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The Metaphysics of the Collective Unconscious

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THE METAPHYSICS OF THE COLLECTIVE UNCONSCIOUS

by

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ABSTRACT

This thesis shows how the metaphysical features of the Jungian collective unconscious can be demystified by viewing the collective unconscious through the lens of functionalism. The features of the collective unconscious that will be investigated in this thesis are the possibility of the collective unconscious being present in every person, the archetypes as being the formal feature of some of our modes of perception, psychic energy, and synchronicity. By admitting functionalism, Jung doesn't need to posit synchronicity to explain how it is possible for the archetypes to interact with the body. This is because functionalism can view mental states as being material without needing another connecting principle, i.e., synchronicity, which goes beyond scientific explanation. If mental states are material and the body is a material thing, there is no need for Jung to explain how the archetypes interact with the body through synchronicity. In viewing the collective unconscious as a functional system, synchronicity can be dismissed while still leaving the rest of Jung's psychological theory of the mind in place.

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INTRODUCTION

The *collective unconscious*, *archetypes*, *primordial images*, and *psychic energy* are concepts which have been received with skepticism ever since their first appearance in the works of one of the most controversial figures in psychology: Carl Jung. His unorthodox approach to psychology lead Jung to formulate some of the most revolutionary concepts in psychotherapy, which have contributed to philosophy, religious studies, anthropology, and other fields. His empirical work has been the focal point for numerous critiques, with charges of obscurantism and spiritualism. The main focus for claims of spiritualism and obscurantism reside with one of his least understood and highly-disputed contributions, the theory of the *collective unconscious*. The collective unconscious has been controversial within the field of psychology ever since its introduction. The reasons behind some of these disputes are due to the obscurity with which Jung presents his theories. According to Jung, the claims can only be so clear, because of the ‘irrepresentable’ contents of the mind which Jung is trying to describe. This has led a few scholars to wrongly conclude that Jung is just another spiritualist who wants to resurrect something like the Platonic Forms in all their original glory (Mills, 2013). In this thesis, I will show that the four claims which have led to Jung’s collective unconscious as being called mystical are either unfounded or do not threaten the entirety of his theory. The four claims which make it seem like Jung is being mystical are the mental structures which make up the collective unconscious being present in everyone across time, the possibility of inherited structures which give images in the mind their shape, psychic energy, and synchronicity. One of the main goals of this thesis, then, is to show that these claims hold no water when viewing Jung’s collective unconscious as a cognitive system that is defined based on its function, i.e., the inputs and

outputs and their causal relationship to each other. By appealing to functionalism, a metaphysical theory of the mind, Jung doesn't need to postulate an extra-sensory phenomenon (synchronicity) to explain how the mind and body interact. This is because functionalism doesn't make claims about the material make-up of mental contents but views them as being composed of a variety of properties maintaining a shared function, e.g., a spoon can be made from wood or tin. If the mind, then, has the same material properties as the body there is no need to go as far as Jung does to explain the features of the collective unconscious.

The defense in this thesis relies heavily on concepts that are the foundations of Jung's theory of mind, namely, the collective unconscious and archetypes. To understand my defense, I will provide a brief introduction to the core features of the Jungian theory. The mind, for Jung, is broken into two categories; consciousness and unconsciousness. The first of these categories is perceptual awareness. For example, I am able to call upon memories of the names of my closest friends, family, and acquaintances. They are in my conscious field of awareness and I have ready accesses to this sort of information. These components of the mind which fall under perceptual awareness is considered consciousness. The second category, unconsciousness, is the opposite of consciousness. It is everything that we are not momentarily aware of in the mind. For example, sometimes when we forget a loved one's birthday that information has temporarily lost its vitality, it has crossed the boundary of consciousness into the unconscious. It would take a gentle reminder or looking for past clues to restore the memory.

The contents of the mind can fall into two categories for Jung. Those which have been obtained from personal experience and those contents which have not been obtained from personal experience. The two examples given above belong to the category of contents in the

mind which have been personally acquired from experience. Within this group are consciousness and the personal unconscious. The personal unconscious is “comprised of all the acquisitions of personal life, everything forgotten, repressed, subliminally perceived, thought, felt” (CW 6, ¶ 841. When you forgot the material that you studied for a test it isn’t as if you never encountered the material before, but the material just lost its impression and became a part of the personal unconscious. The second category is content that is not acquired through personal experience but come from structures in the mind which are passed down through heredity. This is not to say that you inherit ideas or memories from dead relatives, but you inherit the cognitive structures that your early on ancestors also had. These similar cognitive structures are what Jung calls the collective unconscious.

It is difficult to give a precise description of what the collective unconscious consists of because the contents cannot be directly observed by consciousness. The collective unconscious and its components can only be confirmed by empirical evidence from case studies in psychology, research in mythology and anthropology, and philosophy. Another reason for the lack of precision with what the collective unconscious is has to do with the development of Jung’s work overtime. Throughout his career, Jung has altered his conception of what the components of the collective unconscious are and the roles they play in the mind. Along with this development, the metaphorical language Jung uses to describe the collective unconscious and the archetypes also adds to the complexity in formulating a proper definition. In some of Jung’s early on works, he treats the archetypes and instincts as the same structure in the collective unconscious. In his later on works, he treats them as two separate structures. In this thesis, I will do what Jung does in his later on work and treat the archetypes and the instincts as

two distinct processes. By treating the archetypes and instincts as distinct structures will allow for a better understanding of Jung's mental theory. Not only this, the later Jung thought that it would be best to understand them as distinct but closely related structures of the collective unconscious. Regardless of these issues, I will present what Jung means by these complex structures of the mind and show how the issues of spiritualism do not present an issue for the collective unconscious.

The collective unconscious is comprised of archetypes and instincts. The archetypes and instincts can be compared to the Grand Canyon. The Colorado river about 20 million years ago ran through the Grand Canyon, before it was "Grand". Then due to the Colorado Plateau shifting upwards the river began to cut deeper, forming the vast canyon we see today (Ribokas, 2009). Just like the river that's been running through the Canyon for the estimated 20 million years, so humans' frequent experiences e.g., seeing the sun rise and set, have canalized themselves into the human psyche in the form of archetypes and instincts. When a typical situation, like the sun rising and setting occur, the archetypes activate. When this activation occurs, fantasies and thoughts enter into consciousness. These outputs of the archetypes are what Jung calls *archetypal images*. What distinguishes an archetypal image from a regular thought or fantasy is that the thought or fantasy has a formal quality, i.e., the way in which the thought or fantasy is shaped, that cannot be associated with the person's past. An example of such an image would be the cross. The cross appears in many cultures throughout history in various shapes and colors. We recognize that it is a cross because it maintains a specific form. This is where some confusion emerges in attempting to understand what an archetypal image is. With the example of the cross, the variety of colors and sizes which make up the diversity of crosses found throughout cultures

is not determined by the archetype. What the archetype influences is how the cross is formed. We recognize a cross as a cross by certain characteristic qualities. Without these characteristic qualities a cross wouldn't be a cross. The archetype is responsible for the abstract features of a cross, not the material properties which the cross instantiates.

The apprehension of these typical situations by the contents of the collective unconscious lead not only to the creation of symbols like the cross but also to the spontaneous emergence of ideas and actions. This description of the collective unconscious and the role in which instincts and archetypes play in the production of ideas, symbols, and actions are just a simple example of how the Jungian collective unconscious operates. Of course, this description has led to many criticisms regarding the metaphysical claims that Jung implies or makes outright in sketching his theory, e.g., purporting a transcendent realm where divine interference occurs, claiming that we have shared modes of experiences because there is an underlying force which connects all minds, or that we inherit the memories from our ancestors.

. The main criticism of spiritualism has to do with Jung's theory on the mind-body interaction. *Synchronicity*, for Jung, is the solution to the problem of how the mind and body can interact when they are two different substances. Jung feels the need to describe how the archetypes interact with the body. His solution to this problem is synchronicity. The reason synchronicity has been accused of spiritualism is because it makes something essentially non-physical cause physical events in ways that seem to require entirely new laws of nature.

To give a crude explanation (to be expanded later), synchronicity occurs when an internal mental content shares a relationship with an external event which cannot be easily explained by

physical causality and is rather connected by their similar meaning. For example, dreaming of the number 756 and having a movie ticket print out the number 756. The proof for this relationship is lacking and has stained Jung's reputation. The purpose of this thesis, then, is to explore and evaluate the metaphysical claims that Jung makes regarding the collective unconscious and show how these claims do not threaten the collective unconscious or the archetypes if we view them as just another functional system of the mind. Some of the metaphysical claims that will be investigated in this thesis are

- 1.) The collectivity of the collective unconscious;
- 2.) The possibility of pre-existent contents within the mind namely, instincts and archetypes;
- 3.) Psychic Energy;
- 4.) Synchronicity

The first two claims do not offer any difficulties for the way I propose to understand the collective unconscious. I will show how the collectivity of the collective unconscious and the pre-existent structures, instincts and archetypes, don't face any new or original problems that other contemporary accepted theories which have similar characteristics face. The third claim that Jung makes seems mysterious given the contemporary use of the term *psychic*. There is a lot of association with the term psychic to refer to something supernatural, e.g., you go to a psychic if you want to know your future. What Jung means by psychic energy is just a metaphor to help describe the movement of objects in the mind. Psychic for Jung is just everything that is related to the mind. The fourth point does pose an issue for Jung. Jung posits a phenomenon which is

almost impossible, given technological limitations and available evidence, to prove. I will show, throughout this thesis, that three of the four features of the collective unconscious do not pose an issue to Jung's overall psychodynamic theory. Yet, by viewing the collective unconscious as a functional system, a theory of the metaphysics of mind which states something is the essential kinds of things they do, I will demonstrate how Jung doesn't need to talk about synchronicity the way he does because the mind-body interaction problem goes away.

DETAILED EXPOSITION OF THE COLLECTIVE UNCONSCIOUS

Despite being studied in a variety of fields such as the humanities and physics, Jung was first and foremost a psychiatrist. His aim was to not only to cure his patients from their psychological impairment but to also find purpose for the patient's life through a process known as *individuation*.

Individuation, according to Jung, is the process of self-actualization. In other terms, it is the process through which the person becomes aware of certain aspects of their personality which previously was unknown to them Jung uses "the term 'individuation' to denote the process by which a person becomes a psychological 'in-dividual,' that is, a separate, indivisible unity or 'whole.'" (CW 9i, ¶ 490). Jung thinks that there are aspects of a person's personality which are not consciously accessible. For Jung, the missing aspect which requires to be unified is the unconscious portion of a person's personality. The individuation process is a natural process which occurs on its own, but as all natural processes can suffer from some sort of defect, e.g., heart failure, the individuation process can also cease to function properly. To fix the defect in an individual's individuation process Jung came up with his psychotherapeutic method.

Jung admits that the methods for treating his patients usually rely heavily on Freud's theory. There are many similarities between Freud and Jung. They both posit a structure of the mind known, as the unconscious, which, is a structured group of mental states outside of conscious awareness. Additionally, they both also think that fantasies are a product of the unconscious mind. To study the unconscious, then, Freud and Jung thought it was necessary to study the fantasies that their patients produced. This lead both of them into the study of dreams

were fantasies are produced spontaneously. Freud takes an *objective view* on dreams, i.e., that the contents of a dream refer to objects in the world. Freud also believed that dreams disguised their meaning to prevent the dreamer from waking up. The reason a person may wake up was because Freud believed that some of the immoral contents of the unconscious would conflict with the person's consciously-endorsed moral principles. Dreams, then, expressed for Freud unrealized infantile desires, e.g., the desire to marry your father. These incompatibilities could, in some cases, cause a disturbance known as a *neurosis* (CW7, ¶14)¹. It is these infantile wishes that are the primary causes of dreams for Freud. When a person becomes aware of their infantile wishes there is a tendency for consciousness to deny their existence and repress them. There occur certain situations in a person's life that reminds them of their infantile desires, and it conflicts with the persons current moral principles, then the situation is repressed, and neurotic symptoms begin to appear.

The infantile wishes are usually sexual, and they represent a wish from the patient's childhood past which would be unacceptable given the persons moral principles. Freud had observed in his patients that by talking about specific aspects of their dream they would unconsciously produce a string of ideas which causally lead back to infantile desires.

Jung finds a few flaws in the Freudian theory. To begin with, Jung and Freud differ drastically on what dreams represent. Freud's theory on dreams states that the dream intentionally hides the moral conflict of the dreamer to not disturb their sleep. This doesn't hold

¹ "Neurosis is self-division. In most people the cause of the division is that the conscious mind wants to hang on to its moral ideal, while the unconscious strives after its- in the contemporary sense- unmoral ideal which the conscious mind tries to deny." (CW7, ¶18)

too much weight for Jung, because dreams usually depict fantastic scenarios which are beyond the morals that a person may have when they are awake. For example, you may dream that you've murdered your mother without waking up. If Freud was correct, then dreams that are directly incompatible with your moral views should always wake you up, but they don't. This either implies that Freud is wrong to assume that the infantile wishes are disagreeable to consciousness or that there is more than one cause of a dream. Freud's theory that the cause of dreams are childhood experiences seems to be lacking and that there is something more to the creation of dreams than just childhood experiences (Freud, 1899). For example, how could Freudian theory account for Neils Bohr's dream of the structure of the atom (Weisskopf, 1984)? Or Einstein's dream inspiring the discovery of his theory of relativity (Sweeny, 2014)? You can't explain the sudden revelation of an idea from personal infantile desires but instead require a deeper explanation that Freudian theory cannot support.

To resolve some of the issues with Freudian dream interpretation, Jung took a different approach. Jung believed that dreams were a spontaneous biological product used as a compensatory mechanism to maintain mental stability. He believed that dreams did not disguise their meaning but thought that they revealed important information about the person at face value.

Dreams are impartial, spontaneous products of the unconscious psyche, outside the control of the will. They are pure nature; they show us the unvarnished, natural truth, and are therefore fitted, as nothing else is, to give us back an attitude that accords with our basic human nature when our consciousness has strayed too far from its foundations and run into an impasse (CW 10, ¶ 317).

Much of the debate with Freud takes place with reference to dreams. Although I am not going to defend Jung's or Freud's method of dream interpretation, I will give a few examples of why the structures that Jung theorizes, the archetypes, are in the mind. This requires an explanation of some of Jung's core ideas and theories which explain the efficacy of interpreting the contents of dreams. Dreams are the product of both the *personal* and the *collective unconscious*. The personal unconscious consists of experiences gained throughout one's life; while the contents of the collective unconscious consists of cognitive structures which are inherited. These cognitive structures give a specific shape to our ideas, feelings, and thoughts, and are not to be confused with the theory that the ideas themselves are inherited. To be clear, certain aspects of the contents which come from the collective unconscious can be recognized based on their similarities. The cognitive structures of the collective unconscious, then, give the framework to specific contents but do not reproduce them exactly as they appear in history. The cognitive structures which reside in the collective unconscious, then, are "inherited possibilities of human imagination as it was from time immemorial" (CW7, ¶101). Under Jung's theory, aspects of a patient's dream could be explained which Freud's method could not account for. For example, the sudden appearance of something in a dream which also appears in a mythological narrative that the patient had no knowledge of, or the continuous repetition of a dream motif throughout history.

The evidence that Jung produces for this view is vast, and he goes into a variety of material. To name a few are personal anecdotes, journals, mythological narratives, case studies,

literary texts, biographies.² Also, many studies have shown the effectiveness of Jungian therapy. A review of an average of 90 Jungian therapeutic sessions across a six-year period showed that “Jungian treatment moves patients from a level of severe symptoms to a level where one can speak of psychological health” (Roesler, 2013).

In what follows I will cite a few examples showing the widespread occurrence of an archetypal image throughout dreams from Jung’s patients, and images from different cultures. The first three dreams and images contain the symbol of the mandala, which for Jung is the archetype of wholeness. *Mandal* is the Sanskrit name for a circle (CW9i, ¶ 629). The mandala is a geometric pattern that represents, in religion, the universe. In some religions it represents the microcosm of the universe and a guide for realizing the “true” self. A basic mandala is depicted as a circle inside of a square or a square inside of a circle like the two images shown below.

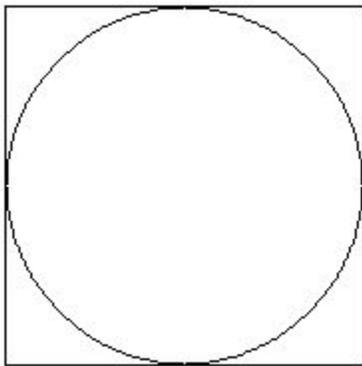


Illustration 1 Circle Inside of a Square

²² I refer the reader to Jung’s *Symbols of Transformation* for more information on the type of material that Jung used.

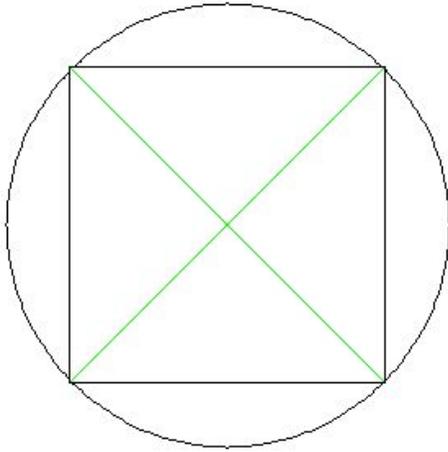


Illustration 2 Square Inside of a Circle

The parallels between the meaning of the mandala in both China and India makes one assume that one developed from the other. But as Jung says

[m]y late friend Richard Wilhelm, the eminent expert on classical Chinese philosophy, was of the opinion that no direct connections could be assumed. Nor, despite the fundamental similarities of the symbolic ideas, does there need to be any direct influence, since the ideas, as experience shows and as I think I have demonstrated arise autochthonously again and again, independently of one another, out of a psychic matrix that seems to be ubiquitous. (CW9i, ¶ 643).

The first dream comes from a woman in the second half of her life.

‘I was trying to decipher an embroidery pattern. My sister knew how. I asked her if she had made an elaborate hemstitched handkerchief. She said, “No, but I know how it was done.” Then I saw

it with the threads drawn, but the work not yet done. One must go around and around the square until near the centre, then go in circles' (CW9i, ¶647).

The second dream takes place in Liverpool with one of Jung's male patients traveling friends.

During this conversation we reached a sort of public garden in the middle of the city. The park was square, and in the centre was a lake or large pool. A few street lamps just lit up the pitch darkness, and I could see a little island in the pool. On it there was a single tree, a red-flowering magnolia, which miraculously stood in everlasting sunshine. I noticed that my companions had not seen this miracle [...] (CW9i, ¶654).

The third dream I'll mention comes from a ten-year-old girl.

Once in a dream I was an animal that had lots of horns. It spiked up other little animals with them. It wriggled like a snake and that was how it lived. Then a blue fog came out of all the four corners, and it stopped eating. Then God came, but there were really four Gods in the four corners. Then the animal died, and all the animals it had eaten came out alive again. (CW9i, ¶623).

The circle of the mandala in this last dream is the one God, while the square is the one God who is really four.

To show the widespread occurrence of the mandala I will cite three different images. The first image is a sandpainting done by the Navaho Indians.

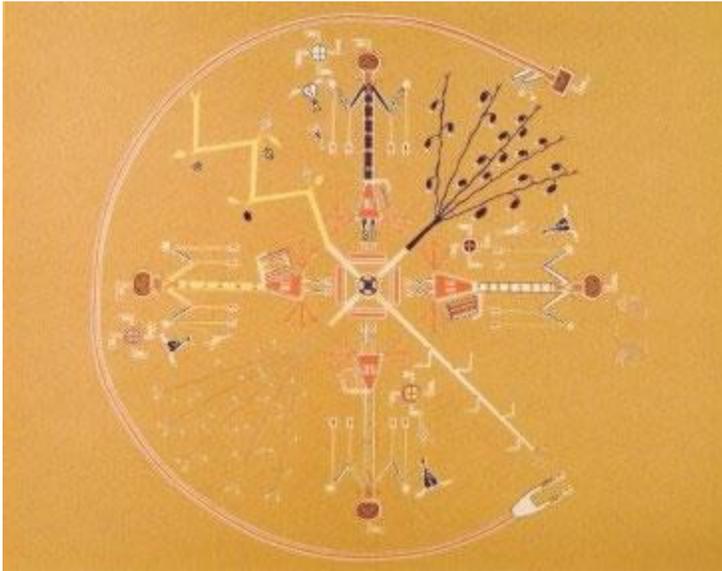


Illustration 3 Lodge of Dew

The second image is the Tibetan mandala taken from the Sera Monastery



Illustration 4 Tibetan Mandala

The third image is a mandala from Jakob Böhme XL Questions Concerning the Soule
(1620)

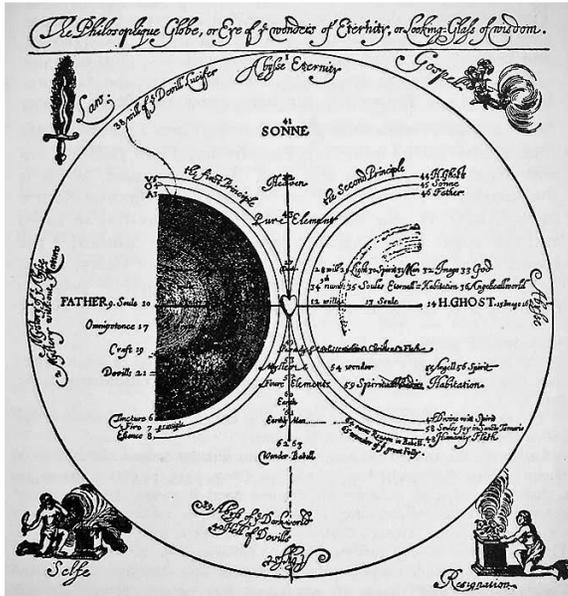


Illustration 5 Jakob Bohme 1620

The third image represents four aspects of the soul which are really the four corners of a square enclosing a circle. The circle, in this image, shows the unity of two opposites, light and darkness, in the circle.

From the examples given above it becomes clear that the mandala symbol is not only spontaneously produced in the dreams of patients, but also occur throughout history in a disparate of cultures. The mandala symbol is only one of the many archetypes that Jung identifies in his collective works. It is now my task to describe what the archetypes are and how they function in the mind.

ARCHETYPES AND INSTINCTS

ARCHETYPES

As mentioned above, two central concepts for understanding the Jungian collective unconscious are *archetypes* and *instincts*. In this section of the thesis I will exposit Jung's account of archetypes and instincts in detail, describing their relation to the *will* and *psychic energy*.

One of the difficulties when reading Jung is his understanding of the terms primordial image, archetype, and archetypal image. Jung first used the term "primordial image" to designate both the archetype and the archetypal image. As time progressed, he realized he needed to draw a distinction between the images which are perceived in consciousness and the structures which give them their form. I will be referring to these structures as *archetypes* and their products as *archetypal images*. The archetypes are structures present from birth and are passed down to the next generation through biological reproduction. We can never be directly aware of these structures because "the organ with which we might apprehend them- consciousness- is not only itself a transformation of the original instinctual image, but also its transformer (CW8, ¶399)." The only means of having access to these structures is through their products that appear in consciousness, the archetypal images . The archetypal images are images that appear in consciousness and motivate us to a specific action or way of thought.

But what exactly does Jung mean by the term "images"? It is "a figure of fancy, or fantasy-image, which is related only indirectly to the perception of an external object" (CW6, ¶743). The images appear abruptly in consciousness like a vision or a hallucination, but not as

vivid. The images are only internal and can be distinguished from external sensory perception except for rare cases, e.g., psychosis. The image “never takes the place of reality by the fact that it is an ‘inner’ image” (CW6, ¶743). For example, I see a distinct oak tree in the forest and on my way home I try to envision the tree in my mind. The image of the tree in my mind may not be as vivid and doesn’t evoke the same responses that the actual tree does, e.g., the rough feeling of its trunk, the smell, and so on, but it contains a specific form which makes me able to recognize that it was the oak tree I saw in the forest. For Jung, some images come from the unconscious, that is, forgotten memories, repressed ideas, and collective structures, i.e., instincts and archetypes.

The inner image is a complex structure made up of the most varied material from the most varied sources. It is no conglomeration[...] but a homogeneous product with a meaning of its own [...] It undoubtedly does express unconscious contents, but not the whole of them, only those that are momentarily constellated. (CW6, ¶ 745).

There are two types of images. First, personal images, which come from our memories and experiences and are not collective. And the second, archetypal image, which contain contents which are not personal but represent similar characteristics to mythological motifs. A quick example of an archetypal image comes from Jung’s observations of a schizophrenic patient:

[H]e told me he could see an erect phallus on the sun. When he moved his head from side to side, he said, the sun’s phallus moved with it, and *that was where the wind came from*. This bizarre notion remained unintelligible to me for a long time, until I got to know the visions in the Mithraic liturgy (CW5, ¶ 151).

In this pathological case, the image is projected onto the sun. This symbol can be found in the Mithraic liturgy, part of the Greek Magical Papyri. The Cult of Mithras was a 1st to 4th century CE Roman mystery religion which focused on the god Mithras. In the Mithraic liturgy, the wind was said come from a tube hanging down from the sun. The publication of the work containing

this mythological symbol did not appear until after Jung's observation with his patient. This means that the patient, not even possessing any higher education, was unlikely to have come across it. Because of the image did not belonging to any experiences that the person had, and it consists of mythological attributes, the image is an archetypal image.

The source of the archetype's images are the *archetypes*. The archetypes are like blueprints which give the archetypal images their form. The archetypes are "a typical basic form, of certain ever recurring psychic experiences" (CW6, ¶ 748), e.g., growing old, having a child, losing a friend.

To elaborate further, the archetypal images which are forced into consciousness can vary in their form. They can be actual mental images depicting an actual or possible object or they can be auditory hallucinations. The archetypal image is distinct from a regular mental image because they do not contain characteristics which are personal but are *collective*. This doesn't mean that the idea is inherited, but the formatting elements, the archetypes, are inherited and are present as cognitive structures within most people. The archetypes do not contain anything from the person's experience, unlike the archetypal images which when they emerge in consciousness are filled experiential content but remain archaic because of the characteristic form they have. This form indirectly supposes the existence of an archetype (CW6, ¶ 749).

These images, as Jung puts it, have a certain "dynamism." This means that they are capable of motivating an individual into a particular state. Like instinctual reactions, the behavior which these images produce is impeded within the biological make-up of the archetype. It is

when a person perceives these images that they carry with them the capacity to motivate the person into a particular state of being which is related to the archetype which activated.

INSTINCTS

Instincts are patterns of behavior in which we inherit from our early ancestors. They are collective, in the sense that they are found in most humans across a variety of cultures and can be recognized by the uniformity in reaction that is produced in a characteristic situation of an instinct, e.g., seeing a snake evokes shivering and screaming.

Jung distinguishes between *phobias* and instincts. The state of fear can have a variety of causes and effects ranging from being locked in a dark room to being scared of ducks because one bit you as a child. The latter case can be described as a fear being personally acquired through experience; in Jungian terms, a phobia. Phobias, being personally acquired, trigger symptoms characteristic of fear, e.g., anxiety, trembling, sweating, turning pale, etc. The instincts, on the other hand, emerges in most cultures throughout history. Instincts, by contrast, are present at birth and develop with the subject.

Instincts are impulses to act in a certain way not spurred by conscious. The instincts, like the archetypes, reside in the collective unconscious and activate when a certain situation is perceived. Jung says that

[t]here are, in fact, no amorphous instincts, as every instinct bears in itself the pattern of its situation. Always It fulfills an image, and the image has fixed qualities. The instincts of the leaf-cutting ant fulfills the image of ant, tree, leaf, cutting, transport, and the little ant-garden of fungi. If one of these conditions is lacking, the instinct does not function, because it cannot exist without its total pattern, without its image (CW8, ¶ 398).

The Jungian instincts are what biologists and psychologists typically think instincts are. They are modes of behavior which causes a person to react in a uniform way. An instinctual reaction usually takes place before the conscious perception of the action. For example, when you place your hand accidentally on a burning stove you instinctively pull it away. Conscious

deliberation on whether the stove is hot is bypassed by the reflexive response caused by the instinct. The conscious awareness of the stove being hot usually doesn't take place until after the action has been performed. It could also be argued that the conscious perception of the stove being hot, and the instinctual reaction take place at the same time. But either way, the example shows that the instinct is an unconscious reaction to a specific situation.

THE ARCHETYPE-INSTINCT RELATIONSHIP

Now that an exposition of the archetypes and instincts have been given, an important question emerges: what is their relationship? Jung's concept of the archetypes went through many distinct changes throughout his work. With these changes also came along different views about the relationship between the instincts and the archetypes. The view that I will defend in this thesis is the interpretation that the archetypes and the instincts are two separate functions in the collective unconscious. At first, Jung speaks as if the archetypes regulated the instincts. This was his opinion in 1931 upon the publication of *The Structure of the Psyche*. He held that

[t]he unconscious [...] is the source of the instinctual forces of the psyche and of the forms or categories that regulate them, namely, the archetypes (CW8, ¶ 343).

From this quote, Jung doesn't make a clear distinction between the instincts and the archetypes, but rather views the archetypes as the controlling force which manages the instincts. Then, in his later writings in *Instinct and the Unconscious* (1948) Jung's view shifted.

In my view it is impossible to say which comes first—apprehension of the situation, or the impulse to act. It seems to me that both are aspects of the same vital activity, which we have to think of as two distinct processes simply for the purpose of better understanding. (CW8, ¶. 282)

This version of Jung, he proposes that the instincts and the archetypes are part of the same process but for clarification purposes will treat them distinctly.

His final view is reflected in *On the Nature of the Psyche 1954*.

To the extent that the archetypes intervene in the shaping of conscious contents by regulating, modifying, and motivating them, they act like the instincts. It is therefore very natural to suppose that these factors are connected with the instincts and to inquire whether the typical situational

patterns which these collective form-principles apparently represent are not in the end identical with the instinctual patterns, namely, with the patterns of behavior. (CW 8, ¶ 404).

Therefore, I will do in this thesis what Jung also does in his later on work; I will treat the archetypes and instincts as two separate processes which interact with one another.

The metaphorical language Jung uses to describe the relationship between the archetypes and instincts may leave the interpreter puzzled. The analogies he uses regarding the instincts and the archetypes, and the claim he made saying that there is no evidence to assume that the instincts and the archetypes are the same structure do help to clarify this relationship. Take the following

[the instincts] have two aspects: on the one hand it is experienced as physiological dynamism, while on the other hand it is multitudinous forms enter into consciousness as images and groups of images, where they develop numinous effects which offer, or appear to offer, the strictest possible contrast to the instinct physiologically regarded... There is no point in deriving one from the other in order to give primacy to one of them. Even if we know only one at first, and do not notice the other until much later, that does not prove that the other was not there the whole time (CW8, ¶ 414).

To elucidate this passage, Jung regards the instincts as being experienced “physiologically.” This is what our common concept of what an instinct is biologically: a person sees a snake and they unconsciously scream or run away. That’s biomechanical. The archetype is what Jung calls the other aspect of the instinct which produces images in consciousness. But why does Jung refer to the instinct as being both a biological response and a production of images in consciousness? This make it seem that Jung is equating the instincts and the archetypes as the same process. This would contradict what he said earlier about the archetypes and instincts being two distinct processes. But this would be a misunderstanding of the claim that Jung makes in this

quote. Jung calls the archetypes the “formative principle of instinctual power” (CW 8, ¶ 416), which means that the archetypes transform the instincts into conscious images. Which motivates the person to fulfill the goal of the image. This isn’t to say that the archetypal image is the instinct or completely different than the instinct, or as Jung says in a metaphor the archetypal image is the “instinct raised to a higher frequency” (CW 8, ¶ 416). The higher frequency represents the archetypal image being conscious as compared to the unconscious instinct.

Now a further question arises. What determines whether an archetype as opposed to an instinct will activate? Whether or not an archetype or an instinct will be activated depends on situation that the person is in and their disposition.

Psychic processes[...] behave like a scale along which consciousness “slides.” At one moment it finds itself in the vicinity of instinct, and falls under its influence; at another, it slides along to the other end where spirit [(the archetype)] predominates. (CW8, ¶ 408)

Depending on whether or not an archetype or instinct activates depends on the disposition of the person. If the person views are underdeveloped, they will be driven by their instincts because their only goal is immediate gratification. If the person is in opposition to the instincts the archetypes will exhibit a large influence on the person and the result would be an intense spiritual commitment. The second is the situation that the person is in. Now, depending on the disposition of the person the situation that they encounter will produce either an archetype an instinct or both.

Take for example, a girl who is going for an early morning jog. As she is approaching an intersection, she feels the urge to abruptly stop. As she does so, a car runs a red light, barely missing her. If she kept going the car would have made an impact, injuring her, but her impulse to stop saved her life. The physical urge to stop can be seen as instinctual, it was her body which

reacted before she was able to process the situation. Now take the same situation, but this time imagine the girl running and she hears a voice telling her to stop. In this way, the situation that was sensed produced something psychological. Be it a voice telling her to stop, a hallucination, an image, this is the way the archetype manifests itself in these special situations, situations that may be new in the way they are expressed but resemble a typical experience that our ancestors would have undergone as well. What makes these two scenarios distinct is the way the archetype and instinct manifested in the situation. The image would be a way in which the archetype represents itself, while the unconscious response is the manifestation of the instinct.

Will and Psychic Energy

There are two important features which need to be mentioned to complete a full description of the Jungian psyche. The first is Jung's concept of *will* and the second is *psychic energy*.

Within the psychic sphere the function [of instinctual aspect of the mind] can be deflected through action of the will and modified in a great variety of ways. This is possible because the system of instincts is not truly harmonious in composition and is exposed to numerous internal collisions. One instinct disturbs and displaces the other, and, although taken as a whole it is the instinct that makes individual life possible. (CW8, ¶ 378).

By nature, the instincts have a particular compulsive character and respond when a typical situation is perceived. The aspect of the mind, which is not unconscious, has "lost its compulsive character, can be subjected to the will and even applied in a manner contrary to the original instinct" (CW8, ¶ 376). This reveals that the products of the instincts themselves are not complete dominants but exhibit a partial influence on our behavior. It is more the case that the archetypal images present an opportunity for the instinctual behavior to be transformed. A consequence of the interaction between the individual and the image is the discovery of

something new. It is through these discoveries that the will is able to put that instinctual energy into productive use. For example, the meaning of what magnetic properties represented changed over time as we interacted more with the material. “The pre-Socratic philosopher Thales, for instance, argued that magnets demonstrated the “universal soul” of God in nature” (Kitch, 2018). But as we interacted with magnets more this view has changed from an association with God to an extremely useful material to be put to use.

Jung’s concept of psychic energy is just a term to help describe the movement of contents in the mind. It is nothing more than a concept used to describe the relationship between changes and is not something which is complimentary to physical energy as used by the physicist. The usage of psychic energy is a mere metaphor, like most of Jung’s metaphors, to grapple with the difficulty in understanding his theory of the collective unconscious. There is no evidence to assume that the mind uses something other than the energy found in the physical world. For us to be aware of contents in consciousness, those contents need to possess a certain intensity in order to persist in consciousness. The contents which have high psychic energy are those which we are familiar with. For example, I am able to remember large portions of information about my friends and family so these contents contain a large amount of psychic energy and I can have ready access to them. Those contents which do not contain enough energy to cross the threshold of consciousness remain in the unconscious. The contents in the unconscious possess a certain amount of potential energy which has been either forgotten, repressed, or are archaic vestiges, e.g., instincts and archetypes. Certain situations release the potential energy that these contents contain. If they have a high enough activation energy they can enter into consciousness and displace certain contents, e.g., when a person sees a snake, they may lose their ability to think

rationally about a situation and instead uncontrollably scream or run away. The will has been temporarily displaced by the perception of the snake.

With the expansion of neuropsychology and cognitive psychology, it is most likely the case that the persistence of memory is due to the neural connections and how well formed these neural connections are. The archetypes and the instincts have their bases in the brain and because of this they interact through neural connections. In this way, then, psychic energy is nothing more than a metaphor in order to understand the relationship of the movement of contents within the mind without invoking the complicated neuroscience involved in order to account for the interaction of these structures.

INHERITANCE AND COLLECTIVITY

Jung defines *collective* as “all psychic contents belong not to one individual but to many, i.e., to a society, a people, or to mankind in general” (CW6, ¶ 692). The *collectivity* of the collective unconscious refers to the features of structures within the psyche which are not personally acquired but are inherited. To put it more precisely, the collective unconscious is the layer within the human psyche which consists of the archetypes and instincts which are inherited from our ancestors. These structures result in at least some of the emotions, thoughts, and social structures we share. The collective unconscious contains cognitive categories which are the formative principle which causes the shared thinking and emotions depicted through mythological motifs found in a variety of cultures, e.g., worship of the sun or the anguish one feels when betrayed. These psychologically inherited structures may influence how we interpret reality; however, they do not completely determine human thought and action. In this section, I will show how the issue of collectivity in Jung’s theory are similar to other contemporary theories in cognitive psychology and evolutionary psychology which deal with .

Jung’s collective unconscious is bound to inspire some critical remarks about its collective nature of the collective unconscious, that is, how can there be a part of the mind that produces images with features that are present in many cultures? This aspect of the mind gets enmeshed in the “nature v. nurture” debate. The collective unconscious, a piece of inherited human nature, is a sort of storage house, and thus, containing the imprints with the formative capability of producing psychological images or the capacity to evoke instinctual behaviors. These psychological images and instinctual behaviors are recognized by scientist by their form

or pattern that they take. The recognized occurrence of these forms and patterns has led many biologist and linguist to identify an inherited structure of the mind which is capable of producing these forms and patterns in civilizations and cultures throughout time.

In pathological cases, Jung noticed an abundance of fantasy images which resembled mythological symbols cross-culturally, which drove him to study symbology, anthropology, and comparative religion. From his study of these various fields, he concluded that there was a structure within the human mind with the capacity to automatically produce images which have their origin, not in personal acquisition, but in a universally shared structure, the collective unconscious. This theory is recognized as a possibility with the support of contemporary evolutionary psychology and the capacity to acquire language.

In human genetics, the genome which has the ability to imprint genetic information allows for the development of the individual biologically, but it is also the case that genetics shape the way we develop psychologically. As with instincts being recognized as common patterns of behavior, it wouldn't be too surprising to assume that there is also a structure within the human mind which shape mental images. This can best be seen in the widening acceptance of the inherited genetic origin of many pathological disorders. If the mind has certain capacities to develop these genetic disorders based off of inherited genes, it could very well be the case that we inherit other features along with the passed on pathological disorders. As Jung suggests, it seems very likely that we also inherit the formative ability to produce images which influence the way we behave, think, and act. It isn't just Jung who came to this conclusion about inherited structures in mind, other fields in psychology have held similar observations.

One of the main theories which exemplify this point is language acquisition. It had been thought that language was acquired by memorizing the rules of grammar and applying them. It wasn't until Noam Chomsky proposed the theory of Universal Grammar that this supposition was challenged. In response to what Chomsky has called "Plato's Problem," which is how it was possible for a child who has never been educated to learn geometry, he suggested that language acquisition is innate and that the "ground plans" for acquiring grammar rules are present at birth in the individual (Chomsky, 1986).

The language acquisition module represents the basic rules for the ability to acquire language. This device is embedded within the mind and gives the individual the capacity to learn the language. The Jungian collective unconscious has similar features to Universal Grammar theory's representation of our language abilities that Chomsky presents. The archetypes have a specific form which can produce psychological contents within the human consciousness. As the language acquisition device contains the basic rules for structuring language in mind, the archetypes can also be viewed as rules for structuring specific psychological contents in the human mind as well. If there is the case that there is this structure which allows for language acquisition, it wouldn't be too improbable for the collective unconscious also to be structured within the human mind capable of producing psychological contents with forms that are not acquired through the individual's experience.

Evolutionary psychology shows that there are other features within the mind which are not altogether learned, but (at least partially) innate. These structures are known as modules. These modules are domain specific, which to say that a cognitive structure is domain-specific means that [they are] dedicated to solving a restricted class of problems in a restricted domain.

For instance, the claim that there is a domain-specific cognitive structure for vision implies that there are mental structures which are brought into play in the domain of visual processing and are not recruited in dealing with other cognitive tasks (Samuels, 2000)

According to the consensus in cognitive psychology, modules are innate. They are largely influenced by genetic outcomes, and the selection for these modules is motivated by the process of natural selection, and the final feature of these modules is that they are universally present in any normally functioning human being from birth (Samuels, 2000).

The features of modules to which cognitive psychology are committed are similar to the properties that Jung ascribes to the archetypes and instincts in his theory on the collective unconscious. It seems that if the evolutionary psychologist can make claims about the collectivity of their innate structures called “modules” that the archetypes and instincts as well be viewed as a collective phenomenon that occurs in the human mind.

SYNCHRONICITY

In Synchronicity: An Acausal Connecting Principle, Jung attempts to explain his most problematic and least understood concept: synchronicity. Jung comes up with the idea of synchronicity from a variety of sources, ranging from Lao-tzu's philosophy on the Tao, Hippocrates and his concept of the sympathy of all things, and Gottfried Wilhelm von Leibniz with his pre-established harmony (CW8, ¶ 957). These sources, though vast in their diversity, have similar features that form the bases of Jung's idea on synchronicity, that is, the relationship between mind and the physical world. Due to the obscurity of the text and Jung's uncertainty about the phenomenon he is investigating I will attempt to give as clear as possible an explanation of Jungian synchronicity.

In Jung's words,

[t]he causality principle asserts that the connection between cause and effect is a necessary one. The synchronicity principle asserts that the terms of a *meaningful coincidence* are connected by *simultaneity* and *meaning*. (CW8, ¶. 916)

To understand Jung's theory, then, an elaboration of what constitutes a meaningful coincidence needs to be explained including an explanation on why causality is inadequate and how synchronicity is a solution to the mind-body problem.

The most basic understanding of what he means by synchronicity is the occurrence of two or more events which have no seemingly causal connection but are connected because they have a similar meaning. Jung thinks that meaning is the value that the subject gives to the events that are taking place. He says that

we must conclude that besides the connection between cause and effect there is another factor in nature which expresses itself in the arrangement of events and appears to us as meaning.

Although meaning is an anthropomorphic interpretation it nevertheless forms the indispensable criterion of synchronicity. What that factor which appears to us as “meaning” may be in itself we have no possibility of knowing. (CW8, ¶916)

An example of this would be, that you dreamt of a black swan that night and when you are walking in the morning you see a dead black swan on the side of the road and then, later on in the evening, you get a phone call telling you that your friend James Blackswan has suffered a significant heart attack. The higher the number of meaningful events in the series that happen to appear the less likely that there would be an apparent causal explanation for the events taking place. The sequence of events, as shown above, occur daily and are seemingly unconnected. It could be that the city that you were living in was mainly known for their swans and swan culture and frequently held plays depicting swans in them. There would, then, be a likely casual explanation for these events and therefore the sequence would not exhibit the phenomenon of synchronicity. What makes the sequence of events a synchronistic phenomenon is occurrence of the mental image with the occurrence of a series of external events which are connected by a similar meaning. The larger the series of events which correspond to a meaningful mental image the less likely a materialistic casual explanation can be given. This is because there is a relationship between the mental image and the external event which Jung thinks ordinary causality cannot explain. Synchronicity, therefore, has two factors

- a) An unconscious image comes into consciousness either directly (i.e., literally) or indirectly (symbolized or suggested) in the form of a dream, idea or premonition.
- b) An objective situation coincides with this content. (CW8, ¶ 858)

In connection to the example given above, the unconscious image came from a dream. And from this dream there occurred a series of events which the person ascribed meaning to. There are three different events which meet Jung's criterion for synchronicity. These are

1. The coincidence of a psychic state in the observer with a simultaneous, objective, external event that corresponds to the psychic state or content... where there is no evidence of a causal connection between the psychic state and the external event...
2. The coincidence of a psychic state with a corresponding (more or less simultaneous) external event taking place outside the observer's field of perception, i.e., at a distance and only verifiable afterwards...
3. The coincidence of a psychic state with a corresponding not yet existent future event that is distant in time and can likewise only be verified afterward. (CW8, ¶ 984)

This leads us to two remaining questions. 1. What evidence gives Jung the confidence to assert that there are acausal phenomenon? And 2. How is it the case that we are able to have mental images that occur at the same time or before an event with no ordinary casual connection?

To answer the first question, Jung references some experiments, one including his own, to bolster his theory on synchronicity. One of the main experiments is done by J.B. Rhine³ This controversially experiment, was critiqued by skeptics as not being able to be replicated and numerous instances of fabricated results. The experiment had to do with the probability of guessing between five different symbols drawn on a pack of twenty-five cards. The different symbols were a star, a square, a circle, wavy lines, and a cross. The experimenter and the subject were separated by a screen. The experimenter shuffles the cards using a machine and the subject needs to guess the symbol on the card that is being pulled up. The experimenter doesn't know which order the cards are in and neither does the subject. The expected probability was five

³ For the full details on this experiment I would suggest J.B. Rhine, *Extra-Sensory Perception and New Frontiers of the Mind*. For a brief overview given by Jung I would suggest his essays on Synchronicity: An Acausal Connecting Principle.

correct answers out of the twenty-five cards that were drawn. The first experiment made the subjects guess the cards 800 times. The average was 6.5 correct guesses. Which is 1.5 more than expected. The probability of such deviation is 1 : 250,000. The results depended upon the subject. Some individuals had averages of 10 correct answers for 25, and one individual had 25 correct hits per 25 which is a probability of 1 : 298,023,223,876,953,125. In another set of experiments the spatial distance between the experimenter and the subject was increased to 250 miles. The average result of these were 10.1 correct guesses per 25 cards. These experiments were conducted several times with positive results. Further experimenting showed that time also had positive results which exceeded the assumed probability. The subject was to give their answers to future card pulling's (CW8, ¶ 833-834).⁴ Jung comments on these results that

[t]he fact that distance has no effect in principle shows that the thing in question cannot be a phenomenon of force or energy, for otherwise the distance to be overcome and the diffusion in space would cause a diminution of the effect... Since this is obviously not the case, we have no alternative but to assume that distance is psychically variable, and may in certain circumstances be reduced to vanishing point by psychic condition... If, in the spatial experiments, we were obliged to admit that energy does not decrease with distance, then the time experiments make it completely impossible for us even to think of there being any energy relationship between the perception and the future event. We must give up at the outset all explanations in terms of energy, which amounts to saying that events of this kind cannot be considered from the point of view of causality, for causality presupposes the existence of space and time in so far as all observations are ultimately based upon bodies in motion (CW8, ¶ 835-836).

For Jung, this would be statistical proof that the concept of causality wouldn't make sense because the ability to receive the information about which card is going to be pulled does

⁴ For more references to these experiments refer to Jung's essay on Synchronicity. This essay also includes his experiments on astrology. I won't be going into the specific details of these experiments to save space, but anyone can check out the results there.

not follow from transmission of energy. If it were the case that it developed from transmission of energy, then space and time would affect the results of the experiment. It is, therefore, synchronicity which allows for these transmissions to occur, or the mental situation corresponding to the symbol on the card.

The mood of the subject is also a determinant to the number of correct guesses the subject made. If there were a positive or excited mood about the experiment then the number of correct guesses would go up, if there were a decrease in mood or boredom after the first few guesses, the number of correct answers would decrease (CW8, ¶ 838). This would support in Jung's mind, that psyche and the physical world interact in an acausal way because the mood of the subject affected their capacity to receive information about the symbol on the card.

The second question that Jung needs to answer is; how is synchronicity psychologically possible? How is that we can have conscious images about events that are both occurring somewhere else from the subject and are going to occur in the future? A large part of Jung's answer relies on the archetypes and his notion of space and time. Jung regards space and time as consisting of *nothing* in themselves.

In man's original view of the world, as we find it among primitives, space and time have a very precarious existence. They become "fixed" concepts only in the course of his mental development, thanks largely to the introduction of measurement. In themselves, space and time consist of *nothing*. They are hypostatized concepts born of the discriminating activity of the conscious mind, and they form the indispensable co-ordinates for describing the behaviour of bodies in motion. They are, therefore, essentially psychic in origin, which is probably the reason that impelled Kant to regard them as *a priori* categories (CW8, ¶ 840).

With this view, space and time are constructed by the measuring mind. It is through images in which these coincidences are made possible. It is that we have minds and that we have

devised means of measurements which creates the illusion that space and time are objective features of reality. And thus, it would seem that there is no other explanation but pure chance that these synchronistic events occur. But it is not pure chance because the image and the special temporal character are both caused by the same source; the mind. The archetypes contribute not only to the images but to their special temporal features.

Given the evidence that an image produced by the archetypes can foreshadow future events he assumes either that everything is mind or that there exists an *objective* meaning. If the archetypes shape the way we perceive all the way through, then, Jung would be a subjective idealist and admit that the only thing that exists are the archetypes. But Jung doesn't want to admit that. He says that

[t]he great difficulty is that we have absolutely no scientific means of proving the existence of an *objective* meaning which is not just a psychic product. We are, however, driven to some such assumption if we are not to regress to a *magical causality* and ascribe to the psyche a power that far exceeds its empirical range of action (CW8, ¶915).

Jung, in the final analysis, seems to commit to the idea that synchronicity is the principle which allows us to have access to “absolute knowledge.”

The synchronicity principle possesses properties that may help to clear up the body-soul problem. Above all it is the fact of causeless order, or rather, of meaningful orderedness, that may throw light on psychophysical parallelism. The “absolute knowledge” which is characteristic of synchronistic phenomena, a knowledge not mediated by the sense organs, supports the hypothesis of a self-subsistent meaning, or even expresses its existence. Such a form of existence can only be transcendental, since, as the knowledge of future or spatially distant events shows, it is contained in a psychically relative space and time, that is to say in an irrepresentable space-time continuum (CW8, ¶ 948).

Jung thinks that the archetypes are similar to the Kantian categories of space and time. There is no objective spatial-temporal order for Jung but, instead, the mind imposes space and

time onto the external world and are considered by Jung to be transcendental in the Kantian sense of the word. What this means is that the archetypes are the necessary conditions for the possibility of experience. Synchronicity, then, is the mediating force between mind and body which allows us to have access to objects as they are outside of sense perception.

Jung's theory of synchronicity plays with the exciting idea of another principle complementary to causality, an organizing principle which allows internal images to correspond to external events in a meaningful way. Though there seem to be reports about pre-cognition, the empirical evidence confirming them is entirely lacking. That is why Jung is cautious about this theory and waited as long as he did before he published *Synchronicity: An Acausal Connecting Principle*. The claims he makes suppose that there is some "thing" which construes events in a meaningful way, and we can have no direct access to this knowledge but can only suppose it exists from meaningful chanced happenings. It is "transcendental" as Jung uses the term and the experiments used to test this phenomenon are so far insufficient for supporting a transcendental principle such as synchronicity.

Jung only gave a full explanation of Synchronicity towards the end of his life in 1952. Jung got along fine without referencing synchronicity before this and felt that it deserved a proper explanation because of coincidences he happened to observe in his personal life, discussions with the physicist Wolfgang Pauli, clinical studies, and the Rhine experiment. To explain these coincidences, he needed to theorize some principle which would allow synchronicity events to be something other than chanced occurrences. To the extent that Jung requires us to solve the mind body problem becomes irrelevant, so long as we understand the states of the collective unconscious as states of a certain functional system; the mind.

FUNCTIONALISM

In this section, I will present the theory of functionalism about mental states in order to show that it is plausible that the collective unconscious is comprised of cognitive states of the central nervous system, as the functionalist understands them.

Very roughly, a *functionalist* theory (of whatever phenomenon) posits that a thing essentially is what it is because of what it does. This is (equally roughly) what functionalism in the philosophy of psychology and metaphysics of mind says about mental states. According to functionalism a state is a mental state of type *M* just in case it plays the roles characteristically played by *M*-states. Functionalism became popular in the early second half of the 20th century in response to the mind-body problem and radical behaviorism. The two early pioneers of this theory were Hilary Putnam (1967) and David Armstrong (1981) and to exemplify what functionalism is I will use the example of a basic thermometer. Take a simple machine which can only display two colors; red and blue. The machine says red when the temperature of the room is above 70 degrees and shows blue when the temperature is below 70. When the temperature reaches above 70 degrees the machine switches into mode 1 and displays red. When the temperature is below 70 degrees the machine switches into mode 2 and shows the blue light. We can say, then, that mode 1 is constituted by when the machine senses that the temperature is above 70 degrees and displays a red light. Similarly, mode 2 is constituted by the machine sensing when the temperature is below 70 degrees and shows a blue light.

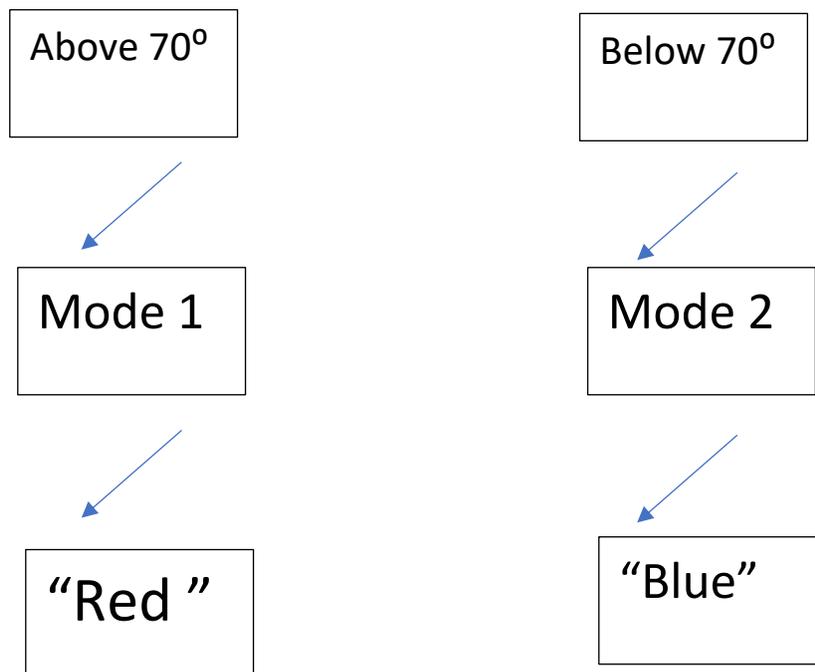


Figure 1
Functionalist Model
of Mode 1 and Mode
2

Putnam and Fodor would view this example as analogies to mental states in a version of functionalism known as machine state functionalism. Mental states, for Putnam and Fodor, can be defined based on similar methods for defining the mode 1 and mode 2 of the simple machine above. That is, mental states are constituted of their casual roles in a cognitive system, i.e., their relation to other mental states and inputs and outputs.

Another important feature of functionalism is that mental states can be realized by states with very different physical properties (Block, 1996).⁵ What this means is that both mode 1 and mode 2 of the thermometer could consist of either analog or digital properties. For example, the

⁵ Can be realized also by non-physical properties

analog thermometers use mercury in a glass chamber. When placed inside the object, the mercury either heats up or cools down to the proper temperature reading (THERMOPRO, 2019). The digital thermometer, on the other hand, uses the expansion of metal and electrical circuits to read temperature when placed inside an object (THERMOPRO, 2019). The material which makes up the thermometer is ignored and instead the focus on what is a thermometer is based on the casual roles of the system, i.e., placing the thermometer inside an object and getting an output of either a red light or a blue light depending on the temperature reading.

Functionalism defines what something is based on its function and does so by describing the inputs and outputs characteristic of that thing. Mental states for the functionalist are the inputs and outputs characteristic for those mental states. Take a basic belief of there being a cup on the table. The belief that there is a cup on the table is formed by a variety of internal and external processes. For functionalism what a mental state is, like the belief of their being a cup on the table, are the casual roles and the mental state. For example, imagine walking into a room and there being a cup on the table. The initial input would be the external perception of the cup. This external input is converted into internal neural inputs. These internal neural inputs cause the belief that there is a cup on the table. This, then, leads to internal neural outputs which cause an external output of, for example, grabbing the cup or smashing the cup. What makes up the belief of there being a cup on the table, for the functionalist, are all of these characteristic inputs, outputs, and their casual relationship to the mental state.

Functionalism emerged as a response to behaviorism and its rejection of internal states of mind. The behaviorist believed that we shouldn't talk about the mental states if mental states weren't required for predicting behavior. Behaviorism logged many a priori and a posterior

objection to mental states. Therefore, behavioral psychologist would focus only on the “observable stimulus-response behavior,” (McLeod, 2017) and ignore internal mental states, e.g., thoughts, beliefs, and desires as internal mental states. The typical psychological picture is of the “form $E \rightarrow M \rightarrow R$ ” (Flanagan, 1991, p. 93), where E is an environmental condition, M is a mental state, and R is the response. Skinner, the most prominent behavioral psychologist, believed that if the observable data didn’t support mental states, then we wouldn’t have the need to talk about them. This reduces the “typical psychological casual chain from $E \rightarrow M \rightarrow R$, to $E \rightarrow R$ ” (Flanagan,1991,p.94).

Flanagan present many common objections to the model that Skinner presents (1991, p.95).

1. Skinner assumes the purpose of science is prediction, whereas the cognitive psychologist may believe the purpose of psychology is to give an account of these neurological and mental states that explains as well as predicts.
2. Skinner assumes that the casual sequence above begins in the environment, whereas it could possibly begin in the mind, or mental states causing other mental states to result in a response.
3. Skinner gives an unrestricted conception of explanation. He thinks any cause can explain an event. He assumes that a single cause is sufficient for a scientific explanation when this isn’t necessarily the case. Some explanations require further causes, while Skinner thinks that showing one cause is sufficient. Take two examples of explaining why a girl may be thirsty. First; the girl is thirsty because it is hot. The

second; the girl is thirsty because it is hot outside and she just came from a run. The second explanation is more sufficient than the first.

The behaviorist, or Skinner's psychology, fails to provide an adequate account of human behavior precisely because it eliminates internal mental states. The functionalist gives a way of restoring mental states to psychological explanation while still being able to maintain materialism.

To show how this can be so Ian Ravenscroft (2005) gives the following example. Say that the tallest person in the room is identical to Sally, and that Sally is identical to the smartest person in the room. Then by the transitivity of identity we can conclude that the tallest person in the room is identical to the smartest person in the room (Ravenscroft,2005)

He expresses this principle as

1. $A = B$
2. $B = C$

Therefore,

3. $A = C$

Ravenscroft (2005) uses this application of identity relations to show how functional role realizers can be identical to physical states. He exemplifies how functional mental states can be physical with reference to pain. He says that if we assume that the occupant of the pain role is equal to R and R is equal to some neural state. Therefore,

1. Pain = R

2. R = neural states

Therefore,

3. Pain = Some neural state (Ravenscroft, 2005)

This means that mental states and brain states can be identical. In describing the inputs and outputs of the system, we do not need to talk about what the brain states or mental states are made of. Therefore, it wouldn't matter whether or not we are talking about specific neural activity, but what would matter is the casual relationship which is characteristic of the mental role, it and the interaction between other mental states.

FUNCTIONALISM AND JUNG

In this section, I will create a general functionalist view of instincts and archetypes as they are presented in the later version of Jung. In doing this, I will show how three of the four features of the collective unconscious do not raise any issues of spiritualism. The reason for why is because functionalism can be viewed as a materialism. The issue of how we can have archetypes that are present in everyone is resolved because mental contents are also materialistic under functionalism. This means that the explanation for why we have archetypes is because of evolution and how the archetypes work must also, then, be due to biochemical processes. By viewing the collective unconscious through the lens of functionalism, Jung doesn't need to rely on spiritualism to explain how mental systems can interact with the body.

To map on the functionalist theory onto the Jungian theory of the collective unconscious. I will use the example of fear. Fear, in principle for the functionalist, can cause a variety of inputs and outputs, but not everything that causes fear or is caused by fear is characteristic of the mental state. In the functional model, all of the relata are characteristic except for the mental state itself, i.e., the casual inputs and outputs. The functionalist model of fear begins with the inputs. These inputs can vary from being alone in the dark to seeing a bear in the woods, but one of the things which leads to being in fear is the perception of some event which usually causes fear in a person. The external input then leads to internal inputs in the form of neural activity. The neural activity causes the person to think fear like thoughts and this will cause the person to be in fear. The fear in the individual will produce internal outputs and external behavior of fear. The internal outputs are neural activity occurring and this neural activity will produce an external behavior to fear, e.g., running away.

Basic Functional Model of Fear

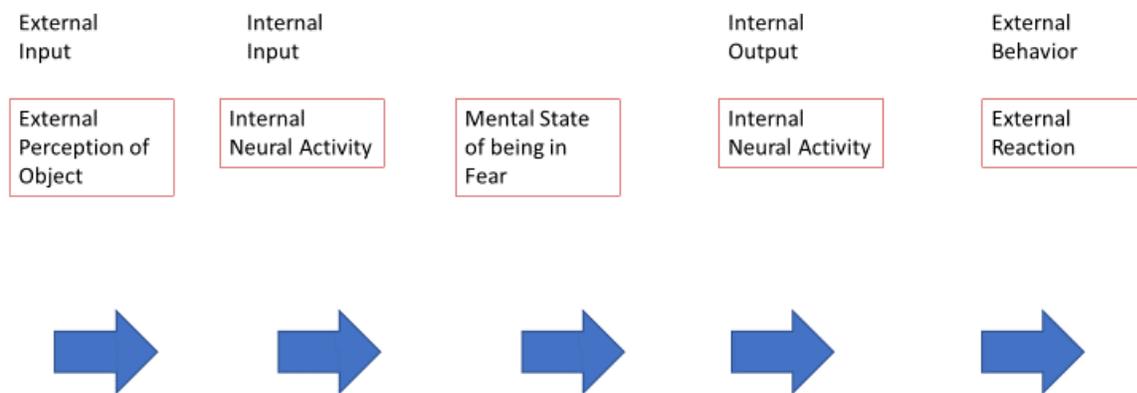


Figure 2 Basic Functional Model of Fear

I will be expanding on this very basic model to help show how the Jungian collective unconscious can be integrated into the functionalist picture of the mind. As a reminder, the collective unconscious consists of archetypes and instincts. The archetypes are the blueprints which give the archetypal images their form, and the instincts are reactions that are not personally acquired but collective. The instincts easily fit into the model that we've built above. Instincts are the inherited uniform reaction people have. For the functional model, I will use the example of an encounter with a snake. Snakes are notorious for producing fear when seen. To add on to the model that's already been built, we can say that when someone sees a snake, there

is an internal input of stimulation in neural activity which activates an instinct or instincts. The instincts' activation produces characteristic internal outputs of those instincts, e.g., triggers neurons to fire, which usually cause the external behavior characteristic of those instincts, e.g., running or screaming and the belief that you are in danger. In the case of instincts, the reaction occurs before the belief. It is only after or at the same time of the perception of danger that you become aware that you are being threatened.

Functional Model of an Instinct

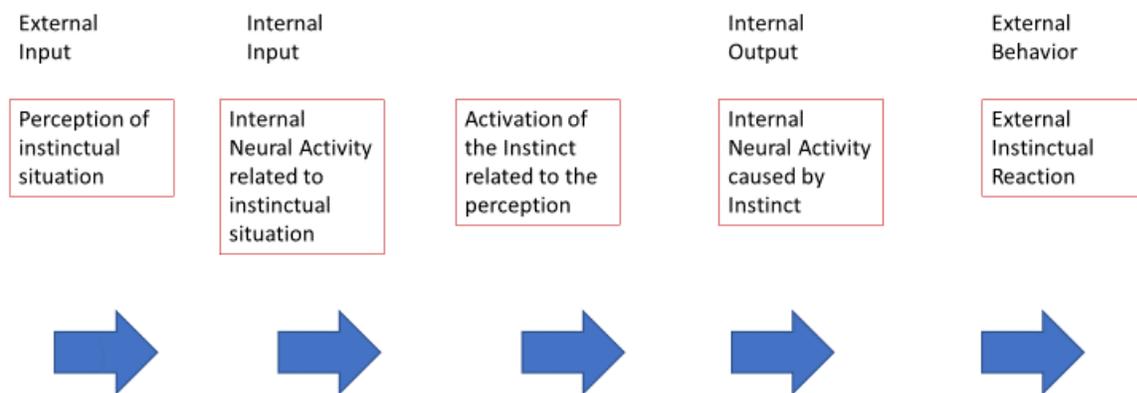


Figure 3 Basic Functional Model of an Instinct

The archetypes and the archetypal images present a greater complexity to the model above. Just as the instincts activate when an instinctual experience is perceived and produces unconscious impulses to react, the archetypes also activates when a characteristic situation is perceived. When this occurs, archetypes produce archetypal images in consciousness. This, in turn, produces characteristic beliefs in the person, and these beliefs produce internal neural

outputs which motivate the person to a characteristic action. To turn back to the snake example, instead of an instinctual response to unconscious impulses, we could say that when the person typically sees a snake, the external perception of the object sends internal neural responses via., neurons, to the proper neural configuration which makes up the archetypes . If the neurons firing activates the archetypes, they will produce archetypal images.⁶ These internal images could be a voice in the mind telling the person to run or a vivid apparition of the devil which causes the characteristic belief that they are being threatened. The external input of the perception of the snake with the internal input of neurons fire lead to the archetypes' internal outputs of archetypal images, which lead to the internal outputs of neurons firing, which will then cause the external behavior of screaming and running, which are characteristic of an archetypal situation.

⁶ There are issues with physicalism about mental imagery. There is a metaphysical mystery about how felt content can be functional. This is an issue for physicalism but is not a special problem for functionalism.

Functional Model of an Archetype

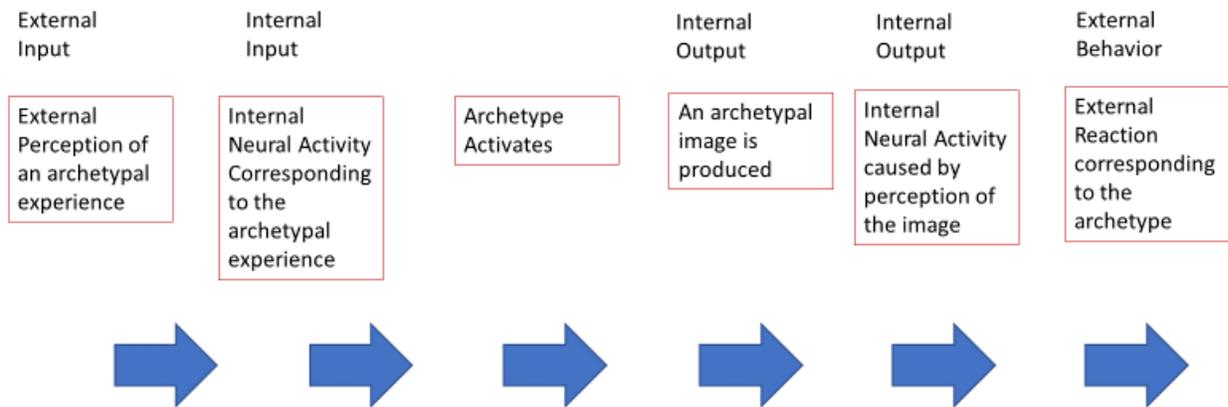


Figure 4 Functional Model of an Archetype

CONCLUSION

In this thesis, I have discussed four features of the collective unconscious that may pose issues for Jung's theory.

1.) The collectivity of the collective unconscious

2.) The possibility of pre-existent contents within the mind namely, instincts and archetypes

3.) Psychic energy

4.) Synchronicity

Three of these features I have shown to be plausible explanations for the contents of the mind. The first feature was the collectivity of the collective unconscious. In the initial exposition of this paper on Jung, I gave six examples of a single archetypal image. Three of the examples are dreams and three are pictures. The pictures and the dreams support the claim that there are structures in the mind, archetypes, which are collective. It would be difficult to assume that the connection between these similar images had to do with the migration of a group of people. Even if we make the leap and assume the Tibetan monks were in contact with the Navaho Indians, it still doesn't answer the question of the mandala symbol appearing in dreams. It would be a more compelling assumption to assume the existence of archetypes which produce these images. This would explain how the symbol of the mandala could emerge in these two separate cultures.

The second feature of the collective unconscious that was covered in this thesis, is the possibility of inherited cognitive structures of the mind. I have compared the archetypes and the instincts to contemporary theories of evolution and linguistic theories which, if credible, would

also have to make, at least partially, Jung's theory credible. It would be absurd to assume that the mind is the only organ which doesn't undergo evolutionary changes. To assume that we can pass on the formal structures of our mind shouldn't raise criticisms of spirituality. Jung doesn't say that ideas and memories are inherited, but that the formal elements of ideas and images are. The archetypes are similar to the structures Chomsky refers to when he speaks about language acquisition. It isn't that the rules of grammar are inherited, but the structures which make grammar possible are. It seems possible, then, that the archetypes are inherited structures present in the mind.

The third feature of the collective unconscious is synchronicity. Synchronicity was Jung's way of dealing with the interaction of the mind and body. In this thesis, I didn't defend Jung's conception of synchronicity because it implies more than what is necessary to explain how the mind and body interact. Synchronicity implies something complementary to causality which orders events in a meaningful way. The data that Jung presents for this phenomenon is lacking. If he is going to posit a force complementary to causality, there would need to be more concrete evidence which is currently not available. But despite of these issues, I have shown that Jung doesn't need to assume the existence of this complementary force, because of functionalism. If we assume that the contents of the collective unconscious are functional systems, then we wouldn't need to talk about how it is that the mind and body interact. This is because functionalism is a materialist theory which states that something is its function. By defining the archetypes in functional terms, the mind-body problem goes away.

In viewing the Jungian collective unconscious as containing functionalist structures, I've shown that the issues of synchronicity do not threaten Jung's theory overall. The collective

unconscious should be viewed as an adequate theory of the contents of the mind. The radical claims of spiritualism have led many to unjustly ignore psychological and philosophical works of Jung. I hope, in the future, more attention will be given to the theories of Carl Jung.

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