

EMPIRICISM AND BEYOND

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Ibn Ṭufayl's renowned treatise, *Philosophus Autodidactus* (Ḥayy Bin Yaqzan)²⁷ has been studied primarily from the point of view of its dramatic interest, literary form and occasionally from a philosophic standpoint. Thus far, his theory of knowledge has not been adequately treated by philosophers and scholars alike. There are many reasons, which I have discussed fully elsewhere,²⁸ for this unintended negligence. In fact, despite the many languages, and the useful scholarly commentaries introducing these translations,²⁹ Ibn Ṭufayl's methodological presentation of his ideas, and the *plurality* of methods of *knowing* contained in *Philosophus Autodidactus* have not as yet been discerned or studied seriously.

In this paper I shall a) discuss Ibn Ṭufayl's epistemology, and b) for the sake of emphasis and illumination, compare his views with modern ones. Also, I intend to employ "epistemology" in a broad sense to include the examination of the fundamentals of every kind of knowledge leading to or generating from the Necessary Being. Considered thus, "epistemology" would constitute a variety of modes of cognition. On the one hand, it includes an assumption-free base for human knowledge, and on the other, it embraces revelation as a culturally assumed source of knowledge.

It is my firm contention in this paper a) that the Andalusian Master is primarily an empiricist who shared some of Locke's and Hume's basic epistemological determinations (though less developed), and b) that the

²⁷ Ibn Ṭufayl, *Ḥayy Bin Yaqzan*, edited and translated into French by Leon Gauthier, Beirut, 1936 Henceforth, all references to the Arabic text will be to this edition of Gauthier, briefly mentioned as "Ḥayy".

²⁸ See S. S. Hawi, "Ibn Ṭufayl's Ḥayy Bin Yawn: Its Structure, Literary Aspects and Method", *Islamic Culture*, Hyderabad, July 1973. See also by the same writer, "Ibn Ṭufayl: On The Existence of God and His Attributes", forthcoming, *Journal of The American Oriental Society*

²⁹ Examples of these translations and commentaries are Gauthier, op. cit., and Simon Ockely, *The History of Ḥayy Ibn Yaqzan*, revised by A. S. Fulton, New York, 1929

question of the origin and means of knowledge is at the very basis of Ḥayy's (or Ibn Ṭufayl's philosopher model) attempts comprehend the intimate nature of the ultimate, and *includes more than one method of knowing*. Empiricism, which is the springboard for all knowledge (on the human level), will eventually point *beyond* itself to the "genuine" method of *intuitionism and immediacy* according to Ibn Ṭufayl.

THE PRINCIPLE OF COOPERATION OF METHODS OF INQUIRY

Philosophus Autodidactus is a treatise in which the author displays his views on various philosophic issues in a concrete situation. Through Ḥayy's development, laborious explorations and the examination of the quiddity of things, Ibn Ṭufayl grounds his philosophic understanding showing it at work. Thus a *formal* study of his essential epistemological doctrine must begin by reconstructing his ideas from Ḥayy's dialectic encounter with nature. In so doing, I shall support my elucidations and inferences by continuous reference to the text in the original.

A careful reading of *Philosophus Autodidactus* reveals beyond doubt that the author adopted more than one method of acquiring knowledge about man, God and the universe. Ibn Ṭufayl makes extensive use of different methods of inquiry both simultaneously and coextensively in order to find answers to the questions he posed concerning nature, and to provide solutions for the problems he encountered. These methods are the *Inductive, Deductive, Intuitive and Behavioral*.³⁰ In addition to these there is the method of

³⁰ 1. I have discussed the inductive and deductive methods in detail elsewhere. See S. S. Hawi, "A Twelfth-Century Philosophy of Science", Pakistan Philosophical journal, September 1973, pp. 15-36, and by the same writer, "Ibn Ṭufayl: On the Existence of God..." op. cit. In the former snide in my formulation of Ibn Ṭufayl's views on scientific procedure the interdependence of the inductive and deductive methods was discerned and discussed. I have also shown how Ibn Ṭufayl employed deductive inference in verifying hypotheses. Most of his conclusions about causal relations were based on observations and inferences which are confirmed by reference to particular facts. (Ḥayy. pp. 38-45, 47-52). These two methods cooperate continuously until Ḥayy discerns the unity of all bodily and animal species Ḥayy moved from the observed to the unobserved by an inductive leap: a

Revelation.³¹ The free manner in which he utilized these methods compels one to believe that Ibn Ṭufayl did not consider that *philosophy has only one distinct method of its own*. Ḥayy's use of generalizations is based on observation. The application of these to biology and nature, his intuitive knowledge of the Necessary, and his contention that facts of revelation are in agreement with basic tenets of demonstrative knowledge, are evidence in support of this contention.³²

Philosophy, as a *radical* attempt at undersanding and interpreting phenomena, natural, inward-human, and metaphysical, seeks (as Ḥayy has done) the profound foundations of these phenomena. Thus, from Ḥayy 's employment of diverse methods in the treatise to comprehend the myriad natural and transcendental episodes, one can infer that according to Ibn

intellectual jump from a limited number of observations to a universal and unlimited number, to the universe as a whole (Ibid. pp. 60-61). Throughout Ḥayy's explorations and inventions, his schematization of the multiplicity of natural objects into types and classes (Ibid. pp. 53-69), his knowledge of the characteristics of different entities, and his uncompromising investigation of the phenomenon of death Ibn Ṭufayl utilizes the cooperation of the inductive and deductive procedures in apprehending truth. His scientific training was not an innocent factor in all this. Moreover, the inductive method prepared Ḥayy to discover the existence of the Necessary Being deductively; the proofs for both eternity and creation of the world and the arguments in support of his seeming belief in the finitude of the world (Ibid. pp. 73-91) are also instances of Ibn Ṭufayl's rigorous application of the deductive method promoted by the loyal help of inductive inquiry. Also, the intuitive-behavioral method which deals with Ibn Ṭufayl's immediate apprehension of the transempirical entities or with mystical experience, will be briefly discussed in this article in order to show that empiricism along with the experimental procedure (induction) and deduction pronounce their own downfall by pointing to the method of intuition and inward insight. Thus, my discussion of Ibn Ṭufayl's mysticism is only instrumental to the basic aim of this paper and will be considered fully in a separate article on his mysticism.

³¹ Ḥayy ., pp. 136-56,

³² See Hawi, "A Twelfth - Century Philosophy..." op. cit. See also Ḥayy, pp. 35-50.73-86,

Ṭufayl philosophy should conduct its search by having at its disposal *all methods of obtaining knowledge available to man*. For in our author's opinion, as evidenced from the larger part of the treatise,³³ the occurrence of problems is a *dominant* aspect of *experience* in man's t (Ḥayy's) development which results in methods of inquiry. It may be said of Ḥayy's encounter with nature and his acquisition of knowledgethat "in the beginning there were problems"³⁴ and these led to methods of solving them. From the beginning of his career to the of his laborious journey to God and meeting with AsāI and Salto Ḥayy 's life was characterized by the pervasive presence of problems by his perpetual victory over them.³⁵ He achieves all this through the givenness of his nature and his unaided sensibilities. Consequent philosophic activity as understood by Ibn Ṭufayl, implies the presence of a problem or a *variety* of problems in need of a solution; and since' method is "a device or a procedure, to solve a problem or answer a question,"³⁶ and since problems or questions *vary* (the way they did with Ḥayy) in *kind* the methods for solving them will also vary

Thus, the multiplicity of problems confronting Ḥayy's intellect demanded the use of multiplicity of methods. This fact is corroborated by what one finds in the treatise: an examiner will discover that there is a formal dialectic which pervades the whole of *Ḥayy Bin Yaqzān*. This, however, is not restricted to one methodological approach in analyzing the items of experience in nature; instead, it lends itself to a *plurality* of methods characterized by a gradual yet vital growth of movements movement of the totality of the human self in its attempt to comprehend and exercise mastery over its surroundings. This formal dialectic operates on the principle of *cooperation* and *interdependence* of different methods of inquiry.³⁷ Ibn Ṭufayl must have been greatly impressed by the empirical scientific approach: this is why he commenced his philosophic investigation by it³⁸ and continued its

³³ Ḥayy . pp. 33-135.

³⁴ Marvin Farber, *Basic Issues of Philosophy*, New York, 1968, p. 39.

³⁵ Ḥayy, pp. 33-135

³⁶ Farber, *op. cit*, p. 39

³⁷ Most of Ibn Ṭufayl's work is based on the cooperation of variety of methods of knowing. See Ḥayy pp. 34-156-

³⁸ Ḥayy. pp. 35-50

application until the disclosure of the Necessary Being was achieved.³⁹ This, however, did not force him to a slavish adherence to such an approach nor to give up the results of other methods.

Also, the treatise suggests that philosophy attempts to establish a world view and a *synthesis* of knowledge which claims to be a tenable and adequate account of reality commensurate with scientific achievements.

The reasons why I am stressing this particular aspect of Ibn Ṭufayl's thought are: 1) The foregoing observations concern points of method that are of lasting significance to philosophy regardless of particular beliefs held by individual philosophers; 2) These observations were overlooked by previous writers on the subject; instead, such writers were by and large occupied with certain historical, Neo-platonic, and literary aspects of the treatise.

It must be noted that the noetic elevation of Ḥayy 's reflective ego did not in any way change the intrinsic nature of surrounding phenomena; facts simply acquired a deeper and contextual meaning in relation to the *whole* and in *relation* to a human consciousness (Ḥayy). Thus, although in substance the intimate nature of reality and experience is not altered when utilizing the principle of cooperation of method in the treatise, man's attitudes, (as instanced by Ḥayy) knowledge and emotional cosmos are progressively changed; and these, in turn, determine his behavior. For Ibn Ṭufayl therefore, knowledge is *not* a bare *conceptual* understanding of reality and the systematization of its laws alone. Abstraction or pure theory impoverishes man's significant relationship to nature and leaves him suspended in the intellectual landscape of semi-real possibilities with his inwardness remaining unkindled and dull⁴⁰ On the other hand, true knowledge for Ibn Ṭufayl, as for Socrates, Plato, and Kierkegaard, is that form of understanding that seeps into the intimate structure of the personality and transforms the whole man: Ḥayy became a mystic. For Plato the philosophical enterprise culminates in love; for Kierkegaard it ends in an intense leap to the other "end", namely, God; for Ibn Ṭufayl it becomes a passionate yearning to become Him.⁴¹

³⁹ Ibid., p. 73-86.

⁴⁰ Every new knowledge which Ḥayy acquired determined him behaviorally. See Ḥayy .pp. 33-53. 53-90.

⁴¹ Ibid., pp. 114-21.

EMPIRICISM: ORIGIN AND SCOPE OF KNOWLEDGE. IBN ṬUFAYL, LOCKE, AND HUME.

According to Ibn Ṭufayl, what is the origin of knowledge?⁴² The origin of knowledge is experience and its scope is nothing less than the comprehension of the Divine Nature. This is mostly contained in the larger part of the treatise before Ḥayy meets Asāl, the dialectician mystic. Ibn Ṭufayl's epistemology is a presuppositionless one; at least this was his ideal. His examination of the origin and means of knowledge compelled his artistic imagination to place Ḥayy on a solitary island, and consequently to *dislodge tradition* from its very foundations. By so doing he intended to give his theory of knowledge a *radical beginning* similar in this respect to al-Ghazzālī, Descartes, Hume, and Husserl. By "radical" I mean what Husserl meant by the term, namely, the ideal of emancipation from all presuppositions. This means beginning with the ambitious task of knowing things without any a priori adoption of epistemological, metaphysical, ontological or value principles. By removing Ḥayy from the social situation, Ibn Ṭufayl was *attempting a hypothetical destruction of and universal doubt in the surrounding world of values and early education*. He was shattering the mold which captures the very fabric of the ego at the moment of birth and fashions it according to the patterns of the past and present. Ibn Ṭufayl was proclaiming to philosophers the Husserlian maxim before Husserl: "back to the things themselves", see, perceive, observe and describe phenomena afresh. The "things themselves" were "things" as they appeared to Ḥayy, that is, the phenomena. Ḥayy had set out to study the environing world as it appeared to him or as he encountered it in immediate experience, and was judging them in terms of a metaphysical theory or a philosophical system.

Ibn Ṭufayl does not seem to endorse the Platonic theory that the mind comes into the world already in possession of certain innate truths, a theory handed on to medieval thought by Augustine and accepted by Descartes, Spinoza and Leibnitz; like Locke, he holds that there are no such things as innate moral, mathematical or logical principles by which the mind, already

⁴² Although I shall not discuss, in this paper, the historical influences of Aristotle, Plotinus, al-Farabi and Avicenna on Ibn Ṭufayl in this connection, a future study of this aspect is certainly worth undertaking.

fortified, begins its operation of thinking about the world.⁴³ For instance, when Ḥayy embarked on his journey to comprehend nature, he did not disclose *any moral sense or innate logical capacities*. Only by observation and experience was he able to employ logical and inductive reasoning and a moral or religious sense.⁴⁴

Indeed, it is possible to categorize Ibn Ṭufayl's theory of knowledge as *process* epistemology. Man's mind develops and acquires strength and complexity through the process of growth and interaction with the environment. There exists a parallelism between the development of the mind and the exploration of the surroundings. This is attested to by Ibn Ṭufayl's emphasis that Ḥayy's age and mental growth should correspond to his philosophic and scientific attainments,⁴⁵ and by the fact that Ḥayy's powers of comparison of things and his attraction to them did not arise except after "their images were fixed in his mind."⁴⁶ This shows clearly that the mind acquires its texture after experience stamps itself on man through the gradual process of growth. The more images are fixed in the mind the more powerful and penetrating man's thinking becomes. Thus, through the passage of time Ḥayy's mind acquired keenness and sophistication and more insights into problems.

The foregoing remarks are in perfect agreement with what John Locke charts in his *Essay Concerning Human Understanding*. Says he:

"Follow a child from its birth and observe the alterations that time makes, and you shall find, as the mind by the senses comes more to be furnished with ideas, it comes to be more and more awake; thinks more, the more it has matter to think on. After some it begins to know the

⁴³ Cf. Ḥayy, pp. 37. 75. 90. 135.

⁴⁴ Cf. Locke, John. *An essay Concerning Human Understanding*. Ed. Alexander Compel Fraiser. New York. 1959. vol. 1. pp. 37-63.

⁴⁵ Cf. Ḥayy, pp. 115-116. Compare these facts in these pages with Locke, op.cit., Ch. II. pp. 64-73

⁴⁶ *Ibid.*, p. 34. Compare this statement with Locke who maintains that "men at first perceive and image individual objects." op. cit., Book II. Chapter I p. 140.

objects which being most familiar with it have made a lasting impression."⁴⁷

This is exactly what happened to Ḥayy in his development: the richness of his thought and the capacity of this thought to deal with the environment were made possible by the "fixed images in his mind" of objects in his immediate perceptual field. His confrontation with herds of roes, the death of his mother, his discovery of fire, and his awareness of the stars, minerals, plants and animals⁴⁸ offered his mind more matter upon which it could grind. By using the impressions of these objects he was able to perceive relationships by comparing the images of such objects to one another. These images in Ḥayy's mind became the carriers of his thought and the source of his creative imagination in discovering the art of building⁴⁹ and the like. Ḥayy's mind was improving by degrees in terms of innovation and comprehension.⁵⁰ The modern tenability of such a view as that of Ibn Ṭufayl and Locke in the field of psychogenesis is a truism nowadays and needs no argumentation.

Also, unlike Plotinus, according to Ibn Ṭufayl, when the soul dwells in the body it does not have any previous knowledge of the intelligible world. Nowhere in the treatise does he mention or even indirectly refer to the existence of forms in universal reason or *nous*. The soul does not entertain a pre-existence before man's birth; it is simply generated from God when the body becomes prepared for receiving it.⁵¹ This soul is the principle of life in the individual and does not innately possess fullness of thought.

Since man is a creation of God, he must contain an element of divinity. This element constitutes a *bridge* to the knowledge of the Truth.⁵² However, this is not to say that man is innately knowledgeable, but instead that he is *disposed* to develop a mind and knowledge under the proper circumstances. Therefore, the mind is initially a sheer power, a capacity to form ideas when it encounters experience. The fact that the soul is God-given simply means

⁴⁷ Locke, op. cit., p. 140.

⁴⁸ Ḥayy, p. 55

⁴⁹ Ibid, p. 53

⁵⁰ Compare Ibn Ṭufayl on this point with Locke. op. cit., pp. 140-141,

⁵¹ Ḥayy, pp. 28-29

⁵² Ḥayy, pp. 91-92.

that God endows the individual with the *instinct* of life and nothing more.

Therefore, in a Lockean manner, Ibn Ṭufayl considers the mind a *tabula rasa*,⁵³ a blank sheet of paper with only the capacity of having water marks of any sort in its fiber given by the Necessary Being. All of our (Ḥayy 's) ideas are, without exception, derived from the traces of experience stamped on the infantile virgin surface of the mind. To repeat, Ḥayy 's process of thinking and comparison commenced after "the images of objects were fixed in his mind."⁵⁴ Experience is therefore the outcome of the interaction between the senses and the environment.

According to Ibn Ṭufayl, man's means of knowledge are the five senses through which the impressions of the external world are received.⁵⁵ The basic sense which all animals possess is touch. It absorbs primarily the properties common to all bodies, the "textures hard or soft, rough or smooth."⁵⁶ The other senses perform more specialized functions; they suck from objects the qualities to which they are sensitive. Also the senses interact and aid one another in the process of knowing. Although localized in different organs of the body, they point to the one and the same object and yield not five different worlds but a configuration of one world.

This interpretation of Ibn Ṭufayl's theory of knowledge, with respect to the senses, is clearly Aristotelian, Farabian and Avicennian. However, he differs from these thinkers in not positing what they called *sensus communis* (*al-ḥiss al-mushtarak*), which in their psychology is another Sense over and above the five senses apprehending an abundant multiplicity of different objects. Ibn Ṭufayl binds the results of the senses with his knowledge of physiology and psychology.

The five senses are the means which the animal spirit employs to actualize perception. Thus the sense organs cannot function without the animal spirit and their being is totally dependent upon it.⁵⁷ But, the seat of the animal spirit is the heart which diffuses sensitivity and nutrition to the

⁵³ Cf. Locke. *op.cit.*, pp. 121-128

⁵⁴ Ḥayy, p. 34

⁵⁵ Ḥayy, p. 34

⁵⁶ Ḥayy, p. 91

⁵⁷ *Ibid*, pp. 32. 43-46. 49-52. Especially p. 52. See also pp. 107-109.

brain and liver;⁵⁸ and although perceptions are effected by the help of sense organs, our further awareness of the whole perceptible field cannot be located in them. The eye sees but it cannot be aware of its seeing; nor is our awareness that we are seeing or hearing, a *seeing* that we see, or a *hearing* that we hear.

The consciousness of our seeings and hearings which results from sights and sounds cannot be located in our eyes and ears in so far as they are exercising their specific functions of vision and hearing. According to Ibn Ṭufayl this consciousness has its focal point in the brain.⁵⁹ The animal spirit reaches the brain from the heart. The nerves conduct the animal spirit from the cavities of the brain to the sense organs.⁶⁰

Similarly, the sense organs relay the sensible qualities of external objects to the nerves, and these in turn pass them to the brain. The brain, therefore, is the center in which man perceives objects as wholes, and in Ibn Ṭufayl's epistemology, takes the place of the *sensus communis* contrived by Aristotle and adopted later by al-Fārābī and Avicenna.

Thus, Ibn Ṭufayl emphasizes the role of the brain in the different processes of knowledge and places the sense organs at its service. He also contends that the brain comprises different faculties (*arwāḥ*).⁶¹ These are specialized in different performances to secure the accomplishment of the cognitive process. The act of perceiving, discerning colors, and the awareness of the smells and tastes, as qualities of objects, take place in different areas of the brain. Even pleasure and pain, repulsion and attraction,⁶² owe their sources to brain processes. Moreover, imagination arises when the animal spirit commands the brain to visualize sensible objects or remember them after their actual presence ceases.⁶³ Consequently, thought and all its constituent categories are contingent upon the material functions of the brain. Should a disruption occur' a certain brain compartment, the corresponding function of the disrupted compartment comes to a halt.⁶⁴ The

⁵⁸ *Ibid.*, pp. 32. 52

⁵⁹ Havy, pp. 32. 51-52.

⁶⁰ *Ibid.*, pp. 31-32. 52.

⁶¹ *Ibid.*, p. 52.

⁶² *Ibid.*, p. 34

⁶³ *Ibid.*, p. 83.

⁶⁴ *Ibid.*, p. 52.

following passage shows Ibn Ṭufayl in agreement with the basic tenets of empiricism:

"He counted off his senses, hearing, sight, smell, taste and touch. None of them could grasp anything *but the physical or the attributes subsisting in it*. Hearing catches only sounds which are generated by the vibrating waves of air when bodies strike together.⁶⁵ Sight knows only colors; smell odors; taste flavors; touch the temperature and disposition of bodies and textures of solid or soft, rough or smooth. Imagination too can apprehend only things with length, breadth and depth. *All these are qualities predictable only of physical things, only these can be objects of the senses because the senses themselves are powers diffused in material things* and thus divisible with their substrates. The senses, for this reason, can apprehend only divisible objects, that is physical things. For their object must be ca of corresponding division. Thus any faculty in a physical body can apprehend only physical bodies and their attributes."⁶⁶

Thus, all knowledge, unaided, stems from experience resulting from the confrontation of the senses with the man-independent universe. Perception, as is evident from the passage, is not in direct contact with its object. It is an outcome of the integrating processes of the brain; the sense organs are its medium; and the qualities of the surrounding objects are sucked through a straw as it were: the air through the ears, the luminous medium through the eyes, odor through smell, flavors through taste, and solidity, softness, and roughness through touch. Consider the following words of Locke and compare them with ibn Ṭufayl's passage:

".. knowledge extends as far as the *testimony of our senses, employed about particular objects that do effect them*, and no further...I think it is not possible for any man to imagine any other *qualities in bodies* howsoever constituted, whereby they can be taken notice of besides sounds, tastes,

⁶⁵ It must be noted that this notion of the generation of second is in perfect agreement with the views of modern physics.

⁶⁶ Ḥayy. pp. 90-91. This passage as well as others are drawn from L. E. man's English translation of Ḥayy

smells, visible and tangible qualities...the idea of *solidity we receive by touch*...and indeed hard and soft are names that we give to things only in relation to the *constitution of our bodies*."67

Not only touch is restricted to the acquisition of the qualities of the material objects, but, like Ibn Ṭufayl, Locke maintains that the remaining senses provide us with other qualities: sounds through hearing, colors through seeing, flavors through taste, and odors through smell.⁶⁸

One can discern a further resemblance between the initiator of modern empiricism and the Andalusian philosopher.⁶⁹ Genuine know-ledge, contends Ibn Ṭufayl, is not of particulars. The qualities of objects furnished by the senses are retained and remembered.⁷⁰ 'I his persistence of the sensible qualities aids the mind in discerning their similarities and differences, and to *compare* their elements in an order not immediately given in sense data, and to *abstracts*⁷¹ from them what is ordinarily *called general ideas* The general idea is an essence or an abstract common quality of the members of the class in question. This is what Ibn Ṭufayl says on this issue:

"For that understanding which he, and such as he means is nothing else but that rational faculty which examines the individuals of sensory particulars, and from them abstracts a universal notion."⁷²

According to Ibn Ṭufayl this power of abstraction is not possessed by

⁶⁷ Locke, op. cit., Vol. II. Book IV. Ch. XI. p. 334. Also Vol. I. Book II, Ch. II. p. 146., Vol. I, Book II, Ch. IV, pp. 151-164

⁶⁸ Ibid., Vol. I. p. 296.

⁶⁹ In discerning these resemblances I am not maintaining that among the ancients and the medievals, Ibn Ṭufayl is unique in anticipating modern views.

⁷⁰ Ḥayy, p. 83. Also as evidenced by Hay's retention of the qualities of fire, material objects, the throbbing of his heart, and the resemblance among members of different species.

⁷¹ Ibid., p. 125. Ḥayy also compared the different species of body and living things and abstracted from them common notions.

⁷² Ḥayy, p. 126. See also p. 34.

the animals but confined only to man.⁷³

Although Locke is more elaborate than Ibn Ṭufayl in his discussion of the issue of abstraction, he is in complete agreement with the latter. Locke also attributed to the mind the power to combine, add, and compare the different sense data imprinted on it⁷⁴ This sense data is a presupposition of reflection or thinking; abstract ideas are made out of the examination of the sense data and the formation of internal or intellectual general models:

"The mind makes the particular ideas received from particular objects to become general.. this is called ABSTRACTION, where by ideas taken from particular beings become representatives of all of the same kind; and their names general names, applicable to whatever exists conformable to such abstract ideas.⁷⁵

Like Ibn Ṭufayl, Locke also maintains that the synthetic act of forming abstractions is predictable of rational beings and not of brutes.⁷⁶

Thus, the preceding comparison permits one to infer with confidence that for both Locke and Ibn Ṭufayl knowledge originates in experience. Ibn Ṭufayl's empiricism is corroborated by the preceding exposition of his ideas and their substantial agreement with some basic views of Locke. However, empiricism, as a school of epistemology, is of many brands and shades nowadays. It suffices to say that Ibn Ṭufayl anticipated its essential teachings. These are in total harmony with his naturalistic outlook.⁷⁷

Moreover, my comparison of the two philosophers reveals that some⁷⁸ of Locke's *epistemological determinations, with regard to their essence and general outlook*, are not philosophically new. He may have acquired the springboard for his empiricism from the medievals in the same manner as Brentano, and after him Husserl, did with the notion of "intentionality of consciousness.

⁷³ Ibid., pp. 65-66. 125-126.

⁷⁴ Cf. Locke *op.cit.*, Book II. Ch. XI pp. 200-206. This view of Locke may be traced to Plato: but Plato believed in the pre-existence of the mind, whereas Ibn Ṭufayl and Locke did not.

⁷⁵ *Ibid.*, pp. 206-207.

⁷⁶ *Ibid.*, pp. 207-208

⁷⁷ I mean Science-oriented

⁷⁸ And I do not mean all or in detail

"While the impact of Islamic philosophy on the medieval west had its definite philosophic repercussions, one cannot decide with any degree of precision that these had an influence on Locke himself.

Perhaps I should emphasize here that my comparison of Locke and Ibn Ṭufayl was not intended in any way to blur the important philosophic differences between the two. For one thing, Ibn Ṭufayl was a metaphysician mystic, whereas Locke was somehow contemptuous of metaphysics, felt uncomfortable with the proofs for the existence of God, and was never a mystic.

With Ibn Ṭufayl's account of the genesis of knowledge goes his view on causal relations. In harmony with his empirical attitude, Ibn Ṭufayl could not discern a *visible* link between antecedent and subsequent phenomena in an experimental situation. All that one perceives are events, changes, or modifications in the sensory qualities of objects; these follow one another without the presence of an empirical necessary connection between them. The force that transforms water to vapor is not perceived in fire or water. That which these bodies *empirically* possess is a *disposition* to become, a propensity to expand, shrink or burn; but *what* makes the change is neither in the cause nor in the effect; cause and effect appear to be contiguous and in constant succession; the factor or entity which binds them together is not present in the perceptual field of our sensory apprehensions:

"He examined water first and found that if left to itself, determined only by its own form, it was perceptibly cold and downward seeking; but if warmed by fire or the heat of the sun first its coldness would pass, leaving only proclivity to fall, then if it were heated strongly, this too would vanish, and it would seek to rise, leaving it without either of the characteristics which had sprung from its form. *Yet all he knew of that form was that these functions issued from it.* When they were gone the rule of that form must have ended. The form of water must have left this body, since it now exhibited behavior characteristic of some other form. A new form not previously present must have come into being here, giving rise to behavior unlike that it had shown under its original form. (Note the succession of events and Ḥayy's inability to find a connection between them). Now Ḥayy knew by necessity that *every effect* must have a

cause. From this consideration he gained a vague and general notion of the' cause of this form. He then considered that in which the forms inhere and found it to be no more than a *body's disposition for such and such an action to arise from it...*thus the proneness of a body to certain kinds of motion as opposed to others must only be due to its propensity or form clearly the acts emerging, from form did not (empirically) really dwell in them but all the actions attributed to them were brought about through them by another being."⁷⁹

Thus, Ibn Ṭufayl does not seem to find in the causes or in the effects a quality or a power that can empirically constitute a link between them. In his search for the link, had he restricted himself to the data of perception his world would have been by necessity, chaotic and dispersed. Had he stopped at this keen observation of the absence of causal connections, skepticism in knowledge including the empirical sciences, would have been his lot. For again, as seen in the preceding passage, what one perceives are certain actions proceeding from a body. Such a fact one may describe by contending that the body has a fitness or a disposition to perform those actions; but, as is also clear from the passage, we do not see any *definite bond* between those actions and that particular body nor do we see any form from which those actions emanate.

Construing the problem of causation in this manner renders Ibn Ṭufayl one of the forerunners of Hume; it is not, however, in his solution of the problem, but in his *awareness* of the empirical difficulties involved that Ibn Ṭufayl ought to be categorized as such. For Hume, along Ibn Ṭufayl's line of argument, believes that the feeling of necessary connection is often described by maintaining that the cause *produces* the effect, and that the effect is produced by the cause. But Hume says that we never experience the *process* in which one event is generated from another, nor do we *perceive* any one impression, any power to bring another into being. To be sure we observe fire melting ice, but we do not perceive the *power* making the melting. Hume says the following:

⁷⁹ Hayy . pp. 72-74. See also p. 21. Italics are mine.

"I believe...that finding from experience that there are several new productions in matter such as the motions and variations of body, and concluding that there must somewhere be a power capable of producing them, we arrive at last by this reasoning at the idea of power and efficacy...now nothing is more evident than that the *human mind cannot form such an idea of two objects as to conceive any connection betwixt them*, or comprehend distinctly that power or efficacy by which they are united...the idea of necessity arises from some impression There is no *impression conveyed by our senses which can give rise to that idea.*"⁸⁰

Clearly then, in the same way that Ibn Ṭufayl could not find the actions issuing from the forms to be residing in these forms, Hume could not discern a power or efficacy residing in antecedent factors of changing events. But whereas Hume refused to acknowledge any power outside experience responsible for the continuity of bonds among phenomena, Ibn Ṭufayl, the scientist-mystic, had to escape the arresting grip of skepticism. Ḥayy's scientific generalizations about nature were definite and admitted no element of probability; his mystical attainments were emphatically so. To justify all this Ibn Ṭufayl deserts his radical empiricism and invokes the notion of an Immaterial Agent who is the Efficient Cause of the entire universe, and who does not only generate physical causes and imbues them with basic impulses, but also deter-mines their existence and perpetually bestows on them all those changes and productivity. Even hearing and sight cannot take place without the insertion of God's will.⁸¹

It may be remembered that on this issue of causal connections Kant remained in the phenomenal world by stressing that the under-standing imposes connections and order on the sensible manifold. Man's a priori forms of the mind organize the vast multiplicity of natural phenomena. Locke and Berkeley, on the other hand, followed Ibn Ṭufayl's footsteps. By the end of his essay, Locke demonstrates, and then posits, God as the source of the necessity of links among causes.⁸² From his known maxim "to be is to

⁸⁰ Hume, *A Treatise of Human Nature*, Oxford, 1967, pp. 157,161 135. Italics are mine.

⁸¹ Ḥayy, pp. 74-75.

⁸² Locke, op. cit. Vol II. Book IV. Ch. X. pp. 306-324.

be perceived" Berkeley is led to God's existence as a guarantee for the existence of, and connection between, the succession of events.

Perhaps the marked influence on Ibn Ṭufayl's mind was al-Ghazzālī's thought on this particular problem.⁸³ In his defense of Muslim orthodoxy, and in his attacks against the philosophers, especially Avicenna and Aristotle, al-Ghazzali demolished the very basis of the causal principle. He denied man and other events in nature any real autonomy or freedom from God's pervading intervention with the universals and particulars of this world. Fire does not burn; instead God bestows on it capacities to burn and burning takes place only because God necessitates it. Since eternity God, as it were, willed that particulars should interact and become productive of one another.⁸⁴

Beyond Empiricism

Intuitive⁸⁵ and Behavioral Methods

Thus man's mind acquires its texture from the dictates of experience. The mind, as we have seen, perfects itself by a continuous empirical approach to the understanding of phenomena. This approach is *extended* by Ibn Ṭufayl to include naturalism⁸⁶ in its two basic components — induction and deduction. The cooperation of these two aspects of naturalism is executed diligently and pervasively in the treatise to *point* to a domain *beyond* the modalities of sensible experience, the domain of immediate apprehension and mystical intimacy. All that naturalism can comprehend is the nature of the phenomenal world, the separate intelligences, and the existence of God.⁸⁷

⁸³ Ibn Ṭufayl may have also been influenced by the Ash'arite theologians (tenth-century) on this problem of causal relations.

⁸⁴ Al-Ghazzali, *The Incoherence of the Philosophers*, ed. M. Buaij. Beirut 1962. pp. 48-53.

⁸⁵ As I have mentioned in a previous footnote, I shall confine my discussion of the Intuitive and Behavioral methods here to the essentials, since I shall treat this aspect fully in a separate article.

⁸⁶ By naturalism I mean the science-oriented approach which includes the philosophical generalization of the result of the experimental procedure.

⁸⁷ This is evidenced by Ḥayy's explorations of the world by using reason and experimentation and by discovering God's existence before achieving

Naturalism,⁸⁸ in its processes of synthesis and analysis, pronounces its own *downfall* after performing its functioning of pointing to a deeper reality than the world of appearances; it comes to know that it *cannot know* the intimate nature of the Real.⁸⁹ In fact, Ibn Ṭufayl suggests that the empirical method becomes inadequate, and noetically ineffective in dealing with the transphenomenal realm.⁹⁰ Such a method when understood and utilized properly proves in the final analysis, to be illusory, and acts on the mind as a restraint in achieving liberation from the bondage of the world of simulated truth. As Wittgenstein says, one must discard his (Wittgenstein's) propositions after one has used them to climb up beyond them. Thus, Ibn Ṭufayl abandons the *naturalistic category* completely in the intuitive method and places the apprehensions of his consciousness outside the realm of rational discourse⁹¹ This new sphere is that of inward subjectivity whose core is the intuitive vision of the Divine Essence. Such a vision takes place by a *leap discontinuous with discursive reason*⁹² In substance this intuition is existential, namely, non-rational and consequently is neither true nor false and cannot be understood in a propositional form. The only way to communicate intuitive knowledge is through an oblique form of expression.⁹³

Consequently, Ḥayy 'y *ego cogito* becomes the focal point of his new transempirical attainments. By embracing mystical gnosis his knowledge takes a transcendental turn, that is, the source of his newly acquired cognitive state becomes the data of the perceptual field of his inward insight, namely "subjective" life, a definite regress to the ego. Knowledge, no more originates in sensory experience but instead it emanates from Ḥayy's *ego cogito* in relation to the Necessary Being. This constitutes a break, a disconnection from the empirical method; in this disconnection Ḥayy brackets the natural world, performs a *continuous radical suspension* of his previously objectifying position,

mystical ecstasy. See Ḥayy, pp. 34-51. 83-90.

⁸⁸ I must state that naturalism in this context is a broader term than empiricism.

⁸⁹ Ḥayy . pp. 6-9. 91-120. 125-126. 127-129.

⁹⁰ *Ibid.*, pp. 6-9.

⁹¹ *Ibid.*, p. 126.

⁹² *Ibid.*, p. 125-126.

⁹³ *Ibid.*, pp. 46. 6-11. 19. 107. 122. 127. 132.

and comprehensively places the physical world in *abeyance*. Epistemology here becomes a form of *egology*; every awareness and every episode of Ḥayy 's conscious "flashes" are ultimately reduced to the knowing ego in its laborious attempts to become Him without permanently becoming Him.⁹⁴ Such a life of the ego, though beyond empiricism, itself can be categorized as a *second degree empiricism*. It is the data of consciousness that gives the conscious ego its life, history and grounds the new knowledge in a passionate relationship to the Necessary Being. *Inward perception* based on immediate encounter with the contents of consciousness constitutes the criterion of spiritual "validity". Of course, like in all mystical states, Ḥayy's second degree empiricism here is incurably solipsistic. For nowhere in the treatise do we find a mention by Ibn Ṭufayl of a common criterion which bridges the gap between, at least, two independently existing egos that supposedly have enjoyed mystical felicity. Ḥayy's mystical experience is private, "closed" and cannot be depersonalized.

The intuitive method yields a most direct and certain knowledge that is charged with intensity. The ambition to put this into word is like "wanting to taste colors, expecting black as such to taste either sweet or sour."⁹⁵ The experience of the vision of God is like the experience of colors which is intuited and not demonstrated. In the same way that one cannot taste colors or hear smells, one cannot rationally penetrate the bounds and locus of intuitive experience. In this, reason is replaced by love, the passion and yearning to become Him. Ḥayy gravitates toward the Necessary Being with the joy of expectation and the anguish of deprivation. This yearning for Him becomes cosmic and his involvement existential. He settles to a life of "inwardness" with internal dynamic activity: intensity of feeling and thought before the Necessary Being. He glimpses God's presence in the plethora of things, among them the animals and the Heavens. According to Ibn Ṭufayl mystical experience is the highest and profoundest form of knowledge. Muslim mystics wisely, perhaps, termed this knowledge (*dhawq*) "taste," a word which refers to immediate experience and inward perception.

Furthermore, in a Bergsonian manner, Ibn Ṭufayl holds that the intuitive knowledge of something is becoming empathetically and truly that something. And since Ḥayy intuited the Essence of the Truly Existent Being,

⁹⁴ *Ibid.*, pp. 98-116.

⁹⁵ *Ibid* pp. 121-222.

he himself became that Being.⁹⁶

On the other hand, the behavioral method is linked with the intuitive method and helps prepare the way to it ; in itself it is not knowledge, but instead, simply a necessary step toward obtaining knowledge. Ḥayy's naturalistic knowledge of animals, separate intelligences, and the Necessary Being, had to penetrate his whole being and existentially determine his actions. Since in his "outer" aspects he resembles the bodies of animals and the stars, and in his "inner" aspect partakes of the Divine, he finds it imperative to perform three empathetic actions: to imitate irrational animals, Heavenly bodies, and the Divine. The performance of the third, he knows, is necessary for his happiness and freedom from anguish, and the other two are the gateway to the third.⁹⁷ Thus, Ḥayy 's behavioral method places him on the way to intuitive knowledge and consequently helps him succeed in beholding the Necessary Being.⁹⁸

REVELATION AS A METHOD OF KNOWLEDGE AND ITS HARMONY WITH PHILOSOPHY

Revelation is recognized by Ibn Ṭufayl as another method of acquiring knowledge. He devotes the last part of his treatise to this method and its harmony with demonstration and the intuitionism of the mystics. In substance, revelation as a method is non-logical⁹⁹ and reinforces itself by an appeal to authority which is, according to Ibn Ṭufayl, the Word of God as expressed through Prophets in holy books. These books are supposed to contain the truth about the world, man's destiny, and the after life.

Revelation is unlike the inductive and deductive methods mentioned earlier, which co-operate to enhance philosophic and scientific knowledge; revelation is independent of these methods and does not philosophically give them assistance. The philosopher, exemplified by Ḥayy, must not use revelation to promote his philosophic attainments. Like any other

⁹⁶ *Ibid.*, pp. 123-124.

⁹⁷ *Ibid.*, pp. 98-116.

⁹⁸ *Ibid.*, pp. 103-119.

⁹⁹ The words of the prophets do not belong to the discursive mode of reasoning, and usually their statements are not supported by evidence based on logical thinking.

phenomena in the universe, the facts of revelation are subject to scrutiny and investigation by the philosopher.¹⁰⁰ Upon examination Ibn Ṭufayl finds revelation to contain truth whose source is transphenomenal. To acquire this knowledge there has to be an intervention, a disclosure from above, by God.¹⁰¹

Other methods considered co-operate to move from the ordered facts of nature to the Necessary Being. In contrast, revelation descends from God to man. The two movements are polarized but the contents of both, according to Ibn Ṭufayl, are *almost* the same.¹⁰² This brings forth the notion of the two ways for the same truth which dominated the minds of medieval thinkers.¹⁰³ Revelation and its imperatives are, as it were, the *outward expression* of the profound truth possessed by philosophers. The intimate knowledge of things, as they are in them-selves, acquired by Ḥayy is *echoed* in the revealed truth; the dictates of reason are in total harmony with the precepts of revelation.¹⁰⁴ The philosopher who commences his inquiry unprejudiced by tradition and aided by his scientific, rational, and intuitive capacity¹⁰⁵ will discern an *outward* and *inward* meaning for religious truth.

I have shown elsewhere¹⁰⁶ that the last part of the treatise is philosophically and artistically imposed on the events of the story, and that the work is for the most part devoted to poignant philosophic discussion;¹⁰⁷ this is mostly due to Ibn Ṭufayl's belief that the revealed truth, only when interpreted becomes harmonious with the truth of reason. Philosophic knowledge attains certain heights from which the mind penetrates and grasps the truth most direct and naked.¹⁰⁸ Although he chides al-Fārābī for his

¹⁰⁰ This is instanced by Ḥayy 's visit to Asal's island and his attempts to examine and study the revealed Law according to which its inhabitants live. cf. Ḥayy, pp. 144-154.

¹⁰¹ *Ibid.*, pp. 145-146..

¹⁰² The use of "almost" will shortly be justified.

¹⁰³ For instance. Averroes and Aquinas.

¹⁰⁴ *Ibid.*, pp. 145-146.

¹⁰⁵ *Ibid.*, p. 144.

¹⁰⁶ See S. S. Hawi, "Ibn Ṭufayl's Ḥayy Bin Yaqzan: It's Structure..." op. cit.

¹⁰⁷ See Ḥayy, pp. 1-20. 27-135. The whole treatise is 157 pages.

¹⁰⁸ *Ibid.*, pp. 146-147. See especially p. 154. Asāl seems to have behaved as a

heretic views of prophecy and shows great reverence to the Prophet, Ibn Ṭufayl regards the knowledge conveyed by the prophets as subordinate to philosophic knowledge. What justifies this contention is Ibn Ṭufayl's belief that facts apprehended by philosophy are communicated by prophets not as they are, but in the form of parables, symbols, metaphors and projection of images.¹⁰⁹ Even the inward meaning of religious statements when apprehended by expert dialecticians such as Asāl, remains short of philosophic heights. "Ḥayy searched for his ecstasy as he had before, until again it came. Asāl *imitated* him until he approached almost the same heights or nearly so."¹¹⁰

The subordination of revelation to philosophy is partially due to a disparity of purpose in the two methods. Religion attempts to guide its adherents, each according to his powers; it provides the masses with a certain "indispensable minimum" of truth and permits them worldly indulgences and gains within the confines of the law.¹¹¹

According to Ibn Ṭufayl, men are at variance in potential; each must work according to his capacities and comprehend that for which nature had already predisposed him. Should any one individual stretch his aspirations beyond what is given for him to understand, he would waver, slip, and his end would be all the worse¹¹² Thus, "for every task there is a category of men, and each belongs to the life for which he was created."¹¹³ This passage epitomizes Ibn Ṭufayl's view concerning the gradation of seekers of Truth. Men are of three categories: (a) Those whose life is set for the acquisition of demonstrative truth and are capable of attaining it — (Ḥayy). (b) Those who

student to Ḥayy concerning ultimate truth although the former taught the latter language.

¹⁰⁹ *Ibid.*, pp. 144-146.

¹¹⁰ *Ibid.*, p. 154.

¹¹¹ *Ibid.*, pp. 152-153.

¹¹² *Ibid.*, p. 154.

¹¹³ *Ibid.*, p. 153. Ibn Ṭufayl, in this statement, reiterates Plato, Aristotle and al-Farabī. Plato, as evidenced from his *Republic*, contends that men are at variance ; Aristotle, in his *Politics*, held that men perform certain roles in society by the necessity of their natural endowments, whereas al-Farabī recognized such a distinction in his *Virtuous City*.

by nature are able, through the interpretation of revelation, to comprehend its internal meaning — Asāl). (c) Those who adhere to the literal meaning of revelation — (Salāmān). Men of the last category are similar to irrational beings or brutes;¹¹⁴ they cannot go beyond the realm of shadows and animal faith. Theirs is a life centered around fleeting pleasures and wealth which lead to the negligence of the after-life.¹¹⁵

This distinction of three classes of seekers is significant in the history of the problem of the relation between faith and reason; it left a definite impression on Averroes and later, perhaps, on Maimonides and Aquinas. In fact, Averroes mentions the same distinction, with more elaboration, in his *Decisive Treatise*.¹¹⁶

Ibn Ṭufayl's work has the merit of crystallizing this distinction by pointing to the intricacies involved in it. However, the source of this distinction is, perhaps, embodied in the cultural and religious categories of his age. These were conditioned to a large extent by the mode and outlook of the Mūwahḥid rulers themselves. The two predominant traits of the Mūwahḥid outlook, religious orthodoxy and love of learning and philosophy, had found a compromise.¹¹⁷

¹¹⁴ Ḥayy, p. 153.

¹¹⁵ *Ibid.*, pp. 151, 153.

¹¹⁶ See Averroes, *On the Harmony of Religion and Philosophy*, Translated by G. F. Hourani, London, 1961, pp. 18-36. 65-71.

¹¹⁷ Some of the Mūwahḥid rulers were great patrons of learning and philosophy some of them were scholars themselves. In their private life they enjoyed the company of philosophers, presided over their discussions and took delight in philosophical speculation. While attending to their public duties as the heads of a Muslim state they did not want to show any deviation from the orthodox way. This however, did not prevent them from appointing philosophers to high positions, showering favors on them and consulting them in all important matters. The philosophers themselves accepted the situation willingly or unwillingly. They were content with the position that philosophy is the privilege of the chosen few. They enjoyed perfect freedom to speculate. But the masses were not to be initiated into its secrets and their simple faith and discipline were not to be disturbed. These facts seem to have conditioned Ibn Ṭufayl's and Averroes' thought

Furthermore, before him al-Fārābī displayed cognizance of this distinction. Al-Fārābī seems to have been prompted by two basic motives in his writings: the desire to reconcile the ideas of Plato and Aristotle¹¹⁸ in order to establish the unity of all truths of philosophy, and the desire to harmonize these truths with revelation. Thus, in his *Virtuous City* the attempt to attune philosophy to revelation, and the distinction between the grades of men in terms of truth are clearly presented.¹¹⁹ Ibn Ṭufayl says in the Introduction that he had read most of al-Fārābī's works.¹²⁰ Accordingly al-Fārābī's writings and the conditioning of the cultural religious categories of his period were the two main factors behind Ibn Ṭufayl's distinction. Even al-Fārābī himself is not entirely original on this problem. It may be remembered that the attempts to harmonize revelation with philosophy (in Islamic thought) presented themselves earlier, when the Greek rationalistic spirit came in contact with the revealed message of Islam, as exemplified by Islamic rationalists (al-mu'tazila) and al-Kindi.

The preceding discussion shows that Ibn Ṭufayl's work includes more philosophic facts of definite consequence than what traditional scholarship has thus far suggested. Previous writers have exclusively overlooked *most* of the themes stressed in this inquiry. His epistemology, as I have used the term, seems to employ a plurality of methods of knowing that co-operate to establish his basic philosophic understanding of things. Thus, *Ḥayy Bin Yaqzān* is more than a narrative: a future philosophic study of the basic themes contained in it must in the final analysis, say that the Muslim Master has anticipated the basic *impulse* behind a variety of engaging insights in modern philosophy.

concerning the classes of seekers of truth. Cf. al-Marrakushī, 'Abdal-Wahid, *Kitāb al-mu'jib fitalkhis akhbār al-maghrīb*, Cairo, 1949, pp. 238-240 and O'Leay, DeLacy, *Arabic Thought and Its Place in History*. London. 1963. p. 250 and Averroes, *op. cit.*, pp. 6-18.

¹¹⁸ See al-Fārābī. *Kitāb al jam'bain ara' yal-hakimayn*. (The book of reconciliation between the opinions of the two sages: Plato and Aristotle). ed. A. Nader. Beirut. 1962.

¹¹⁹ See al-Fārābī, *Ara' ahl al-madina al-fadila* (Opinions of the People of the Virtuous City) ed. Albert Nader, Beirut. 1959.

¹²⁰ Ḥayy pp. 12-14.