can embody scholarly, artistic, moral, and religious traits, which reflect human greatness and are essential for progress. These ideals drive the world forward: the pursuit of truth leads to science and philosophy, the pursuit of beauty inspires literature and art, and the pursuit of goodness forms the foundation of morality. Among these, the religious tendencies encompass and surpasses all others, representing the soul's ultimate action toward Allah (ﷻ), the highest and most complete goal.⁴⁹⁰

We have previously pointed out the importance of tendencies in acquiring knowledge in Topçu and the connection of our tendencies with *Irādah*. In this sense, we can say that there is a similarity between him and Al-Ghazālī. Because, if we were

⁴⁸⁸ Syed Naquib Al-Attas, *Islam Secularism and the Philosophy of the Future* (New York: Mansell Publishing Limited, 1985), xvii.

⁴⁸⁹ Topçu, *Psikoloji*, 68, 70.

⁴⁹⁰ Topçu, *Psikoloji*, 92-93.

to say based on Al-Ghazālī, knowledge is acquired in the direction where the heart flows. The part where the heart will be directed is not a deterministic phenomenon. Here, we can put forward Topçu's concept of *Irādah*. For him, *Irādah* is not a faculty that can be directed in a deterministic manner. The gains related to it are concentrated wherever the heart is concentrated. It may vary according to the person's efforts. As a person moves away from physical pleasures and turns towards mental pleasures, their ability to reach the truth also increases. In fact, it is not possible for someone who has become accustomed to material pleasures to specialize in any subject. For this, the formation of interest, inclination, desire and will in that regard are required.

We see a similar issue in Sufism. We can give the dhikr techniques of the Naqshbandi order as an example. In terms of divine wisdom and closeness to Allah (ﷻ), the foremost technique that will ensure this closeness is dhikr performed on the heart. We can say that the process of getting used to doing dhikr with the heart, since doing dhikr will completely focus the heart's occupation and intensity here, intuition will develop in this direction, that is, in the direction of divine truths. From the perspective of an artist, if the heart focuses on being involved in art, the intuition of that ability will develop. The situation is the same for a doctor or an engineer. However, if we evaluate it here in the context of Al-Ghazālī as a Sufi-philosopher (in contrast to *Mashshāi* philosophers), if there is an intensification in worldly sciences together with the remembrance of Allah (ﷻ), it will be easier and more effective to move away from material pleasures and towards intellectual pleasures, and the ability to intuition will develop even more effectively.

The course of thought is necessarily to reach from intuition and thought to belief, and from belief to faith, through the analysis of consciousness.⁴⁹¹ Consciousness is not something that only gives information about an object, it is a window that opens to infinity, to the absolute. Intuition is a light from eternity, perhaps the door to truths.⁴⁹² The transition from intuition to mystical intuition, the first intuition he mentioned corresponds to philosophical intuition, but mystical intuition is something else;⁴⁹³ put succinctly, "science and metaphysics meet in intuition."⁴⁹⁴

⁴⁹¹ Topçu, *Conformisme et Révolte*, 14-19.

⁴⁹² Topçu, *Conformisme et Révolte*, 38-39.

⁴⁹³ Topçu, *Conformisme et Révolte*, 120-125.

⁴⁹⁴ Bergson, *Creative Mind*, 226; Alvin Goldman and Brian P McLaughlin, *Metaphysics and Cognitive Science*, 2, 6, 41-42.

In the scientific data on intuition, a situation where intuitions contradict each other is mentioned. Goldman, on the other hand, opposes this view by saying, “although there seems to be a superficial disagreement, it is also possible that there is no conflict in general.” When we look at it from this perspective, the hadith of the Prophet Muhammad (ﷺ), “my ummah will not unite upon *dalālah* (misguidance),” in a sense expresses trust in collective intuition. Although there might be disagreements among the views offered by majority, it is quite possible that there is a consensus on not uniting on error.⁴⁹⁵

5.3 CHAPTER CONCLUSION

When we look at Topçu’s understanding of intuition from a holistic perspective, we see that he distinguishes philosophical intuition from mystical intuition, but in terms of their foundations, these two types of intuition are essentially the same, differing only in degree, and emerge with the connection with *Irādah*. With *Irādah*, a person passes from the stage of “belief” to the stage of “faith/*īmān*” (the much stronger form of belief), and this faith provides the formation of mystical intuition. Just as intuition is related to the nature of man, mystical intuition is also related to the nature of man. According to Topçu, every person and every society has such an orientation. While the intuition he first expressed is effective in all kinds of knowledge, mystical intuition is effective in morality, religion, and art.

In other words, the mystical intuition that Topçu stated is not only related to religious situations, but also to human nature and can show itself in art, morality or desire for knowledge/truth. However, in matters regarding divine truths, human nature, and *Irādah*, a mystical bent alone is insufficient for mystical intuition; the door beyond to such truths cannot be opened without divine help. When this happens, a union is experienced as a result of surrendering to the Only Necessary Being. He defines this union as *Wahdat al-Wujud*.

⁴⁹⁵ Abu Dawud, *Sunan Abu Dawud, Book of Tribulations, Vol. 4*, translated from Arabic by Nasiruddin Al-Khattab, (Riyadh: Darussalam, 2008), 491; Alvin Goldman and Joel Pust, ‘Philosophical Theory and Intuitional Evidence,’ 4-5. We can also give an example from the Mashshāi philosophers of Islamic philosophy. In Al-Farabi’s *Al-Madīna Al-Fādila*, the philosopher king of his “virtuous city” should govern until he dies, and then be replaced by another philosopher. However, if no one meeting the prerequisites to be a philosopher king can be found to govern the virtuous city, a board of individuals meeting some of the qualifications of the philosopher can collectively contribute a simulacrum of a philosopher king (i.e., with the sum of their parts), thereby governing through a shura council (as a proxy for a philosopher king). See Al-Farabi, *Al-Madīna Al-Fādila*, 233-253.

When we come to Islamic philosophers like Ibn Sina and Al-Farabi, we see that the starting point of this whole process is not consciousness and self, but “Being.” In Islamic philosophers, we see the definition and hierarchy of being first, which has become a tradition, and then the knowledge system. This knowledge system is directly related to the *being* system. The concept of intuition also gains a special meaning within this system. In this context, Islamic philosophers explain being with the theory of emanation and explain gaining knowledge with the concepts of potential intellect (*al-'aql bi'l-quwwah*), actual intellect (*al-'aql bi'l-fi'l*), acquired intellect (*al-'aql al-mustafad*) and active intellect (*al-'aql al-fa'al*). While explaining how we acquire knowledge about the universe, Ibn Sina and Al-Farabi state that abilities such as sensation, perception, and reasoning are faculties related to the soul, while Al-Ghazālī states that these faculties are physiological.

As for the understanding of intuition, according to Ibn Sina, the formation of concepts, the determination of the middle term in the comparison, the justification of a belief, and the emergence of belief are all executed through intuition, and this intuition seeps into the human being from the active intellect. Al-Farabi says that intuition, the basis of all theoretical sciences, is inherent in human nature, and is given by Allah (ﷻ). Intuition refers to the ability to establish a direct connection with the active intellect, and its degrees vary from person to person. Al-Ghazālī tries to explain this faculty with elucidations such as the proto-prophetic power of the “inner eye.”

Using this faculty, which is found in every human being, Al-Ghazālī states that man needs it to understand issues such as Allah (ﷻ), prophethood, and the hereafter, which exceed the limits of the rational mind in the material universe. It is not a coincidence that Al-Ghazālī, while explaining this faculty, cited the sciences of astronomy and medicine as ways for mankind to be sure of the existence of this faculty, because according to the established opinion among naturalists, abstract mathematics, which is also the basis of physical sciences, is derived from intuition.

CHAPTER SIX

CONCLUSION AND SUGGESTIONS

6.1 MAIN OUTCOMES

The unprecedented pace of technological, socio-economic, and cultural change during the last five centuries has been unprecedented in human history. During this period, societies around the world have undergone a profound rupture with their traditional worldviews, fundamentally changing the ways in which they view the world, themselves, and their place within the world. Given the profound changes that have changed in the transition from the traditional to the modern period (or, in terms of the chronology of Western cultural change, from the early modern to the postmodern periods), the method of approaching knowledge itself has also undergone radical changes.

The traditional societies which promulgated most of the fundamental breakthroughs in what is conventionally called “science” fundamentally premised their “scientific” development within a solid metaphysical foundation, and knowledge was held to be a sacred phenomenon. This is evident in the ancient Mesopotamian, Egyptian, Indus Valley, and Chinese civilizations, and continued throughout the classical Graeco-Roman period, into the Islamic and early modern eras. During the early 18th century, Newton, whose name is synonymous with materialist science (i.e., the “Newtonian universe”), was primarily concerned with mysticism, and the study of Hebrew and Arabic spiritual texts. Indeed, if one were studying the *longue durée* of human civilization, one would conclude that the concept of obtaining knowledge without this being grounded in a metaphysical matrix is a very recent innovation indeed.

Nevertheless, from the early modern period onwards, particularly contemporaneous with the impacts of the Protestant Reformation in Europe, the place of metaphysics in epistemology was questioned, and it began to be eclipsed by the purported certainty of mathematics, experimentation, and observation (i.e., classical positivism), which became *de facto* “science” by the 19th century. This paradigm shift in epistemology gradually moved towards completely isolating metaphysics from epistemology. While metaphysics was included, albeit limitedly, in classical positivism,

the initial condition of scientific knowledge was to “exclude metaphysics” in the logical positivism phase. Moreover, as a result of the material (i.e., technological) successes engendered by “science,” a trend emerged towards scientific knowledge being a strong authority, or even the sole authority, on the subject of “reality.”

However, if we pay attention, even during the period when the “logical positivism” method was dominant (i.e., during the early 20th century), metaphysics was not totally rejected; in fact, they sought ways to create knowledge/science by excluding metaphysics. However, metaphysical or quasi-metaphysical philosophers such as Husserl (d. 1938) and Heidegger (d. 1976) were confined to the sidelines, and materialist philosophy reigned supreme in the political economy, education, and daily reality of both the capitalist and communist worldviews during the 20th century. While such philosophers could find a place in the European imperial metropole, finding some resonance in academia and culture as original and novel thinkers, non-materialist thinkers were systematically excluded in the colonized or anti-colonial world, as the absolute devotion to material development reigned supreme. “Modernizers” in such countries sought definite and clear ways to completely exclude metaphysics, as seen in the complete rejection of ancient Chinese metaphysics (e.g., Confucianism) in the world’s oldest continuous civilization.

Such trends were clearly discernible in the Ottoman realms. During the late Ottoman period, these concepts were pursued in Türkiye during Tanzimat, and were reflected during Topçu’s formative years, extending into the early Republican period, when positivism had a dominant effect not only on religious thought but also on knowledge/science. Thinkers like Thomas Kuhn argued that this paradigm shift was an indirect imposition, and that the exclusion of metaphysics in the acquisition of scientific knowledge was not a necessity, but a choice. Likewise, Topçu stated that this imposition would corrupt the Muslim Youth and cause permanent damage to humanity, and therefore there could or should not be science/knowledge without metaphysics.

We see a similar attitude in Al-Attas, when he described positivism as “secular logic.” As per Quine, the scientific paradigm developed a final and clear attitude on this issue and developed the concept of “naturalized epistemology.” In this context, Quine evaluated the foundations of “logical positivism,” which claims the possibility of ignoring metaphysics, as “dogma,” because reducing metaphysics to positivism would actually mean the acceptance of metaphysics, albeit indirectly (i.e., materialist

philosophy is premised on metaphysical claims, including the negation of traditional metaphysical and spiritual values). When it became apparent that the foundations of abstract mathematics (i.e., intuition), which is the basis of science, were not compatible with the assumptions of logical positivism, Quine assumed (subjectively) that he had put an end to this debate.

Accordingly, in his theory of naturalized epistemology, Quine claimed that there is no need for any metaphysical elements in knowledge/science, and therefore there was no need for philosophy anymore, and that epistemology/philosophy was a discipline under the auspices of (i.e., secondary to) “science.” More precisely, he claimed that science would completely replace epistemology/philosophy under the field of psychology. His conclusion is that there should be no distinction between *a priori* and *a posteriori*, analytic & and synthetic in knowledge. Islamic thinkers such as Bakar and Al-Attas arrived at similar conclusions to those of Quine, proposing a *Tawhīdīc* epistemology in which there are no distinctions such as *a priori* and *a posteriori*, analytic & and synthetic or conceptual and doctrinal in knowledge, based on classical Islamic philosophy (in terms of its source).

In our opinion, from Descartes to Kant, mathematical truths, which are the basis of “science,” are mental processes related to the phenomena, but they are based on an intuitive foundation. Ayer, who argues that our propositions about the universe must be free of all non-material elements, states that our propositions about how our mathematical and logical faculties (which form our propositions about the universe) work, and how they were formed, are the subject of epistemology (i.e., philosophy). Nevertheless, he does not forget to say that these abilities develop with experience not an innate faculty. However, unlike logical philosophers claim, mental categories are not a matter of grammar, but have a side that goes beyond this. In the simplest terms, for example, the consciousness of naming every object, the consciousness of dichotomies like “less/more,” “most/least” (i.e. consciousness of comparing) are faculties that exist independently in every language, which is expressed linguistically and helps us make comparisons; these faculties are not present in animals. Thus, the question arises, on what material elements are human impulses such as giving meaning, naming, and making inferences based?

Indeed, as we have stated before, Descartes, who is considered the founder of modern European thought, has many similarities with Al-Ghazālī in terms of

methodology, and indeed his method can mostly be attributed to Al-Ghazālī, as discussed in Chapter 3. This methodological paradigm shift in science and philosophy contributed to the development of sociology in the West, and indeed to sociological change itself (alongside other dynamics). Laurence J. Lafleur states in the preface of the translation of “Discourse on Method and Meditations” that Descartes’ role in this sociological transformation should not be underestimated. In this regard, we must ask why a commensurate impact of Al-Ghazālī was not seen on Islamic societies, despite the same concepts being developed and popularized 500 years previously.

Based on our analysis, this can be attributed to the fundamental differences between Islamic and Western (which, in this context, can be described as Christian) civilizations. The dominance of the Church in Western society shaped all aspects of life for centuries, and mediated the transition and diffusion of ancient and Islamic developments into European society. Conventionally, Aquinas is supposed to have based his thought on Aristotle (although in reality he merely translated ideas directly from Islamic philosophers’ commentaries and developments of Aristotle), while Auguste Comte’s ideas were considered to be ultimately based on Platonic philosophy. In both cases, there was a wholesale adoption of their ideas due to monolithic institutions, including the Church in the days of Aquinas, and academia in the days of Comte (which were institutionally direct heirs to the Church).

There was thus an integrated readiness for such paradigmatic approaches by all segments of society in the West. Conversely, in the Islamic world, “philosophy” was not a field of widespread interest, and it was not even a primary concern among the classical philosophers from whom Aquinas borrowed (just as Newton was personally more interested in “mysticism” than in his own “secular” discoveries). Islamic societies have shown more interest in ontological matters commensurate with the transition to the modern nation-state system, and attempts to construct modern national and political ideologies, yet they still occupy a very marginal segment of public interest.

Aside from historical context, returning to the world of pure philosophy, it is claimed that it is not possible to have knowledge of a transcendent reality via phenomenal faculties. However, this transcendental area, especially in the Islamic tradition of thought, is an area where everyone will have knowledge and understanding to the extent of their power. There is no question of absolute and definite knowledge, which is an attribute that belongs only to Allah (ﷻ). For created beings like humans,

there are varying degrees of knowing and being able to know. However, the knowledge of everyone other than Allah (ﷻ) is incomplete, as attested in the Qur'an. When Allah (ﷻ) says, "I will create a vicegerent (man) on earth," the angels use the (empirical) knowledge vouchsafed to them to query by saying, "O Allah (ﷻ), do you want to create a being who will shed blood and cause corruption on earth?" To which Allah (ﷻ) responds, "I know what you do not know." (Qur'an, 2:30) Thus, this is why, at the end of their treatises, Muslims (including Muslim philosophers) say "Allah (ﷻ) knows best" about any subject they write about. Albeit man does occupy a unique position with regard to apprehension, his knowledge will always be incomplete in the face of absolutes.

Today's science progressively reveals how material existence functions and defines the nature of the world and the Universe, but the whole is greater than the sum of its parts. Our knowledge is quite limited in the face of the vastness and complexity of the cosmos, including biological phenomena. For instance, science allows us to precisely identify the elements that make up the brain and their quantities, such as specific amounts of protein and glucose; however, the brain as a complete entity is more than just the sum of these components, and its functionality in relation to perception and cognition is an entirely different entity to the mechanisms of its protein and salts. Similarly, while we can describe the elements and quantities that compose a human being, a *person* as a whole represents something entirely beyond these parts.

We innately understand our own existence and aspects of it without needing any empirical evidence. As described, we *know* this, intuitively. This intuition tells us unmistakably that we are more than just the individual parts of our existence. Likewise, we can explain how the Earth and even the Universe are composed and function, but we also know intuitively that, as a whole, they possess an existence beyond their parts. This same intuition helps us understand the existence of God. It can be argued that an individual's actions are ultimately determined by environmental inputs and the biochemical sequence of brain states, which equates to the traditional argument over whether free will exists. In this case, in the context of the existential approach, "belief" plays an important role, because both environmental-external factors and internal factors such as impulses will lose their effect in the face of a strong belief/*Irādah*.

We must state that there is a significant deficiency that we come across among naturalist epistemologists, some of whom have argued that intuition is merely a natural

phenomenon. This approach completely ignores the history of the Prophets, and aside from religious belief and creed, clearly certain individuals throughout history have experienced uniquely powerful mystical experiences; indeed, the existence of religious belief itself can be viewed as an existential material reality, which must be acknowledged rather than swept aside by materialists. Naturalist epistemologists have ignored the fact that, in addition to the moral life of the Prophets, certain techniques were also conveyed to humanity by them through revelation, which is the highest level of intuitive ability.

While the construction of a gigantic ship, based on revelation, was unknown to humanity, Prophet Noah (عَلَيْهِ السَّلَامُ) introduced ship engineering to humanity by teaching him by Allah (ﷻ). Likewise, Prophet Joseph (عَلَيْهِ السَّلَامُ) reflected the science of dream interpretation to his own society. He taught the technique of storing wheat with the teaching of Allah (ﷻ), and taught economic planning, resource management and strategic agricultural policy. As far as we understand from the whole Qur'an, the Prophets contributed to the development of humanity not only with the knowledge of the afterlife and moral knowledge, but also with the knowledge of certain techniques as informed by Allah (ﷻ).

Albeit atheists do not believe in such events, they cannot deny the existence of certain unique individuals in human history who have played a role that cannot be convincingly explained by materialism. Aside from revered religious figures, modern scientific figures like Newton, Einstein, or Tesla, as well as geniuses like Rumi, da Vinci, or Shakespeare, comprised the same meat and bones as their peers, and received the same education and stimuli, while they were uniquely inspired in their arts and others were not. The vast gulf between the attainments of certain pivotal figures in human civilization and ordinary people cannot be realistically attributed to the mechanistic rudiments of naturalist epistemologists. Furthermore, their claims that humanity is inexorably developing toward an evolved superior version appears increasingly shaky with the fruition of discoveries in archaeology and biology, such as ancient civilizations and “early humans” being far more advanced than could be

imagined during the 19th and 20th centuries,⁴⁹⁶ and the fact that human brains have shrunk in size by 10% during the last 3,000 years.⁴⁹⁷

Pertaining to human inspiration and intuition, the ongoing miracle of the Qur'an that came to the Prophet Muhammad (ﷺ) some 14 centuries ago, and which has been preserved in memorized and written form until today, continues to drive the daily lives of hundreds of millions of people worldwide. The Muslim civilizations of the Mediterranean World, West, Southeast, and East Asia were obviously key dynamos in human development, yet the material elements that they learned from Islam (particularly from the Qur'an and the Prophet Muhammad (ﷺ) himself) have been systematically ignored in terms of their contributions to the development of humanity.

Kornblith argues that the ability to intuit in humans is a “natural kind” of ability that has evolved as a result of “survival instinct.” Moreover, he states that this ability to intuit is found in all living species, such as animals and plants. Bergson also states that the intuition in animals is instinct, but that this instinct has a metaphysical connection directly connected to existence, in his ontological foundation. This view is premised on certain intelligent behaviours of various insects seen in nature, such as the butterfly, parasitoid wasp, and sitaris beetle, which act in ways that suggest deep knowledge of their hosts and environments. These insects exhibit highly specialized behaviours—such as laying eggs in precise locations and timing their actions perfectly—to ensure their larvae's survival. However, this “knowledge” is not learned through experience, but rather manifests in instinctive, predetermined actions. The behaviour of these insects appears as if they possess an understanding of their surroundings, but this understanding is externalized in their actions rather than being consciously realized.

Bergson's approach to intelligence and intuition resembles the “natural kind” interpretation, but when it comes to humans, Topçu evaluates the concept of intuition in a unique way. According to him, the instinctive or intuitive actions of other living beings other than humans occur unconsciously. Even if they also contain a very deep wisdom, their actions are dependent on an automatic repetition. They cannot develop,

⁴⁹⁶ Blasco, R., Rosell, J., Arilla, M., Margalida, A., Villalba, D., Gopher, A., and Barkai, R. “Bone Marrow Storage and Delayed Consumption at Middle Pleistocene Qesem Cave, Israel (420 to 200 ka).” *Science Advances*, 5 (10) (2019), eaav9822. <https://doi.org/10.1126/sciadv.aav9822>.

⁴⁹⁷ Jeremy M. DeSilva, James F. A. Traniello, Alexander G. Claxton, and Luke D. Fannin. “When and Why Did Human Brains Decrease in Size? A New Change-Point Analysis and Insights from Brain Evolution in Ants.” *Frontiers in Ecology and Evolution*, 9 (2021), 742639. <https://doi.org/10.3389/fevo.2021.742639>.

transform or interpret it. Conversely, humans do not acquire a specific instinct like an insect species, and their intuition continues to take shape constantly, depending on their own efforts, desires, and wills, with every moment of existence. This intuition enables the development of institutions that require high spiritual capacity, such as science, art, morality and religion. However, this intuition related to the Universe in Topçu, which can also be called a philosophical intuition, is different from mystical intuition. To attain mystical intuition, the first kind of intuition is necessary, but mystical intuition is something quite different but not totally separate each other.

Apart from that, it is not a coincidence that Topçu puts forward the concept of belief, because it is of vital importance for the institutionalization of scientific activities. As stated previously, the knowledge produced by each person is “unique” and specific to him or her. Interestingly, Quine and Topçu agree on this issue. However, belief ensures the institutionalization of this individual knowledge (in other words, belief). For example, a science student does not test whether the information they receive while learning the laws of thermodynamics at the university they attend is true one-by-one; rather, they accept it as it is (in other words, they believe it). When the concept of belief comes to the fore, both epistemologists and scientists have to organize their theories accordingly. Quine tried to overcome this problem with the concept of empathy. According to him, thanks to this innate ability that comes with evolution, we reach an agreement on certain “concepts” and “theories.” Topçu calls this the “imitation of belief.” Moreover, he says that if humans did not have the actual “ability to believe” and “imitate” it, there would be no such thing as science today.

This is exactly what epistemologists often emphasize. If what we call “knowledge” is “justified true *belief*,” then the *formation* (or causation) of belief is the most important point in terms of “knowledge.” This is where scientists and philosophers fundamentally differ. Both sides accept that the formation of belief occurs through intuition. The starting point of knowledge/belief is intuition. While philosophers accept that this faculty is a metaphysical faculty, scientists claim that this faculty is the “natural kind” that comes with evolution and is rooted in materialist philosophy. Here, we can benefit from Al-Ghazālī’s method of criticism. Materialists cannot provide a “definitive proof” (*Burhān*) for their claim as per their own methodology. The justifications they put forward on this issue are typically quite personal.

However, as far as we can observe, both methods have aspects to be criticized. For epistemologists, claiming that knowledge is a purely mental activity means ignoring the physiological state of man. This is exactly the starting point of Topçu's intuitionism, which contends that knowledge is neither a fully empiricist nor a fully rational phenomenon, but rather an interconnected process in which both of these dimensions are involved. The elements that unite these two areas are "*Irādah*," a divine faculty that comes from Allah (ﷻ) and intuition, related to it. Whatever a person produces in the name of value/virtue such as knowledge, science, philosophy, art, ethics is thanks to this faculty. This faculty means for a person to get rid of material interests and take a step towards the divine realm. Intuition gives us the opportunity to evaluate knowledge from a scientific, philosophical and *sūfī* perspective at the same time. Topçu's epistemology does not rest exclusively on either reason or experience; rather, it is grounded in the self/consciousness, which he treats as the foundational condition for both. In both ontological conceptions—whether realist or idealist—, his starting point in knowledge, the self/consciousness (to which he relates it to intuition and *Irādah*) remains operative in both.

In Islamic philosophy, the concept of the "active intellect" was influenced by the original Aristotelian concept, which Islamic philosophers gave additional metaphysical depth. The active intellect is the source of knowledge and form for all beings. The human intellect receives "light" from the active intellect in the processes of thinking and comprehension. Ibn Sina's understanding of *ittisāl* states that the human intellect can reach metaphysical truths by uniting with the active intellect. This unity occurs not only through reasoning or logical analysis, but also through intuition. The difference between this understanding of knowledge and Western thought is that it bases knowledge not only on reason and experience, but on a metaphysical ground. While the West evaluates *a priori* knowledge entirely within the framework of the human mind and logic, Islamic thought connects this knowledge to a transcendent source.

In this case, we can say Islamic thought has different dynamics than the West. For example: In the West, knowledge is generally seen as an independent product of the human mind (even in Kant, *a priori* knowledge is based on the structure of the human mind). In Islamic thought, knowledge comes from a transcendent reality and the human mind is a tool that "accepts" knowledge in this reality. Therefore, intuition is not limited to man's own mind; it establishes a metaphysical connection. The human mind learns

the truth from a transcendent source and this source both constitutes foundation of *knowledge* and communicate with man directly through intuition. We can say that the difference between Islamic thought and the Western thought is that it emphasizes a metaphysical dimension in the source and nature of knowledge.

Islamic thought has a different dynamic than Western traditions of thought in the ways of reaching knowledge. The concept of active intellect (*al-aql al-fa'âl*) shows this difference most clearly. The understanding of “*ittisâl*” (union or communication) of Islamic philosophers offers a special theory of knowledge in which intuition, reasoning and metaphysical realities come together. As Al-Attas says, angels and men have knowledge of this; this is not to say that they know what the reality of this qualification is, but through the teachings about it that they have received, each according to his own capacity (“each knows the spring where he will be refreshed” (Qur’an 2:60)).

There is consensus among Islamic philosophers (including Ibn Sina, Al-Farabi, and Ibn Miskevehy) that the ability of intuition is different for everyone, and can be developed. After humans gain the ability to reason, think abstractedly, and intuition, they will now be aware of the distinction between good and bad and make their choices accordingly. The definition of “natural good or bad” independent of humans is meaningless, because these concepts are meaningful for humans who reason. As long as humans with free will exist on earth, natural selection will no longer be completely *natural*, because humans intervene in nature and its functioning, whether in a good or bad way, according to their will (*Irādah*). This is most obvious in terms of human offenses against creation, such as human beings following their unbridled desires and depleting water resources, inflicting destruction on nature, causing the extinction of species, and manufacturing weapons of mass destruction and deadly chemicals, all of which can be viewed as “bad” only by conceiving human action to have a moral value that does not arise from nature (i.e., if it is argued that humans should act in a way contrary to their natural inclination in order to preserve nature, this is contrary to nature, and cannot be attributed to nature).

However, we can say that Allah’s (ﷻ) will is for the divine/just order that Allah (ﷻ) has established in the universe to be established on earth by human beings, and to develop it, as expressed in the following Qur’anic verses:

“He brought you into being out of the earth, and made you thrive thereon.” (11:61)

“He is the One Who has placed you as successors on earth and has raised some of you above others in degrees [of rank] that He may try you through what He has given you.” (6:165)

The Qur’an is a common knowledge base for Muslims. However, also what we acquire from the Qur’an changes according to our intuition capacity. In fact, when we examine it in more detail, a similar situation is also found concerning our knowledge of the universe. William Ramsey, in his work titled “Prototypes and Conceptual Analysis,”⁴⁹⁸ considers it questionable (in terms of psychological processes and experiments) whether our intuitive judgments can lead us to a relatively simple set of defining features for abstract concepts, and that it will perfectly coincide with the presence or absence of a certain set of features. However, we can say that this result may be valid for those whose intuition abilities are not at the same level in the context of Islamic philosophy.

When we examine the concept of intuition regarding Topçu, although he differentiates between mystical intuition and intuition, according to him, this difference is not in terms of nature, but in terms of degree. The root of the *Irādah*, in the creation of man and manifests itself in self/consciousness and is originally in the transcendent world. This creates the conditions that enable intuition to emerge, and prepares the ground for the emergence of mystical intuition. However, as we have stated before, Topçu considers the intuition that he associates with self/consciousness not only from an epistemological perspective, but also as an element that reveals human action. Perhaps for this reason alone, he evaluates his own understanding of intuition as separate from intuition discussed in philosophy/epistemology. Likewise, he makes a similar observation while making an evaluation for his teacher, Bergson.

Mystical intuition is different from this intuition in terms of degree, because here the consciousness of *Irādah* passes from the stage of “belief” to the stage of “faith/īmān.” After īmān is established in the person, the declared connection with *Irādah* becomes mystical. *Irādah* wants to reach the Absolute *Irādah*. However, this union occurs with the help of Allah (ﷻ). Starting from this connection of mysticism with the self and consciousness, Topçu emphasizes that this mystical faculty is a characteristic that comes from human nature and that man and societies have a tendency towards it. The mystical orientation and method of each society may be different, and

⁴⁹⁸ Ramsey, William. “Prototypes and Conceptual Analysis.” *Topoi*, 11 (1) (1992):59-70.

they may have been influenced by each other, but he states that the formation of Islamic mysticism/Sufism is formed from its own original sources, the Qur'an and our Prophet Muhammad (ﷺ). Although he occasionally mentions that Islamic mysticism may have been influenced by Hellenic culture or other external factors, he presents a clear stance on the originality of Islamic mysticism in terms of its formation (the terminology it uses, the method, etc.), based on his teacher Massignon. Topçu's connection between the Self and mysticism reminds us of Al-Ghazālī, because, as systematized in Sufism, Al-Ghazālī emphasizes that knowing oneself is knowing Allah (ﷻ).

When we examined intuition in a philosophical/epistemological context, the disagreement between naturalists and epistemologists was not about the existence of the faculty of intuition, but about whether its nature was natural or metaphysical. While naturalist epistemologists such as Quine and Kornblith claimed that it would be more appropriate to explain the formation of intuition in humans subjectively, as per Darwinian evolutionism, we turned to Islamic philosophers for their assessment that the evolution/creation process in the universe did not operate in a chaotic randomness but was instead a divine process that contained a deep intelligence behind it. In this context, we have examined the data supporting this narrative in Ibn Miskawayh, Ibn Sina, and even Al-Farabi. Based on this, we can say that there is never any clarity in terms of scientific methodology as to whether the nature of intuition is natural or metaphysical, on the contrary, in terms of Topçu and Islamic philosophers' *Irādah* and the intuitive thinking method, it can be clearly stated that the nature of intuition and *Irādah* is a transcendent/metaphysical.

Contrary to Ibn Sina and Al-Farabi, Al-Ghazālī states that perception and reasoning are not related to the soul, that they are physical characteristics and do not include concepts such as *a priori* axioms. Moreover, our reasoning, perceptions, and acquired concepts about the world develop gradually after we enter this world. We can say that there is a similarity between this explanation and Topçu's explanations on the connection between consciousness and the self, and the process of formation of the self. In this regard, Topçu states that the main element that determines this process and our orientations is *Irādah*, while Al-Ghazālī states that this element is the heart. We can say that these two explanations are similar to each other in terms of the explanation he brings.

6.2 SUGGESTIONS

Unfortunately, due to the scope of the study, we did not have the opportunity to examine some subjects in depth. Since such examinations would exceed the scope of the current study, we think that it would be more appropriate to be the subject of future research.

If we recall Quine's theory of empathy and the value Topçu attributes to the concept of "belief," as we have stated before, if there were no communication skills and ability to "believe" in humans, it would not be possible to talk about logic or science. While Quine explains this situation with Darwinian evolution, as expected, Topçu explains this situation with the concepts of *Irādah* and intuition, without denying the material existence of evolution. Although we briefly touched on the importance of the concept of intuition in the formation of language and logic in Ibn Sina, we did not have the opportunity to discuss the ontological basis of language and logic, because it was outside our scope. We think this topic also deserves to be studied separately.

Additionally, we think that the evaluations of naturalized epistemologists on the nature of the concept of intuition and how it works should be criticized specifically from the perspective of Islamic philosophers. In this context, it would be appropriate to examine the concept of intuition from the perspective of *Ishrāqīyyah* in the light of the theory of naturalized epistemology. In fact, since examining it directly from the perspective of *Ishrāqīyyah* would make the scope too wide, we think that it would be more appropriate to examine the subject specifically from a philosopher from an *Ishrāqīyyah* school. Moreover, it seems possible and necessary to examine it from the perspective of *Mashshāīyyah* methodology and *Mashshāī* philosophers on the same foundations, because methodologically there will be a difference between addressing this issue from the perspective of *Ishrāqīyyah* and *Mashshāīyyah* methodology.

From another perspective, we think that the explanation of the concept of intuition with the theory of evolution is of great importance. As discussed in this thesis, explaining the nature of intuition only with Darwinian evolution, or accepting it as such, does not put an end to the matter, moreover, it takes the subject to a very different field of study in terms of how you accept evolution. In this context, Topçu also occasionally explains evolution with action philosophy, and he does this through his teacher Bergson's interpretation of the evolution, which gives us the idea of examining the concepts of intuition-evolution theology/metaphysics from the French school. In addition, as occasionally mentioned in the preceding chapters, we believe that

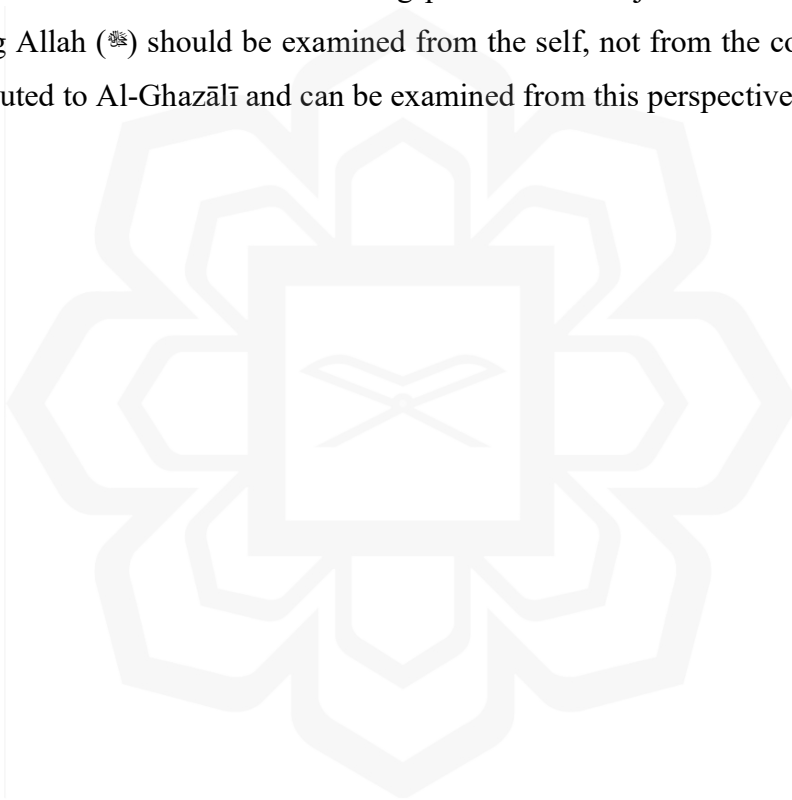
evaluating these concepts (intuition-evolution-theology/metaphysics) in the light of Islamic philosophers' evaluations of evolution will also make a great contribution to the field.

Hegel is conspicuous by his absence in Topçu; despite being one of the pre-eminent philosophers of modernity, Hegel, is never mentioned by Topçu, despite the fact that he makes the subject-object relationship the fundamental factor in human knowledge, and defines being as the [process of] existence and qualifies consciousness as a part of this existence (action). Topçu's extended analysis of Johann Gottlieb Fichte (1762-1814) makes it impossible for him not to be aware of Hegel, who was closely related to him. The fact that Hegel is never mentioned in Topçu, with his theories such as Subject-Object, consciousness-self-consciousness (i.e., consciousness being the object of self-consciousness) is also something that could be analysed separately in a future work, which could be evaluated in relation to other Islamic philosophers.

Al-Ghazālī's connection between knowing oneself and knowing God pertains to the fact that faculties such as perception and reasoning are related to the stages that develop after our arrival in this world, and those we go through during life. Al-Ghazālī's explanations in this regard can also be examined in terms of the philosophy of action or existentialism. Although we touch on this subject very limitedly in terms of our scope, it would be useful to investigate both Topçu's evaluations on this subject and the philosophy of action and existentialism itself through Al-Ghazālī's comments. In our opinion, it is essential to analyse Al-Ghazālī more completely in order to address these issues more comprehensively, since the foundation of modern sciences is based on these discussions.

For example, one of the many points in which Al-Ghazālī pre-empted Descartes can be found in *Al-Munqidh*. In this work, Al-Ghazālī noted that classical philosophers claimed that their own methods increased disagreements rather than providing definitive knowledge. Conversely, since the data of mathematics are considered definitive, denying them carries the danger that if one rejects mathematics based on religion, but later sees the definitiveness in mathematics, then he may think that religion is questionable. Starting from this, it is possible to see Al-Ghazālī as the basis of the search for a method of obtaining "definitive knowledge" (i.e., positivism), based on mathematics, converging with the later position of Descartes. In addition, it is also possible to link Al-Ghazālī's thought to the theory of "the limits of reason," which is

the most basic motto of Kant and today's science, by claiming that the principles of reason of the classical philosophers cannot be certain in the field of metaphysics. Again, the view that every material event has a material cause, which is one of the most basic rules of today's understanding of science, and which is conventionally attributed to David Hume in Western sources, can be examined from the perspective of Al-Ghazālī. In addition, Locke's theory that the human mind is a blank slate (tabula rasa) when it comes to this world and that the conceptual/mental ground develops with its contact with the world can be examined in the light of the assessment expressed by Al-Ghazālī above that the human mind comes to the world in a bare form. More than this, the foundations of the fact that the starting point in the subjects of knowing action and knowing Allah (ﷻ) should be examined from the self, not from the concepts, can also be attributed to Al-Ghazālī and can be examined from this perspective.



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