

DUALISM VS. MATERIALISM; TWO INADEQUATE PICTURES OF HUMAN NATURE

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CHAPTER 1 INTRODUCTION

The perennial question “Who am I?”, which thrusts many into an existential quandary, is no longer merely the project of introspection, but has now arrested the interest of the sciences which posit the more generalized query: “What constitutes humanity?” We are still in the project of identifying ourselves, of determining our basic nature as humans. Who we are is a foundational question upon which we live our lives. There appear to be two opposing views in the Western world. Both probe basic questions of human nature, but each represents humanity and the world in which it resides quite differently. We are therefore torn between two images. Science purports a monistic view of all of reality in which everything that exists is material, humanity included. Contrary to the scientific perspective is the view common to the general public that reality is divided into two distinct substances (material and immaterial elements), and man is likewise divisible. Though these two vying images present a conflict between theory and belief—unmatched opponents from seemingly different classes—there remains a common ground. Neither view is utterly irrefutable. Neither can instantiate their claim to the point of infallibility and so, both in the end resign to faith. Faith is their commonality, and both must employ a measure of faith to claim anything at all.

Therefore, it isn't an issue that we compare two separate realms (belief and theory), for both overlap in a leap of faith. Instead of throwing one's hands up in a resignation to sheer skepticism, that nothing can be known or claimed with absolute certitude, both views accept their position despite its flaws. They accept with a measure of faith.

The proceeding aims to demonstrate that the dualism that many ascribe to contains a number of flaws. It reflects a set of beliefs that are often contradictory and laden with error, error which continues without interrogation. These beliefs result in an image of the human person as an immaterial soul apart from the body, and this is not a wholly adequate representation of the human person. Although a belief in an immaterial and separable soul may lack defensibility, we cannot think of ourselves merely in terms of the body. The materialism of science, which avows that we are mere matter, is a theory with its own failings. It is not immune to contestation or criticism. Therefore, both positions (dualism vs. monistic materialism), despite their flaws, are held as true representations of reality. This is done so in faith that the model one holds as true is the best presently, until convinced otherwise by strong evidence to the contrary. At this point the dualists cannot convince the materialists and vice versa. Both see incorrigible flaws in the other while accepting their own position as the better of the two for the time being. We may choose between the two dominant images, dualism or monistic materialism, but in the end we do so in faith rather than unquestionable confidence.

CHAPTER 2

BELIEF VERSUS THEORY

As previously mentioned, the dualism vs. monism debate reflects a conflict between belief and theory. We will pause to distinguish between the two. Belief is often defined as an instance when an individual holds a premise to be true, though the premise may not actually reflect any truth. Whereas belief is often a proposition held as true, yet loosely justified or not rationally defended at all; theory, in the context of modern science, involves a proposition that is supported by evidence and thus seen as sufficiently justified to hold as true. While one does not require justification, the other holds its premise as true as a result of validating reason and evidence. Through the examination of facts—a fact being a provable concept or verifiable information—a theory is proposed as the best explanation of those facts available. The theory is accepted as an appropriate explanation in tandem with the awareness that it may be possible at another time to be proven false. Despite this possibility, the theory is accepted for the time being. Belief and theory are therefore defined as separate terms, yet as we will see in the case with the dualism of common belief and the materialist theory of the natural sciences, these two disparate realms have in common a degree of faith.

In the case of the dualism of popular belief vs. the materialist theory of the (natural) sciences, both sides offer a proposition which comments on the nature of reality, of human nature to be more specific. As we will see in the forthcoming, neither is infallible, and yet both parties accept their position despite the lack of certitude. It can be said that it takes a step of faith to do so.

We begin with an examination of the commonsensical view which purports that humanity is a composite of two substances, material and immaterial, one of which is the essence and truest expression of the individual person.

CHAPTER 3

THE COMMON VIEW: DUALISM

In ordinary day to day life we rarely find ourselves reflecting upon the nature of our individuality and personal identity. We take these things for granted. We experience ourselves naturally and without any deliberate, self-reflective act. In just existing we have a continuous engagement in self as a separate entity in the world and experiencing it as something distinct from ourselves. We are conditioned with concepts learned and developed over centuries of man experiencing himself. We posit the existence of a soul to account for this sense of self, a continuous entity and the pure essence of personal identity or personhood. The soul can be a number of things to one who believes it is a very real aspect of their being. The soul is conceived of as the subject of and witness to our embodied experiences; it is seen as store house for our character traits, behavioral dispositions, and the history of our experiences; the soul is additionally considered the morally accountable aspect of our being; and it is often believed to be the continuation of our self once our body perishes.

This identification between our sense of self and some immaterial aspect of humanity seems somewhat natural to us. We encounter ourselves as the permanent subject of a series of experiences that accumulate as our personal history. We are most commonly aware of this sense of self as incorporeal whence confronted with the frailty of our existence. When death befalls the body, we immediately and unreflectively dissociate the person from the corpse. We commonly spout such phrases as, "Grandma is in a better place now." This locution consents to a belief that the body that remains to perish is not

the actual person; that upon death, the individual has continued existence apart from the body. This is indicative of a belief that we are not ultimately identifiable with our bodies.

Our bodies change throughout our lives and eventually cease to function. The way we commonly talk about death suggests a belief in some immutable and enduring entity that can persist through these changes and can endure despite the body's decay. This we consider, without hesitation or thoughtful reflection, to be the person, and thus the essence of identity. The person is seen as some immaterial being within a body. This immaterial entity is commonly conceived of and colloquially referred to as the soul.

If we were to prompt person's holding such a dualist view to give an explanation and cite the source of their perspective, this may prove a trying task. It seems natural for many of us to conceive of ourselves as something immaterial apart from the body, because our inner mental life seems most intimately a reflection of ourselves. We know each day as we wake that we are the same person who was yesterday and expects to persist until tomorrow. We don't have to verify this in a mirror. Our bodily image matters not. We are well aware that our body has changed dramatically over time though we continue to experience ourselves as one continuous entity, irrespective of these changes. We could lose a limb and no one would feel as though they lost a part of their self, that some part of their person or personal history was so intimately tied to one's body that it departed with the lost limb.

The dominant view appears to be that we are comprised of a non-physical soul (in part influenced by the Cartesian immaterial mind) which exercises free will as an expression of our independent personality, is witness to our embodied experiences, is immutable and does not change with the body, and retains personal identity postmortem

in some form of continued existence, and is thus the essence of each individual person. Yet once we pause to examine the soul and the attributes assigned to it, we see that many of the characteristics we ascribe are issues of contention. There are inconsistencies in our beliefs about the soul which need to be repaired otherwise the soul remains undefined.

Though this type of dualism and notions of the soul have circulated for centuries, Cartesian dualism, as a more contemporary and resounding philosophy, has heavily influenced this commonsensical view. Many inadvertently reflect the posture of a Cartesian. They have inherited this world view, with its picture of humanity and basic self-conception as a result of their circumstances. Time, place, and culture have made available these thought models and deeply imbedded them within the fabric of Western thought. We are accustomed to concepts that endorse and perpetuate this view, and through them we discover reality as divided. We harbor these uncritically held beliefs even having never read a single sentence of Descartes' *Meditations*. It seems painlessly natural to conceive of ourselves in this way, suggesting that the commonsensical nature of this view presupposes a degree of truth and we've no need for reevaluating our image of humanity, and the basic core of our self-identity.

The Soul of Today

It appears quite common to conceive of oneself in this way: as comprised of two distinct and divisible parts. Moreover, we tend to think of ourselves as distinct from other forms of life and postulate why this might be so. We derive an opinion that we alone have souls which make us distinct. We possess the higher faculties of intellect, reason, abstract thought, judgment, discernment, emotion, free will, moral capacity etc. and determine these to be what constitutes our distinctiveness and therefore comprises the soul—our

advanced mental capacities. Therefore, if we think of ourselves merely in terms of what seems immaterial (in contradistinction to the material which is finite), we tend to conceive of ourselves in terms of mental faculties. Further, these mental faculties comprise the mind as a functioning entity separate from the body. Mind and soul consequently become correlative or analogous.

In addition to the soul being conceived of in terms of the higher human faculties of mind, there is another aspect of mind which further forwards the notion of soul as the essence of human persons as permanent individuals. The mind as the immaterial aspect of our being seems cognizant of a lasting "I" that persists through all bodily changes. The mind, as the agent of mental activities, is aware of itself as the one doing the thinking, feeling, willing, and so forth. As a result of this awareness the soul is perceived as not only the higher human faculties of mind, but the essence of sustained personhood. As a composite of mental activities, the soul is therefore considered immaterial. It is perceived as distinct from the body because it is thought to be comprised of immaterial mental processes (thinking, feeling, willing, etc) while the material body is comprised of mechanical processes that involve material components.

In its most rudimentary and uninvestigated form, the soul is believed to be our immaterial, immortal personality. It is distinct from the body and can persist in a discarnate state. It reflects our truest self and is thus the aspect of our being which is most important. It is enduring and unchanging, unextended and immaterial. It is conceived of as not only unlike the material body but wholly opposite in qualities. The body is material, the soul immaterial. The body changes, the soul is immutable. The body is

finite, the soul, therefore, is eternal. We are thus, to many, bodies possessed of souls, a combination of two entities.

Why We Needed the Soul

The question remains to be pondered: When did we, as a species, begin to consider ourselves as, in part, immaterial and eventually spiritually eternal? Why do we need to postulate the existence of a soul? Is it because it is a hopeful expectation for continued existence once our body fails us, or is it because it seems consistent with the experience of ourselves?

It appears as though we are immediately and intimately aware of our separation from the rest of our reality. We experience a world that seems external to and different from us through our senses. Our senses help us discover our boundaries; where we begin, where we end, and the space which separates us from what is outside and distinct. We experience the limits of our extension through the confines of our body, and in the face of our finitude we survey ourselves to further qualify what exactly is this apparent individual in space which we encounter as ourselves. Once we are confronted with the frailty of our body and the transience of life we wonder...what am I, I know that I exist, but what does that existence entail?

Why did we in the past, and why do many of us still today, think of ourselves in terms of two distinct entities, one of which is immaterial, immortal, and that which represents our truest self? We can postulate a number of motivations for positing a soul. Theories of the soul may have arisen as a means of defining personal identity and individualization. We are clearly individualized by something. Is it merely our body or something immaterial and incorporeal, something more lasting which evades the fate of

our transient body? General supposition is a union of these two distinct entities—matter and form, body and soul, mind and brain. But the soul is most commonly envisioned as the true representation of the person and the enduring aspect of our being.

The soul may have also been contrived for a number of other functions, one of which is that, for some, it offers a means by which we can experience, in theistic terms, a connection to God. Some would cite scripture in support of their view, quoting: “We are made in the image and likeness of God”. (Genesis 1:26) The soul is thus seen as the aspect of the human being which is of the same or similar substance to God and allows us to experience God (though embodied and in material form) and permits us to ultimately return to his presence. It further reflects a similarity to God in that the soul or mind is a reflection of his intellect or reason. St. Thomas Aquinas explains:

Man is said to be after the image of God, not as regards his body, but as regards that whereby he excels other animals. Hence, when it is said, *Let us make man to our image and likeness*, it is added, *And let him have dominion over the fishes of the sea* (Gen i. 26). Now man excels all animals by his reason and intelligence; hence it is according to his intelligence and reason, which are incorporeal, that man is said to be according to the image of God.¹

This intellect or reason is incorporeal and thus separate from the body. Aquinas contends that, “the workings of the intellect are not the product of any organ. They are therefore distinct from the body as the intellectual soul.”² For Descartes the aspect of his being which most closely resembles God is his will, for it is “only the will, or freedom of choice, which I experience within me to be so great that is above all in virtue of the will that I understand myself to bear in some way the image of God.”³ The will is a function of the soul. When the soul exercises its will it acts freely of its own volition and

¹ Aquinas, St Thomas. Summa Theologica. Trans. The Fathers of the English Dominican Province. (New York: Benzinger, 1948) 15.

² Ibid. 32.

³ Descartes, Renee . Selected Philosophical Writings. Trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch. (New York: Cambridge, 1988) 101-102.

according to its own prerogative. The individual soul is the solitary initiator of activity, nothing else causes it to act but itself alone. God himself is seen as uncaused by anything else, and his actions are seen as self-initiated. Nothing done by God can be attributed to any other cause. Man therefore, in Descartes perspective, resembles God in this manner, though Gods will is ultimately unmatchable.

In addition to serving as a source of likeness between God and humanity, the soul has also taken on the role of providing humanity with a sense of superiority. The soul serves to support evolutionary distinctiveness. It sets humanity at the top of a hierarchy and makes humans of special interest to their creator. We have asked: What sets us apart from the rest of creation? The soul has served as a basic answer to this question. The soul has served as an aspect of humanity which distinguishes it from other living things, and furthermore has determined humanity's role, purpose, and function based upon faculties perceived to be exclusive to the human soul.

Many may feel threatened by the scientific view that all is matter, and rightfully so, but they may also become anxious over the prospect that the soul as they know it is a fiction. The soul has been a functional concept and persisted for century upon century. As even just a term, it has itself been seemingly immortal, surviving as an inextricable element of humanity's self-concept. Many now exclaim, "The soul is dead!" This is a play on words to suggest that something once thought to be immune to death turned out to be just as vulnerable as the body. This is so because it may never have truly existed as commonly understood.

As previously suggested, there may be various reasons why we have posited the existence of the soul, yet it remains to be questioned: How has humanity commonly

conceived of itself, and more specifically, how has it conceived of the soul? The West, being predominantly theistic and in large part Christian, has acquired an image of humanity which has emerged from the influences of ancient Hebrew thought, Hellenistic culture and philosophy (which highly influenced Christian theology), and modern thought including, but not limited to, Cartesian dualism.

The History of the Soul

What Owen Flanagan calls the humanistic image, depicts humanity as a unique living creature whose free will and agency set it apart from the material world. This view renders animals as powerless to the determinism of their material nature, but humans as distinct in virtue of their capacity of free will. This autonomous agency enables them to override the laws of nature which otherwise direct the activity of animals. Humans therefore have an aspect of their being distinct to themselves which is separate from and not subject to the material world. This “humanistic image” reflects the widespread dualistic mentality which considers humankind in part animal with one’s body under the dominion of nature, yet also distinct from the material world. Flanagan explains that this notion has been developed and perpetuated over centuries of inquiry.

Perennial philosophy, the wisdom of the ages, provides an unfolding humanistic story of our nature. In the West, we look to the writings of Plato, Aristotle, Augustine, Aquinas, Descartes, Hume, Kant, and Hegel, as well as to the Old and the New Testaments, to discover both who we are and how we ought to live. These works give us an image of what it is to be a person and guide our way along life’s path—they tell us the way to goodness, righteousness, knowledge, happiness, and, most importantly, a meaningful life.⁴

An extensive history of thought has served to contour modern articulations of what exactly constitutes the soul. The soul is a notion closely tied to religious thought as

⁴ Flanagan, Owen . The Problem of the Soul, Two Visions of Mind and How to Reconcile Them. (New York: Basic Books, 2002) 1.

it addresses some of the theological questions regarding humanity's nature, fate, and relation to its creator. Many find their self-conception couched in religious teachings and the Scriptures from which they are derived. Yet, even if an individual purports to be unreligious, ideas regarding human nature and the soul circulate beyond the institutionalized religions of the West as widely held assumptions regarding humankind. The February 26, 2003 Harris Poll on the religious beliefs of Americans revealed that 84% of those polled believed in the survival of the soul post death.⁵ This therefore suggests that a large segment of the population believes in the actual existence of the soul. A belief in its eternal fate presupposes a belief in its existence.

What Constitutes the Soul

The soul was seen by some ancient philosophers as some immaterial and separate entity. Socrates thought that humanity was in part immaterial soul. He surmised that the soul was the actual person, while the body was merely a trap. In the face of his imminent death, Socrates tries to console his friends as they lament by assuring them that he is distinct from his corpse and the lifeless body they are to encounter merits no remorse.⁶ Socrates believes himself to be an immaterial soul and not his body. Other ancient philosophers, the Stoics and Epicureans, postulated that a soul existed, but it, like the body, was material. The material soul and material body together constituted the person. The person was not one or the other, but a unity, and both were equally material and perishable.

⁵ Humphrey, Taylor. "The Religious and Other Beliefs of Americans 2003" *Harris Interactive Inc* February 26, 2003. <http://www.harrisinteractive.com/vault/Harris-Interactive-Poll-Research-The-Religious-and-Other-Beliefs-of-Americans-2003-2003-02.pdf>

⁶ Plato. The Trials of Socrates. Ed. C.D. C. Reeve. (Indianapolis: Hackett, 2002) 79.

Aristotle's position was that the soul existed as the animating principle of all life forms. Therefore, plants, animals, and humans alike possess souls. The soul was one of two necessary elements for existence and persistence. Once the unity of matter and form, body and soul, was compromised, the integrity of the being was likewise endangered and the living thing ceased to exist.

A similar notion is expressed in ancient Hebrew thought. The earliest text in the Hebrew Bible reflects an ontological holism in which the matter and life force (later translated as soul in the Septuagint) combine to create the human person. This life force is nothing more than an animating principle. It does not reflect the individual person in any way for it is the generic breath of life which enlivens all human beings.⁷ Biblical text began to reflect a shifting anthropology in which talk of Sheol, an underworld destination for the deceased, demonstrated intimations of a dualism of sorts which envisioned the dead as some immaterial remnant of the departed.

The Bible on the whole, from Hebrew Bible to New Testament, reflects a conflicting anthropology. It ranges from monism to dualism to trichotomism. Many contemporary Christians have garnered from New Testament texts a dualistic view of human nature in which the soul is seen as the eternal essence of humanity, but this is not a belief with consistent textual support.

⁷ The traditional Hebrew view of human nature is often perceived as a more monist or holistic view of the person which does not divide material from immaterial, perishable from imperishable, as distinct entities. The basic understanding of human nature in the Hebrew Bible appears to be, in its oldest texts and earlier sentiments, a more holistic view. In the second creation account in Genesis 2:7 the matter of humanity is infused with the breath of life (*neshama*) and humanity is thus here depicted as a unitary being imbued with life from God. The matter and life force of humanity are inseparable, existence requires their union. Upon death the matter of humanity returns to the dust from which it came and the power of God which gave it life returns to its source, but not as the personal identity of the individual. Ecclesiastes 12:7-8 states "And the dust returns to the ground as it was, and the lifebreath returns to God who bestowed it." The "breath of life" is nothing more than an animating principle. It does not serve as an individuating principle in which personality develops.

The story of the soul continues through the centuries, commented on in such realms as philosophy and theology, but we fast forward in our extremely cursory gloss of the soul's history to Cartesian dualism. Descartes' philosophy considered humanity a composite of immaterial and material parts, but instead of calling the immaterial aspect of humanity the soul, he referred to humanity in terms of mind and body. The prevalent dualistic mentality of today in large part resembles the sort of dualism which Descartes touted as a discernable truth. Through phenomenological feeling and introspective encounter with ourselves we perceive this duality with ease.

The Cartesian perspective seems almost commonsensical and natural to many. Many of us divide ourselves by two distinct aspects. One of which seems to be ourselves, a permanent and unchanging expression of our person which is not subject to the natural laws, but exercises free will to direct our body in the world. We consider this independent and autonomous aspect to be the intellectual part of our being which can think and will, discern and judge, and therefore direct the activity of our material body. This aspect seems unlike the material body and separate from it.

Cartesian dualism represents this substance dualism which many of us assume to be the picture of human nature. Human nature is believed to be the combination of two substances, a material body and an immaterial soul. Descartes arrives at his dualistic view of human nature by examining issues of epistemology. He is concerned about what he can know for certain. He begins from the famed Cartesian skepticism in which he recognizes that he cannot know for certain things previously and uncritically accepted as real. He recognizes that the senses, which he once trusted to reveal reality to him, are fallible and have in the past deceived him. For instance, he realizes that the sun is not as it

seems. Though his sensory experience reveals to him a small disk in the sky, he has come to know that it is not as small as his eyes convey.⁸ This being the case, Descartes embarks on the task of identifying what can be known with certitude. The only thing “necessarily true”, which he cannot doubt, is that he himself exists. All other things could be a mistake of the senses or a dreamlike illusion, but every time he thinks that he exists, it cannot be the case that he does not exist. The very act of thinking involves existing. Therefore, Descartes concludes that the proposition “*I am, I exist*, is necessarily true whenever it is put forward to me or conceived in my mind.”⁹ From this point he examines “what is this ‘I’ that now necessarily exists.”¹⁰

Descartes surmises that his body is not necessarily a part of himself. The body can be an illusion of the mind and product of the imagination, but he claims “thought...alone is inseparable from me.”¹¹ And so, he determines himself to be essentially and necessarily as thinking thing. Descartes explains: “At present I am not admitting anything except what is necessarily true. I am, then, in the strict sense only a think that thinks; that is, I am a mind, or intelligence, or intellect, or reason”¹²

He considers again, “But what am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions.”¹³ All such things are functions of the mind he now considers to be the most irrefutable aspect of his being.

⁸ Descartes, Renee. Selected Philosophical Writings. Trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch. (New York: Cambridge, 1988) 90.

⁹ Ibid. 80.

¹⁰ Ibid. 81.

¹¹ Ibid. 82.

¹² Ibid. 82.

¹³ Ibid. 83.

This is as Descartes saw himself, essentially an immaterial mind that performs a number of functions. The existence of his inner mental life he could not deny. Whenever an activity of his mind is present to his consciousness, he is unquestionably aware of his own existence. He exclaims: "I think, therefore I am." For, as mentioned before, every time he thinks that he exists, it cannot be the case that he simultaneously does not exist. He is therefore unquestionably in part a mind which is distinct from the material body. Humanity is resultantly depicted as immaterial mind combined with material body.

CHAPTER 4 THE PROBLEM WITH COMMON DUALISM

Many endorse this view, that we are an immaterial mind or soul housed within a material body. This mind or soul is seen as the agent responsible for directing the activity of the body to which it is joined. We are seen as intellectual beings, unlike other living things, who have the power, in virtue of our capacities, to direct ourselves in a self-willed, free, and even moral manner. Many harbor an image of humanity as a distinct creature, unique in virtue of our advanced mental capacities that appear to elevate us above all other living things. Our seemingly distinct capacities of intellect and reason, emotion and moral capacity, will and self-direction, and so on, forward our claim to have something special and separate from other animate beings and the rest of the material world. We may even go further to surmise that we are not only distinct *within* the material world but even in some sense distinct *from* it as well. We are aware that the material world abides by fixed laws and all phenomena in nature are therefore determined and predictable. Yet we consider ourselves self-determined, able to direct our own actions. Owen Flanagan remarks in his chapter on free will:

One reason, however, that the belief in a nonphysical mind took hold is because thinking of the mind as non-physical fits well with thinking of humans as free agents. Physical things obey natural laws, nonphysical things don't. Or so one might plausibly think.¹⁴

We do not see ourselves as powerless to the workings of a material and mechanical body. Instead, we experience ourselves as this Cartesian “thinking thing” which has thoughts, judgments, makes choices and uses these and other mental capacities

¹⁴ Flanagan 102.

to direct the material body. We consider this mental aspect of our being to be distinct from the body in substance as an immaterial mind. Some consider this the workings of an immaterial soul that is joined to the material body and directs its activity. Further, many consider this mind or soul to be the most intimate expression of our independent person because it exercises autonomous agency. Self will is seen as self expression. The agent that wills is the self. The thing involved in the will to act is the mind, therefore the mind and self are rendered synonymous. We consequently think of ourselves as essentially immaterial beings joined to a material body. We think this seemingly immateriality is the essence of our person and our body is merely a vessel for the workings of an immaterial mind or soul.

We therefore picture ourselves as a composite immaterial mind/soul and material body, with the immaterial soul as our individual essence and the expression of our independent person. This is taken further when considering the afterlife, for the immaterial aspect of this prevalent dualism is believed to be our immortal personality. It continues on, impervious to the finitude and decay of a material body, perpetuating our individual person beyond biological death.

The Problem of Free Will

This type of dualism has its critics which raise pertinent questions that may ultimately be irresolvable. With the mind or soul as the agent of free will we run into a point of contention: this notion of unrestrained agency. Some would argue that free will does not in fact exist. Such a claim eventuates into the question of whether there is a soul if there is no free will.

Voluntary actions as the product of free will is a notion incompatible with science. If the scientific image is true, then there is no free will, all is the product of biological determinism and this feeling of self agency is merely an illusory phenomenon. If all phenomena within the human system can be explained in terms of material processes, then all activity is traceable, calculable, predictable, and determined by the preordained workings of a mechanical world. My choice to write these very words is then beyond my control. Though it feels as if the words I write are intentional and purposeful in way that I myself have determined, they cannot be if free will is a farce and all happenings occur as a result of the intricate programming and predetermined activity of a highly complex physical system.

Owen Flanagan suggests that the issue of free will arises because we are confusing voluntary action with completely unrestrained activity. He suspects that most people, if pressed, would concede that there really can be no such action that is completely and utterly free of limits. When we make what we believe to be a rational choice we would admit that we are limited by a number of factors, the number of options available in itself is a limiting factor.¹⁵ We don't explain our voluntary actions as entirely free from constraints. Instead,

When we explain our voluntary actions, we never speak as if these acts were totally unconstrained. We think of free actions as unforced, as not involving compulsion to do what we don't want to do, but this is very different from thinking that free actions occur with no constraints of totally outside the causal nexus.¹⁶

We are not actually completely unconstrained. Our activity is a part of a larger causal series in which a number of factors contribute to our ultimate choice. These factors

¹⁵ See Flanagan chapter on free will 99-159.

¹⁶ Flanagan 103.

contribute to and constrain this apparent “free choice”. When I decide what to eat, I am limited by whether I choose to eat at home or go out. If I go out, I am limited by the restaurants in the locale I choose. I am then further limited by the choices on the menu of the restaurant I have selected, and so on.

An additional problem which Flanagan draws attention to is: if we hold to the notion of free will, we engage in the blasphemy of likening ourselves to God. If we are the only thing which causes ourselves to act we are the first cause of all our activity. God is traditionally conceived of as the first cause of all creation (Aristotle and Aquinas). God, himself not being caused by anything else, is the beginning and the source of all that occurs and exists in the universe. If our actions are not caused by anything but ourselves, we liken ourselves to this God-like “first cause”. Not many would be willing to contend that they equivalent to God in this respect.¹⁷

Although free will, as completely unconstrained activity, may not exist, this does not mean that the mind itself does not exist or that the soul is exposed as an ancient fiction. This is simply occasion to see that our beliefs often go unquestioned and once interrogated show their flaws.

The Problem of Interaction

Another issue with substance dualism is the problem of interaction. This entails the question: how can something immaterial (as in the mind or soul) interact with something material (as in the body). We believe that we make the mental choice to reach for our cup of coffee. We believe that we direct all physical activity as a result of a host of mental events including thoughts, judgments, desires, and so on. Yet, how is it that our mind can have a thought, desire, or will to act which then translates into an actual activity

¹⁷ See Flanagan chapter on Free Will, 99-159.

of the body. How can immaterial translate to material, how can an immaterial mind or soul have causal efficacy on a material body?

If we allege this substance dualism, that humanity is comprised of two distinct substances, we have to answer the major query: how can something material interact with something immaterial and vice versa. We believe that we consciously will certain actions and our body follows our command. How is it that immaterial, mental processes can thus affect material, bodily processes? The natural sciences absolve the problem by explaining away mental phenomenon altogether. They just speak of any physical activity in terms of the observable physical processes in our neurophysiology. A sufficient explanation in the context of scientific materialism is attained. The notion of choice and intentional purpose is not taken into consideration as a part of the causal series because science is not concerned with *why* we do what we do, but instead *how* it happens. We experience ourselves as the one how initiates the activity for a purpose, we are aware of why, for instance, our arm has moved. Since science is not concerned with this *why*, it merely accounts for how the movement happens in terms of electro-chemical processes.

When we consider the mental will to act, we still have troubles (if we maintain substance dualism) accounting for how mental events interact with the physical brain and thus result in a physical phenomenon. We still continue to experience the causal efficacy of the mind upon the body. We encounter observable evidence of the mind's power to influence physical events. Science in large part wants to consider this merely an illusion because it cannot otherwise account for a nonphysical event creating a phenomenon in the physical body. This runs contrary to the traditional model of causation.

Despite these problems, many of us continue to believe that we are in part an immaterial mind, or in a more metaphysically poetic way many consider themselves an incorporeal soul. Whichever one chooses, the mind or soul is seen as responsible for the mental activities, the workings of the intellect, and the source of agency. Humanity is thus largely conceived of in terms of the mind. The body is seen as the animalistic aspect of our being, and a part of the material world, abiding by natural law. The mind on the other hand is conceived of as impervious to these laws because it is distinct from the material world as it is not of same substance. It is therefore conceived of as able to act freely and unconstrained by the determinism of natural law. It is a part of the material world in virtue of its embodiment only. Yet, the mind though embodied is not powerless to the calculable order and functioning of the material world. The mind alone has agency and freedom from these regulations and is thus seen as the truest expression of the individual person.

The human soul is often described in terms of things thought to be most distinctly human, often times faculties of mind. We therefore see that humanity has for an indeterminate time conceived of itself in large part in virtue of its mental capacities, grouping these together within the concept of the soul. The mind or soul is an expression of not only what is distinct to humanity, but becomes an expression of each individual person for it exercises its own agency to act in the world in ways unique to its own self-generated discretion and judgment.

We think we are most essentially our soul, or rather our inner mental life is most intimate a reflection of ourselves. We conceive of an immaterial soul as the entity which is a conglomerate of all that seems immaterial within ourselves-thoughts, desires, will,

consciousness, feelings, etc. Science though wants to contend that all mental phenomena is the product of our material brain, reducible to electrochemical processes and therefore does not truly exist as an ontologically separate and real thing. If the thoughts, desires, will, consciousness, and feelings that were once thought of as the workings of the soul are all reduced to brain processes, then we chance not only explaining away the existence of the mind, but subsequently losing the concept of the soul. Science wants to depict a world of matter which is explainable in terms of laws and therefore predictable and meaningless. If mind has no autonomous agency and everything it seems to do is done as a result of the material brain, what appears the source of our self-expression is an illusion. It is nothing more than the result of the preprogramming and predictability of the material world.

CHAPTER 5

THE SCIENTIFIC VIEW: MATERIALISM

Though the view common to the general public is that of a world of duality, Science purports a world of mere matter in which humanity, as part of the material world, is likewise composed. The popular view in the sciences is to assume a one-to-one correlation between mind and brain, thus completely opposing the Cartesian worldview and equating the Cartesian mind and its mental states to the correlating brain activity. This is coined the Identity Theory in which the mental states are themselves reduced to brain states. We're left with only matter.

Keith Ward, in his work *Religion and Human Nature*, expresses how science and Christian theology, specifically, have both interpreted the same thing differently. He explains:

What looks from outside to be a sequence of electro-chemical processes in the brain is experienced by that brain as a sequence of experiences, decisions, and intentions, organized and directed by a continuing subject of consciousness. The subject is, of course, the brain, but the brain as a subjectively experiencing and partly self-directing entity. That subject is what has been traditionally referred to as the soul in Christian theology.¹⁸

One says it is the product of the brain, and the other says that it is an expression of the soul.

This seems to be the entry by which the hard sciences feel they can confidently say anything about what we experience subjectively in our mind or consciousness. Scientists are attempting to study the subjective consciousness which is otherwise the personally exclusive experience of mental states. The problem with this, as acknowledged by Owen Flanagan, Professor of Philosophy and Neurobiology at Duke

¹⁸Ward, Keith. *Religion and Human Nature*. (Oxford: Oxford, 1998) 144.

University, is that “[f]irst-person phenomenal consciousness cannot, even in principle, be captured in the sort of third-person objective description that normal science relishes.”¹⁹

Since they can have no direct access to my experience of, for instance, the color blue, scientists instead observe the brain activity involved in my perception. Since the neural firings are the accessible aspect of my experience, this is how scientists explain it: solely by means of mechanical processes. Science then purports that our mental states—which are otherwise a subjective experience exclusive to ourselves—are now observable to an outsider as processes in the brain. Scientists subsequently tout a new found ability to view mind objectively by viewing it as brain.

Yet, even if all of *my* experiences can be localized to certain parts of the brain and explained in terms of neural processes, thus completely disregarding mind, we still have an incomplete picture of experience. We leave out the part where *I* am aware of and experience that neural activity as the color blue. This is complicated further because it involves a two part awareness in which I am aware of *blue*, but also aware that *I* am involved as the conscious observer of blue. There are then two objects, one of which is myself, involved in my perception. Thus the scientific study of perception is incomplete in that it only observes one object and one which I am not even myself directly observing: the neural activity that coincides with my perception.

In spite of the scientist’s ability to encounter the neural circuitry involved in my perception, without me, there is no one to say that the neural activity in my brain is recognizable as any color for that matter. It remains that if not for me and my capacity of awareness, there would be no experience of blue just objectively observable brain activity. We could hardly call this blue. *I* have to identify it as blue. The scientist merely

¹⁹ Flanagan 88.

observes the neural activity that corresponds. If not for me, the isolated brain activity could not itself be identified as anything other than mappable firings across brain topography. I am a necessary element of the process, but I am being disregarded because materialism cannot otherwise account for me, my mind, or my conscious awareness of blue. But science is only concerned with determining *how* and makes no effort to consider the accompanying *why*, for teleological considerations are outside the scope of science.

Gerald M. Edelman, in the preface of his work *A Universe of Consciousness*, begins by acknowledging the predicament we find ourselves in as we approach the project of studying human nature. He aptly sets up the problem at hand as follows:

Studying consciousness presents us with a curious dilemma: Introspection alone is not scientifically satisfactory, and though people's reports about their own consciousness are useful, they cannot reveal the workings of the brain underlying them. Yet, studies of the brain proper cannot, in themselves, convey what it is like to be conscious. These constraints suggest that one must take special approaches to bring consciousness into the house of science.²⁰

The current model by which the hard sciences attend to the study of mental phenomena including consciousness cannot adequately account for the mind. Instead of studying it as something real and influential, science calls it an illusion which emerged from our complex neurophysiology. Consequently, those things we associate with the mind are then called into question. Free will, selves, souls, and so on, all of which the dualistic mentality considers very real and distinct aspects of our humanity, are viewed by science as a result of the intricate functioning of our complex matter. They are the result and therefore nothing separate from the material body which produces them. They

²⁰ Edelman, Gerald M. *A Universe of Consciousness, How Matter Becomes Imagination*. (New York: Basic Books, 2000) xi.

are reducible to their material constituents and are nothing more than the mechanical processes that produce them.

The Emergence of Mind

What was once called ‘the soul’ science now claims to be able to reduce to mental states localizable within the brain. The soul is often times associated with mind, or the functions of mind which are distinct to humanity. The soul is mythically considered to be implanted within humanity upon its primordial conception. The soul acts within the world through the body of its own volition which is guided by its reason or intellect. The mind though, which seems to exercise this capacity for reason to direct the activity of persons, is of late considered an emergent property. It is considered the result of our evolutionary biology. As a product of our matter it is therefore subject to the determinism of natural law and not actually an agent of free will .

Keith Ward, a philosopher, theologian and ordained priest in the Church of England who is highly interested in the intersection of religion and science, describes in his book *Religion and Human Nature* the process by which mind is said to emerge. He explains how mind is seen to develop out of our physiology rather than being added to the picture in one stroke of a Creator. He explains that in response to our environment our matter became more complex over time, out emerged a capacity to postpone immediate response to external stimuli. This in turn allowed us to evaluate potential reactions from which we develop goals and execute action appropriately in response to and with the intention of alteration of external circumstances. Further, we are then equipped to use abstract thought in determining proper behavior which lends itself to our

moral capacity. In our mental abstractions we aim to discern right from wrong as a measure for action.

Our advanced capacities are thus explained in terms of the evolution of our neural physiology. Ward explains: “In an evolutionary salutation made possible by the rapid growth of the neo-cortex, humans develop linguistic ability, the capacity for abstract and reflective thought, and a sense of moral responsibility for their actions. At this stage, consciousness becomes able to distance itself from its immediately embodied situation.”²¹ Humans can thus restrain bodily, visceral response to external stimuli, retreating from bodily existence to the mental world in which the organism can evaluate potential responses other than those to which the body is immediately inclined. Ward relates that distinct to *Homo sapiens* is this ability to abstain from instinctive reactions in the interest of evaluating alternative modes of action. This he then qualifies as the aspect of humanity we traditionally consider the soul, it is the “inner aspect of the human brain” that which is aware of information input and evaluates the incoming data, examining modes of reaction and thus decides and directs a bodily response.²² But, as Ward reminds, the soul of man is not something “inserted into physically receptive brains” but is instead an emergent property that has arisen out from an evolutionary continuum.²³

The issue to confront is that once mind is considered an emergent property, it is thought of solely in terms of the complexity by which it emerges. The mind is reduced to the neurophysiology from which it arises. Mind—thought of in terms of brain processes—is considered equivalent to and not distinct from brain. Mind is therefore not seen as functioning on its own, but only as a result of brain activity. Mind is

²¹ Ward 14.

²² Ibid. 142.

²³ Ibid. 142.

not ontologically separate and able to produce phenomenon in the brain in the same way that brain produces the phenomenon which we call the mind. We are thus limited by a linear model of causation which suggests that all mental phenomena are traced back to activity in the brain—this linearity does not allow for the reverse. Mind is thus inert and powerless. Any indication of its action and agency is an illusion, because the mind is inevitably reduced to brain and all phenomena occur as a result of neural processes and nothing more. This, though, is only theory. If the mind is merely the result of the neural activity and is numerically identical to the brain we would not have proof of mind's causal efficacy. However, evidence demonstrates the efficacy of mind, thus confirming its separate and influential identity.

CHAPTER 6 WHAT'S WRONG WITH MATERIALISM?

Evidence of Mind

Although the materialism of science wants to demonstrate that we are merely matter, powerless to the determinism of a mechanical world, unable to act freely of our own volition, and consequently animals or, in an even more debased portrayal, outright automatons or computerlike entities. Yet, Mario Beauregard and Denyse O'Leary, the authors of *The Spiritual Brain*, exclaim: "The time has come for science to confront the serious implications of the fact that directed, willed mental activity can clearly and systematically alter brain function."²⁴

As demonstrated before, we cannot think of a person in terms of merely a brain and consequently solitarily matter. In studying a person's conscious mental experiences in terms of brain processes, we are only able observe one aspect of the whole human experience. The entirety of the experience involves both brain states and mental states as inadmissible elements. Blue is not blue without my conscious awareness of (and subsequent judgments made regarding) the stimulus my brain has received from the external world. As we have seen, even the materialist philosophers of the ancient world (Stoics and Epicureans) recognized an aspect of the human person involved in sensation which receives and processes the incoming information in a way that demonstrates human agency. They considered this agency the power of the soul. Even though they believed that the soul was still material, they viewed it as a distinct and influential aspect of the human system. The materialist perspective of today will not concede that the mind

²⁴Beauregard, Mario and Denyse O'Leary. *The Spiritual Brain*. (New York: Harper, 2007) 126.

(never would they call it the soul) even has such agency, because, as a product of the brain, it is not self-determined but under the governess of laws by which matter abides.

In their book *The Spiritual Brain*, Mario Beauregard (neuroscientist) and Denyse O’Leary (journalist) demonstrate that since science has trouble explaining such things as mind and consciousness, it at times abstains from even using the terms altogether. Science takes on the project to explain everything explainable, and if the mind is not made intelligible by scientific methodology, its objective existence is dubitable. As a result, science neglects to acknowledge the existence of mind and consciousness as separate entities, hopeful that these will just be forgotten. Science instead shifts the focus to talk of brain and the observable processes of our neurophysiology. Quoting Karl Popper at length, Beauregard and O’Leary show how scientists are well aware of what they are doing, and admit it is done deliberately.

We shall be talking less and less about experiences, perceptions, thoughts, beliefs, purposes and aims; and more and more about brain processes, about dispositions to behave, and about overt behavior. In this way mentalist language will go out of fashion and be used only in historical reports, or metaphorically, or ironically. When this stage has been reached, mentalism will be stone-dead, and the problem of mind in relation to the body will be solved itself.²⁵

This is quite naively optimistic and far too simple. By neglecting to talk of the mind and those happenings which appear to be a product of it, it does not go out of existence. We continue to encounter it even if we are silent about it.

If it is merely not politically correct to refer to mind, it doesn’t subsequently eliminate it. We will find new PC ways of referring to mind which are not so crass and inappropriate in the opinion of scientific prudes. The products of mind will remain, these “experiences, perceptions, thoughts, beliefs, purposes, and aims”, and so, even if the

²⁵ Ibid. 119.

terminology goes out of fashion, we'll still need to explain a phenomenon we encounter as a very real aspect of our person.

The soul, as a term, remains a part of our vocabulary as a word to refer to ourselves, our inner mental and subjective lives, our personhood, etc. Maybe this term is becoming ineffective, and quite possibly, mind or consciousness may likewise become inadequate, but it remains that we encounter ourselves in a way that is distinct from neural processes. We will still seek to name, refer to, and explain this aspect we encounter subjectively, even if science doesn't want to.

And so, it remains to be demonstrated that mind is a very real and inadmissible aspect of our being. We shall endeavor to do so by showing how mind is present and effective. If it can have causal effect on the matter of our brain and body, then we cannot deny its existence and necessity.

As purported by Identity Theory the mental states and their correlating cerebral activity are in fact one and the same. Even though we describe the two differently and from two disparate points-of-view (1st person subjective vs. 3rd person objective), mind/brain identity theory argues that we are in fact describing the same thing which is one and indivisible. A number of analogies are used to demonstrate how an entity which is ontologically one can be described by means of different vocabulary and commentary, and yet we are well aware that the thing to which the different descriptions refer is one and the same. John Hick explores this idea using the example of lightning which we can talk of in terms of our sensory experience, but we can also describe it in terms of the natural processes necessary for its occurrence.²⁶ Both describe the same thing, lightning.

²⁶Hick, John. The New Frontier of Religion and Science. (New York: Palgrave, 2006) 86.

Proponents of Identity Theory would suggest that mind and brain talk are likewise two sides of the same coin: the brain. And so, when we talk of sense perception in terms of neural activity and the subjective experience present to our mind, we talk of the same thing. There is no distinction between brain activity and mental phenomena. Therefore, there is no mind and brain, but just brain. This must be so, because brain is what we have direct access. What is observable and tangible to the third person objective view becomes the reality to which all descriptions point.

Hick, though, warns that using such an example is inadequate because “When we take examples of two things which are both uncontroversially physical, like...a flash of lightning and a cloud-generated electrical discharge, we are begging the question—which is not whether two physical phenomena can be identical, but whether physical and mental phenomena can be identical.”²⁷ Although disparate descriptions refer to the same physical phenomenon—lightning—we don’t have the same orbital point toward which descriptions of brain and mental phenomena both point. This is because when we describe lightning as both a flash of light and an electrical discharge, we are still describing the same physical thing.

When we suggest that first-person description of mental phenomena essentially refers to the same brain activity as a description of neural processes, we are presupposing that both are generated from the same brain activity and can accordingly be reduced to one thing: the brain. In so doing, we neglect to consider mental states which seem to us to effect brain activity and subsequently the whole organism in a top-down causal flow. In such instances we cannot say that mind is generated solely by the brain and therefore indistinct from our neurophysiology. Though the brain produces mental phenomena, the

²⁷ Ibid. 86.

mind can similarly create phenomena in the brain of its own volition. The causal efficacy of mind is a crucial premise to the argument for its actual, ontological existence. We must therefore demonstrate that the bottom-up model of causation which renders all phenomena the product of determinism at the atomic level is an inaccurate view of reality. Mind is real, and therefore capable of having causal influence. It is not just a passive receptor of information or an epiphenomenal consequence of brain activity, as an intangible shadow.

Therefore, contrary to the claim that both descriptions (one of mental and the other of physical processes) refer to the same single thing, I surmise that we are in fact speaking of two separate entities, yet highly interdependent and mutually influential. How do we know that these are two and not the same? This is observable through evidence of the mind's efficacy on the brain. We will see that mind can have just as much affect on the brain as the reverse.

In addition to Identity theory as just discussed, epiphenomenalism in like manner challenges the existence of mind. Epiphenomenalism contends that mind is not an actual, ontologically existing entity, but an aftereffect of brain activity. As a shadow is not the person, so the mind is merely a reflection of the real, physical entity which is the brain.

This conjecture is made as a result of, among other observations, the discovery that conscious awareness can be shown to be delayed in response to brain activity. In the 1970s Benjamin Libet a neurophysiologist at the University of California, San Francisco preformed experimentation dealing with consciousness. The results have had resounding affect on the way we view consciousness, the role of mind, autonomous agency, free will, etc. One aspect of his experimentation involved studying subjects who were told to

perform the simple act of flicking one's wrist. The brain activity during the process was monitored and the individual was to identify the point at which they made the conscious choice to perform the action. What Libet found was that preconscious brain activity began to occur prior to (300-400 milliseconds before) the moment of conscious decision to move one's wrist.

In their article "Dynamical agents: Consciousness, causation, and two specters of epiphenomenalism" Liam Dempsey and Italy Shani recognize that it is often the temptation to interpret the results of Libet's experiment to suggest that the delay of consciousness further fortifies epiphenomenalism. They quote Libet's remark that "[t]he initiation of the freely voluntary act appears to begin in the brain unconsciously, well before the person consciously knows he wants to act!", and Dempsey and Shani then comment that "It would appear, then, that the preconscious neurophysiological mechanisms which mediate the fast and fluid behavior of everyday life operate well before the arrival of consciousness. Indeed, conscious volitions seemingly proceed as a *consequence* of this activity."²⁸ Yet, this is not as Dempsey and Shani themselves read the results, nor was it how Libet understood his own findings.

Though Libet's experiment revealed that consciousness arrived to the scene late in the process, its tardiness does not render it entirely ineffective, redundant, and thus outside the causal loop as an epiphenomenon. Dempsey and Shani recognize that:

...conscious volition comes too late in the action sequence to have changed the action. The neurophysiological mechanisms that cause an action are already reliably measureable at some 350-400 milliseconds before the decision to act is experienced. Libet interprets this finding as indicating that the choice is made about 0.4 seconds before the subject consciously wills it. In this case, the conscious volition seemingly follows as a consequence of the actual cause, the

²⁸Dempsey, Liam and Italy Shani. "Dynamical agents: Consciousness, causation, and two specters of epiphenomenalism." PCS (2009) 8: 231-232.

antecedent preconscious processing. Even with the adoption of a thoroughgoing physicalism, then, the specter of epiphenomenalism returns.²⁹

Yet, the tendency to read such results as evidence that agency is an illusion is not an indisputable conclusion. John Hick also refers to the same experiment and castigates this type of thinking by reminding that not all mental activity is present to our consciousness. Thought processes occur of which we are not directly aware. We talk of such mental activity as occurring *below* the level of consciousness within the *unconscious*. We use the preposition *below* to allude to a division of activity, suggesting that some mental activity occurs which is lower and precursory to conscious thought.

He expresses that “unconscious processes must also have their neural correlates” and “many of our daily actions, not involving deliberate decision, are preformed automatically, on autopilot—such as walking, or the spontaneous hand movements which many people make while talking. These do not involve conscious deliberation. But there is nevertheless a brief period of unconscious preplanning.”³⁰ Hick suggests that Libet’s 500 milliseconds may have been just that “a brief period of unconscious preplanning”.

Libet himself did not consider his findings to exclude consciousness entirely from the system as causally impotent. Libet noted that consciousness retains its efficacy in its power to veto action. Though the flick of the subject’s wrist appeared to be traceable to preconscious brain activity, the point of consciousness is the point at which the agent can willfully proceed with the activity initiated by preconscious brain activity or veto the activity altogether. This is the causal influence and agency of consciousness. It is not merely redundant, making a choice that has already been made by the brain, and therefore unnecessary, but remains effectual as the executive power.

²⁹ Ibid. 239.

³⁰ Hick 93.

Citing such examples as the use of neurophysiological therapy with stroke patients, Dempsey and Shani illustrate the effect of mind and the causal influence of consciousness. They explain that this therapy is successful because the patients consciously work to rehabilitate the impaired portion of their body and in so doing their brain recruits new neural networks to do the work those damaged by the stroke are no longer able to. This is a case of mind affecting brain. This is one example of autonomous agency in which the whole organism, the human person, can function at the macro level to influence happenings at the micro level. This demonstrates a non-reductive account of causation, for it is not the neurons which rewire themselves autonomously, but require a willful and concerted, conscious effort on the part of the patient to affect change. The impairment may otherwise go unattended.

Another more mundane example is used with an individual's coffee consumption.

Dempsey and Shani explain that:

...when one chooses to drink a caffeinated beverage in order to fulfill the extropic desire for increased cognitive arousal, one first recognizes an internal deficit—a deficiency with respect to the new holistic goal of increased cognitive arousal—and then utilizes the environmental affordance or, say, coffee to affect the background conditions under which certain micro-processes, processes having to do with the regulation of cortical arousal, operate. By choosing to drink coffee one is intentionally pursuing a particular holistic end, cognitive arousal...

Dempsey and Shani explain that micro processes have a lower level sufficient cause but require the “background conditions” offered by the macro level in order for activation.

The individual had to recognize their deficiency and determine the course of action necessary to prompt lower level processes necessary to rectify the situation.

Dempsey and Shani postulate that since we have evidence of the causal efficacy of consciousness we must rethink our model of causation. Causality cannot be thought in

traditional linear terms, that contiguous events can be traced back to their root cause, at the most basic and elemental level of reality. This is not always an accurate explanation of reality and we thus perform an errant reductionism in cases where bottom-up causation is unable to account for phenomena. Dempsey and Shani would rather propose a model of causation which is cyclical in which causal influence can happen at both the macro and micro levels. The root cause becomes unidentifiable within this model, we cannot say that all is subject to biological determinism or the mind has exclusive power. This model therefore portrays an integrative system which sustains itself through a balance of powers.

This further forwards the point to be emphasized, that mind and brain are equally influential elements of an integrated whole. Both are necessary elements of a functioning system in order for it to have existence and persistence. Within the system, the organized whole which assembles as a human person, there is both bottom-up and top-down causation. Yet, neither can be determined to be the initial, first cause or commanding authority on the functioning of the organism.

OCD and the Use of Mind to Rewire the Brain

Many are familiar with the phrase “mind over matter”. Such an expression reveals our belief that mind is separate and influential, often able to overcome the body. Belief in the power of the mind is at times brought to bear for the purpose of healing. In these cases, the potency of the mind is acknowledged and harnessed for medical purposes. Jeffrey Swartz, a nonmaterialist neuropsychiatrist, studied Obsessive Compulsive Disorder (OCD) beginning from the conjecture that the condition was prompted by an

“intact mind troubled by a malfunctioning brain”.³¹ Those that suffer from OCD are tormented by irrational worries which are allayed by compulsive behavior. An individual may worry that their mother will die a horrible death and feel the compulsion to turn a light on and off seven times when entering a room. The individual cannot curb the worry without performing the act.

Swartz located the areas of the brain involved in panic and compulsion and determined that in those who suffer from OCD, these areas are not functioning properly.

He found that:

...the error detector centered in the orbital frontal cortex and anterior cingulated can be over-activated and thus locked into a pattern of repetitive firing. This triggers an overpowering feeling that something is wrong, accompanied by compulsive attempts to somehow make it right.³²

By continually reinforcing the worry and compulsion through repetitive behavior, the individual strengthens the neural networks involved and furthers the condition.

Beauregard and O’Leary explain that:

The key problem with OCD is that the more often the patient actually engages in a compulsive behavior, the more neurons are drawn into it, and the stronger the signals for the behavior become. Thus, although the signals appear to promise, “Do it one more time and then you will have some peace,” that promise is false by its very nature. What was once a neural footpath slowly grows to a twelve-lane highway whose deafening traffic takes over the neural neighborhood. The challenge is to return it to the status of a footpath in the brain again. Neuroplasticity (the ability of neurons to shift their connection and responsibilities) makes that possible.³³

Once the portions of the brain were identified and diagnosed as the subject of faulty wiring, Swartz devised a plan to change the brain so that his patients no longer felt powerless to the obsessions and compulsions which they often identified as distinct from

³¹ Beauregard and O’Leary 127.

³² Ibid. 128.

³³ Ibid. 128-129.

themselves. Beauguard and O’Leary remark that “OCD sufferers know that their beliefs are mistaken and their activities are useless. They do not even experience them as a part of themselves.”³⁴ Therefore, Swartz used a form of cognitive brain therapy in which the patient first recognized that something else is directing them (their OCD) and they have the power to take control. They are subsequently trained to substitute a different activity which is accompanied by a host of other associations and not a single anxiety. The activity previously performed was associated exclusively with an anxiety. Thus each time it was performed it reinforced the fear. The new activity which the individual performed in its place followed the fear, but could easily be connected to a number of other associations which the individual was accustomed to. After viewing PET scans which showed modified brain activity, Swartz expresses:

This was the first study ever to show that cognitive-behavior therapy—or, indeed, any psychiatric treatment that did not rely on drugs—has the power to change faulty brain chemistry in a well-identified brain circuit... We had demonstrated such changes in patients who had, not to put too fine a point on it, changed the way they thought about their thoughts.³⁵

This study demonstrated that OCD patients who were able to use their mind to rewire their brain in response to their obsessions so that they could overcome their compulsive behavior.

The Placebo Affect and the Power of the Mind

Beauguard and O’Leary explain that the placebo effect is a phenomenon which demonstrates that mental states, specifically what they pinpoint as the beliefs and expectations of patients, have causal efficacy within the human system.³⁶ They reference a number of studies and instances in which control groups are given a placebo and report

³⁴ Ibid. 127.

³⁵ Ibid. 130.

³⁶ Ibid. 141.

recovery which is verifiable by physical examination. Most striking was their mention of a study which administered a saline solution to patients with Parkinson's disease, telling them the treatment was to help their tremors. Beauregard and O'Leary remark that "Neural activity associated with tremors declined as the symptoms decreased, so the patients could no simply have been confabulating that they felt better."³⁷ Additionally, they explain that the reverse is also possible, that if the patient does not display a sense of hope, the treatment can be rendered ineffective even if the individual is actually administered a drug or undergoes a medical procedure. This such instance, referred to as the Nocebo effect, is yet again indication of the influence of mental states, and thus the overall efficacy of mind in health and wellness.

The Phantom Limb

Further evidence of the mind as a separate and equally influential entity is displayed by the phenomenon of the phantom limb. Long after the limb has been amputated, patients report sensation from the lost limb. What has happened is the neural circuits once utilized to report sensation in the lost limb are rewired to report sensation from somewhere else. Yet, (and this is the point of emphasis) the mind remembers that this neural network reported on experience of the absent limb. I surmise that this indicates that the mind retains its own identity as a separate entity. The mind remembers that a particular circuit pertained to the presently lost limb. It discerns from the brain activity what it is experiencing in reference to how it has experienced previously. If the brain had total effect on the mind, the mind had no reciprocal efficacy and had no memory of its own, then the mind would not make this mistake.

³⁷ Ibid. 142.

CHAPTER 7 THE PROBLEM

And so, we have developing a great disparity between popular belief and scientific thought. Owen Flanagan describes the discrepancy between the two as follows:

[W]e live in a world in which two distinct self-images, vying for allegiance, disagree about human nature and about the ground of meaning. One image says humans are possessed of a spiritual part—an incorporeal mind or soul—and that one's life and eternal fate turn on the state of this soul. The other image says that there is no such thing as the soul... We are finite social animals.³⁸

One tells it like they see it, or rather as they experience it; that is, that there is a mind and a subject of experience which is witness to mental states in a way that is different than merely observing neural circuitry. This entity reflects the person in a fundamental way, as some pure and immaterial essence, a continual subject of experience. The other wants to explain away anything immaterial, intangible, incalculable, which is not measurable or directly accessible. And so, the mind, the self, and ultimately the concept of soul—failing to meet the standards of scientific inquiry—are dismissed from consideration. Science is confident that it is within our power to understand what is real in the world, and has decided that what cannot be scientifically known is therefore not real

One suggests that our most basic nature and the truest reflection of our self is found in some immaterial and separable entity: the soul. And this is reflected by the workings of an immaterial mind. The other determines that humanity is nothing but the body, is material through and through.

³⁸ Flanagan, ix-x.

The first says that the human being is a composite of soul and body, or in a less antiquated model, humanity is comprised of mind and body. This duality renders the human being divisible into a material body and an immaterial mind. Whatever one believes the immaterial aspect itself contains is likely varied from one to the next, yet it is seen as something substantial and often believed to be subsistent apart from the body. This, in theistic terms, is called the soul which is seen to continue after death as not just a remainder of the person but the actual person. The other says that no such immateriality exists, and we are just bodies. Both devalue or dismiss one for the other. We are either a soul inhabiting a body or just a body. Yet, neither model of reality has shown itself to be wholly adequate for each has its own shortcomings. The trend in the sciences is to attain a naturalistic explanation of all phenomena. What is natural is seen as that which is in conformity with the workings of a material world. If an immaterial mind or soul is ontologically separate from the body in number and substance, it is therefore outside the boundary of explanation. To bring it within the realm of scientific commentary and description, what once was viewed as immaterial must be considered in terms of the material components and processes that contribute to the phenomenological feeling and first-person subjective experience of mental events. As a result of this methodology we abstain from talk of the mind and anything previously thought to be immaterial, speaking instead of electro-chemical and neurophysiological processes. Mind is either not a part of the conversation or called an illusion. Yet as we've seen, theories such as epiphenomenalism which render the mind a mere after effect are not fool proof. There are very strong cases for the causal efficacy and agency of the mind; and so it seems inaccurate to render all human activity the product of unconscious and involuntary

biological determinism. The scientific model which depicts humanity as merely matter appears to have its own unresolved foibles. Likewise, when examining the dualistic belief common to many, we see many beliefs are undefined, unjustified, or problematic.

Can these two perspectives be reconciled? The trend in science toward materialism and a naturalistic explanation for all phenomenon in the sensible world wants to not only demythologize our sense of self by discounting ideas of the soul, but wants to take away our sense of self altogether. It does so by discrediting the notion that we are active agents in our own life developing our own history and identity through choice and experience. We are instead utterly powerless to the determinism of a mechanical world. Additionally, the monism of science purports that matter is all that exists and therefore anything immaterial, as in mind or soul, cannot be accounted for in a nonmaterial way; ergo, it must not exist.

In light of advancements in science, we appear to have an unhealthy viscosity to the theory of the soul. To survive at all as a living term, with existence and meaning, it appears we must reevaluate conventional notions of human distinctiveness and personal identity. More and more science is trying to disclose the myth of the soul through a narrow reductionism. This reductionism claims that individuality and freedom are a delusion instead of innate and inalienable aspects of our nature. Every behavior is subject to neurological determinism, free will is a farce, and our self identity is a feigned optimism. Materialism denies a spiritual aspect of humanity and ultimately the existence of God. But do we need the soul to save God? Is it a necessary prerequisite in logical argumentation for the existence of God? Must we establish the existence of an immaterial, incorporeal aspect of humanity first in order to prove the existence of an

ultimate otherworldly existence of which we are some sort of reflection and have hope for some day uniting with? All such questions may be beyond the scope of this inquiry, yet such questions have produced the answers from which theories of the human soul have developed.

Where has the notion of the soul come from, and how has it managed to permeate the thought models and worldviews of so many? It appears that the theory of the soul has had a long history in which it has sought to answer some of the perennial questions that occupy humanity—such as the role, fate, and nature of human existence. The theory of the soul appears as an amalgam of ideas in which theology, philosophy, and science have been recurrently vexed even until now as to what it is and whether it truly exists. The current day mantra that “the soul is dead” seems to spout from issues that arose from the Cartesian dualism that many of us today unknowingly ascribe to. After centuries of configuring and reforming our picture of the soul—and ultimately our sense of self—we seem to have settled on an image of humanity largely influenced by Descartes’ mind/body division which has come up against some vain opposition but also serious challenge.

Descartes anthropology partitioned humanity into parts, each a distinct substance. Cartesian dualism split humanity in an unhealthy and unnatural way which has had resounding consequences. His substance dualism is fraught by the problem of interactionism—how an immaterial mind can interact with and have causal influence upon a material body. And so, Cartesian duality left mind and body remote and incommensurable. It also made mind, soul, or the seemingly immaterial aspect of humanity, the interest of religion alone. Science was concerned with the empirical world

of Newtonian Physics, which was tangible and testable, and only the material body qualified for investigation. In the wake of Descartes' *Meditations* humanity is therefore itself torn. Science emphasizes the body and common dualists often emphasize what they call the soul as the most important aspect of our being. Both endeavor to comment on the nature of human existence, yet each approach from their own side.

It has now become customary for many to perceive themselves as divided. Yet this model has had baneful ramifications. We thus need to reevaluate our sense of self and the nature of our humanity. This old dualistic model is proving to be out-dated and suffers to be replaced by the monism or en vogue materialism of science which threatens to take away all that is dear us: our individuality, freedom, moral capacity, etc. If we gauge theory as more trustworthy than belief, we may be wooed by the apparent reliability and verifiable support offered by scientific methodology. We might therefore retire our beliefs of old for the materialism of science which claims to have evidence contrary to commonsensical dualism. In so doing, we drop one imperfect position for another.

CHAPTER 8

CONCLUDING REMARKS

Understanding human nature may be an unending process. This seems ironical. How is it that we could still be unsure of ourselves? We've seen that of the two dominant views neither is a wholly adequate representation of humanity for neither is fool proof. We've seen evidence that in the view of scientific materialism mind cannot be explained away as some emergent property, some illusory epiphenomenon that is the product of our evolution and that we are mere matter. This does not make mind any less a mystery because it doesn't sufficiently explain why it should be so that we would even develop such a mind. The materialism of science is not infallible and so it does not reflect an undeniable truth that we all must accept. Common dualism equally has its own issues to contend with. We are left with unresolved issues within both positions (materialism and dualism), and yet there remain proponents on both sides. The prevalent dualistic image, passively accepted and seldom examined, is—like the materialism of science—an inadequate sketch of reality.

The natural sciences have until more recently been quite narrow in their approach to human nature. They've aimed to discredit the existence and efficacy of mind, considering the material world of prime concern because of its measurability. Similarly, the notion of the soul as the lasting expression and therefore most important aspect of our humanity has resulted in a disdain for and resultant neglect of the material world. An imbalance ensues.

In the human effort to advance toward a fuller picture of reality, diverse perspectives are of great benefit. Yet science harbors an inflated self-concept and

confidence that it alone has the power to demystify reality. Science claims to employ the methodology appropriate for accuracy and truth. And yet its proposed materialist theory of humanity is just as fallible as common belief. With regards to belief, it may be helpful to consider why it is so that one believes as they do in an attempt to establish a ground of justification. Yet, in the end neither view—dualism or materialism—can exhaust all justification and quiet all critique to the point that one is undeniably the truth while the other is false. And so, both sides accept their position with a measure of faith. Each accepts the explanation they choose is the best explanation given what they know or experience. Knowledge and experience are constantly changing. Therefore theories and beliefs which rest upon these are not static, they too are modifiable.

Neither materialism nor dualism is utterly irrefutable, neither can be proved without a doubt. Thus, both sides accept their position with a measure of unadmitted faith. Despite the disputability of one's position, it is accepted nonetheless. Both views also have to contend with methodological problems. On the one hand, commonsensical dualism is arrived at based on first-person subjective experience which is not verifiable fact by scientific terms, and so it is rendered a belief rather than certifiable theory. On the other hand, materialism is enfeebled by the fact that it attempts to comment on this first-person subjective phenomenon from the third-person objective stand-point of standard scientific methodology. And so, at this point error seems inescapable. Nevertheless, we accept these errors and move forward with the beliefs and theories we now hold, committed with a measure of faith. We cannot be certain that some immaterial and ontologically separate substance exists as the mind or soul, nor can we be sure without a doubt that all is matter. Evidence to the contrary afflicts both positions. Hence, despite

the fact that these competing views present a seemingly unfair match of belief versus theory, the two have in common their resignation to faith. In the face of uncertainty, each view is still maintained as a suitable explanation worthy of support. In the absence of absolute assurance there is conviction. Though faith at times seems to disgrace our capacities to expand our knowledge and uncover the mysteries of reality, faith appears to be a part of the process. To move forward we must accept some things in faith. Until we know for certain who we are and what our nature entails, we accept these views despite their fallibility and lack of absolute certainty. Neither dualism nor materialism therefore has it right. Maybe another model of human nature more adequately describes who we are. For now, the debate continues between common belief and scientific theory, and neither wins. Both have flaws and thus commit to their position in faith.

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