The Epicurean Theory of Mind, Meaning and Knowledge

The Epicurean Theory of Mind, Meaning and Knowledge

By

David Swift

Cambridge Scholars Publishing

The Epicurean Theory of Mind, Meaning and Knowledge, by David Swift

This book first published 2008 by

Cambridge Scholars Publishing

15 Angerton Gardens, Newcastle, NE5 2JA, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN (10): 1-84718-404-9, ISBN (13): 9781847184047

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

Anyone who finds the information in this book useful owes a debt to James Krakovsky, James Hill and Steve Lee. They listened to and argued with a madman when no one else would. Their patience sustained me, while their probing questions drove me to dig for the deeper explanations. Many helped, those three were involved. Those who helped include Maylin Scott, Fernando Lebron, Monica Lebron PhD. and Linda Nichols.

INTRODUCTION

> "The problem, the contradiction the scientists are stuck with, is that of *mind*. Mind has no matter or energy but they can't escape its predominance over everything they do. Logic exists in the mind. Numbers exist only in the mind. I don't get upset when scientists say that ghosts exist in the mind. It's that *only* that gets me. Science is *only* in your mind too ..."
> —Robert Pirsig, *Zen and the Art of Motorcycle Maintenance*

The philosopher I admire most, my muse, Robert Pirsig has a valid complaint. Commonsense tells us that all self-directed beings have a mind. Even animals appear to have minds. But modern science holds that minds and other mental things like knowledge and meaning can't possibly exist. Mental things are neither mass nor energy and science demands that all real things be one or the other. Depending on your point of view, minds, ideas, hypotheses, meaning, knowledge, logic, numbers, emotions and all other so called mental things blink in and out of existence like mirages.

From the point of view of our everyday experience mental things are constantly used and often talked about. As Pirsig points out, if your world won't work without a thing it must exist. Can anyone imagine learning or communication or any sort of conscious life without minds, knowledge or meaning? We couldn't conduct ourselves from moment to moment without them. But from the point of view of science, only things that can be detected and measured, the kinds of things that are physically real, chemically real and biologically real, can be said to exist. Is mind a thing essential to the life of every sentient being or an imaginary thing that can't be scientifically studied?

This book contends that the conflict between common experience and scientific theory arises because so called mental things exist in a conceptual blind spot in our vision of reality. We have misunderstood the concept of mind and so mental things appear to blink in and out of existence according to our perspective. That's the contradiction Pirsig was talking about: science itself is a mental thing that, by its own laws, doesn't exist. But when you confront scientists with their double standard: when you tell them that, by the rules of science, their hypotheses, proofs, conclusions and knowledge don't exist as real things in the physical world, they just smile and say, "They're just ideas." They're as annoying as the waiter who brings you steak and eggs when you ordered pie and ice-cream

but still expects to be thanked and given a tip. They just don't get it. If ideas don't exist you can't use them for your science. But the claim that ideas don't exist, when, in fact, it's obvious that they do exist doesn't bother scientists doing physics, chemistry or biology. They can use ideas while denying their existence without any conspicuous consequences. The place it hurts, the people it hurts, are psychologists and the people who would benefit from a workable science of psychology. Mental things are the stuff of psychology, and their relegation to limbo has reduced psychological investigations to unsolvable riddles. The reason for this predicament is a series of events that have evolved over more than two thousand years. Finding those events and solving those riddles starts at the beginning of recorded history and makes stops in Roman, Medieval, Renaissance and Modern Scientific times. What follows is an intellectual detective story with an historic sweep.

Because of the way events have unfolded, the concept of mind promised in the title cannot be stated without first resolving the mental/physical conflict. No one is going to be able to figure out why Aunt Matilda left the family silver to Jenny and not Johnny, her favourite, until we understand the nature of things like meaning and knowledge. Among other things, we will need to find solutions to those two longstanding mysteries, mysteries that no one in modern times has taken the trouble to solve because we have been unaware that their solutions are crucial pieces of knowledge with practical importance. Over our history we have found and lost our method for finding those solutions - twice. In the coming pages we'll be getting it back for a third time. This time we might be more careful because now we badly want it back again. At this moment it is the most desperately needed and sought after piece of information on the planet.

Humankind is known as the helpless but wily species. We have no poison, camouflage, great strength, speed, sharp beak, teeth or claws. We only have one survival advantage: the accelerated ability to find and use knowledge. So you would think we would value that ability. But for most of our history, we haven't payed much attention to it. The ancient Greeks perfected the way to do it over two thousand years ago. That skill, which guarantees their eternal fame, was ignored, overwhelmed and scattered by arrogantly indifferent Roman rule.

But it wasn't lost forever.

It passed into Arab hands, from where it was taken to Europe by returning Christian crusaders. There, a handful of people, living between 1450 and 1850, found, revived and used it again and again with spectacular results and then modern scientists threw it away for a second

time! Replaced it, like a used car, with a far less effective method. In all confidence and somewhat smugly we now call that replacement, the scientific method. And that's a part of our mystery. Why did they give it up the second time? It's easy to understand the first time: the Romans were powerful; they didn't care about intellectual pursuits because scholarship didn't have the quick payback of conquest and subjugation. We can forgive the Greeks; it's easy to give up your philosophy when you're running for your life. But what happened the second time, in eighteen fifty, just a hundred and fifty years ago? What caused them to give up a method that produced the basics of modern science, for a second time?

This was at the end of the Renaissance it and ancient Greece were the most accelerated learning periods in history. Thinkers had recaptured the Greek method, they had used it to come out of the dark ages and then they traded their BMW of methods for two Pinto hubcaps and a steering wheel. While none of the really impressive contraptions we have now were invented during the four hundred years of the Renaissance, people like Galileo, Leonardo Da Vinci and Newton did work out the basic science behind today's rockets, computers and cat-scans. They could almost feel the gadgets to come. Leonardo even drew some of them in his notebooks. Renaissance thinkers gave us physics by the yard, and today's businesses still depend on those basic discoveries to stamp out new products, but not much of Renaissance psychology has survived and, as a result, psychologists and psychiatrists can't agree, even among themselves, as to how our minds work. A thinking person has to wonder, "Why did we latch on to their physics to such great advantage but ignore their psychology?" As if one would be fabulous while its fraternal twin would be useless?

The early modern scientists mainly focussed on Renaissance physics because, in the famous words of English political philosopher, Thomas Hobbes, their lives were, "solitary, poor, nasty, brutish and short." Physics was a solution to their most pressing problems, but Renaissance thinkers were every bit as good at psychology. No one knows that today, because in 1850 modern scientists tossed their psychology away along with their Greek research method. As a result, we don't have the same kind of solid Renaissance basis for psychology that we have for physics. We still can't say why we behave the way we do, and most of our pressing current problems: emotional abuse, mental illness, poverty, crime and war, are a legacy of our ignorance.

Today, the greatest Renaissance psychologists, people like Locke, Hume, Kant and Mill, aren't even considered to have been scientists at all. The results of their psychological experiments have been repackaged and

mislabelled as philosophy. Nothing wrong with philosophy, mind you, what you're reading now is philosophy, but it's not where you go looking for scientific psychology and that misidentification is a clue. How did they mistake psychology for philosophy? That happened because of the way the new scientific method developed. As was said, it developed with a blind spot in our vision of reality.

The scientific view of reality is missing the whole category of physical things, like numbers, logic and meaning, because science mislabels these physical things as mental things. In the second chapter these mislabelled elements will be shown to be made of matter and energy. They are the physical stuff of psychology. Because modern scientists believed that Renaissance psychology was an inquiry into mental things that didn't exist in physical reality. It seemed to them to be high-toned but frivolous speculation about nothing. In short, the study of knowledge and meaning sounded like philosophy to them because they thought of knowledge as mental rather than physical.

The same blind-spot kept them from realising that they were also not doing physics according to the rules of their newly minted scientific method. Chapter one will demonstrate that the formal scientific method, as it is written is and always has been impossible to use as a tool of inquiry. That didn't hurt physics because, while it uses the mistakenly called mental elements of reality like hypotheses, facts and conclusions as tools in its inquiries, they are not subjects of its inquiry, and it does not examine them. Therefore the physical sciences don't even notice that they're denying the existence of their own tools. No one has used the scientific method while sticking to its own rules to discover anything, and while you can do physics by using parts of reality that are not included in its scientific vision, you can't do psychology without acknowledging the physical reality of things like knowledge, meaning and emotions. The scientific concept's blind spot has left psychology without a functioning general theory, and worse, no scientifically correct way to get one. Our mastery of physics combined with our ignorance of psychology has put advanced atomic weapons in the hands of leaders with a severely limited understanding of psychology. This is the story of what went wrong, how to fix it and a theory of psychology that reveals the causes of human motives.

The mislabelling of our perceptual and thinking faculties as mental elements was a culmination of mistakes starting with the very first psychological concept, the idea that each of us has a single mind or brain understands the world and controls our actions. It was the first and for thousands of years has been the only serious concept of psychology.

We're not going to be able to replace that mental mind theory without first understanding how and why it was developed and popularly believed for so long. The first chapter is a blow by blow of the who's, where's and why's of the mental mind concept and its role in the mis-development of the scientific method, followed by an adjustment in that method that reclaims the abandoned mental elements as physical elements of reality.

The general theory, which will be revealed later, is based on a very different, but equally ancient Greek, idea: that our brains don't understand anything. That they dole out instructions thoughtlessly according to simple, biologically-proscribed rules. It was the idea of a philosopher by the name of Epicurus. He pictured the brain more like a librarian meekly shuffling off to get requested files than a boss barking orders. He also believed in a single thinking, deciding mind, but he thought it was physical and in the chest. And here's the difference, he didn't believe that decisions were driven by mental intellect; he thought the process was emotional and therefore physical.

Developing a theory that fit the Epicurean concept took me thirty years and, given that the original goal was to help myself and others with their psychological problems, development now seems the easy part. The odds against a peripatetic scholar (one who works without being attached to any one university or institution) like me solving a mystery that thousands of academics and scientists working for centuries couldn't solve are astronomical. Understanding animal psychology has always been acknowledged as an impossible problem and has been tackled by only the most established thinkers. That's just a fact. The Epicurean concept has been around for more than two thousand years. Intelligent readers have to wonder why no one before has suggested that it might form the basis for a general theory of psychology. Why after all this time should any reader take the time to read one contrarian voice from outside academia? But in fact there was another, and the reader will soon be introduced to Alexander Bain, a philosopher and psychologist of the Scottish School. He is the only other person I could find who agreed with the Epicurean concept. I suspect that the only reason that he was unconvincing in his own time is that he didn't explain why his concept seemed at odds with our experience and observations.

Psychology has not developed in the same order as physics. Physics started with the concept of atomic theory. Aristotle had atomic theory two thousand years before scientists like Niels Bohr and Albert Einstein would need them. In contrast, psychology has been held up for more than three hundred years because scientists like Sigmund Freud and Burrhus Skinner had no workable mind theory for their observations and conclusions.

Physics was a concept in search of hard evidence to prove it; psychology was hard evidence without a valid concept for it to prove. The popular concept of mind has not proved useful, and we need another one that better accommodates the facts. With it we could use scientific principles to redesign our laws and education system eliminating crime, poverty and other behavioural problems.

The theory presented later is a radical departure from accepted theories. It claims that our minds function differently from what others have theorised. It holds that we don't have the single, unified mind assumed by tradition. The average reader will read the last sentence and still not comprehend that I mean that we don't think in our heads, that our brains don't understand and that this new theory holds that all voluntary behaviour has an emotional rather than intellectual source. Anyone with a new idea knows that getting noticed for the right reasons is a universal problem. As it turns out, the very fact that peripatetic investigators are free to pursue any line of inquiry without the institutional pressure of deadlines or having to please others has allowed me to take what looked to be a most unpromising direction. Robert Pirsig, in the book quoted above, described an experience like mine, "The truth knocks on the door and you say, "Go away, I'm looking for the truth," and so it goes away. "Puzzling." The twenty-first century assumes that basic knowledge is already known and hasn't provided itself with an easy way to challenge that assumption.

My sister-in-law, Linda, a bright and thoughtful person, tells me that the second chapter reads like a textbook. She's right but I make no apologies for the formal presentation. This isn't one of your feel-good, isn't everyone wonderful, psycho-babble, self-help books. This is a concept of psychology for nerds and geeks, the kind of people who have to understand everything, yes, even emotions, rationally, intellectually, with all the terms defined and the causal relationships explained. As anyone reading the first chapter will know, until now vagueness and lack of intellectual rigour has made psychology the shabby half of science. And it's important that mankind have a precise understanding of animal psychology, especially human psychology, before the mad-men get us with one kind of bomb or another.

Here's how the book is laid out. The first chapter describes psychology's place within the whole of science and the mental concept of mind's position as the basis for the whole of psychology (such as it is). While most of us would like to believe that time began on the day each of us was born and that everything worthwhile was discovered in our lifetimes, science has inherited a foundation of ancient concepts and basic knowledge. I believe that we have a self-interested duty to re-examine and

question all of it - especially when a discipline (like psychology) doesn't progress by finding answers and solving problems in the way you'd expect it to. My own examination reveals that a mistake in 1850 (the birth of the modern scientific method) voided all psychological discoveries made up until that time. That revelation points to a modification in the scientific method that makes way for science to resume in a way more like the method of ancient Greece and the Renaissance.

As the second illustration in the first chapter depicts, we conceptualise knowledge from several perspectives or metalevels. The trouble with the mental mind theory is that it only has one perspective, the philosophical concept that declares that a unified mind is the origin of meaning and action, with no physics, chemistry, or biological explanations following. It is not a general theory. A general theory, for those who don't already know, explains everything. That is, would explain psychology in terms of biology, in the same way biology is explained in terms of chemistry and chemistry is explained in terms of physics. Each general theory links up with other general theories producing a consistent and coherent whole that explains all of reality. Psychology has been the muddle in this chain. There are lots of theories, but none of them consistently explain human behaviour. While psychologists have learned many true facts from observation, in over two thousand years, their basic theory hasn't moved beyond its original assumption. That kind of lethargy should have made someone want to kick it. The first chapter is also a description of psychology's historical context.

Chapter two recaps the psychological discoveries made in the Renaissance. Three arguments are presented about what meaning is and how we understand it biologically. That Renaissance work was originally discounted because it had no workable philosophical perspective. It was a series of scientific observations in search of a philosophical concept. Concepts are needed for the simplest observations because to understand your observations, you must first be able to conceptualise them. The Renaissance psychologists were empirically probing some questions that had only ever been tackled logically before. Chief among them were the philosophical questions: what is knowledge? And what is meaning? In this chapter we continue what they started, answering the ancient philosophical meaning question from an empirical, scientific point of view.

Chapter three tackles the knowledge question and also answers it from the perspective of the laws of physics and chemistry. To the surprise of mental mind theory believers, knowledge and meaning aren't two-dimensional, intellectual concepts; they are three-dimensional, flesh and blood biology. Only when meaning and knowledge have been explained in

biological terms are we ready for the Epicurean concept of mind.

The forth chapter uses that concept to describe the biological mechanisms that cause our sense organs to understand meaning and produce action. Those mechanisms are our biological, understanding and control, reflex operations. Yes, we are run by reflexes, but they are simple like a computer is simple; that is, simple with complex results because we have the ability to learn reflexes. Not only can we learn them, we cannot avoid continuously creating biological reflexes all the time we are conscious. Those who would be therapists or builders of robots (robots that would be not only smarter but also more agile than us) can learn the unconscious rules that govern those operations.

Chapter five returns us to the philosophical metalevel with a discussion of the four part nature of meaning. It describes a perspective from which motive can be understood to be biological.

Six, seven and eight describe our three methods of learning; that is, how experience loads our software into this biological machine we call a body. That tells the reader how we learn both our universal and individual beliefs and opinions and that will give everyone an opportunity to understand personalities - their own and others.

The ninth and final chapter examines some of my own observations on how the theory can be applied to our everyday problems based on my experience with the theory.

CHAPTER ONE

BEFORE WE CAN BEGIN...

Ours is a history of a struggle for survival against a hostile world, but the discoveries of Renaissance and modern physics have given us new weapons and now it is a beaten world that's struggling. But we can't afford a complete victory. That would kill us all. The nightly news confirms that we are well along this suicidal course so we have never needed to understand our motives more urgently. Judging by the various theories proposed in the new and used psychology books for sale along Harbord Street, just west of the University of Toronto, we have felt the need to understand ourselves for some time now. The mania for self-awareness has replaced the goals of power and wealth, but none of the theories available so far seem to help. There is empathy for those who don't fit in but would like to, as well as advice for those who would prefer to distinguish themselves from the crowd; but no general theory for those who just want better decisions. Between the years 500 BC and 1950 just about everybody believed that a mental unified mind approximately centred on the brain was somehow the source of our decisions and non-scientists still cling to that opinion. They still expect science to reveal the causes of our behaviour by discovering how that kind of mind works. But almost no serious scientist has believed that we have what we have always understood to be a *mind* since Gilbert Ryle published, *The Concept of Mind* in 1949. Ryle makes a pretty good case for believing that the concept we call mind can only be described as "a ghost in the machinery" because while our physical bodies can be easily seen and touched, no physical organ called mind has been be found.

The fact is, the *mind* concept has been the psychological community's embarrassing little problem for over fifty years. Embarrassing for two reasons. First, minds are reputed to exist in a non-physical, mental dimension that science doesn't recognize and second, the idea that we have unified minds hasn't been replaced by another generally accepted theory, so there's no face-saving alternative basis for investigation or treatment therapies. Minds have depended on a mental dimension that

can't have matter or energy and so is the scientific equivalent of children's fairy tales, yet that disconnect has been kept so secret that *mind* is still a common word in our everyday language. All of us, even psychologists, talk about changing our *minds*, being out of our *minds*, things that come to *mind*, absent *mind*edness, *mind*-altering drugs and being *mind*ful of this or that as if *mind* was something physically real made from things we could detect and measure. Actually, the idea that we have single *minds* was just conjecture for the more than two thousand years before Ryle published his book, but over that time it has wormed its way into the language so completely, that unless you think about it, you automatically accept it as a proven fact. And so while scientists admit that mental minds can't exist, they act as if they do. Hard-science scientists don't even acknowledge that it makes any difference and continue to use their non-existent *minds* as if they really existed and they do it without apology. For the last fifty five years psychologists have been caught between psychological theories because, while they can no longer believe that mental minds exist, no one has yet proposed a creditable replacement. Without it, we've had no other choice but to use the concept of a mental *mind* when thinking or talking about the cause of our thought and behaviour.

At the point of this writing most psychologists believe that we are biological machines and that the medical and biological sciences will eventually reveal the real causes of our behaviour. And, while theoretically dissection might produce a new psychological theory, the process would be tediously complex and we have waited a long time and there's no telling how much longer it could take. There is an alternative. It's based on Renaissance scientist's analyses of our conscious streams[1] and it provides a satisfying explanation for and a way to predict our behaviour. We all have a conscious stream. It is a record of our conscious thoughts and actions, and anyone not mesmerised and beguiled by mistaken beliefs about what it is and how it works can deduce the laws that govern it. We'd have it already except that we have been beguiled and mesmerised by our belief in the existence of a mental mind. That same mistake has caused us to misconstrue the natures of meaning and knowledge and misconceive the scientific method. There is much to correct in our current cultural concept of how psychology works before we can develop a general theory.

We have been misled from the beginning and what follows is a brief summery of the highlights. Anaxagoras, inventor of the unified mind concept, was the first civil service philosopher in the ancient Greek city-

[1] The phrase: stream of consciousness was coined by William James in *The Principles of Psychology*, 1890.

state of Athens. He was head-hunted for his position from Ionia (on the west coast of Asia Minor). Some say it was patronage from the mayor, his friend Pericles. Only fragments of his work survive, but in one of them, he speculates about which things are parts of other things and which things are indivisible. The whole fragment translates into three paragraphs in English and in the last paragraph he lays out his theory, "Mind is infinite and self-ruled, and is mixed with nothing, but is alone, itself by itself." and a few sentences later, "Mind has power over all things, both greater and smaller, that have life.".[2] He was saying that we have two parts: he invented mind,[3] an indivisible organ and said it controls the behaviour of our other parts, collectively called the body. He doesn't say whether mind is mental or physical, only that it is unified and controls our actions. His claim that mind controls the body fits conscious experience so well that once it was suggested nearly everyone said, "Of course that's the way it must work."

Like many things that look obvious that was a mistake. But Mayor Pericles hadn't wasted anyone's tax drachmas. Anaxagoras set an example of analysis that helped to elevate the Athenian intellectual standard to the point where the next three generations boasted Socrates, Plato and Aristotle, the big three mega-stars of ancient philosophy. Their method had two main characteristics: firsthand observation and rational analysis.

Plato was an early supporter of the unified mind theory. He looked at the same experience as Anaxagoras and proposed an even greater distinction between mind and body. Agreeing that a mind controls each animate body, he added that minds and bodies must have different natures because, while bodies age, fall ill and die, the mind's ideas are always perfect and ageless.[4] For example the universal idea of a bed is different from any real bed. It is the perfect blueprint that every maker of beds aspires to copy but cannot physically realise. It exists on an ideal mental, rather than physical plane. He claims that the two parts of people must be made of dissimilar kinds of material: physical and mental. That put the elements of reality into two irreconcilable dimensions. Philosophers now call his division, Dualism. Plato had conjured a mental dimension from thin air that accommodated Anaxagoras's concept of a unified mind. If

---

[2] *Treasury of Philosophy,* D. Runes PhD Editor, Philosophical Library, Crown Publishers, Inc. New York, New York. Pg. 48.

[3] He uses the Greek word Nous, which could mean either mind or rationality, but it doesn't matter which because those who followed generally took him to mean mind.

[4] *The Collected Dialogues*, Plato, Princeton University Press, Princeton, New Jersey, 1985, *Theaetetus* and *Republic Book VI*

Plato had been older when he developed the mental category, he might not have been so sure that ideas and memories don't fade over time. His mistaken belief that knowledge and meaning were not physical, nor subject to physical laws, allowed him to populate his mental dimension with idealised versions of things like ideas, beliefs, memories, emotions and the like that are actually physical but cannot be sensed with any externally focussed sense organ or any instruments available at the time. These mental things seemed to fit together with the unified mind and they stayed together for over two thousand years. It was a marriage of convenience. The mental dimension obviously didn't have to follow the rules of physics. That freedom allowed people to avoid explaining how minds worked. Mental things were obviously beyond comprehension! But that didn't stop Plato from trying to understand the mental dimension.

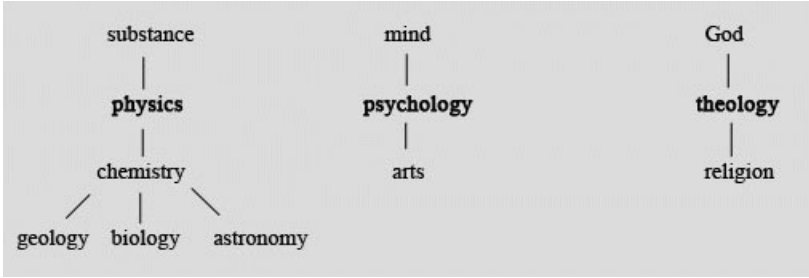
The raw material of thought and cause of behaviour is knowledge. Plato's *Theaetetus* concerns his search for the nature of knowledge. In it he attempts to define knowledge as either perception, reflection, value (the good), or truth. The important thing for the reader to notice, at this time, is that knowledge and all four candidates for its cause are considered by him to be *mental concepts*. Later it will be useful to twenty-first century scientists to realise that, while truth is an aspect or condition of knowledge, knowledge itself and its three components are physical. His failure to distinguish between non-physical (truth is non-physical because it's a condition, not a thing) and physical aspects of knowledge confuses the argument. Plato is mislead by his insistence that knowledge can only be true - a philosophical rather than a scientific distinction. At one point in the *Theaetetus*, he suggests that perception could not be knowledge without reflection (memory), but his belief in a mental dimension kept him from following up on his insight that knowledge could be a combination of components. He believed that the nature of knowledge must be monolithic because he believed that knowledge must be knowledge of something, and therefore that something must exist and knowledge must then be true. Actually knowledge is a combination of physical components and it can be false. Plato would have called false knowledge opinion, but there is no physical difference between opinion and true knowledge. Both are kinds of knowledge. Plato tried many hypotheses for the nature of knowledge and while he eliminated some of them, he didn't find a satisfactory solution. But those who followed found his dualistic vision of reality convincing.

Eight hundred years later a medieval scholar, Saint Augustine, who divided the universe into heaven and earth, added to the distance between mind and body by proposing that mind has a supernatural form that

survives the body. Mind became spirit, completely vanishing from our world and was thereby made unobservable to any and all of the Christian, scientific intelligentsia. That included any and everyone interested in the subject. The belief that mind was now mental and, later, supernatural, added an amorphous and ethereal, meta-level motive for our behaviour which was impossible to expose because it didn't exist in the physical dimensions, and that intangibility stalled the progress of psychology until the modern era.

Scholastic thinkers like Saint Augustine lived under the influence of the anti-intellectual, Roman rule and seem to have been so overawed by the knowledge found in ancient Greek and Hebrew texts that they trivialised and ignored their own everyday experience. But that kind of first-hand experience was the basis for the Greek method of finding knowledge. They only trusted authorities with impeccable credentials, and their own humble eyes and ears were not members of that club. Taking Plato's mental and physical dimensions, Aristotelian logic and Biblical knowledge, like the existence of God, as indisputable premises, they deduced truths like this must be the best of all possible worlds. By that kind of reasoning medieval churchmen set a three dimensional concept of reality securely into western culture.

Figure 1-1 The Medieval Concept of Reality[5]



God, of course, created and rules over everything. There are two levels in reality: the celestial and the worldly. God, his angels and human minds (as souls) exist on the celestial level. Mental things like human minds, ideas, knowledge and meaning and physical things made of atoms exist on

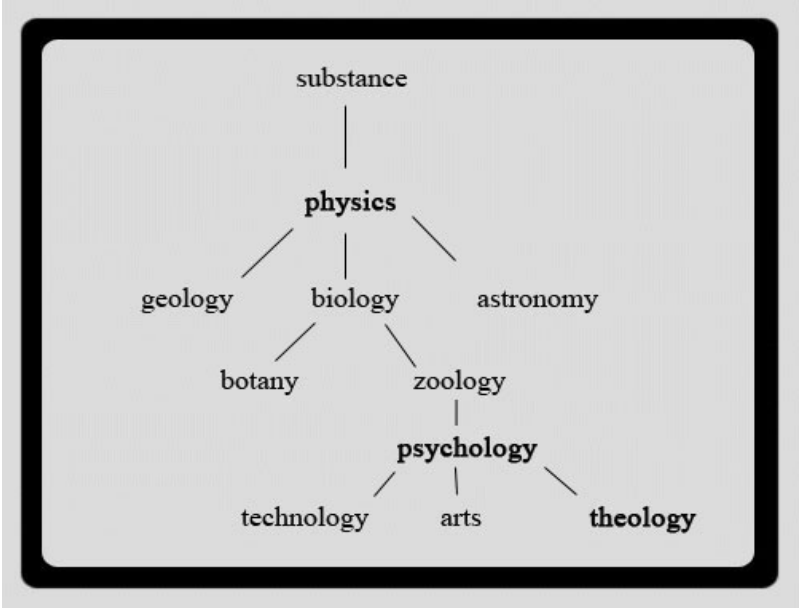
[5] This concept is still reflected in the departments and subjects of current universities and is the normal concept of reality of even sophisticated modern people outside of scientific circles.

the worldly level. So there are two categories existing on two levels. Mind exists on both levels: it exists on the worldly level while we live and is promoted (or demoted) to the celestial level when we die. This is a fairly complex concept of reality produced to accommodate the transient nature of the mental concept, but people found it convincing for centuries.

Interest in understanding how minds work resumed with the Renaissance (c. 1450) when a string of great thinkers rediscovered the ancient Greek method of inquiry that had so recently been taken from Arab hands. The first was a Spanish monk by the name of Ludovicus Vives, who invented what we now call empirical or classical psychology. His main work was *De Anima et Vita*, 1538. The third part of that book, *The Passions of the Soul,* dealt with the causes of basic emotions, which like a Greek, he studied by observing the emotions in his own conscious stream. He seems to have started an intellectual chain reaction. The main links were: Frenchman, Rene´ Descartes of "I think, therefore I am." fame, who was followed by four Englishmen: Thomas Hobbes, who claimed that the natural state of man is constant war and that any government, even a bad government, is better than anarchy; John Locke, who was the intellectual father of the American Revolution; James Mill, the utilitarian; and his son, the ethicist, John-Stuart Mill. The English links were interrupted after Locke by Scotsman David Hume, who realised that we have no proof that effect follows from cause. And then finally along came German, Immanuel Kant, who, among other things, discovered a kind of knowledge *(a priori*[6] synthetic judgements) that will prove pivotal to the theory of psychology presented later. All of these thinkers except Vives is more famous for his work outside of psychology, yet, using the reinstated Greek, look-for-yourself method, they made substantial efforts to improve on Anaxagoras's mind theory by studying their conscious streams for cause and effect relationships. But their progress was obstructed by their medieval concept of reality that told them that things like meaning, knowledge and mind were not physical things. It’s important to notice that, at this time, they still believed mental things were every bit as real as physical things, just different.

[6] *a priori* - known without experience of the specific course of events in the actual world. *The Oxford Dictionary of Philosophy,* Simon Blackburn, Oxford University Press, Oxford 1994

Figure 1-2 The Scientific Concept of Reality



At the same time the above listed great thinkers were trying to understand mind, others were exploring the physical dimension with far better results. Polish astronomer Nicolaus Copernicus, after lonely nights observing the stars, concluded that the sun, not the earth, was the centre of our solar system. His book *De Revolutionibus Orbium Coelestium* (1543) foreshadowed the mathematical analysis of nature. Other familiar names picked up the physics quest: Kepler, Da Vinci, Galileo Galilei, Harvey and Newton. There were three separate lines of inquiry (physics, psychology and theology) because, based on their existence in different, but to them still very real, dimensions (physical, mental and spiritual), renaissance thinkers still conceptualised knowledge as being divided into the same three branches as medieval thinkers.

But by 1850 there was a change afoot. Scientists pursuing the parallel investigations of physics and psychology were gradually evolving a new commonly accepted method partially based on the writings of 16th century English philosopher, Francis Bacon. He lectured against "idols of the mind": the false assumptions of the medieval period. By about 1879 (when German, Wilhelm Wundt the first full-time modern psychologist, founded

his psychological laboratory in Leipzig) scientists had agreed among themselves that they would only admit to facts that were based on, "repeatable and publicly checkable observations and experiments."[7] We now call it the scientific method and it only acknowledges the existence of the physical dimension of reality. It's important to notice that scientists were very much leaders in this change. The general public was not aware of this metamorphosis in thought and even today the majority of humans on this planet still believe in a three dimensional universe. The scientific concept of reality excluded anything undetectable by our five externally directed senses and relegated anything detectable by our internally directed senses, along with the things in the unobservable mental and supernatural dimensions, to the unscientific or fantasy category. The new standard was **only the detectable is real**. It was the beginning of an evolution in thought that was fairly complete among scientists by 1950 (coincidentally with the publication of Gilbert Ryle's book). As a group, scientists rejected the mental theory because of this modern way they had come to conceptualise reality. They determined that it is impossible for a thing like a mental mind to exist in a universe ruled by the laws of science because it is not detectable by any of our five sense organs and just accepted the implied loss of freewill as a consequence. That requirement deleted the spiritual and mental dimensions from their scientific world. The hierarchal chart above (fig. 1-2) reflects that metaphysical change and gives us a one-dimensional view of reality that includes physics, psychology and religion, but not as co-equals. Science views psychology as a product of physics and religion as a product of psychology.

Under this new metaphysical concept a general theory of physics (the atomic theory) was developed and physics literally took off like a rocket, progressing from horses and buggies to moon landings within a century. Something very good had happened. Psychology didn't do nearly as well, but as we'll see in the next chapter, the advances of Kepler, Da Vinci, Galileo Galilei, Harvey and Newton were matched by a real comprehension of basic psychology: meaning by Locke, knowledge by Kant and the role of association by Mill. Those psychological discoveries were every bit as significant as the discoveries of gravity, inertia, blood flow, etc., but for reasons that will soon be discussed; those advances were labelled as philosophy. Modern science discounted the factual significance of inquiries into the so called mental world and blocked any scientific way to proceed with the psychological inquiry. Physics and psychology had

[7] *The Concept of Mind,* Gilbert Ryle, 1949, William Brendon and Son, Ltd. UK. p.327.

been progressing at the same rate from their beginnings with Copernicus and Vives all the way up to about 1850 and then physics took off while psychology died. As I said in the introduction a thinking person has to ask why. The observations made by psychologists were as promising as those made in physics but, while physicists had a concept of how it worked, psychologists had the wrong concept. They had believed that mental things like ideas were products of their minds and so disappeared when the mental mind was dismissed as a useful concept. That left them with an inability to put their observations into a useful context and that froze all progress.

Concepts are needed to make sense of observations. The classic example of trying to make sense of observations without a concept is the seven blind men and the elephant. As the story goes, seven blind men come across an elephant and, since they aren't familiar with this kind of thing, they try to describe it to each other. The one at the ear says it's like a sailboat, the one that feels the leg say it's like a tree, the one feeling its side says that it's like a house; the one grasping the tail says it's like a snake and so on. They cannot agree and their observations are no help to each other because they aren't applying them to one overall concept. If they had been looking for an animal with four legs, two ears, a trunk, sides and a tail they would have been better able to integrate and interpret their observations.

In the same way, Renaissance psychologists were unable to conceptualize what their observations were describing. It wasn't just that they didn't have a concept, they had the wrong concept, and that had the same kind of effect as if the blind men had been trying to apply their observations of an elephant to the concept of a very strange toaster oven. They might get bread into the one end but they could never get toast out of the other. Without a decent concept of the object of their inquiry, psychologists couldn't progress to the same useful kind of pay-off that physics was getting. They eventually figured out that the mental mind concept was wrong. But it was the scientific method's insistence on publicly confirmable observations that stopped modern psychologists from developing a physical concept of mind. The hurley-burley of rapid scientific progress allowed French philosopher-of-science, Auguste Comte, to build a mistake about how we observe right into the scientific method as it was developed. He misunderstood the role of an observational method called introspection. His misunderstanding was the single thing that caused all of science to abandon introspection as a scientific observational method and that blocked psychology's ability to find a useful physical mind concept for a hundred and fifty years. Before

we can begin to understand the Epicurean concepts of mind, meaning and knowledge we must re-establish introspection, his observational method, as a valid scientific tool.

Most modern readers will need an explanation of the terms intro and extro-spection. They are forms or methods of *specto,* the Latin root for looking or observation. The human conscious stream seems to hold elements from both the mental and physical dimensions. All through history thinkers have defined extrospections as the five senses external observations, like visual sensations of scenery or auditory sensations of music, while defining introspections as observations of our private memories, like a memory of your first grade teacher and feelings, like hope or tiredness. Examining the outside elements of their conscious streams was called physics and looking at the inside elements was called psychology. Thinkers up until the middle of the nineteenth century, less than thirty years before Wundt set up his psychology laboratory, had been introspecting and extrospecting their conscious streams with equal confidence. Both internally and externally sourced sensations were just data to be analysed to people like Anaxagoras, Socrates, Plato, Aristotle, Vives, Descartes, Hobbes, Locke, the Mills, Hume and Kant. But that changed in 1854 when Auguste Comte published his Positivist philosophy.

Like Anaxagoras, he was an early and articulate spokesman for a temptingly plausible but ultimately wrong idea. In a time when scientists were demanding hard evidence, Comte was claiming that introspected observations were not publicly verifiable and, therefore, could not be scientifically valid.

He said,

> "It is the same with the pretended internal observation of intelligence. To render this possible, the individual would have to divide himself into two persons, one thinking, the other observing the thoughts. Thus man cannot directly observe his intellectual operations; he can only observe his [sense] organs, and their results.[8]

Just like Anaxagoras's mind concept, Comte's claim seemed to fit our experience of consciousness so well that everyone agreed. They also agreed that thinking cannot be hard evidence because it can be changed at will.

Twentieth-century psychologist, Paul Fraisse, agreed:

---

[8] *Early Essays on Social Philosophy*, Auguste Comte, trans. Henry Dix Hutton, George Routledge & Sons, Ltd. 1854, p. 340.

> "A. Comte was the first to demonstrate that introspection, the method then current, was invalid because our mental life cannot continue unaffected while it is observing itself.[9]

Because introspection was the method that had proposed and supported the mental mind and all the other things in the, now-outlawed, mental dimension, it was associated with the mental category and Comte, generalizing guilt by association, was able to destroy it as a valid scientific method. It was laughed out of respectable science, and that blocked psychology from having a useful observational method for finding the new brain concept it so badly needed. But if Comte is right, the search for knowledge is a search for nothing because things like knowledge, facts and meaning can't exist in a world where things can only exist if they can be known extrospectively. Things like poverty, crime and war that are caused by beliefs are then caused by nothing and things without causes cannot be changed. That's the whole point of searching for knowledge: we can control what we understand. We can build atomic bombs or end wars, but only by understanding their causes.

Beliefs, ideas and meaning are really physical things with palpable effects on the world. The Renaissance psychologists were looking for the nature of these real physical things that Plato had misclassified as mental. They were using the only observational method open to them - introspection. The only mistake they were making was misclassifying the physical as mental. That didn't affect the truth of their results and reality has necessarily asserted itself in current therapeutic practice. In spite of scientific rules; we talk about emotions and other, so called, mental things because we can introspect them. Introspection is what today's therapists are asking patients to do when they ask, "How do you feel about that?" Because all of our motives are emotions, teaching patients to be aware of their emotions through introspection is the most effective therapy currently known to psychology and psychiatry, but it's not called introspection. They do not call it anything; it's in our modern concept of reality's blank spot that was created by Comte. The patient is expected to name an emotion, which by the rules of science doesn't exist, but they ignore the introspective process that finds that name. Modern therapists are reverting to Plato's dualism in spite of scientific correctness because it works best for the patient.

Physics has given us the comfort and ease of a technological lifestyle

---

[9] *Experimental Psychology: its scope and method,* Jean Piaget, Paul Fraisse and Maurice Reuchlin, Trans. Judith Chambers, Routledge & Kegan Paul Ltd. Great Britain, 1968, p. 56.

and recent advances in electronics and medicine imminently promise an even greater mastery of external reality. The part of the new scientific method that they got right was good for physics. Banishing the insensible mental and spiritual worlds put physics on solid observational grounds. But banishing the exclusively internally-sensible world of ideas and feelings because they believed they were mental category things was a disaster for psychologists because they could no longer observe the basic elements of their science. The new insistence on objective physical evidence has completely discredited all of the valid progress made in comprehending the essence of meaning and knowledge because that progress had been based on what was believed to be a strictly mental introspection process. That insistence totally obfuscates the fact that meaning and knowledge are the psychological equivalents of the basic physics elements of neutrons, protons and electrons. Plato originally deduced the existence of mental mind from internally observed ideas and feelings, but his mistake was in the deduction, not the observation. Comte didn't realise that while mind is neither externally nor internally observable, other mental things like meaning and knowledge are really physical things observable by both methods. Mental mind was Plato's unobservable imaginary invention. It was easy to give it up to scientific correctness, but anyone can confirm the existence of knowledge and meaning by introspection. We can confirm the effects of ideas, knowledge and desire in their effects, like buildings, roads, damns, etc. on and in this world. And everyone knows knowledge for example their own name and address and what food and shelter mean. Everyone knows that all human achievements start with an idea. After Comte, all concepts previously believed to be mental were reclassified as philosophical because philosophy still valued and used introspection. In the process, introspection, the results of introspection, as observed by renaissance psychologists and philosophy were denied to students of science. It would also seem that psychology was not the only discipline to suffer from Comte. Metaphysics, which had been the "Queen of sciences" in Kant's time is now often confused with charlatans selling *new age* crystals and pyramids on street corners. If science is the lever that moves the world forward, philosophy is its fulcrum. I believe that now is the time to give it a little more respect.

The problem was the belief in the existence of a whole lot of things that do exist, like knowledge, meaning and emotions and the work done to discover their natures by Renaissance psychologists, was thrown away with the mind concept because scientists had lumped them all together as mental things that only exist in our conscious streams.

As far as we know, animals like us, are the only things that have a conscious stream. It is one hundred per cent of our awareness. Anything and everything that we are aware of seeing, hearing, feeling, tasting, smelling, remembering, dreaming, imagining, intuiting, perceiving, thinking, saying, writing, gesturing, willing, wishing, or hoping (to name but a few of the included operations) are elements in our conscious streams. They are our experiences of reality, our only window on reality and the only way to learn anything about ourselves and our relationship to any other part of reality. And, according to the new scientific method, none of those things exist because none are measurable. The scientific method was being used to search for facts, meaning and knowledge. But according to its concepts and rules, none of those things exist because they aren't observable by our five senses, nor are they measurable by any instrument with observable readings. As we'll see later, this was a mistake based on the misunderstanding of what they should be observing and measuring.

Scientists had denied the existence of Plato's mental dimension and all the things in it. They prudently and tactfully ignored God and religion as issues beyond the methods of science. And then, to translate the mind concept into physical terms, they somewhat arbitrarily (that is without any scientifically acceptable evidence at all) assigned the functions of their concept of mind to what seemed its obvious physical component, the brain.[10] While the mind had been dumped as a mental reality, it was retained as a concept. Nothing had really changed. The brain as mind was Plato's dualism dressed up in scientific clothes. And there was no scientific way of moving beyond the dualistic concept because scientists ignored what they assumed to be mental concepts like knowledge and meaning. Comte had discredited introspection as a method for psychological investigation, and psychologists contemplating the causes of behaviour after him, were limited to casting about for an extrospectively verifiable general theory. Psychologists couldn't study physical knowledge and, for the same reason, couldn't study our hopes, dreams, or even their own motives. Science had returned to the ways of the medieval scholars: they didn't trust their own observations, at least not the ones about their internal states. The scientists who bought Comte's argument (nearly all of them) defaulted to the only acceptable method left, so called objective experimentation. They had given up psychology's most powerful observational tool and consigned themselves to the sidelines in the search

[10] An idea originally put forward by Herophilus, an Alexandrian anatomist (300 BC.) reasoning from the observation that all nerves end at the brain.

for a general theory. No one was going to find a new psychological concept without introspection. Progress in the science of psychology depends on finding the nature of knowledge and meaning. That is impossible until introspection is restored as a respectable method of science and that's what we'll discuss next.

The denial of the mental dimension caused a conceptual vacuum. Most psychologists followed the lead of, medical doctor, Sigmund Freud or lab-scientists Ivan Pavlov and B. F. Skinner. Freud ignored Comte and based the psychoanalytic theory of psychology on his insightful introspections. He replaced Anaxagoras's unverifiable single mind theory with an equally unverifiable three minds theory: id, ego and superego. More will be said about Freud's brilliant observations in the chapters ahead. Pavlov and Skinner represent the scientifically correct branch of psychology. Both had been trained as physiologists and, while they didn't have a general theory, they believed that such a theory would still be based on the mental mind concept, but a physiological version of it. A theory of how the brain and nervous system control our bodies. However the details seemed too complex to attempt at the time.

The inevitable complexity of the investigation they imagined once prompted a young and earnest professor to tell me that psychology would never be understood; "Even if mankind survives on this planet another ten thousand years," he said. He was inclined to exaggerate. The physiologists were half correct. The theory presented later is physiological. But while there are a great number of things going on at the same time, it's not as complicated as they had expected. They supposed that yet to be developed techniques or technological equipment, like cat-scans, MRI's, etc. would allow us to see the details in action. But that plan has a problem. Having a machine that would show us the physiology of thought and behaviour in live action wouldn't really help because seeing all the circuits of the brain and nervous systems alive with sensations at one time would be much like hearing all the words of an unknown language spoken together. There would be so much going on, it would be impossible to isolate and connect the related activities. Today we still don't have the kind of CT-scans or MRI's that would let us see that action. However, our experience with even less complex circuits (look into the back of your TV or computer, and you can wonder for yourself) tells us that we would need some idea of how animal psychology works before we could understand the labyrinthine process in live action. Luckily, such machines are not preconditions for finding this theory because the way we identify and understand current sensations has much more to do with our memories than we had previously thought. We need to have cognised something