



THE COGNITIVE FUNCTIONS OF THE HUMAN
SOUL ACCORDING TO IMĀM AL-GHAZĀLĪ, AND
IBN RUSHD: A COMPARATIVE STUDY

BY

SSUNA SALIM

A dissertation submitted in fulfillment of the requirement
for the degree of PhD in Islamic Thought
and Civilization

Kulliyyah of International Institute of Islamic Thought
and Civilization (ISTAC)
International Islamic University
Malaysia

DECEMBER 2012

ABSTRACT

This study compares and contrasts Imām al-Ghazālī's (c.1055-1111) and Ibn Rushd's (c.1126-1198) views on the cognitive functions of the human soul and its role and effect on knowledge acquisition. The descriptive, analytical and synthetic approach was adopted which was mainly interpretative in the form of textual commentary. The five concepts of *ilm* (knowledge), *rūh* (spirit), *nafs* (soul), *ʿaql* (intellect) and *qalb* (heart), were defined according to exegetists, theologians, jurists, lexicographers and philosophers. The study mainly focused on the external and internal senses of the human soul and noted some variations and similarities in al-Ghazālī's and Ibn Rushd's perception of the cognitive functions of the human soul, in terms of their positioning and function in relation to the reception of intelligible forms and their relationship to the type of knowledge perceived. No special relation was noted on methodology since both scholars employed the same methodology in other areas of study. No significant relation and influence of cognitive functions of the human soul was noted on the classification of knowledge. The study views the cognitive functions of the human soul as an indispensable element of modern Muslim education curricula. The research advocates that whoever is involved in knowledge dissemination and seeking in modern curricula should be made aware of the role of the cognitive functions of the human soul, its role in knowledge acquisition and the type of knowledge acquired in order to seek or disseminate knowledge solely in quest of the pleasure of Allah (SWT).

ملخص البحث

قامت الدراسة الحالية بمقارنة بين آراء الإمام الغزالي وابن رشد حول الوظائف الإدراكية للنفس البشرية، دورها وأثرها على عملية التحصيل العلمي، ونوعيته، بالإضافة إلى علاقة وطبيعة العلوم المكتسبة. قامت منهجية الدراسة الحالية على المنهج الوصفي التحليلي حيث قام الباحث بطرح آراء العالمين ومن ثم قام بتحليل النص والتعليق عليه. تبدأ الدراسة بتعريف المصطلحات الخمسة: العلم والروح والنفس والعقل والقلب عند المفسرين، والفقهاء وعلماء اللغة واللاهوتيين والفلاسفة. ركزت الدراسة أساساً على الحواس الخارجية والداخلية للنفس البشرية ولاحظت بعض الاختلافات والتشابه في تصور الإمام الغزالي وابن رشد عن الوظائف الإدراكية للنفس البشرية، من حيث موقعها ووظيفتها في ما يتعلق باستقبال المعقولات وعلاقتها بنوع المعرفة المكتسبة. ولوحظ أنه لا توجد علاقة خاصة بين الإمام الغزالي وابن رشد في منهجية الدراسة والوظائف الإدراكية للنفس البشرية حيث أن المنهجية المستخدمة عموماً هي نفسها في مجال الدراسات الأخرى. ولم تلاحظ الدراسة أية علاقة ذات دلالة وتأثير في دراسة الوظائف الإدراكية للنفس البشرية على تصنيف العلوم. تعتبر الدراسة الحالية الوظائف الإدراكية للنفس البشرية عنصراً لا يمكن الإستغناء عنه في مناهج التعليم الحديثة للمسلمين. وتوصى الدراسة بأنه ينبغي لكل من يشترك في نشر العلم واكتسابه في المناهج الحديثة بعض المعرفة عن الوظائف الإدراكية للنفس البشرية ودورها في اكتساب العلم ونوع العلم المكتسب، من أجل السعي وراء رضوان الله.

APPROVAL PAGE

This thesis of Ssuna Salim has been approved by the following

Bahrudin Ahmad
Supervisor

Malik Badri
Internal Examiner

M. Kamal Hassan
Internal Examiner

Suradi Salim
External Examiner

Nasr Eldin Ibrahim Ahmed
Chairman

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 any other institutions.

Name: Ssuna Salim

Signature:.....

Date:.....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

**DECLARATION OF COPYRIGHT AND AFFIRMATION OF
FAIR USE OF UNPUBLISHED RESEARCH**

Copyright © 2012 by Ssuna Salim. All rights reserved.

**THE COGNITIVE FUNCTIONS OF THE HUMAN SOUL ACCORDING
TO IMĀM AL-GHAZĀLĪ AND IBN RUSHD: A COMPARATIVE STUDY.**

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below.

1. Any material contained in or derived from this unpublished research may only be used by others in their writing with due acknowledgement.
2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
3. The IIUM library will have the right to make, store in a retrieval system and supply copies of this unpublished research if requested by other universities and research libraries.

Affirmed by: Ssuna Salim

Signature

Date

This dissertation is dedicated to my mother Hanifa Namukwaya, my father Hajj Ediriisa Ssenyonga, and my brother Shaikh Umar Kyeyune who always gave me moral support and encouragement for my success in education. May the Almighty Allah forgive them their sins and admit them to Paradise, Amīn.

ACKNOWLEDGEMENTS

This dissertation has been made with the assistance of many individuals and I am grateful for their support and contribution.

I wish to convey my deep appreciation and indebtedness to my supervisor, Associate Professor Dato' Baharuddin Ahmad, for his guidance, support and encouragement. His expertise and invaluable comments helped greatly in the completion of this dissertation. My sincere appreciation is too extended to Prof Tan Sri Dr Mohd Kamal Hassan (post viva supervisor) whose expertise, experience and wide knowledge about the study, helped enormously in giving the study its final shape.

My appreciation and special thanks is extended to my beloved wife Siti Hawa Binti Daud, my son Auf Fayyadh Kaliisa and my daughters Ain Mastura Nakaliisa and Aafa Nabila Nnanyonga, who shared my joy and frustration during my study and gave me great support through their patience, understanding and encouragement.

TABLE OF CONTENTS

Abstract.....	ii
Abstract in Arabic	iii
Approval page	iv
Declaration	v
Copyright page.....	vi
Dedication	vii
Acknowledgment	viii
INTRODUCTION	1
Statement of problem	2
Purpose of study.....	3
Method of study	3
Rational Study.....	4
Research Objectives	5
Limitations of the Study	6
Literature review	6
CHAPTER ONE.....	18
Meaning of Five Important Concepts according to Muslim scholars other than al-Ghazālī and Ibn Rushd: <i>‘Ilm, Rūh, Nafs, Qalb</i> and <i>‘Aql</i>	18
CHAPTER TWO: THE THOUGHTS OF IMĀM AL-GHAZĀLĪ.....	59
Al-Ghazālī’s early education and intellectual interest	59
Factors that influenced al-Ghazālī’s thought.....	62
Al-Ghazālī’s methodology and approach.....	68
Al-Ghazālī’s conception of the soul.....	79
Animal faculties	87
Motor faculties (<i>Quwwah Muḥarrikah</i>)	91
Apprehending faculties (<i>Quwwah Mudrikah</i>)	101
Specific human faculties.....	106
The seats of human faculties.....	107
By what means does the soul apprehend?	107
The seats of specific faculties and their relationship to virtues and vices ..	107
Grades of intelligence taken from the Divinely Revealed Books	110
The correlation of rational intelligence and the Divine Law and their need for each other.....	110
CHAPTER THREE: IBN RUSHD	112
Biographical educational background and influence of earlier Muslim philosophers and theologians.....	112

Methodology and Approach	112
Ibn Rushd's understanding of the human soul.....	117
Influence of earlier Muslim Philosophers and Theologians and Ibn Rushd's refutation of their interpretations	119
Ibn Rushd's criticism of al-Ghazālī	120
Ibn Rushd's doctrine of the agent intellect.....	126
The five faculties of the soul.....	132
The external senses.....	133
The internal senses	136
The rational faculty	139

CHAPTER FOUR: COMPARISON OF AL-GHAZĀLĪ AND IBN RUSHD. 144

Al-Ghazālī's And Ibn Rushd's Conception of The Human Soul	149
---	-----

**CHAPTER FIVE: THE SIGNIFICANCE AND IMPORTANCE OF THE
COGNITIVE FUNCTIONS OF THE HUMAN SOUL AND ITS ABUSE..... 200**

BIBLIOGRAPHY.....	227
--------------------------	------------

LIST OF FIGURES

<u>Figure No.</u>		<u>Page No.</u>
Figure 1	Al-Ghazālī's Animalistic Faculties	155
Figure 2	Al-Ghazālī's Human Faculties	156
Figure 3	Ibn Rushd's Animal Faculties	156

LIST OF ABBREVIATIONS

S.W.T	: Subḥānahū wa-ta‘ālā
P.B.U.H	: Peace be upon him
R.‘A	: Raḍiya Allāh ‘an-hu

INTRODUCTION

All Muslim philosophers concerned themselves with the subject of the soul and its cognitive functions. The most detailed and most important works on this subject include that of Ibn Rushd in which he combined his proper understanding of the Qur'anic teachings on the subject with non-Muslim philosophers' views more especially Aristotle's views which without doubt have had a great influence on the understanding of this subject on both Muslim and non-Muslim philosophers. Consequently, his work will provide an in-depth analytical understanding of the subject of the current study.

Al-Ghazālī is one of the few Muslim scholars who never ceases to inspire and guide the Muslim community. Obviously, al-Ghazālī's contribution almost covers all fields of studies. On this 'Umaruddin asserts that there is still a great demand for books on al-Ghazālī because of his humanitarian and universal outlook on men and their affairs which appeals to all irrespective of their caste, creed and colour, besides his ideas being for all times and always fresh and new. The study of his philosophy elucidates 'Umaruddin, covers the fundamentals of human thought reflected in many modern philosophers like, Descartes (*Method of Doubt*), Hume (*Law of Causation*), Kant (*Antimonies*) to mention but a few¹. He struggled as well to establish the validity of real and eternal values of life, of religion and philosophy to expose falsehood and provide light for seekers after the truth. As if that was not enough, the study of al-Ghazālī provides an insight about the culture and Islamic civilization, by benefitting from his critical examination of the tendencies of religious sects and philosophical

¹ M. 'Umaruddin, *The Ethical Philosophy of al-Ghazālī*: (Kuala Lumpur: A. S. Noordeen, 2003), Preface.

systems of his time, which have a bearing on the spirit of the times. Consequently, the study of the cognitive functions of the soul is one of them, in which he gave due importance in a number of his writings.

Additional evidence for this claim is also to be found in the *Wonders of the Heart* as reported in his *Ihyā' 'Ulūm al-Dīn* when al-Ghazālī elaborates that, he found everyone during his time craving for material gains, hence forgetting the eternal salvation and to make matters worse the learned people in religion to guide the masses were not available as all of them had lost their souls to world temptations, making people presume that knowledge was simply a means of spreading their fame through debates and arguments. Consequently, the knowledge that was required to enlighten the path to the world to come had completely disappeared, as a result, this state of affairs made al-Ghazālī to sound the alarm.²

Consideration of the works of these two great scholars with an Islamic oriented approach will inspire the present study by bringing us to the proper perspective of the cognitive functions of the human soul and its influences on knowledge acquisition in view of its nature and type.

STATEMENT OF THE PROBLEM

The problem to be examined will focus mainly on a comparative analytical study of the cognitive functions of the human soul. It will put more emphasis on the differences and similarities of the selected aspects of the cognitive functions of the human soul according to al-Ghazālī and Ibn Rushd. A secondary purpose is to determine the extent to which the human cognitive functions of the human soul influence knowledge acquisition in view of its nature and type. Thus there are three

² Al-Ghazālī, *Wonders of the Heart*: translated from Arabic by Skellie Walter James (Kuala Lumpur: Islamic Book Trust, 2009), Publisher's note. See also Al-Ghazālī, *Ihyā' 'Ulūm al-Dīn*: Vol. I, 1-13.

dimensions of the research problem: (1) Imām al-Ghazālī's views on the cognitive functions of the human soul; (2) Ibn Rushd's views on the cognitive functions of the human soul; (3) A comparative critique of the two views. (4) The role and influence of cognitive functions of a human soul on the process and type of knowledge acquired. However, it is crucial to note that in studying the cognitive functions of the human soul, al-Ghazālī, Ibn Rushd's intent was to serve religion though Ibn Rushd was influenced by Aristotle's idea while al-Ghazālī's views were influenced by theologians and *Sūfis*.

PURPOSE OF STUDY

The study will begin by defining the five important concepts; *ʿIlm*, *Rūh*, *Nafs*, *Qalb* and *ʿAql*, according to lexicographers, exegetists, theologians, philosophers and jurists. The study will then proceed with an analytical presentation of the views of al-Ghazālī and Ibn Rushd's thoughts, which will be followed by a critical comparison of these thoughts. The study will conclude by looking at the significance and impotence of knowing the cognitive functions of the human soul; its abuse and misuse and its relevancy and role on scientific knowledge acquisition in the Islamic tradition and its effect on current Muslim education system.

METHOD OF STUDY

Since this dissertation is a comparative study between al-Ghazālī and Ibn Rushd's views on the cognitive functions of the human soul and its influence on the knowledge acquired, the method of the study is descriptive, analytical, philosophical as well as synthetic, in order to notice the main causes of similarities and difference. Hence, the analytical method was adopted to analyze and elaborate the literature cited

to the topic. The researcher referred to various sources and references written by al-Ghazālī, and Ibn Rushd, whereby the philosophical method was used to grasp their main ideas, while discussing issues related to the similarities and differences of the cognitive functions of the human soul in particular. In this respect the method adopted was mainly interpretative in the form of a textual commentary, whereby, the texts were critically analyzed in order to interpret and to describe phenomenon in order to synthesize the text for comments.

RATIONALE OF THE STUDY

The study of the human soul occupies a central position in Islamic philosophy since the soul's cognitive functions are the pivot on which the reminder of its other functions are subservient. There is no doubt that the discussion of the human soul due to its centrality occupies a highly important position in Islamic philosophy as a substratum of knowledge and in fact forms its main focus. For that reason, most Muslim philosophers agreed as did their Greek predecessors, that the soul consists of two aspects; the non-rational and rational parts. The non-rational part refers to the appetitive as well as the plant and animal souls, while the rational aspect embodies the practical and theoretical intellects. Interestingly, all the philosophers; Muslim and non-Muslims believed that the non-rational part is linked essentially to the body although some considered the rational part as separate from the body by nature while others were of the view that all the parts of the soul are by nature material.³

It is by virtue of his rational soul that man is the lord of creation and is able to acquire knowledge of God and His Attributes. Knowledge of the human soul can lead one to the knowledge of God. Through the purification of his soul man can become

³ Al-Ghazālī, *Iḥyā' 'Ulūm al-Dīn*: The book of destructive evils; soul and its attributes, al-Ḥāfidh al-Irāqī, Vol 3, 1. <http://www.ghazali.org/ihya/ihya.htm> (accessed 2 March, 2012).

close to God and be more fully conscious of Him. Thus, the soul is the king of the body and its different organs are its servants to carry out its orders and commands; as a result, it is the soul which will be asked and rebuked. Consequently, the soul becomes fortunate if it is purified and cleansed and it becomes unfortunate if it is kept impure.⁴ As a result, the body is like a city and the intellect or conscience rules over that city like a king. Its armies are its external and internal senses and its subjects are its organs.⁵

RESEARCH OBJECTIVES

Objective #1: To examine the major purpose of Imām al-Ghazālī' and Ibn Rushd's for studying of the cognitive functions of the human soul.

Objective #2: To scrutinize the methods used by the two thinkers in studying the cognitive functions of the human soul. This is because the methodology portrays and relates to the style of arguments, something that provides more insights in a better understanding of the ideas of the scholar.

Objective #3: To compare and contrast between the views of Imām al-Ghazālī, and Ibn Rushd on the cognitive functions of the human soul, critically examining the causes and consequences of these differences and similarities.

Objective #4: To analyze and determine the role and extent to which the cognitive functions of human soul influence the process and type of knowledge acquired and knowledge classification. These objectives will be achieved by referring to the abundant literature in this field for Imām al-Ghazālī, and Ibn Rushd.

⁴ Ibid., 1-2.

See also Al- Ghazālī, *Iḥyā' 'Ulūm –al-Dīn* vol. 3, translated from Arabic by Fazlul Karim (New Delhi: kitab Bhavan, 1982) 1.

⁵ *Iḥyā'*, Vol3, 1-2.

LIMITATIONS OF THE STUDY

This study will be solely based on the views of al-Ghazālī and Ibn Rushd, during the periods the two scholars lived, leaving aside the views of other Muslim scholars of various eras on the subject whose impact on Islamic thought had also been considerable. Nevertheless, this does not imply that the study is devoid of any value because of the above limitations. It will help in understanding the basic principles of the cognitive functions of the human soul and its influence on the way and type of knowledge acquired. In additions to that, the study will also generate more discussions and research that will help to clarify other dimensions of the conceptual problem pertaining to the human soul.

LITARATURE REVIEW

The study of the human soul occupies a central position in the Islamic philosophy, since its cognitive functions is the pivot on which the reminder of its other functions are subservient. Consequently, the study of the cognitive functions of the soul did not only attract Imām Al-Ghazālī, and Ibn Rushd, it did too attract a number of other Muslim as well as non-Muslim scholars, past and present, who looked at the aspect of the cognitive functions of a human soul as one of the major and necessary aspects of a stable psychological state of a human being. Thus leading to either dedicating a section or a whole or a number of publications in which they gave due importance to this science.

The soul is located in the body and its non-rational part manages the body while its practical intellect manages worldly affairs, including those of the body and the theoretical intellect knows the eternal aspects of the universe. Most philosophers were of the view that the ultimate end or happiness of the soul depends on its ability to

separate itself from the demands of the body and focus on the grasp of the eternal aspects of the universe. The cognitive functions are the armies of the soul, which is the principle thing in man that catches knowledge of God and spiritual world, thus, the human soul the object of knowledge, receives the forms of objects, comprehends the realities of existents, besides possessing an organ of sight that perceives out-word sensible things through the ordinary eye, while inward realities are apprehended with the eye of the intellect.⁶

It is crucial to note that al-Ghazālī did not directly use the term cognitive functions of the human soul, though he describes its various constituents, which he termed as armies of the soul, important for its up keep. He makes it clear from the beginning that their real nature is only known by Allah. According to him, they are of two types. One army can be seen by the external eye while the other can only be seen by the internal eye. One of the cognitive functions of the soul affirms al- Ghazālī is the army of greed, which is also called Will, which does benefit the soul. The second army is anger which moves the bodily organs to give the object of greed, power and strength. The third army elaborates al- Ghazālī's works like secrete emissaries and it constitutes powers of sight, hearing, smell, taste and touch. There is another power that lives secretly in the horizons of brain and it is divided into five aspects: the power of idea, the power of thought, the power of memory, the power of retention and the power of consolidating them together.⁷

Al- Ghazālī went on to clarify on how the various cognitive functions of the soul relate to one another. He elucidates that the hands, feet, eyes, ear, tongue and other in-word and out-word organs as the armies of the soul to which they are

⁶ *Iḥyā' 'Ulūm al-Dīn*, vol.3, 3. See also Al- Ghazālī, *Iḥyā' 'Ulūm –al-Dīn*: translated from Arabic by Fazlul Karim (New Delhi: Kitab Bhavan, 1982) Vol3, 6.

⁷ *Iḥyā' 'Ulūm Dīn*, Vol. 3, 3.

servants, it rules over them and were created to obey the soul. When the soul orders the eyes to open, they open, when it orders the feet to walk, they walk. In this case their submission is like that of angels of God, this is because, these armies are necessary for the soul's journey to God.⁸

During the process of an intellectual operation, the intellect is not altogether passive, as the senses would be, thus, the intellect was distinguished into two by Aristotle:- the active or the agent intellect and the passive or receptive intellect. The active intellect is differentiated from the passive intellect by being alone, separate, eternal, immortal and everlasting. This type of intellect renders the objects of the senses actually intelligible, which objects in themselves are only potentially intelligible. The soul possesses a power which makes all things intelligible and another power to become all things by identifying itself with the actual intelligible, which mirrors all objects faithfully without essential distortion. Thus, what is passive or potential must be raised to activity by something already in act. Therefore, potential intellect cannot become active except by an intellect which is already active.⁹

The agent intellect is a giver of forms and one of its functions is simply to infuse pure intelligible and immaterial forms into the human soul. Consequently, according to Ibn Sīnā, concepts are acquired mainly through divine inspiration not through senses. As a result real knowledge is a sort of illumination (al-ishrāq) or infusion of pure intelligible and immaterial forms by the giver of forms into the

⁸ Ibid. See also Yusuf Easa Shamma, "Al- Ghazālī's *The Ascent to the Divine through the Path of self-Knowledge*" (*M'ārij al-Quds Fi Madārij Ma'rifat Al-Nafs.*) (Ph.D. thesis, Hartford Seminary Foundation: 1958) Chapter II.

See also Mohd Zaidi Bin Ismail. "*The Sources of Knowledge in al- Ghazālī's Thought: A Psychological Framework of Epistemology*" (Istac Master's Thesis Series volume 2, Kuala Lumpur: 2002), 7.

See also, al- Ghazālī, *Wonders of the Heart*: translated from Arabic by Skellie, Walter James (Kuala Lumpur: Islamic Book Trust, 2009), Translator's Introduction.

⁹ El-Har, Ahmed M, "*Ibn Rushd's (AVERROES') Doctrine of The Agent Intellect*" (Ph.D. Thesis, Saint Louis University, 1982), 43-45.

human soul or intellect. The agent intellect is the last and the lowest of all intelligences. So, when the human intellect attains its contact with the agent intellect, it realizes its proper perfection, thus, becoming identified with the intelligible world thereby becoming a mirror in which the beauty and order of that world are reflected. This is because the soul is a spiritual and simple substance, more akin to the intelligible than the sensible world.¹⁰

According to Zadler, Saint Thomas Aquinas,¹¹ shared the same opinion with Ibn Sīnā when he asserts that in the universe a Necessary Incorporeal Being, the source of all other beings, who reflects upon himself thereby giving rise to the first effect, the pure intelligence, which effect must be only one in order to proceed. When this first intelligence thinks of the Necessary Being, it gives rise to a second intelligence, from this Agent Intelligent which is one for all men. Thus, intelligible forms are infused into possible intellects belonging to individual human souls. However, souls can only receive species after comparing and considering the images that have come from the senses. These movements in turn prepare the soul for abstraction, a process that entails the emanation of intelligible forms, though the species received by men's possible intellect are not retained, hence, in case of intellectual knowledge, the souls must be united with a separate Agent Intelligent.¹²

Man's highest power; the cognitive power, imagination and memory, carry a very important task of preparing the sensory data the separate intellect will use, thus, Ibn Rushd sometimes dignified the cognitive power with the name of intellect and at times passible in order to designate its generable and corruptible nature.¹³

¹⁰ Ibid., 48-49.

¹¹ Saint Thomas Aquinas, *On The Unity of The Intellect Against The Averroists: (De Unitate Intellectus Contra Avveroistas)*, translated from Latin by Zedler, Beatrice H (Marquette university Press, 1968), 2.

¹² Ibid.

¹³ Ibid., 13.

The separate agent intellect makes actually intelligible the intelligible species potentially present within the phantasms provided by man's sensory powers. The separate possible intellect can then be actuated to become the subject in which knowledge exist. Unless the data of knowledge were provided, the separate possible intellect would know nothing. Consequently, man plays an indispensable function in intellect's knowing by providing objects of knowledge, besides he himself somehow sharing in this knowing.¹⁴

Reason has two aspects: a general aspect that can be with every one and a specific aspect that can be understood by religious experts and the righteous. The real nature of man does not mean his body only, for one is a man if he is a substance together with the soul by means of which he gets nourishment, has sensation and move at will, such that he can comprehend the intelligibles and learn crafts, which he can practice if there is no hindrance from outside, but not from the standpoint of his human nature. The combination of all these factors will produce one essential man. Thus, the real nature of man is not an accident, for accidents may change. This proof, is of use for the men of quick comprehension, fine understanding and right judgment and not heedless of their essential being and their real nature even when they are asleep.¹⁵

It is due to Man's ability to think that God caused all other animals to obey him thus, becoming superior over many of his creatures. Living beings can obtain consciousness of things that are outside their essences through the external senses of hearing, vision, taste and touch Allah has given them. However, Ibn Khaldūn observes that man has the advantage of perceiving things outside his essence through his ability to think, something beyond his senses, by the use of the special powers placed in the

¹⁴ Ibid., 15.

¹⁵ Ibid., 16.

cavities of his brain by God, by which he takes the pictures of the sensibilia, applies his mind to them thus abstracting from them other pictures. Consequently, the ability to think is the occupation with pictures that are beyond sense perception and the application of mind to them for analysis and synthesis.¹⁶

The vegetative faculty (al-quwwah al-ghādhīyah) by which man nourishes is the first to appear when he comes into being, then this is followed by the faculty with which he perceives the tangible objects heat and cold, besides tasting, hearing sounds, smelling or seeing colors and all other objects of vision such as light rays. Along with the senses there develops a faculty with which he craves for sensible which he will either like or dislike. Then the imaginative faculty (al-quwwah al-mutakhayyilāh) with which he retains the impressions of the sensibles upon his soul after the sensible objects have disappeared from his senses. This faculty combines and separates some impressions of sensibles from others thus producing distinct combinations and separations, some of which are true while others are false. The power of desire towards the objects of imagination is also associated to this faculty. This is followed by the rational faculty (al-quwwah al-nāṭiqah) with which man is able to perceive intelligibles that help him to make a distinction between the splendid and the meager and to gain possession of arts and the sciences. Associated to this faculty too, the desire towards what has been perceived by the intellect. Consequently, the human gains knowledge of a thing either through the rational faculty, the imaginative faculty or sensation.¹⁷

The internal perceptive faculties shared by animals include the imaginative faculty (al-quwwah al-khayāliyah), the estimative faculty (al-quwwah al-wahmiyah)

¹⁶ Ibn Khaldūn, *The Muqaddimah: An Introduction to History*: translated from Arabic by Rosenthal. Franz. (Princeton University Press, 1980), Vol.2, 411-412.

¹⁷ Osman Baker, (1992). *Classification of Knowledge in Islam: A Study in Islamic Philosophies of Science*. (Kuala Lumpur, Institute for Policy Research, 1992), 49.

and the active imagination (*al-Quwwah al-mutakhayyilah*) which in human is termed as cognitive faculty (*al-quwwah al-mufakkirah*), which in both humans and animals arranges the sensed images one with another and aligns the various images with the corresponding forms or images, by acting as the intermediate cavity (*al-tajwīf al-awsaī*) between that which preserves the images and that which preserves the meaning associated to them. This power receives the impressions from the senses and the power that preserves them after they are no longer being perceived by senses, which constitutes the imaginative faculty comprising of sub-faculties, the receiving and the preserving and the estimative faculty which also receives and preserves intentions associated with the images, thus, the identified internal perceptive senses corresponds with the number of external senses.¹⁸

The motive faculty comprises the faculty of desire and yearning (*al-quwwah al-nuzuhiyah wa-as-shawqiyyah*) and the active motive faculty, the actual physical cause of motion (*al-quwwa al-muḥarrikah al-fi'liyah*), which is further divided into two; the appetitive (*al-shahwānīyyah*) and the irascible (*al-ghaḍabīyah*). When a desirable repulsive image is imprinted upon the imaginative faculty, it will be induced by the active motive faculty to upshot some kind of motion, if the perceived object is necessary, the appetitive faculty desires it and induces the active faculty to approach it. But if the imagined object is perceived as being injurious, the irascible faculty seeks to over-power it. Thus, the coordination of sub-faculties belonging to the faculty of desire and yearning result into a function termed as (*al-fi'lī*) will. The motive faculty triggers the nerves and muscles to cause them to contract, by either pulling the sinews and the ligaments connected with the limbs towards the locus in

¹⁸ Osman Baker, 50.