

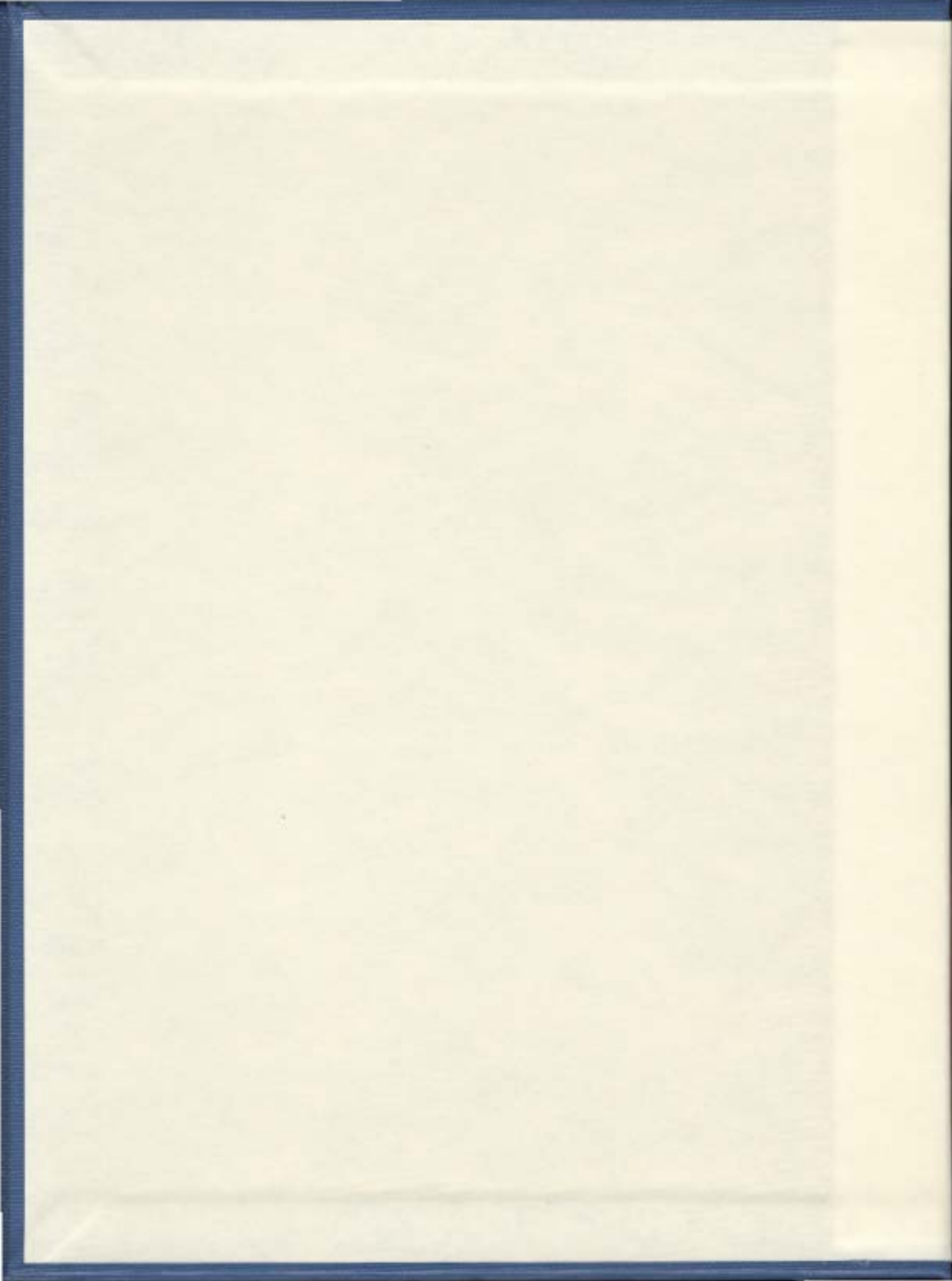
LANGUAGE & CONSCIOUSNESS:
WHAT CAN WE LEARN ABOUT FERAL CHILDREN?

CENTRE FOR NEWFOUNDLAND STUDIES

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TERRY J.V. BUTLER



Language & Consciousness:
What Can We Learn About Feral Children?

by

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Abstract

We are all intimately aware of what is meant by the term *consciousness*; it is something that is at the core of our very being yet it remains a puzzle to many thinkers. Relying largely on the work of contemporary philosophers Daniel Dennett and David Rosenthal I argue that our current notions of consciousness are rooted in a misguided Cartesian tradition. Both philosophers claim to advocate the dissolution of our traditional Cartesian notions of consciousness but Rosenthal ultimately fails to fully exorcize his Cartesian ghosts. Therefore we must look toward Dennett for a better way to explain consciousness. Dennett's multiple drafts model, heterophenomenological method, and intentional stance form the basis of his theory of consciousness. Dennett's intentional stance provides us with a powerful strategy for interpreting behaviour, since it allows us to attribute a mental life to an entity without necessarily attributing consciousness to that same entity. Dennett's heterophenomenological method is intrinsically linguistic and thus gives us a hint as to what is required for consciousness.

Exploring this linguistic connection to consciousness we notice that language is unique to the human mind. As a linking example I will use the case of feral children, Kamala and Amala, to illustrate a number of points about consciousness and language. Counter-intuitive to our common understanding of language production Dennett argues that language is produced unconsciously allowing us to avoid traditional Cartesian ghosts. Dennett's theory of language production posits an anti-private language argument and as a consequence implies a public arena where language must take place. The main thrust of my thesis then argues that language is required for consciousness. On the surface this may also seem like a very counter-intuitive claim however language is the only way a third-person observer can determine if an entity is conscious and also the only way a first-person experiencer can determine if he or she is a conscious entity.

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Terry J.V. Butler

Introduction

There are many stories, fables, and myths of feral (wild or undomesticated) children raised by animals in forests and jungles. Feral children are lost or abandoned children raised in extreme social isolation, either surviving in the wild through their own efforts or by being 'adopted' by animals. Of these numerous myths and legends the story of Romulus and Remus is among the most famous.¹ These stories often characterise feral children as exhibiting the same animalistic nature of the animals that raised them. Supposedly these feral children are able to communicate with their animal 'parents' but are these children able to develop something more than the ability to signal? These feral children do not develop a language in the sense that 'normal' humans develop a language, or do they? Are feral children conscious in the same way that we are conscious, or are they conscious in a similar way as their animal 'parents'?

The actual case of the 'Wolf Children of Midnapore' (India) in the early 1920's

¹ According to Roman legend Romulus and Remus were the twin sons of Mars, the god of war, and Rhea Silvia, a vestal virgin. As a vestal virgin Rhea Silvia was forbidden to marry and forced to take a sacred vow of chastity. However Mars fell in love with Rhea Silvia and she gave birth to twin sons - Romulus and Remus. The infant twins were placed in a trough and abandoned by throwing them into the River Tiber. At that time the river was flooded and when the waters fell, the trough, still containing the two children came ashore under a fig tree. They were discovered by a she-wolf and woodpecker who care for them. (The wolf and woodpecker are both sacred animals to Mars.) It was some time until the twins were found by the king's shepherd. The shepherd and his wife adopted the twins giving them the names, Romulus and Remus. After growing up the twins decided to found a city on the spot where they were first discovered (Palatine Hill) by the she-wolf. Romulus killed his brother during a battle over who should govern. He then named the city after himself (Roma).

provides us with an interesting example that can be used as a sounding board in attempting to answer these philosophical questions. Two young girls Kamala (about age 8) and Amala (about 1½) were observed living with wolves near the village of Midnapore in India. When they were discovered, their rescuers actually removed them from the embrace of a pair of wolf cubs in order to take them to a local orphanage. Not only did they exhibit the physical behaviour of wolves but they displayed physiological adaptations, including modifications of the jaw which resulted from chewing on bones. In particular Kamala would walk on all fours or creep on her hands and knees, she would howl like a wolf, stay active during the night, lap at her food, only eat raw meat, and show her teeth and make harsh noises when other children from the orphanage approached. The girls were taken to an orphanage where they were cared for and for the first time exposed to human society. Amala died within a year of her removal from the wild but Kamala lived for 9 years until the age of 17. During her 9 years at the orphanage Kamala learned to walk upright, learned to understand verbal instructions, learned to speak (she developed a vocabulary of 45 words), and learned to do basic chores and run simple errands. Kamala fell ill and died on November 12, 1929, from uraemia (Gesell, 1942).

Cases of feral children are of widespread interest, not just because of the natural curiosity they arouse but also because of what they can teach us about language acquisition. When feral children are returned to society, after numerous years in isolation, many only acquire a very limited command of language and some continue to

remain seriously impaired. In any case these stories and myths (whether real or not) provide us with some interesting questions about the nature of language and consciousness.

My thesis, set against the backdrop of the actual case of Kamala and Amala, then focuses upon the work of contemporary philosophers Daniel Dennett and David Rosenthal. Both Dennett and Rosenthal have been engaged in a debate about the nature of consciousness that has lasted for over a decade. This ongoing debate between Dennett and Rosenthal has proven to be witty, fascinating, and thought-provoking. When I first had the notion to undertake a study comparing the philosophy of Dennett and Rosenthal I anticipated that their respective theories on consciousness would complement each other. But after close inspection I have discovered that this is not always the case. My thesis then adds to this debate by crystallizing some of the ideas that have been produced by Dennett and Rosenthal. Throughout my thesis I will pose questions related to the real world case of Kamala and Amala while the answers I arrive at will demonstrate the linguistic connection to consciousness. In essence I argue that language is required for consciousness.

The Dennett/Rosenthal debate is of significant importance because it confronts how we traditionally think about the link between language and consciousness. I am advocating a notion of consciousness that is something different than our traditional understanding of the term. We cannot equate the existence of a mental life or a mental state to the existence of consciousness. To claim that a being has a mental life is only to

attribute beliefs and desires to that being but not necessarily consciousness. To attribute consciousness then requires something more, namely language. I am advocating a notion of language that is a method of communication that involves a syntax, semantics, and a pragmatics. Language is then something that is currently the exclusive realm of human beings. Both animals and humans can use signals as a method of communication but only humans have developed a system of language.

Dennett argues that we produce language unconsciously. This is a very counter-intuitive claim but it allows Dennett to avoid such traditional notions as mentalese and parroting speech. Dennett further claims that there are no facts of the matter about when an object becomes conscious. Dennett goes a long way toward presenting a coherent theory of consciousness that avoids traditional Cartesian notions of consciousness. The Dennett/Rosenthal debate serves as the avant-garde debate by which to redefine our traditional notions of consciousness. Rosenthal attempts to align his theory of consciousness with Dennett's theory of consciousness but Dennett does not think this is possible. Dennett suspects that Rosenthal has not completely done away with the Cartesian notion of a 'central meander'. For Rosenthal consciousness requires the presence of a higher-order thought (HOT), implying that language is not required for consciousness. In opposition to Rosenthal I suggest, as I think Dennett does, that language *is* required for consciousness.

Human consciousness is just about the last surviving mystery ... There have been other great mysteries: the mystery of the origin of the universe, the mystery of life and

reproduction, the mystery of the design to be found in nature, the mysteries of time, space, and gravity ... We do not yet have the final answers to any of the questions of cosmology and particle physics, molecular genetics, and evolutionary theory, but we do know how to think about them. The mysteries haven't vanished, but they have been tamed ... With consciousness, however, we are still in a terrible muddle. Consciousness stands alone today as a topic that often leaves even the most sophisticated thinkers tongue-tied and confused.

Daniel C. Dennett, *Consciousness Explained* (pp. 21-22)

Chapter 1 - Consciousness

Death Throes of Cartesian Ghosts

Traditionally when we think of ‘consciousness’ we think of being awake or aware of one’s surroundings and this understanding of consciousness holds true for much of our everyday usage. We generally come to realize at some point in our lives that we are conscious entities; some people think that I realize it in myself first and then attribute it to others while other people hold that it is through my interaction with others that I come to recognize that I also am a conscious entity. No matter which way we look at consciousness it is something that is so intimate to ourselves that it seems to be part of what it is to be a normal human being. Our pre-theoretical intuitions often understand consciousness to be something like a personal searchlight. Whatever the searchlight of consciousness is aimed at will become illuminated allowing us to claim that we are aware or conscious of the object or objects being illuminated. We can think of this searchlight of consciousness as illuminating objects in the world (in a Husserlian sense) or alternatively we can think of this searchlight of consciousness as illuminating objects in the mind (in a Cartesian sense). In the Husserlian sense when I aim my searchlight at a physical object, such as a table, I am conscious of that physical object. In the Cartesian sense when I aim my searchlight at an object in the mind, such as the idea of a table, I am conscious of that idea. Our pre-theoretical intuitions also understand consciousness to be something like observation with a ‘mind’s eye’. In much the same way that the

searchlight of consciousness directs our attention so too does the mind's eye. In the mind's eye analogy consciousness is not directed toward physical objects (since our physical eyes would be the vehicle through which we encounter physical objects) but is directed towards ideas or objects in the mind. For example if a hypnotist were to ask us to picture "a warm sandy beach" he may ask us to picture it in our mind's eye. The role of the mind's eye analogy and the searchlight of consciousness analogy are then to stand as pre-theoretical ways of explaining consciousness.

If there is one thinker that has had considerable influence upon our modern day understanding of consciousness it would have to be Rene Descartes. Descartes' influence upon our everyday thinking about consciousness is not to be underestimated. We commonly understand that every human being has a dualistic nature; namely a body and a mind. We understand that our bodies and our minds are somehow harnessed together but we also believe that after the death of our bodies our minds may continue to exist. Our bodies have a public physical nature existing in time and space but our minds do not have the same physical nature (we generally understand that our brains, the mass of neurons in our skulls, are part of our physical bodies). Rather our minds exist in a private mental world. Our understanding of this mental world has become intertwined with our understanding of consciousness. Thanks to Descartes, his dualistic notion of human nature permeates our everyday thinking about consciousness.

Dennett and Rosenthal both agree that philosophers should abandon these Cartesian notions of consciousness. Dennett argues that we cling too tightly to Cartesian

notions of consciousness which saturate not only everyday but even current philosophical thinking. What are these Cartesian notions of consciousness as Dennett sees them? The Cartesian explanation proposes that there is a point of transition in the material brain where consciousness occurs which Descartes suggested could possibly be in the pineal gland. The pineal gland, which is smaller than the size of a pea, is located in the middle of the brain between the right and left hemispheres. The pineal gland is then the part of the brain where consciousness all comes together, it acts as the ‘finish line for consciousness’ which Dennett refers to as Cartesian materialism. Dennett (1991a) argues that “Cartesian materialism is the view that there is a crucial finish line or boundary somewhere in the brain, marking a place where the order of arrival equals the order of ‘presentation’ in experience because *what happens there* is what you are conscious of” (p. 107). The imagery of Cartesian materialism is a powerful and well entrenched one. Dennett points out that “it’s the view you arrive at when you discard Descartes’s dualism but fail to discard the imagery of a central (but material) theater where it all comes together” (p. 107). The pineal gland then stands as a candidate for such a Cartesian theatre (i.e. the mind’s eye). Many philosophers would naturally think that a materialist who has done away with dualism could not possibly still be considered a Cartesian. Thus Dennett’s notion, that non-dualistic materialism could still be Cartesian in nature, seems counter-intuitive. However a non-dualistic materialist can still be overpowered by the persuasive imagery of a mind’s eye or Cartesian screen on which we can witness the final defining moment where consciousness occurs. Dennett ultimately disagrees with this

Cartesian notion of consciousness claiming that it “keeps coming back to haunt us even after its ghostly dualism had been denounced and exorcized” (p. 107).

Rosenthal also advocates the exorcism of Cartesian ghosts but these Cartesian ghosts are not the same ghosts that Dennett focuses upon. Rosenthal claims that under the Cartesian theory of consciousness all mental states are conscious states; part of what it is for a state to be a mental state is that it be conscious. This claim is central to the Cartesian concept of mind, and was forcefully articulated by Descartes. In Descartes’ (1641) *Objections and Replies* to his *Meditations* he claims that “we cannot have any thought of which we are not aware at the very moment when it is in us” (p. 171). Descartes is claiming that any thought that we have is necessarily a conscious thought. He also points out that the word thought “includes everything that is within us in such a way that we are immediately aware of it” (p. 113). Thus for Descartes every mental state must be a conscious state. Consciousness then becomes an intrinsic, non-relational property of all mental states (Rosenthal, 1986, p. 9). Consciousness is non-relational in the sense that mental states are conscious in so far as they are mental, that is, because of an essential, internal property. As a result consciousness is the norm and a mental state will automatically be a conscious state. The Cartesian theory of mind then presupposes consciousness. However, for Rosenthal, it does not take much reflection to realize that we can have mental states that are not conscious. For example we can be in a particular emotional state (i.e. happiness) and only come to realize this after it is pointed out to us by someone else (i.e. “you seem to be in a happy mood today”). Even bodily sensations

can go unnoticed and thus exist without being conscious. For example you could be participating in an energetic game of ice hockey and receive a minor cut on the chin that goes unfelt until the coach points out that you are bleeding. Only after seeing the blood on your jersey do you come to realize that you have a pain in your chin. Rosenthal claims that if we assume all mental states are conscious states we create a problem of circularity because any appeal to mental states is an appeal to conscious states. Rosenthal (1990b) argues that “invoking the very phenomenon we want to explain trivializes the explanation and prevents it from being informative” (p. 735). Rosenthal maintains that if we continue to cling to Cartesian notions of mind the nature of consciousness will remain unanalyzable.²

Rosenthal’s Theory of Consciousness

Rosenthal proposes that we replace these embedded Cartesian notions of consciousness with the folk psychological notion of higher-order thoughts (HOT), which serves as the foundation for Rosenthal’s theory of consciousness. For Rosenthal a mental

² Descartes’ discussion about the perception of the wax concludes that the mind is always better known than anything extended. Thus for Descartes we cannot understand our mind, or more specifically our thoughts, in any other terms but themselves (i.e. we cannot use our minds without using thoughts) since there is nothing we understand better than our own minds. Descartes considers the mind the absolute foundation point for the explanation of everything else. Thus for Descartes consciousness *must* be an intrinsic, non-relational property of all mental states. Rosenthal, who is already convinced of a relational analysis of consciousness, maintains that this Cartesian view appears circular and unanalyzable.

state is conscious when it is accompanied by a suitable higher-order thought, where a higher-order thought is any thought about a particular mental state. What counts as a 'thought' for Rosenthal? A 'thought' is assertoric, occurrent, and episodic - essentially a transient mental event (distinguished from a 'belief' which Rosenthal considers dispositional). Dennett (1991a) points out that Rosenthal uses the term 'thought' as a technical term "to cover all episodic contentful states, not just episodes that we would ordinarily call thoughts" (p. 308). Thus for Rosenthal and Descartes a twinge of pain would count as a thought. But unlike Descartes, Rosenthal claims that it is possible that we can have mental states that are entirely not conscious. Therefore we must explain what it is for a mental state to be conscious by an appeal to a mental state that is *not* a conscious state; this higher-order state itself has the potential to become conscious by an appeal to an even higher-order thought. Rosenthal argues that when we think about a particular mental state we are conscious of that mental state. For Rosenthal consciousness is then a relational property, specifically the property of being accompanied by suitable higher-order thoughts. Rosenthal points out that by defining consciousness in terms of unconscious mental states (i.e. the accompanying suitable higher-order thoughts), he has discovered a way of laying the foundations within folk psychology for a non-circular, non-mysterious theory of consciousness.

Rosenthal identifies two types of consciousness: non-introspective consciousness and introspective consciousness. Rosenthal refers to a conscious mental state, accompanied by a suitable (but itself unconscious) higher-order thought, as a case of non-

introspective consciousness. Non-introspective consciousness requires no special act of attention and as a result non-introspective consciousness has the potential to be an object of introspection (Rosenthal, 1990b, p. 730). That is to say it is the conscious mental state that has the potential to be an object of introspection. A higher-order thought will not itself be a conscious thought unless we also have a third-order thought about the second-order thought, in which case the third-order thought will not be conscious but the second-order thought about the mental state will be conscious. This is a case of introspective consciousness, where introspective consciousness is the attentive and deliberate focusing of consciousness on our mental states (p. 730). When we are introspectively aware of a mental state we are also aware of a higher-order thought. Since we are not always conscious of our higher-order thoughts introspective consciousness occurs less frequently than non-introspective consciousness.

Rosenthal's theory can be seen as a type of triplism. Rosenthal's triplism consists of unconscious mental states, conscious mental states, and the physical body. A mental state, the overall category that conscious and unconscious mental states fit into, will be conscious if it is accompanied by a suitable higher-order thought. Rosenthal attempts to explain consciousness in terms of higher-order mental states. The appearance of mental states does not automatically coincide with their reality, in other words the way that mental states appear may not be how they really are. Thus for Rosenthal (1986) non-consciousness is more basic than consciousness (pp. 17-18). Rosenthal's higher-order thought theory preserves a methodological neutrality with respect to the apparent

opposition between first-person and third-person viewpoints (Rosenthal, 1995, p. 366). Rosenthal claims that his higher-order thought theory, although weaker, yields the same results as Dennett's theory of consciousness (p. 360).

Dennett's Theory of Consciousness

Like Rosenthal, Dennett examines the same two concepts, 'consciousness' and 'mental' but he approaches the distinction in quite a different manner. Dennett examines 'consciousness' using his multiple drafts model while he examines what counts as 'mental' by using his intentional stance (which will be discussed in the next section). Dennett then submits that we should replace the entrenched Cartesian notion of consciousness with a multiple drafts model (MDM), which he believes will ultimately provide us with a better model for understanding consciousness. The multiple drafts model claims that "all thought or mental activity is accomplished in the brain by parallel, multi-track processes of interpretation and elaboration of sensory inputs" (Dennett 1991a, p. 111). There is no Cartesian theater or 'mind's eye' (i.e. a central viewer or observer in the brain) that is the finish line for consciousness. In fact there is no finish line for consciousness at all; there is only a continuous editorial revision of sensory input. If one wanted to settle on a particular moment of processing in the brain as the moment of consciousness, it would be purely arbitrary. The multiple drafts model affirms that not all mental states are conscious states and thus consciousness is not an intrinsic property of all

mental states. For Dennett consciousness is discontinuous, anomalous, and gappy (i.e. to a third-person observer) even though it may appear to be continuous, stable, and single (i.e. to the first-person experiencer). The folk psychological or common use of the word ‘consciousness’ is often ambiguous and often intertwined with our general understanding of the word ‘mental’ therefore I am using the word ‘consciousness’ to mean the content of my personal heterophenomenological reports.³

What is Dennett’s heterophenomenology? Heterophenomenology refers to Dennett’s philosophical method of discovery which has its roots in Edmund Husserl’s phenomenology. Husserl’s phenomenology is an investigative method that is concerned with the description of objects of human experience or phenomena. Dennett refers for Husserl’s phenomenology as autophenomenology, where the prefix ‘auto’ refers to ‘describing one’s *own* experience’. Dennett’s problem with phenomenology is that it is undertaken by *oneself* so Dennett developed heterophenomenology, where the prefix ‘hetero’ refers to ‘describing *another’s* experience’. Thus Dennett’s heterophenomenology refers to an account of objects of human experience which is undertaken by *another*. A heterophenomenologist will seek to interpret how things will seem to someone given their behaviour. Dennett claims that his heterophenomenological method is the appropriate method by which to study consciousness. For example consider the case of a third-person observer who interprets the language of a first-person

³ Special thanks to Don Ross (University of Cape Town, South Africa) for drawing my attention to this discrimination.

experiencer witnessing a sunset. A first-person experiencer claims that she is witnessing a 'red' sunset (we assume that she is reporting honestly). Even if the same sunset appears 'orange' to the third-person observer he must attribute the belief of 'witnessing a red sunset' to the first-person experiencer. The third-person observer cannot experience the same sunset that the first-person experiencer does. Dennett's heterophenomenological method requires data from the third-person observer in order for us to attribute beliefs and desires to that first-person experiencer. It is the process of interpreting a speaker's language that reveals how things seem to that speaker. Dennett's (1991a) heterophenomenological method then "neither challenges nor accepts as entirely true the assertions of subjects, but rather maintains a constructive and sympathetic neutrality, in the hope of compiling a definitive description of the world according to the subjects" (p. 83). Dennett's method is a way of interpreting behaviour and remaining neutral with respect to the apparent opposition between first-person and third-person perspectives. Dennett's method involves the interpretation of the language we generate as speakers, the way things seem to us, or the content of the stories we tell (i.e. our heterophenomenological worlds). Since Dennett's method relies upon the interpretation of the language of first-person experiencers than the heterophenomenological method appears to be intrinsically linguistic.

Dennett provides us with an analogy to help better understand his heterophenomenological method. Dennett (1991a) claims that "[w]e can compare the heterophenomenologist's task of interpreting subjects' behavior to the reader's task of

interpreting a work of fiction” (p. 79). A work of fiction tells a story but not a true story yet we often speak of what is *true in the story*. Consider the example of Sir Arthur Conan Doyle writing about Sherlock Holmes. If Conan Doyle writes that Sherlock Holmes catches a train that departs from Waterloo Train Station at 11:10 am then that is what is true in the story. The fact that Sherlock Holmes catches the 11:10 out of Waterloo cannot be challenged; the content of the story is only what the author tells us about. Thus if a first-person experiencer witnesses a ‘red sunset’ then the content of that report cannot be challenged; it is what is true in the story of the first-person experiencer.

Let us now consider what would happen if we asked the feral child Kamala, upon her removal from the wild, to describe her heterophenomenological world. It is immediately clear that Kamala would not be able to respond to our questions since she had not developed an understanding of human language. We now notice an important fact about our heterophenomenological investigation: “[p]eople are the only objects of scientific study the preparation of which typically (but not always) involves verbal communication” (Dennett, 1991a, p. 73). Since Kamala has yet to learn a language she cannot describe the contents of her heterophenomenological world. However we can still treat Kamala as a rational agent that has beliefs and desires if we adopt the intentional stance (which will be discussed in the next section).

Dennett’s theory of consciousness can be seen as a type of dualism but this is not the dualism of Descartes, rather Dennett’s dualism is that of *content* and *vehicle*. The *content* is about the reports of our heterophenomenological world while the *vehicle* refers

to the material brain (i.e. the neurons, synapse, and chemical process in our brains).

Dennett (1991a) claims that “we can distinguish representing from represented, vehicle from content” (p. 131). Dennett attempts to illustrate this content-vehicle distinction by referring to the Battle of New Orleans which occurred on January 8, 1815, fifteen days after the truce ending the War of 1812. Without the aid of a high-tech communication system letters, intended to be delivered worldwide, would be sent and received at various times. It is reasonable to believe that an individual in India may receive a letter about the Battle of New Orleans prior to receiving a letter about the end of the war. To our observer in India the Battle of New Orleans ‘seems’ to have occurred prior to the signing of the treaty in Belgium. The ingenious idea of placing the date (or postmark) on the letters allows our observer to place these letters in chronological order. Thus the vehicle can be likened to the physical letters themselves while the content can be likened to reports about the dated substance of those letters. Dennett points out that “[t]his distinction between time represented (by the postmark) and time of representing (the day the letter arrives) is an instance of the familiar distinction between content and vehicle” (p. 147). The content-vehicle distinction is important to Dennett’s overall theory of consciousness because “the representation of time in the brain does not always use time-in-the-brain” (p. 131). There is no Cartesian screen or finish line for consciousness where a central observer or mind’s eye witnesses the arrival of various messages into the brain. Consider the example of the sentence ‘Billy and Sally arrived at the party together, but Jane arrived before both of them.’ In the sequence of the sentence the names Billy and

Sally occur prior to the name Jane but we understand that Jane actually arrived at the party before Billy and Sally despite the fact that we read the names Billy and Sally first. The order of the appearance of the names Billy, Sally, and Jane is irrelevant to the content of the information reported. Therefore the role of time is significant since the chronological order of appearance is not what matters but rather the temporal order of the content of the information reported is what really matters.

Dennett's dualism is then very different from both Descartes dualism and Rosenthal's triplism. Dennett's content-vehicle distinction consists of the content of our personal heterophenomenological reports and the vehicle through which the content is produced. Descartes mind-body dualism consists of a mental life and a physical body. Rosenthal's triplism also consists of a mental life (conscious and unconscious mental states) and a physical body. In fact, Rosenthal's triplism appears to be very similar to Descartes dualism. Both acknowledge a physical body and some type of mental life. However Rosenthal considers consciousness to be a relational property while Descartes considers a mental life to be an intrinsic property. Unlike Descartes, Rosenthal and Dennett both distinguish between mental states which are conscious and mental states which are not conscious. The following section will explore what Dennett considers to be a mental life.

Dennett's Intentional Stance

In order to fully grasp Dennett's theory of consciousness we must understand what counts as a 'mental life' for Dennett. Consciousness is something more than our traditional Cartesian understanding of a mental life (or mental state, mental world, mental experience, mental reality, intelligence, mind, etc.). We can understand what counts as a mental life for Dennett in terms of his 'intentional stance'. We have mentioned that for Descartes a mental life is intrinsically the same as consciousness, and that for Rosenthal consciousness is a relational property, but what does Dennett mean by the term 'mental life'? I suggest that by 'mental life' Dennett means something like, 'what the intentional stance refers to'. But in order to understand this, we must first examine in some detail what Dennett means by his intentional stance. Dennett claims that a 'stance' is a strategy for interpreting the behaviour of an entity and that by adopting one of three stances we can explain an entity's behaviour. Dennett's three stances include: the physical stance, the design (or functional) stance, and the intentional stance.

The intentional stance, as proposed by Dennett, is a strategy or method for understanding an entity's behaviour. The intentional stance is a method of explaining and predicting an entity or system's behaviour by treating it as having goals and some capacity to achieve its goals. If we adopt the intentional stance we interpret the behaviour of an entity by treating it as a rational agent whose actions are governed by beliefs and desires (i.e. mental life). Dennett (1991a) claims that "we must treat the noise-emitter as

an agent, indeed a rational agent, who harbors beliefs and desires and other mental states that exhibit *intentionality* or ‘aboutness’, and whose actions can be explained (or predicted) on the basis of the content of these states” (p. 76). As a consequence of Dennett’s intentional stance we can attribute beliefs and desires to an entity without necessarily attributing consciousness to that same entity. Dennett’s intentional stance then plays an important role in understanding what stands as a mental life and in developing an understanding of his theory of consciousness. Even though the intentional stance is an important component of Dennett’s theory of consciousness its purpose is merely to act as an explanatory schema. We must also consider the physical and design stances as explanatory schema.

The physical stance comes from the perspective of the physical sciences. Under the physical stance we use information about an entity’s physical make-up in conjunction with the laws of physics to predict future behaviour. For example when we make predictions about the movement of planets, comets, and stars we require a knowledge of their make-up and an understanding of the laws of physics. These types of predictions often rely upon a knowledge of the law of gravity and the fact that the planets, comets, and stars have weight and mass. Predictions made using the physical stance are fairly common and provide us with great detail however if we were to describe all things using the physical stance the process of explanation would be extremely complex. For example when an ice hockey referee releases a hockey puck from his hand during a face-off, we know that it will drop to the ice. To describe ‘a puck dropping to the ice’ using the

physical stance would require a comprehensive knowledge of physics and gravitational forces that would be so detailed that sports play-by-play announcers would be unable to call the game effectively. Therefore we should reserve use of the physical stance when describing things that involve an understanding of an immense amount of detail like the movement of heavenly bodies, the behaviour of quantum particles, and the process of chemical reactions, just to name a few.

The design (or functional) stance, on the other hand, is used to predict the behaviour of an entity by understanding the program controlling its operations. The design stance assumes that an entity has been designed in a particular way and we predict that the entity will behave as designed. The design stance will produce an explanation that is much simpler than an explanation produced by the physical stance. For our predictions to have any value under the design stance a system or entity must function as it has been programmed to function and we must assume this to be true or the design stance will prove fruitless. Due to this assumption explanations using the design stance are less secure than explanations using the physical stance.

The difference between the physical stance and the design stance can be illustrated by considering complicated objects such as cars or computers. Every time we start a car we predict that inserting and turning the appropriate key in the ignition will start the car's engine. We normally make this prediction using the design stance, that is we predict that the engine will start because that is the way the car has been designed to function. If we were to make predictions using the physical stance we would have to

possess a knowledge of all the physical laws governing the engine in order to describe the workings of a car. The fact that it may be easier for us to apply the design stance to a car does not mean that we cannot also apply the physical stance to it. In most cases when we are dealing with a designed object adopting the physical stance is hardly worth the long-winded effort. We may wish to adopt a physical stance description of our car in order to predict its behaviour in case of a malfunction or problem with the car. Dennett (1996) argues that “[d]esign-stance prediction, when applicable, is a low-cost, low-risk shortcut, enabling me to finesse the tedious application of my limited knowledge of physics” (p. 29). The design stance can even be employed when attempting to predict the behaviour of biological entities. The design stance can predict that a heart will pump blood, thereby doing what hearts are supposed to do (i.e. the way nature designed them to behave).

Dennett claims that we can often improve our predictions by adopting the intentional stance. Remember that intentional states are mental states such as beliefs and desires which have the property of ‘aboutness’. Intentional states are about, or directed at, objects or states of affairs in the world. Following the intentional stance is generally a four step process: first we must decide to treat an object X as a rational agent; second we must determine what beliefs X ought to have, given its place and purpose in the world; third we must determine what desires X ought to have, given its place and purpose in the world; and fourth on the assumption that X will act to satisfy some of its desires in light of its beliefs, we can predict what X will do. The intentional stance has the advantage of greater simplicity than the design and physical stances but due to this simplicity the

intentional stance has a greater degree of risk. The intentional stance buys its simplicity at the cost of accepting assumptions that it can treat a system or entity as having a degree of rationality.

Using Dennett's example of a chess-playing computer we can further illustrate what the physical, design, and intentional stances have to say. The chess-playing computer as a physical system operates according to the laws of physics, the laws of electronics, etc. The chess-playing computer as a design system operates as a designed mechanism consisting of parts with specific functions that interact to produce certain characteristic behaviour. To treat a chess-playing computer as an intentional system is to treat it as acting rationally in order to attribute a certain set of beliefs and goals to it. Dennett claims that adopting the intentional stance is the most efficient and most powerful way to predict and explain what a chess-playing computer will do. He points out that there are hundreds of different programs that could turn a single computer into a chess-playing computer and there are hundreds of differently designed computers that could run a single chess-playing program. When we adopt the intentional stance we do not have to worry about the various physical components of the computer or the programming language used to run the chess-playing program. Once we treat the chess-playing computer as a rational agent with beliefs about the rules and strategies, with the desire to win, we can predict that it will make the best move available to it (Dennett, 1996, p. 30). In essence by adopting the intentional stance we are treating the chess-playing computer as having a 'mental life'.

However the intentional stance may not be the most appropriate method of describing behaviour if something goes wrong with the computer or the program. If the computer suddenly began to act in a manner inconsistent with the actions of a reasonable chess player we would have to adopt the design stance. We may then have to examine a particular section of programming in order to accurately predict the behaviour of the computer. If the computer were to suddenly freeze-up or crash we may have to adopt the physical stance. We may then have to revert to thinking of the computer as a physical object in order to adequately explain its behaviour. However, Dennett claims that we should generally treat the chess-playing computer as a rational agent that will act on its beliefs in order to achieve its desires.

Dennett's intentional stance allows us to attribute beliefs to an entity but are these beliefs *real*? Dennett provides us with an analogy - beliefs are like centers of gravity. There are those who consider centers of gravity to be fictions and there are those who consider centers of gravity to be perfectly real. Centers of gravity are fictions insofar as they are merely abstract points of reference and centers of gravity are real insofar as they are the resultant force (i.e. a vector sum) acting through a central point. Dennett (1991b) defines centers of gravity as "mathematical points (i.e. abstract points) definable in terms of physical forces and other properties" (p. 96). Dennett argues that the question of whether abstract objects are real (i.e. the question of whether or not one should be a realist about them) can take two routes: the metaphysical or the scientific. The metaphysical route is concerned with the existence of abstract objects generally, and does

not distinguish them in terms of scientific utility. The scientific route is concerned with the reality of abstract objects particularly, as they do have scientific value or utility.

Dennett argues that beliefs like “abstract objects have the same metaphysical status as centers of gravity” (p. 97). He points out that we should be interested in the scientific path to realism where centers of gravity are real because they are good abstract objects (p. 97). Thus Dennett adopts a mild realist approach toward beliefs by claiming they are semi-real or good abstract objects. Dennett does not indicate what he means by the term ‘good’ but I suspect that we could replace it with the term ‘useful’. Centres of gravity are then useful abstract objects because they provide us with some form of scientific value or utility.

On the surface Dennett’s intentional stance may seem very much like folk psychology. In fact Dennett (1991b) claims that we use folk psychology as a method of “interpretation of each other as believers, wanters, intenders, and the like - to predict what people will do next. Folk psychology helps us understand and empathize with others, organize our memories, interpret our emotions, and flavor our vision in a thousand ways, but at the heart of all this is the enormous predictive leverage of folk psychology” (pp. 97-98). In this sense folk psychology is very similar to the intentional stance but there is however one minor difference. The intentional stance *can* treat all entities as having beliefs and desires (even computers, cars, and thermostats) while folk psychology only treats humans and animals as having beliefs and desires. Folk psychology is then the ‘common sense’ theory that treats humans and animals as entities that have beliefs and

desires in order to predict their behaviour. Even though we can use the intentional stance to treat all entities as having beliefs and desires, Dennett argues that we should be pragmatic about its use. Thus the intentional stance is also a 'common sense' way of interpreting behaviour with an added degree of flexibility that folk psychology does not necessarily have. Therefore we must use whatever stance gives us the easiest and most reliable predictions. Dennett claims that "our power to *interpret* the actions of others depends on our power to predict them" (p. 98).

Dennett's intentional stance plays an important role in understanding what counts as a mental life and in developing an understanding of his theory of consciousness. The intentional stance then provides us with a powerful tool for not only predicting behaviour but also for attributing mental states (i.e. beliefs and desires). Consider the case of Kamala and Amala. Using Dennett's intentional stance we can treat Kamala and Amala as rational agents and interpret their behaviour as being motivated by beliefs and desires. When Kamala and Amala were removed from the wild they could not speak or understand any language yet they were still treated as having a mental life. For example if we adopt the intentional stance we can attribute the mental state of 'hunger' to Kamala and Amala if we observe them eagerly eating raw meat. However our adoption of the intentional stance alone does not mean that Kamala and Amala are necessarily conscious beings. Using the intentional stance we can separate out from our folk psychological understanding of consciousness what Dennett refers to as a mental state. Attributing consciousness to an entity is *not* the same as attributing a mental life to an entity. Thus

for Dennett the claim that an entity has a mental state only amounts to a strategy of attributing beliefs and desires. For Rosenthal the claim that an entity has a mental state amounts to that entity having a particular relational thought (that particular thought can be conscious or unconscious). For Rosenthal a mental state is consciousness if it accompanied by a suitable higher-order thought; for Dennett consciousness amounts to something different than what Rosenthal's folk psychology advocates.

Both Dennett and Rosenthal's theories of consciousness represent an improved alternative to our traditional Cartesian understanding of consciousness. Rosenthal and Dennett have moved beyond Descartes by dispelling such traditional notions of a mind's eye and a searchlight of consciousness. Consequently there can be no Cartesian theatre where consciousness comes together. I agree with both Rosenthal and Dennett in their attempts to dispel these Cartesian ghosts. However we must focus upon Dennett's theory of consciousness if we are to arrive at a better way of explaining consciousness. Since Dennett's heterophenomenological method is intrinsically linguistic, consciousness must somehow be related to language. An entity need not have the ability to use language in order to be attributed with a mental life (as in the case of Kamala and Amala). However before we can attribute consciousness to an entity more must be said about the nature of language. In the coming chapter we will explore the notion of language in some detail.

Chapter 1

In this chapter we saw how both Dennett and Rosenthal advocate the dissolution of traditional Cartesian notions of consciousness. This chapter explored Rosenthal's theory of consciousness and how he believes that his higher-order thought theory is a better alternative to any Cartesian notion of consciousness. This chapter also explored Dennett's theory of consciousness, focusing upon his multiple drafts model, heterophenomenological method, and intentional stance. Dennett also believes that his theory of consciousness is better than our traditional Cartesian notions of consciousness. While Rosenthal's theory clings to our common or folk psychological understanding of consciousness, Dennett's theory takes us in a completely new direction. Dennett's intentional stance provides us with a powerful strategy for interpreting behaviour. This allows us to attribute a mental life to an entity without necessarily attributing consciousness to that same entity. Dennett's heterophenomenological method then requires us to explore further a linguistic connection to consciousness.

Chapter 2

The second chapter will focus upon language. In particular I will make a distinction between two methods of communication: language and signalling. Language is unique to the human mind whereas signalling is available as a method of communication to both

humans and animals. I will examine Dennett's 'pandemonium model' of language production and Rosenthal's 'refinement model' of language production. Dennett's pandemonium model claims that language is produced unconsciously, which conflicts with Rosenthal's folk psychological notions of language production. I will argue that Rosenthal unsuccessfully attempts to combine his folk psychology with Dennett's pandemonium model. I will argue that Dennett's pandemonium model posits an anti-private language argument and as a consequence requires a public arena where language must take place.

Chapter 2 - Language

Language and Signalling

In our everyday lives we often do not think too much about language but its importance cannot be overestimated. Language is a central part of what it is to be a human being. All normal human beings use language, while non-human animals do not, thus possessing a language is a primary human trait. Language is the main vehicle by which we know about other people's thoughts. Every time we speak we are revealing something about ourselves and the language we use. We commonly understand language to mean our speech, or the words we use to communicate with other people. We commonly understand communication to be the act of giving or passing along information. Language is then a method of communication. However language is not the only method of communication, signalling is another. I will first examine what I mean by the term 'language'.

Language is a method of communication that is unique to normal human beings. Language requires the use and understanding of symbols and characters that represent certain objects. Language involves a combination of rules in which these symbols and characters are immersed into an unlimited set of combinations, each with a determinate meaning. Language can be written and/or spoken but either way one must possess a general understanding of the rules that govern language before one can participate. We now can understand language as having syntax, semantics, and pragmatics. The syntax of

a language consists of the lexicon (i.e. words) of a language and its grammatical or syntactical rules. The words are concatenated according to the grammatical rules in order to produce sentences. The semantics of a language has to do with the meanings expressed by words and sentences. In particular the semantics of a language tell us what meanings are assigned to individual words and how these meanings combine to provide the meanings of whole sentences. Pragmatics has to do with the utterances of sentences in social contexts. Whereas the hope in semantics is that a sentence can be regarded as having a proposition paired with it in isolation from context, when we turn our attention to pragmatics we consider the bearing of the circumstances under which it is uttered on what meaning is ultimately expressed. Sarcastic or ironic uses of language are good examples of what can be considered pragmatic phenomena. The structure of language then provides us with a variety of publicly accessible rules that must be followed which lets us know if we are using language correctly. Human beings have the ability to represent themselves and their thoughts using language. Language then entails the ability to reflect upon our thoughts.

Normal human beings may communicate by using language but what about non-human animals? It may seem obvious to us that animals have a 'language' since we observe animals 'talking' all the time. We commonly understand that the barks, growls, and whimpers of dogs represent certain things to other dogs and it is these verbal utterances that amount to a 'language' for dogs. Animals can 'talk' to one another through a variety of means; for example, a beaver will slap its tail against the surface of

the water as a warning signal to other beavers that danger is approaching. It may be true that we interpret the bark of a dog or the slap of a beaver tail as having the purpose of passing along information but these actions do not amount to a language. The bark of a dog and the slap of a beaver tail do not meet the criteria for language. A language will have a syntax, semantics, and a pragmatics while the bark of a dog or the slap of a beaver tail may have a semantics (and possibly even a pragmatics) but they will not have a syntax. Thus animals can only communicate by way of 'signalling'. Signalling is a method of communication that lacks syntax (i.e. words and grammatical rules); signals have a semantics without a syntax. The main point of signalling is that each signal is *independent* of other signals; that is, they do not form part of a system. Knowing one signal does not help us to know another signal, whereas knowing one sentence in language places us in a much better position to understand another sentence. For example if we know 'the cat is on the mat' then we can figure out 'the dog is on the chair' fairly easily. If we know that dropping a handkerchief signals the start of a race we are no closer to figuring out that a shot fired from a gun signals that the race has been won. Normal human beings have the ability to both signal and to use language whereas animals only have the ability to signal. Signalling is then the activity of passing along particular information which can be accomplished either verbally or non-verbally. Human beings can use language as a method to communicate and can also use some form of signalling (i.e. body 'language') as a method to communicate. Normal human beings have the *potential* to use language and until they actually begin to speak and understand

what they and others are saying then they can only signal their intentions. Successful acquisition of language typically happens by the time a normal child reaches the age of four or five.⁴ Language then involves some mental capacity that animals do not possess. Consider the case of Kamala and Amala and their development toward language. Kamala and Amala, by virtue of being humans, certainly had the *potential* to develop language. Unfortunately Amala died at the age of 2 and did not develop a language. Since animals communicate by signalling it is estimated during the seven years Kamala spent living with the wolves she learned to exhibit many wolf-like signals. When Kamala was discovered in the wild and brought to an orphanage at the age of eight she had not developed a language but she had developed the ability to howl and cry like a wolf. By the time an average North America child has reached the age of eight he will have developed a vocabulary of over 3000 words, whereas the time Kamala was eight she exhibited absolutely no human articulation (Gesell, 1942, p. 60). It is fair to say then that Kamala's only method for communicating was through wolf-like signalling. Thus we can now attribute to the verbal howls and cries of Kamala meanings (or semantics) and beliefs (via the intentional stance, as mentioned in Chapter 1) but not necessarily

⁴ Evolutionary psychologist Steven Pinker (2003) argues that there may be a neurologically-determined 'critical period' for successful language acquisition. "Synapses continue to develop, peaking in number between nine months and two years (depending on the brain region), at which point the child has 50% more synapses than the adult. Metabolic activity in the brain reaches adult levels by nine to ten months, and soon exceeds it, peaking around the age of four. In addition, huge numbers of neurons die in utero, and the dying continues during the first two years before levelling off at age seven. Synapses wither from the age of two through the rest of childhood and into adolescence, when the brain's metabolic rate falls back to adult levels" (*Language Acquisition*).

consciousness. This is one of the central claims of this thesis that for an individual to have consciousness, as opposed to just beliefs and desires, signalling alone is insufficient; syntactical language is necessary.

We have just discussed the differences between language and signalling but what *exactly* counts as a language? We can identify two types of languages: natural and artificial. A natural language is a language that has evolved naturally whereas an artificial language is a language that has been constructed. We can classify English, French, and Latin, as natural languages while we can classify computer code, mathematics, and logic as artificial languages. If we were to construct an artificial language we would need to specify a lexicon, the rules of construction, and a semantics. In constructing an artificial language we would not necessarily need to specify a pragmatics. A typical feature of any type of language is that it can be translated into another language. For example we can translate an old Latin text into French, we can translate a proposition of logic into German, and we can translate the English rules of chess into computer code. When we translate from one language to another we attempt to preserve the meaning of what is translated. For example the English sentence 'It's raining' can be translated into the French sentence 'Il pleut'. However some languages are much more expressive than others and this can lead to problems in translation. Unless otherwise specified when I refer to a language I will be referring to a natural language.

There is another type of language that needs clarification: mentalese. Mentalese is a term coined by Jerry Fodor (1975) from his work *The Language of Thought* which

claims that all mental representations are linguistic expressions within an ‘internal’ language which significantly resembles spoken language. Mentalese or a language of thought (LOT) is postulated to be encoded in the brains of intelligent creatures in order to be used as a vehicle or medium from which all cognition proceeds. Mentalese is not only embedded in our brains but even in intelligent non-human animals that are incapable of speaking any language at all (i.e. chimpanzees). The main function of mentalese is to be a medium of representation for thought; an essential feature of mentalese is that it has a language-like structure (Fodor, 1975, pp. 99-103). Fodor suggests that mentalese resembles a natural language but there is some debate over whether mentalese (if it exists at all) really resembles a natural language. Dennett does not support the idea of mentalese; Dennett’s intentional stance (discussed in Chapter 1) stands as an alternative to Fodor’s position. For Dennett a belief is always specified or made determinate and so requires a natural language. When we *attribute* a belief to a dog the determination is due to *our* language and the belief is semi-real (i.e. much like a centre of gravity). Fodor deals with the same issue exactly but takes an industrial strength realist approach; beliefs are real things sitting inside an organism, regardless of stance. Hence beliefs must have their own structure (independent of stances) and that structure is the same as that of linguistic propositions. Thus for Fodor a belief is *really in* the organism itself, and so mentalese has to be invented to give a belief the specific linguistic structure that it has.

Pandemonium Model

How does a natural language get produced? Are our brains really encoded with some type of mentalese or is there another alternative? What do our pre-theoretical intuitions tell us? Our pre-theoretical intuitions tell us that the words we use are assembled into a language (i.e. English) prior to their verbal sounding. Various components of our brains work together assembling letters into words and words into sentences. The entire project is overseen by a central director or central part of the brain that ensures what is said is what was intended. Thus prior to the occurrence of a verbal expression there exists within us a corresponding determinate intentional state (i.e. I am hungry). It is the determinate intentional state that governs what we say. For example I have the thought 'I am hungry' prior to the verbal expression of that thought in a natural language. Thus the content of our thoughts (or intentional states) fix our speech acts. It then seems plausible that our brains are indeed encoded with some type of mentalese which precedes natural language.

Dennett challenges the above pre-theoretical view by characterizing two models of language production: the bureaucracy model and the pandemonium model. Dennett calls the everyday view 'bureaucratic' and considers it to be based on the Cartesian approach which, as we saw in Chapter 1, he wishes to move beyond. Dennett characterizes the bureaucracy model as proposing a hierarchy of message generation while advocating a central meaner (or conceptualizer) who is responsible for message

discrimination. It is the central meaner that decides which messages are verbalized and which are not. The bureaucracy model then essentially matches our pre-theoretical intuitions of language production. The bureaucratic or pre-theoretical way of explaining the origination of our intentions presupposes that they already exist in us before our brain has to translate them. If intentional states originate in our brain prior to their verbalization in speech, then there has to be some way in which the brain moves from not having intentional states to the production of language. The Cartesian assumption of a central meaner, and Fodor's notion of mentalese, presuppose that there is already a preformed intentional state, but it is precisely the origination of meaning that Dennett's theory is seeking to explain. Dennett claims that his pandemonium model explains this origination and consequently we should discard the bureaucracy model in favour of the pandemonium model. The pandemonium model of language production is then the proper alternative to our bureaucratic or pre-theoretical intuitions of language production.

Dennett's pandemonium model stands in opposition to the bureaucracy model of language production. The pandemonium model, as the name suggests, proposes serendipitous activity by various word-demons. These word-demons work in multiple parallel fashion, feverishly constructing numerous possible expressions. The pandemonium model does not require a central meaner or some type of mentalese. Dennett (1991a) claims that "control is usurped rather than delegated, in a process that is largely undesigned and opportunistic" (p. 241). Phrases that get expressed (i.e. the words that are put forth by various competing word-demons) are the ones that are *in the right*

place at the right time. Dennett claims that “the speaker gets no preview; he and his audience learn what the speaker’s utterance is at the same time” (p. 238). Dennett often quotes E.M. Foster to demonstrate his point; “How do I know what I think until I see what I say?” Our intentional expressions are performed without any conscious preamble. Given this unconscious notion of language production we are often satisfied by what we say; it is normally coherent and rational. In fact it often seems that putting our thoughts into word helps clarify our thinking but this is not the result of us first having a clearer thought because, according to Dennett it is our speech acts that fix the content of our thoughts (or intentional states). For Dennett there is no determinate intentional states prior to the occurrence of verbal expressions. Thus it is our speech acts that fix the content of our thoughts.

An advantage of the pandemonium model is that it allows Dennett to provide us with an explanation of Freudian slips. Dennett argues that slips of the tongue only occur with words that are similar in sound or structure. For example we would not normally say ‘carrot’ in place of ‘God’, however we may mistakenly say ‘God’ in place of ‘dog’ or ‘curse’ in place of ‘course’. These similar words mistakenly get expressed because there is a “mismatch distance in semantic space” this error occurs between “the content that is in a position to be expressed and the various candidates for verbal expression that are initially nominated” (Dennett, 1991a, p. 247).

Critics of Dennett’s pandemonium model claim that he is advocating nothing more than ‘parroting’ speech. If there is no thought behind our speech acts our utterances

will be nothing more than mere recitations; we will be 'parroting' words without thought. Consider the case of Kamala. Was Kamala merely parroting speech when she said her first word? Kamala was ten years old before she said her first word - 'ma' for Mrs. Singh (the housekeeper at the orphanage). Even though Kamala had been exposed to human contact for two years was there any thought behind her first word or was she parroting what she had already heard? I suggest that Kamala was most likely parroting a sound that she had already heard. But once she was able to consistently match the word 'ma' to the object 'Mrs. Singh' then we may conclude that there was some thought behind her speech. Often there are times when what we say does not match the content of our thoughts resulting in parroting speech (or insincere speech - acting, lying, etc.). For example when I act the part of Shakespeare's Brutus I am merely parroting speech because I do not really intend to kill a man named Julius Caesar.

Does Dennett's pandemonium model result in parroting speech? Rosenthal claims that Dennett's pandemonium model, which posits only subpersonal events of content fixation, produces parroting speech. For Dennett these subpersonal events of content fixations, which can be located in space and time, are not conscious. These content fixations are representations of colour, form, orientation, motion, etc. Dennett claims that these content fixations come together in an integrative process which involves dispositions (i.e. beliefs) to produce narratives or stories that are about one's mental life. As a result, for Dennett, there are no phenomena present on the Cartesian screen since *there is no Cartesian screen*. The content fixations and the editorial processes are not

conscious; only the results of them, the content of what is said, is conscious.

Refinement Model

Rosenthal, in direct opposition to Dennett's pandemonium model, adopts our pre-theoretical intuitions or folk psychological view of language production. Rosenthal's folk psychology maintains that the content of our thoughts (or intentional states) fix our speech acts. He claims that "our speech acts, moreover, reflect the content of those intentional states. It is natural to hold that this correspondence of content is exact; whenever we say anything, the speaker's meaning of our speech act is the same as the content of the intentional state we express" (Rosenthal, 2000, p. 289). It then seems from a first-person perspective that what we say matches exactly the content of the intentional states we are in. However when Rosenthal claims that our thoughts are determined prior to their expression in speech this forces him to rely upon our pre-theoretical intuitions and thus advocate some type of bureaucracy model. Granted our speech acts would not be parroting because we would have full fledged intentional states prior to the verbal expression. But Rosenthal would then be obliged to concede that there is some type of language of thought or mentalese. Mentalese should be avoided because it suggests that there is a central meaner working behind the scenes directing the production from mentalese into a natural language. As mentioned in Chapter 1 both Dennett and Rosenthal want to avoid such Cartesian notions.

How then does Rosenthal claim to solve the problem of non parroting speech while avoiding the problem of mentalese? Rosenthal advocates a position that combines the pandemonium model with our folk psychological intuitions to form the 'refinement model'. Rosenthal (2000) claims that "the folk-psychological model arguably exaggerates the match in content between speech act and intentional state, and the pandemonium model provides a useful corrective" (p. 293). For Rosenthal there is some matching of content and speech act but this is not always an exact match. He argues that the content of a particular thought can be expressed equally well in a range of speech acts. For example I may have the thought 'I am cold' and I may express that thought by saying 'I am cold', 'it is freezing', 'I am shivering', 'there is a chill in the air', 'the wind is icy cold today', and the list goes on. Rosenthal regards the content of the thought as neutral in respect to the multiple meanings of the various speech acts. He claims "[a]ny particular choice of words, then, produces a speech act with semantic meaning more fine grained than the content of the corresponding intentional state" (p. 294). The various speech acts are more fine-grained than the content of the thought thus our speech acts can go beyond the content of our thoughts. As a result the folk-psychological claim that the content of our thoughts exactly matches our speech acts does not hold true. Thus, according to Rosenthal, under the refinement model we can have non parroting speech that avoids some type of mentalese. Rosenthal describes his refinement model in the following way:

[T]he refinement model ... avoids the disadvantages of both the folk-psychological and pandemonium models, by allowing us to explain the difference between parroting and nonparroting speech performance while circumventing the temptation to hypothesize a full-fledged language of thought. The refinement model shares with the pandemonium model the recognition that speech often outstrips our thoughts in content. But unlike the pandemonium model, the refinement model preserves both our folk-psychological taxonomy and the traditional view that speech acts express antecedent intentional states. (p. 295)

Rosenthal unfairly criticizes Dennett's pandemonium model for advocating parroting speech. To suggest that Dennett's pandemonium model produces parroting speech is to imply that someone or something, possibly a central meaner, is behind the initial speech act. Dennett's pandemonium model does not involve mere recitations but involves an integrative process that allows for meaning to be generated without relying upon the existence of a central meaner. Could the refinement model, by holding on to our folk-psychological notions, be unknowingly positing a Cartesian central meaner? If so the refinement model may not be doing away with mentalese or parroting speech as Rosenthal suggests. Rosenthal's refinement model specifically refers to an initial intentional state, even though it may be vaguer and less fine-grained than the language it expresses. This vague intentional state will still require a vague mentalese and a vague central meaner. Rosenthal may make the initial intentional state less fine-grained but this does not solve the problems of a central meaner or mentalese. Rosenthal continues to posit an initial intentional state, albeit a less fine-grained one. Here we can see how Rosenthal has fallen victim to his own folk psychology. In his eagerness to hold on to our pre-theoretical intuitions he posits an initial intentional state which results in the

introduction of a central meaner. The best way to avoid the notion of a Cartesian central meaner is to side with Dennett when he claims that our speech acts fix the content of our thoughts (or intentional states).

Dennett ultimately rejects attempts by Rosenthal to align his theory of consciousness (HOT theory and refinement model) with his own theory of consciousness (MDM and pandemonium model). Dennett claims that Rosenthal's hierarchy of higher-order thoughts presents a cause for concern. Remember that for Rosenthal consciousness is a relational property (i.e. the property of being accompanied by higher-order thoughts) thus for Rosenthal (1986) "[t]he appearance of mental states will not, therefore, automatically coincide with their reality" (p. 19). There is the chance then, within the hierarchy of higher-order thoughts, that an error in memory will occur. Dennett (1991a) points out that "if the experience you are reporting is a past experience, your memory - on which you rely in your report - might be contaminated by error" (p. 318). We may want to ask: if error can occur within Rosenthal's hierarchy of higher-order thoughts can we collapse this chain into a flattened world where how things seem to us is actually what we experience? Dennett is quick to point out that, in this sense, a flattened world is a Cartesian notion. For Descartes the way we experience the world is the way the world seems to us. For example if I experience a 'red sunset' then there must be a real 'red sunset' in the world for all to see. In a flattened world the occurrence of the mental state 'I see a red sunset' must correspond to a real red sunset present before me, presumably on the screen in the Cartesian theatre. Thus for Descartes what we experience coincides with

a mental reality (i.e. the idea on the Cartesian screen). As mentioned in Chapter 1 consciousness, for Descartes, is an intrinsic property. Dennett does not espouse this Cartesian view of consciousness where mental states coincide with reality. For Dennett there is only *content* and *vehicle* and thus no mental reality independent of our heterophenomenological reports about the real world. Dennett points out that it makes no sense to make a distinction between how an event *seems* and how that same event is really experienced by us. Dennett claims that the notion of *real seemings* is incoherent. “There is no such phenomenon as really seeming - over and above the phenomenon of judging in one way or another that something is the case” (p. 364). Dennett does not deny that various things *seem* to have various features but what he does deny is that in addition to an event appearing that there is another mental reality of that same event. Dennett wants to avoid a duplicate world since there is only one real physical world. Thus for Dennett there is no mental reality separate from our heterophenomenological reports about the real world.

We can illustrate Dennett’s point, that there is no mental reality separate from our heterophenomenological reports about the real world, if we consider how our brains deal with wallpaper. Dennett supposes that we walk into a room where the wallpaper is a regular array of hundreds of identical images of Marilyn Monroe. We know that the highest resolution of our visual field normally occurs directly in front of our head and eyes but as we move further away from the center of our visual fields into our parafoveal vision the resolution quality deteriorates. Even given the fact that we have poor

parafoveal vision we ‘instantly’ recognize that there are hundreds of identical images of Marilyn Monroe. We can arrive at this conclusion even if we do not examine each individual image to see if it is identical with the last. How is this possible? Dennett (1991a) suggests that our brains “having identified a single Marilyn, and having received no information to the effect that the other blobs are not Marylins, it jumps to the conclusion that the rest are Marylins, and labels the whole region ‘more Marylins’ without any further rendering of Marilyn at all” (p. 355). However it does not seem that way to us; it actually seems as if we are seeing hundreds of identical Marylins. Even though we are seeing hundreds of identical Marylins it is not the case that there are hundreds of identical Marylins represented in our brains. Dennett argues that “[y]our brain just somehow represents *that* there are hundreds of identical Marylins, and no matter how vivid your impression is that you see all that detail, the detail is in the world, not in your head. And no figment gets used up in rendering the seeming, for the seeming isn’t rendered at all ...” (p. 355). This point demonstrates that we should not think about the world as how it *seems to seem* and how it really seems; there is no objectively subjective. If we were to claim that there is (1) the way the world *seems to seem*, and (2) the way the world really seems, we would be advocating Cartesian materialism (i.e. the notion of a mental reality on a Cartesian screen). As mentioned in Chapter 1 Dennett wants to avoid such a Cartesian notion, thus for Dennett there remains no mental reality separate from our heterophenomenological reports about the real world.

Dennett’s basic idea behind his multiple drafts model and the pandemonium

model has been referred to as ‘fame in the brain’. He acknowledges that consciousness is not *exactly* like fame in the brain because fame is something that is normally given or supplied. Consciousness is more like *influence*, a branch of fame, because it is something that is appropriated; it is like ‘influence in the brain’. Dennett claims that consciousness, for Rosenthal, is something that is given or supplied (i.e. here consciousness is like a searchlight of attention), much like a king is able to grant some type of notoriety to his subjects. Dennett (2000) claims that “[t]he main difference between Rosenthal’s HOT theory and mine, then, is that in his theory, being conscious is not like being famous; it’s like being *known by the King*” (p. 376). Dennett believes that Rosenthal’s view of consciousness is misguided. Dennett argues that consciousness must be explained by the functional powers of *attention-grabbing* as opposed to *attention-giving* sources. Dennett accuses Rosenthal of holding onto the Cartesian notion of a central meaner where in *Content, Interpretation, and Consciousness* Rosenthal’s use of the term ‘we’ reveals that he does posit a central meaner. Dennett suggests that “[a] word that stands out like a sore thumb in (my reading of) Rosenthal’s essay is the pronoun ‘we’ ... any theory of consciousness with such a subject still in the picture has a hostage; until it is discharged, we can’t tell if there has been any real progress” (p. 378).

Public Language

Dennett’s pandemonium model proves to be a better way of explaining the nature

of language production than Rosenthal's refinement model. Do Rosenthal's refinement model and Dennett's pandemonium model reveal anything further about the nature of language? What do their respective theories have to say about a 'public language'? A public language stands in opposition to a 'private language'. A private language is a language that contains elements which are logically *impossible* for anyone but the speaker to learn and understand. The philosophy of Jerry Fodor is representative of a thinker who explicitly argues for a private language. A public language, in contrast, is then a language that contains elements that are logically *possible* to learn and understand. A public language requires a public arena where language must take place. This public arena is essentially the human cultural milieu in which our language has developed; it consists of our parents, care-takers, siblings, friends, teachers, and basically all those who are around us and interact with us. It is from those around us that we are first exposed to language and it is from those around us that we learn to speak. Rosenthal's refinement model does not imply a public language because he does not require a public arena where language takes place. Language, for Rosenthal, is produced prior to our verbal expressions. Remember that Rosenthal's folk psychology maintains that the content of our thoughts (or intentional states) fix our speech acts. Thus Rosenthal's refinement model does not imply a public language.

Dennett's pandemonium model of language production and heterophenomenological method of discovery reveal an essential feature of language. We know that language is produced unconsciously and we know that Dennett's method is intrinsically linguistic.

Thus when we verbally report on the contents of our heterophenomenological worlds our reports, which were produced unconsciously, come to reside in a public arena. We now arrive at the conclusion that Dennett's pandemonium model posits the existence of some type of public arena where language must take place. That is to say that Dennett is presenting an anti-private language argument by requiring a public arena where our unconsciously produced reports interact and play. Consider once again the case of Kamala and Amala; would they have developed a language if they remained in isolation from human contact? It is difficult to know what would have happened but the essential foundations for the development of language were present. In particular there was at least two participants, Kamala and Amala, both with the potential to develop a language. What remains to be seen is whether Kamala was past the critical age for language development (possibly age four or five) as it seems current child psychology suggests. In that case Kamala and Amala may not have developed a language if they remained in isolation from human contact.

Dennett's heterophenomenological method requires that there exists some public arena where language takes place and hence implies an anti-private language argument. Dennett requires that there is at least one individual that issues reports about his/her heterophenomenological world and at least one other individual that interprets those reports. Remember from Chapter 1 that heterophenomenology refers to the description of objects of human experience which is undertaken by *another*. Thus Dennett's method requires a first-person reporter (or experiencer) and a third-person interpreter (or

observer). Is it possible to do without a third-person interpreter? Can one individual both issue reports and interpret them? We often 'talk to ourselves' all the time thereby acting as both reporter and interpreter. For example we talk to ourselves saying things like 'It may rain today so I better not forget my umbrella' or 'I have to remember to pick-up the dry-cleaning on my way home from work'. This is true but it is true only because we have previously come to realize that there exists a public arena where language takes place. Since we have already learned a language we can get away with this type of description but if we had not already learned a language we would be unable to describe our heterophenomenological worlds to ourselves or a third-person interpreter. Thus Dennett's method must involve a third-person interpreter and first-person reporter. Since Dennett's method relies upon the interpretation of the language of first-person reporters by third-person interpreters than his heterophenomenological method is intrinsically linguistic and implies an anti-private language argument.

Dennett acknowledges the influence that Ludwig Wittgenstein had upon his philosophical thinking. Thus if we briefly outline Wittgenstein's (1953) anti-private language argument in his work *Philosophical Investigations* we may better understand the roots of Dennett's thinking about language. Wittgenstein argues that to use a language is to do something correctly or incorrectly. We must therefore be able to check, at least in principle, that one is doing it correctly. Can a language contain elements that only the speaker can learn and understand? No! A private language would not allow for one to check if he or she were correct. Therefore language must be something that is

public and accessible to those who have the capacity to participate in a language.

Language then requires a minimum of two individuals in order to give objects common meanings. If we return to the example of Kamala and Amala we quickly realize that Kamala, on her own, would have no hope of developing a language if there are no other humans to create a public arena in which language can take place. Given this public nature of language and that fact that language is related to consciousness, consciousness must also have a public nature. Therefore without a community to create a public arena where language must take place an individual could not become or be conscious.

Dennett's pandemonium model, heterophenomenological method, and the implication that language requires a public arena play an important role in understanding his theory of consciousness. In this chapter I have highlighted the importance of language to Dennett's theory of consciousness. As we have discussed language is a method of communication that requires syntax, semantics, and pragmatics. Animals, who do not possess a language, can only communicate by way of signalling. The key difference between language and signalling is that signalling does not have a syntax while language does. Thus we can attribute meanings and beliefs and desires (via the intentional stance) to the verbal utterances of non-linguistic animals but not necessarily consciousness. We may now begin to see that language is intimately connected with consciousness. Language, which is unique to human beings, is produced unconsciously hence providing the advantage of avoiding mentalese and parroting speech. Rosenthal's refinement model maintains that it is our intentional states that fix our speech acts thereby

positing some type of mentalese. Since Rosenthal clings too tightly to our pre-theoretical intuitions he cannot escape the Cartesian notion of a central meaner. Thus Dennett's pandemonium model serves as a better way of accounting for the production of language than Rosenthal's refinement model. As the better model of language production, Dennett's pandemonium model implies that there is a public arena where language must take place. Since language has a public nature and we know the important role language plays in Dennett's theory of consciousness, consciousness must also have a public nature. Consequently for an individual to be conscious or to become conscious there must also be a public arena where consciousness can occur. We must now attempt to understand what is required for consciousness. In the next chapter we will need to explore in further detail the relationship between language and consciousness.

Chapter 2

This chapter focused upon language. In particular I made a distinction between two methods of communication: language and signalling. Language is unique to the normal human mind, it is something that animals cannot develop. Dennett's pandemonium model claims that language is produced unconsciously which at first glance appears very counter-intuitive. However Dennett's model has the advantage of avoiding mentalese and non-parroting speech. Rosenthal unsuccessfully attempts to combine his folk psychology with Dennett's pandemonium model. Dennett's pandemonium model posits

an anti-private language argument and as a consequence requires a public arena where language must take place. As we learned in Chapter 1 Dennett's method is intrinsically linguistic, combined with his pandemonium model of language production the relationship between language and consciousness appears to be growing stronger. We will now need to explore that relationship further in the next chapter.

Chapter 3

The main thrust of the next chapter will be to examine the relationship between language and consciousness. I will explore Rosenthal's distinction between 'creature consciousness' and 'state consciousness' and how they are intertwined in our everyday understanding of consciousness. I will inquire, using Rosenthal's distinction of 'reporting' and 'expressing', about what makes a mental state consciousness. I will outline Rosenthal's failed attempts to do away with Dennett's first-person operationalism. In doing so Rosenthal actually ends up discrediting his own theory by opening the door to the Cartesian notion of a finish line for consciousness. And finally I will conclude by arguing that language is indeed required for consciousness.

Chapter 3 - Relationship Between Language and Consciousness

Creature and State Consciousness

Consciousness is a word that has a variety of different meanings. We can roughly classify consciousness into two senses: a social sense and a psychological (or mental) sense. In the social sense consciousness means the joint or mutual knowledge shared by a community of people. In Marxist thought the social sense of consciousness is used when referring to a 'class consciousness'. In the psychological sense consciousness relates to individuals, rather than to groups, and contains no political overtones. The psychological sense of consciousness can be subdivided once again into two uses: a transitive usage and an intransitive usage. The transitive usage of consciousness refers to being conscious *of* something. Transitive consciousness then requires a direct object or an intentional component. Rosenthal (1990b) claims that "[o]ne is transitively conscious of something if one is in a mental state whose content pertains to that thing - a thought about the thing, or a sensation of it" (p. 737). The intransitive usage of consciousness, in contrast, refers merely to *being* conscious. Intransitive consciousness does not require a direct object or an intentional component; it refers to a feature a mental state has when I *am* aware of it. Rosenthal claims that "[t]his intransitive use figures only when talking about mental states" (p. 737). This thesis is then concerned only with the psychological sense of consciousness.

Rosenthal identifies two types of consciousness: creature and state consciousness.

He points out that in colloquial terms these two types of consciousness are often run together, that is we normally do not make a distinction between the two. This can cause problems when attempting to discover the true nature of consciousness therefore we must, Rosenthal maintains, distinguish between creature and state consciousness. For Rosenthal creature consciousness simply involves a person or creature being awake and sentient. This type of consciousness is very broad and encompasses most living entities (i.e. such as humans and animals); it essentially involves the ability to be *in* a particular mental state. On the other hand inanimate objects, such as rocks, are excluded because they are not awake or capable of feeling. In addition an entity will not be creature conscious if it is in a deep coma or in non-REM sleep. Creature consciousness is then a property of an entity since it denotes an overall state that an entity is in. Rosenthal points out that his theory of consciousness is primarily concerned with state consciousness and not creature consciousness. For Rosenthal state consciousness is a property of mental states (not entities); it functions as a type-identifier for mental states. State consciousness occurs when we are aware of a particular mental state and that mental state is a conscious state. Rosenthal (1990b) claims that “[s]ince only conscious creatures can be in conscious states, but the mental states of a conscious creature may not all be conscious states, state consciousness presupposes creature consciousness” (p. 731). When Rosenthal speaks of a conscious mental state (accompanied by a suitable higher-order thought) he is referring to state consciousness. Rosenthal argues that some mental states are about things (transitive usage) and these may or may not be state conscious

(intransitive usage), that is, I may or may not be aware of them. If I am aware of them, they are intransitively conscious. Both the transitive and intransitive uses of consciousness are features of mental states, never creatures. Thus creature consciousness is an attribute predicated of entities while state consciousness is predicated of mental states. When I refer to the terms ‘entity’ and ‘being’ I understand that an entity or being is creature conscious if at least one of its’ mental states is state conscious. Thus an entity is creature conscious just in case it has at least one mental state that is state conscious (Rosenthal, 1990b, pp. 729-731).

Expressing and Reporting

We can now see that it is consciousness only in the sense of ‘state consciousness’ that Rosenthal’s higher-order thought theory is intended to explain. But now we need to ask how *you* can know that *I* am in a mental state that is ‘state conscious’. What makes a mental state conscious? Does expressing and/or reporting a mental state make it conscious? This section will then explore the role ‘expressing’ and ‘reporting’ plays in Rosenthal’s theory of consciousness. For Rosenthal *expressing* is our ability to verbalize a particular mental state that we are in. For example when I say ‘It’s raining’ (*p*) I am expressing the mental state that has the content ‘it is raining’. Rosenthal (1990a) argues that “most verbal expressing of intentional states is not at all deliberate, but occurs without any conscious focus on the thought we express” (p. 3). For Rosenthal *reporting*

is our ability to describe a particular mental state that we are in. For example when I say 'I think it's raining' (I think p) I am reporting on my mental state 'it is raining'.⁵

Rosenthal argues that if we can report on a mental state it must necessarily be accompanied by a suitable higher-order thought and therefore be a conscious state (p. 8). We can express a mental state that is not conscious but when we report on that same mental state that particular mental state becomes state conscious.

It seems strange for Rosenthal to claim that verbally expressing a mental state will *not* result in consciousness while reporting a mental state *will* result in consciousness. In our everyday terms it seems that whether we express or report a particular mental state we are aware of that mental state. Clearly when we say 'It's raining' (p) we are verbalizing the mental state that has the content 'it is raining'. How then can this expression *not* be conscious? The fact that we verbalize the expression must mean that we are aware of what we have just said. We may now wish to reject Rosenthal's distinction between reporting and expressing. Surely Rosenthal must be mistaken when he claims that expressions of mental states are not conscious. However Rosenthal provides us with a response to this objection.

⁵ Rosenthal may be taking the statement 'I think p ' too literally. When we commonly say 'I think it is raining' we are really saying that I have the *belief* that it is raining. Even though we commonly say 'I think' we really mean 'I believe'. To say that 'I believe it is raining' does not necessarily mean that I am reporting on a particular mental state. The statement 'I think p ' is not colloquially taken to mean that I am reflecting on p . When I say 'I believe it is raining,' it is more of an expression of my mental state rather than a report about my mental state. In this context Rosenthal may be too preoccupied with the term 'think' and therefore takes it too literally. Dennett (1991a) agrees and thus interprets Rosenthal's 'I think' to mean 'I am sure' or 'I believe' (p. 308).

For Rosenthal there is a clear distinction between expressing and reporting but this distinction does not hold true in colloquial terms. In normal everyday speech the statements 'It's raining' and 'I think it's raining' are often interchanged. It seems that any speech act directs attention to thoughts that lie behind that speech act. That is to say, the statements 'It's raining' and 'I think it's raining' refer to the same thought or intentional state. In any circumstance in which it is acceptable to say one it would be appropriate to say the other. Since Rosenthal's philosophical distinction between expressing and reporting is confused in colloquial speech, reporting a mental state then corresponds to the expression of that same mental state. Rosenthal (1990a) argues that "when a speech act expresses an intentional state, the illocutionary force of the speech act corresponds to the mental attitude of the intentional state" (p. 4). When we verbally express a thought we are really reporting it; we equate the expression 'It's raining' to the report 'I think it's raining'. In everyday terms the two statements are interchangeable because we have a habit that allows us to treat the two intentional states as if they were the same. Rosenthal recognizes that it is a strong habitual character or linguistic habit that allows us to colloquially interchange '*p*' with 'I think *p*'. This point allows Rosenthal to incorporate this everyday view in his folk psychology:

Being able to express an intentional state verbally will also coincide with that state's being conscious. It is because saying that *p* and saying that one thinks that *p* are performance conditionally equivalent and this equivalence is second nature for us that verbally expressing a mental state normally suffices for that state to be conscious. The connection between verbally expressing intentional states and their being conscious seems to be built into the very nature of consciousness and

speech. But it is actually due to the well-entrenched, habitual character of the performance equivalence between saying that *p* and saying that one thinks that *p* (p. 10).

Colloquial expressions lead us to treat *only* first-order reporting and expressing as the same. Thus we can successfully interchange '*p*' with 'I think *p*' because our language has developed an everyday linguistic habit (or habitual character) of doing so. As a result of this Rosenthal claims that an act of expression implies that it is accompanied by a suitable higher-order thought and is thus conscious. The ability to report a mental state is thus the same as the ability to express the very thought posited by the higher-order thought theory (Rosenthal, 1990b, p. 747). Since all verbally expressed first-order intentional states are conscious, for Rosenthal, first-order reporting and expressing go hand-in-hand.

Rosenthal claims that there are three requirements for all verbally expressed intentional states to be conscious states. First only sincere speech acts express intentional states. Sincere speech consists in that which is not insincere speech. Insincere speech includes lying, acting, slips of the tongue, and Freudian parapraxis. These are all examples of insincere speech because the content of the expressed intentional states does not match what is actually uttered. For example, when I act the part of Shakespeare's Brutus in his play *Julius Caesar* the words I speak have no *actual* thought behind them because they belong to a fictional character (remember from Chapter 2 that it is merely parroting speech). Secondly, as I have mentioned above, there is a distinction between expressing and reporting of intentional states. We take '*p*' to be the expression of an

intentional state while 'I think *p*' to be the reporting of an intentional state. Thirdly, reporting is intuitively unmediated; that is, reporting never relies upon inference or observation. If a state is not conscious it will be unavailable to us as the topic of a sincere report. If we can sincerely report on an intentional state then it is a conscious state. That is what we mean by the intuitive immediacy of consciousness.

Since Rosenthal allows verbally expressed thoughts to be conscious, can non-verbally expressed thoughts also be conscious? Rosenthal (1990a) claims that verbally expressed thoughts differ strikingly from thoughts that are expressed non-verbally (p. 1). Rosenthal asks us to consider two cases where the act of taking an umbrella expresses a conscious thought. In the first case I deliberately and consciously take an umbrella to work because I think that it will rain later that day. Even though I do not verbally express my belief to someone, I am, in essence, reporting this belief to myself. By virtue of *consciously* taking an umbrella to work I am aware of having the thought that it may rain later that day. Thus this type of deliberate non-verbal action is not really non-verbal since I report the belief to myself, albeit not 'out loud'. In the second case I am late or preoccupied and automatically take an umbrella to work. In this case it appears that I have taken an umbrella to work without thinking. I have not been aware of the thought that it may rain later that day, as a result it may be an unconscious thought.⁶ Rosenthal

⁶ Sigmund Freud would argue that there may be numerous unconscious thoughts that direct and influence our behaviour. This realm of unconscious states are precisely states that individuals do not believe they are in. These individuals are in states of mind that have not yet occurred to them. Rosenthal would not disagree with this notion since non-verbal expressions are not conscious. The transition (via higher-order thoughts) is a

argues that a non-verbal expression will not necessarily match an intentional state (p. 10). For example the non-verbal expression 'taking an umbrella' does not necessarily match the intentional state 'I think that it will rain later that day'. The taking of the umbrella, which is a non-verbal expression, could match any number of intentional states, such as 'I may need my umbrella to defend myself against a potential mugger'. Thus non-verbal expressions are not equivalent to verbal speech acts. Since non-verbal expressions do not necessarily match intentional states, acts expressed non-verbally are not necessarily conscious. Rosenthal adds that "since we have no well-entrenched habit of treating the non-verbal expressions of an intentional state as interchangeable with a report of that state, non-verbal expressions do not coincide with a state's being a conscious state" (p. 10). Remember from Chapter 2 our discussion of the difference between language and signaling. A verbal expression entails language but a non-verbal expression performed without any conscious thought amounts to nothing more than a signal. Even though we may be able to attribute meaning to the act of taking an umbrella, non-verbal expressions have no syntax. In addition we can attribute *multiple* meanings to the act of taking an umbrella; that is, non-verbal expressions do not necessarily match intentional states. Since the act of taking an umbrella does not form part of a system of language, non-verbal expressions are not necessarily conscious.

Rosenthal points out that there are two 'exceptions' to the generalization that all verbally expressed intentional states are conscious. Firstly there is no habitual character

process of *becoming conscious* of first-order mental states.

or linguistic habit when reporting and/or expressing second-order thoughts and higher. There is no equivalence between ‘I think it’s raining’ and ‘I think that I think that it’s raining’ (Rosenthal, 1990a, pp. 11-12). Since we do not commonly discuss second-order reports and/or expressions (except maybe for philosophers) we have to hold strictly to our distinction between reporting and expressing in its simplest and direct form. Secondly verbal expressions of emotions and verbal reports of emotions do not necessarily refer to the same intentional state. Verbally expressed emotions normally happen by way of evaluative words. For example we can report that we are sad and we can also express our sadness by characterizing something as unfortunate. In this sense there is no second-nature equivalence between these two speech acts (p. 12). When discussing emotions we have to hold strictly to our distinction between reporting and expressing. It is interesting to note that given Rosenthal’s primordial distinction between expressing and reporting, it is actually the first-order case which is the exception! The emotional case, and the higher-order cases are actually ‘regular’ cases, uncontaminated by colloquial habit.

Dennett (1991a) points out that Rosenthal’s folk psychological use of reporting and expressing provides us with “an important clue about the source of the Cartesian Theater model: Our everyday folk psychology treats reporting one’s own mental state on the model of reporting events in the external world” (p. 306). For example, the causal chain for reporting may go something like this: first I observe an event in the external world with my eyes, then I form a belief about the event, then I form a thought, which I express in my report. In order to report a mental state to someone you must have a

higher-order thought which you express. In order to express that higher-order thought you must have some way of first ‘observing’ the mental state, which brings about a belief, whose onset is marked by the presence of the higher-order thought which is then expressed in your report. This causal chain mirrors the causal chain for reporting events in the external world. Dennett claims that “[w]e don’t *first* apprehend our experience in a Cartesian Theater and *then*, on the basis of that acquired knowledge, have the ability to frame reports...” (p. 315). Rather Dennett argues that consciousness occurs by the very process of framing the report. Thus for Dennett there is no Cartesian step-by-step causal chain required to produce a verbal report. Remember, from Chapter 2, Dennett’s pandemonium model requires no central meaner directing reports to a place where consciousness occurs. Since there is no finish line for consciousness Dennett claims there are no ‘facts of the matter’ about what our conscious experiences are at any particular moment. The next section will explore further what Dennett means by ‘facts of the matter’ and how this reveals his operationalist approach toward consciousness.

First-Person Operationalism

Most of us have had the opportunity to experience a beautiful sunset at some point in our lives. Perhaps the sunset was experienced during a leisurely stroll along the beach, or during a mountainous camping excursion, or even during a simple BBQ with some good friends. There is something compelling about the way the deep reds and oranges of

the sun play with each other as they drift below the horizon. No matter where we are when we experience a sunset we all experience it as a unified event. Our experience of the sunset appears to be as a continuous, stable, and single event. Rosenthal (1995) claims that “[f]olk psychology conceives of consciousness as a unified phenomenon, which bears some essential connection to a single, unitary self. This encourages a picture on which consciousness occurs at a single place...” (p. 359). As we have already discovered in Chapter 1 this is the myth of the Cartesian theatre which Dennett wishes to demolish. Dennett claims that there is no single place where consciousness occurs, there is no ‘mind’s eye’ that is the finish line for consciousness. If a scientist were to probe our brains attempting to discover the exact moment when we became conscious of the sunset it would be purely arbitrary. The search for a finish line for consciousness cannot be realized. For Dennett there is no ‘fact of the matter’ about what our conscious experiences are at any particular moment. Facts of the matter are contrasted with ‘how things seem to us’ (we already touched on *seemings* in Chapter 2). Whatever moment it *seems* to me that I become conscious of the sunset is all there is. For Dennett there is no objective moment when something becomes conscious for me, a moment which is different from when it *seemed* to me to become conscious, and about which I could thereby be mistaken. This is Dennett’s first-person operationalism.

Before we can ask what Dennett’s *first-person* operationalism is we must ask what is meant by the term operationalism? Operationalism is a movement in the philosophy of science, stemming from Percy Bridgman’s (1927) *The Logic of Modern*

Physics. Operationalism has to do with the meaningfulness of scientific concepts.

Operationalism focuses upon scientific concepts seeking to safeguard them against meaninglessness by defining them solely with reference to precisely defined experimental operations. Bridgman claimed that scientific concepts must be defined in terms of the operations employed in applying them (i.e. ‘length’ can be defined in terms of techniques of measurement). For example if you desired to discover ‘the length of a table’ you may say that it is the number of times a ruler needs to be placed end to end on the table, going from one end to the other. If there is more than one way to measure the table, such as measuring the temperature of the table by placing a thermometer on the table, then we must specify what type of measurement is desired since measuring by temperature is not translatable into measures of length. Whether we use a ruler or a thermometer each makes sense only in terms of the mode of measurement involved. Furthermore questions which cannot be decisively answered with reference to operations are banned from science. Dennett is not an operationalist in general, however he is a operationalist when it comes to consciousness. Dennett advocates a weaker version of operationalism, which applies only to facts about conscious experience which Dennett refers to as first-person operationalism. What then is first-person operationalism? First-person operationalism refers to the denial that there is any fact of the matter about whether certain stimuli reach consciousness and about what conscious experiences are at any particular moment, over and beyond how it seems to me. Dennett (1991a) claims that “there is no reality of consciousness independent of the effects of various vehicles of content on subsequent

action” (p. 132). As a result “there are no fixed facts about the stream of consciousness independent of particular probes” (p. 138). Dennett claims that first-person operationalism avoids the objectively subjective; the way things seem to you even if they don’t seem to seem that way to you (i.e. as is the case with the phi phenomena, which is discussed in the next paragraph). Rosenthal claims that his higher-order thought theory can do the same job as Dennett’s multiple drafts model without relying upon first-person operationalism. Rosenthal attempts to align his theory of consciousness with Dennett’s theory of consciousness by doing away with Dennett’s first-person operationalism.

Exactly how does Rosenthal’s theory of consciousness function without relying upon Dennett’s first-person operationalism? Consider the example of the phi phenomenon. If two or more small spots separated by as much as 4 degrees of visual angle are briefly lit in rapid succession, a single spot will seem to move. When the different spots are coloured the initial spot seems to begin moving and then change colour abruptly in the middle of its illusory passage toward the second location (i.e. subjects report a red spot moving location and changing colour to a green spot). The phi phenomenon demonstrates the existence of apparent motion and is the basis for motion pictures and television. Rosenthal (1995) claims that “the HOT hypothesis accommodates the various temporal anomalies no less well than the MDM” (p. 362). Rosenthal argues that the initial flash of the red spot causes the mental state of a red spot to occur (the suitable accompanying HOT may never become conscious). The second flash of the green spot causes the mental state of ‘a moving colour changing spot’ to

occur. This mental state is accompanied by a suitable higher-order thought that gives us the conscious experience of a red spot moving and changing colour to a green spot. Rosenthal claims that the higher-order thought about the initial red spot may in fact occur so quickly and be replaced by the second HOT that it does not register mentally.⁷ The first sensory state is then technically conscious but it occurs so briefly that it actually makes no mental difference at all. These examples represent Stalinesque and Orwellian models of memory revision. Orwellian memory revision (which Dennett named after George Orwell's Ministry of Truth that was responsible for rewriting history in the novel *1984*) denotes that you have a false memory of your actual experience; the initial event is accurately observed but then the history of the event is immediately rewritten. Stalinesque memory show trial (which Dennett named after the communist 'show trials' during the reign of Joseph Stalin in the Soviet Union) signifies that you hallucinate an experience and then accurately remember the hallucination; it is a show trial from the start.

Dennett claims that we cannot use introspection to distinguish between Orwellian or Stalinesque models. Dennett is able to argue this because he claims that there is no finish line for consciousness; in other words there is no place where consciousness all

⁷ Rosenthal seems to be advocating the existence of a HOT that does not become integrated into the self. He claims that this initial HOT does in fact become conscious but does not register itself in memory. Could Rosenthal be suggesting that we can be conscious without memory? Does this make Rosenthal a punctualist? Rosenthal does not indicate how long a HOT must endure only that a mental state will be conscious when accompanied by a suitable HOT.

comes together (i.e. no Cartesian Theater). Thus for Dennett there is no fact of the matter about whether certain stimuli reach consciousness, and so there is no real difference between the Orwellian and Stalinesque interpretations. However Rosenthal argues that his HOT theory is, in fact, able to distinguish between the two models. He claims that “the HOT hypothesis would do just that, since the Orwellian model in effect posits an initial HOT that on the Stalinesque model doesn’t occur ... Explaining these phenomena doesn’t require us to deny that there’s a fact of the matter about which is operative in any particular case” (p. 363). Thus Rosenthal claims he can do without Dennett’s first-person operationalism.

However Rosenthal’s argument, that he can do without Dennett’s first-person operationalism, is not entirely satisfactory. The point of operationalism is that if there is in principle no perspective from which a difference could ever be discovered, the so-called difference is then meaningless. There is no way for us to distinguish between the Orwellian or Stalinesque models of memory revision even though Rosenthal’s HOT theory claims that the Orwellian model posits an initial HOT that the Stalinesque model does not. From a first-person perspective there is no way to determine whether a process is Orwellian or Stalinesque thus both models are introspectively indistinguishable. Even non-verbal behaviour would not provide us with anything new, since any reaction could be due equally to a conscious or unconscious reaction. Thus from a third-person perspective there is also no way to determine whether a process is Orwellian or Stalinesque. Rosenthal leaves us with an unconvincing way of avoiding Dennett’s first-

person operationalism. Thus Dennett's first-person operationalism is required to understand that there are no facts of the matter about what our conscious experiences are at any particular moment.

Language is Required for Consciousness

If there are no facts of the matter about what conscious experiences are at any particular moment then how do we know if someone is conscious? How can I tell if *I am conscious* let alone if someone else is conscious? What is required for consciousness? Rosenthal (1990a) points out that "whenever I express my thoughts in speech, those thoughts are conscious thoughts" (p. 1). Remember that expressing or reporting a mental state at the first-order level is colloquially understood to correspond to the same intentional state. A mental state that is expressed is conscious if and only if it is accompanied by a suitable higher-order thought. For Rosenthal it is *not* the expression itself that makes a mental state conscious but it is the accompaniment of a higher-order thought that does so. This leads me to believe that language, for Rosenthal, is not a necessary condition for consciousness. Rosenthal requires the presence of a higher-order thought as a condition for consciousness whereas the ability to express a mental state is not a condition, even though the ability to express a mental state entails language (recall from Chapter 2 that any non-verbal expression amounts to signalling). My ability to express a thought merely lets others know the status of my mental states. Consequently

for Rosenthal a picture now begins to emerge that points toward the possibility that a higher-order thought might occur without the linguistic ability to express a mental state. Rosenthal hints, on a few occasions, that it is possible that non-linguistic creatures can be state conscious (incidentally this will also make non-linguistic animals creature conscious). If higher-order thoughts are possible without the ability to express and/or report on them, then it is possible that non-linguistic creatures can be state conscious. Rosenthal (1990b) points out in the footnotes of his essay *Theory of Consciousness* “this does not mean that the mental states of non-linguistic creatures are never conscious states ... the fact that many mental states of non-linguistic creatures are conscious provides no reason to deny the connection between a state’s being conscious and our ability to report about it” (pp. 752-753). Rosenthal is clearly open to the notion that it is possible that non-linguistic creatures can be state conscious. Rosenthal (1990a) grants that “we can extend the term [state consciousness] to creatures that lack the ability to report their mental states” even though he does not demonstrate how this can be accomplished (p. 18). Rosenthal may simply be relying on the *possibility* that non-linguistic creatures can be state conscious. However claiming that something is *possible* does not demonstrate how it could be realized and can therefore be problematic. In addition, allowing for the possibility that non-linguistic animals could be state conscious violates our earlier distinction between language and signalling. If it were possible that non-linguistic animals could be state conscious then non-verbal expression would amount to more than signalling and animals would have a language. But since non-verbal expression does not

contain any syntax, non-linguistic animals cannot be state conscious. Perhaps Rosenthal sees this as a weakness of his folk psychology and as a result does not directly address this issue.

As discussed in Chapter 1 Dennett's heterophenomenological method is intrinsically linguistic and this has given us a hint as to what is required for consciousness. Bound by Dennett's method of philosophical investigation we are naturally lead to a linguistic connection to consciousness. We can only verbally describe the contents of our heterophenomenological world if we have a public arena where language takes place (as already discussed in Chapter 2). Otherwise the most we can attribute to an entity are beliefs and desires by adopting the intentional stance. Language is then required for the content of my personal heterophenomenological reports. We must keep in mind that language is produced unconsciously. Remember from Chapter 2 that with Dennett's pandemonium model of language production our reports are formed unconsciously and not until our reports are verbalized do they become conscious. Dennett's method involves the interpretation of the content of our personal heterophenomenological reports. It is the issuing of verbal reports, about our heterophenomenological worlds, which result in what I refer to as *consciousness*. Thus language is required for the content of my personal heterophenomenological reports, in other words, language is required for consciousness.

The identification of oneself as a conscious entity can only occur with the ability to use and understand language. Thus language is required even for me to know that *I* am

a conscious entity, since I cannot be a conscious entity without knowing it. Once I am able to see myself as a subject of continuing experience (i.e. a person or a self) then I will be able to tell a story about my life. We all know the story of our own lives because we tell them every single day. We tell them to our families, our friends, our co-workers, and even to ourselves. Once again let us consider the case of Kamala. Imagine what Kamala's story might sound like; 'Before I live with wolves, now I live with Mrs. Singh and children.' It is simple and crude but we can imagine that it is something Kamala might tell about herself if she were asked to tell her story. We can now refer to Kamala's ability to integrate her reports about her heterophenomenological world into a story about herself as a *narrative*. A narrative is a story we tell about ourselves that often occurs unconsciously (remember Dennett's pandemonium model of unconscious language production). Narrative can be seen as a fundamental tactic for human self-control and self-preservation. The self-protective strings of narrative we weave *appear* to come from a single source, such as a centre of narrative gravity. Centres of gravity are purely abstract objects (*abstractum*), thus centres of narrative gravity can also be thought of as abstractions (i.e. much like beliefs, as discussed in Chapter 1). We may now claim that consciousness is the ability to weave a narrative. Consciousness comes from a single source (i.e. a person or a self) much like a centre of gravity is the central point where multiple forces act upon an object. In one sense a centre of gravity is an abstraction; it is not something that we can hold in the palm of our hands. And in much the same way consciousness is not a thing in the brain that can be isolated and dissected.

Language is the only way a third-person observer can determine if an entity is conscious and also the only way a first-person experiencer can determine if he or she is a conscious entity. Dennett (1991a) claims “[e]xpressing a mental state, deliberately or not, is just doing something that provides good evidence for, or makes manifest, that state to another observer - a mind reader, if you like. Reporting a mental state, in contrast, is a more sophisticated activity, always intentional, and involving language” (p. 306).

Dennett argues that it is only our ability to report on the content of our experience, via the structure of language, that is important. Consciousness is something more than expressing a mental state; it is the ability to report on a mental state. A mental state will become state conscious if and only if it is reported in language. Thus for Dennett reporting in language is essential for consciousness. Language is then an integrative activity or process which allows consciousness to occur. There is no ‘experience’ prior to my reporting; not until I report on the content of my heterophenomenological world am I conscious. Thus for Dennett it is the reporting that *is* consciousness. Unlike Dennett, Rosenthal argues that consciousness occurs when a mental state is accompanied by a suitable higher-order thought (remember Rosenthal’s HOT theory from Chapter 1). For Rosenthal, language is not a condition for consciousness since he allows for the possibility that a higher-order thought can occur without the ability to report or express that thought. I disagree with Rosenthal on this point. The ability to report in language is the only way we, as third-person observers and as first-person experiencers, can verify if an entity is conscious. Of course Descartes would argue that we do not need a third-

person observer to confirm that we are conscious. For Descartes all that is required is the ability to be in a mental state (i.e. I think therefore I am) since being in a mental state is intrinsically the same as consciousness. As mentioned in Chapter 1 Dennett wishes to avoid such Cartesian notions of consciousness. Consequently, for Dennett, to be conscious is to possess the integrative ability to use and understand language.

What is the integrative process of language that allows consciousness to occur? This integrative process involves the use of various unconscious content-fixations (representations of colour, form, orientation, motion, etc.). These content-fixations do not occur in one particular place in the brain because there is no Cartesian theatre or central meaner to discriminate among them. Various word-demons use these content-fixations constructing numerous verbal utterances. These unconsciously produced verbal utterances emerge from a parallel, multi-track process of integration (recall Dennett's multiple drafts model from Chapter 1). These verbal utterances are performed without any conscious preamble. The phrases that become vocalized are the ones that are in the right place at the right time. The speaker gets no preview; both the audience and the speaker learn what is said at the same time. Our reports are formed unconsciously and not until our reports are verbalized do they become conscious. The language created as a result of this integrative process is used to produce stories or narratives about our mental lives.

So if Kamala is able to use and understand language can we consider her a conscious being? Kamala's ability to use and understand a language would necessarily

entail a grasp of grammatical rules. If Kamala's verbal utterances adhered to a syntax we could declare that she had developed a language.⁸ With Kamala's ability to use and understand language she would be able to tell a crude story or narrative about herself. At this point in her life Kamala would not have had the vocabulary to understand what the term 'consciousness' meant but this is not immediately relevant; what is important is her ability to report on the content of her experiences, albeit very crudely. Once Kamala could produce a narrative about her life we can consider her to be a conscious being. If we were to teach Kamala the meaning of the term consciousness she would be able to recognize herself as a conscious being. Kamala would not have to know the definition of the term consciousness to be conscious; she would only require the ability to use and understand a language.

As a result of this intimate connection between language and consciousness, the development of consciousness must be seen as something that evolves. The development of consciousness is a gradual evolutionary process; it goes hand in hand with the evolution and development of language. I can report the content of my heterophenomenological world to myself only because I have previously learned to report it to others. Thus I can 'talk to myself' because I have already understood and experienced that there is a public arena where language takes place. Therefore the

⁸ Steven Pinker (1994) argues that during the 'critical period' of language acquisition children quickly learn to use syntax correctly. "A three-year-old, then, is a grammatical genius - master of most constructions, obeying rules far more often than flouting them, respecting language universals, erring in sensible, adultlike ways, and avoiding many kinds of errors altogether" (p. 276).

development of consciousness must be seen as going hand-in-hand with the development of language. We know from our discussions in Chapter 1 and 2 that we can attribute beliefs (via the intentional stance) and meanings (the semantics of signalling) to the verbal howls and cries of Kamala. Prior to her removal from the wild Kamala did not have a public language therefore we can claim that Kamala was not conscious. However once Kamala developed a language, that adhered to a syntax, we could ask her to describe the contents of her heterophenomenological world. Her ability to describe the contents of her world would indicate to herself and us, as third-person observers, that she is a conscious being. Thus as Kamala grew and learned the skills required to participate in language, her development would no doubt be marked by moments of consciousness and non-consciousness as she learned how to communicate via language rather than by signalling. By the time Kamala was 14 years old (six years from the time she was removed from the wild) she developed a vocabulary of 30 words (January, 1926) and by the time she was 15 years old she had increased her vocabulary to 45 words (January, 1927) (Gesell, 1942, p. 93). Even with her limited vocabulary this marks an important time in Kamala's life because she was able to report on the content of her personal heterophenomenological world. In essence Kamala would be conscious because she had developed a language.

Possible Objections

As with any philosophical theory there are going to be a number of possible objections therefore I will address what I think are three of the most pressing issues to my thesis - language is required for consciousness. First there may be an objection to the heterophenomenological method of philosophical discovery. Some critics may claim 'of course language is required for consciousness if you start with a method that is intrinsically linguistic'. The heterophenomenological method remains neutral with respect to the apparent opposition between first-person and third-person perspectives by taking into account the reports of first-person experiencers and the interpretation of those reports by a third-person observers. By not relying solely upon the first-person perspective the heterophenomenological method is an improvement over phenomenology. The heterophenomenological method *must* be intrinsically linguistic because there is no other way of having access to the experiences of another. But if we are to rely upon language as the sole marker for identifying consciousness this may lead critics to a related possible objection - behaviouralism. Behaviouralism, which is closely associated with operationalism and verificationism, is generally understood to be the doctrine of reducing mental concepts to publicly observable behaviour. There are many types of behaviouralism (logical, methodological, radical, etc.) which all involve some sort of challenge to 'mental reality' and our traditional way of thinking about the mind. Am I advocating something that is nothing more than behaviouralism? Surely no!

However I do have concerns about being labelled a behaviouralist and especially about classifying Dennett as a behaviouralist. After reading Dennett's magnum opus *Consciousness Explained* it may be tempting to argue that he is a behaviouralist. However in the appendix to *Consciousness Explained* Dennett suggests that he is not a behaviouralist; in fact he denies that his work sides with any number of 'isms'. He explicitly denies that he is an identity theorist, or an eliminative materialist, or a functionalist, or a verificationist, or an instrumentalist, and the list goes on. It may seem that Dennett wants to deny the existence of mental states and to some extent he does deny that there is a mental reality. There is then the temptation to claim that there are no mental states and thus only observable behaviour. Dennett attempts to slip out of the behaviouralist camp by quoting Wittgenstein; Dennett is quick to point out that Wittgenstein (1953) claims "it looks as if we had denied mental processes. And naturally we don't want to deny them" (p. 103). Dennett is not denying that there are mental states or mental processes, remember from Chapter 1 that we can attribute mental states (i.e. beliefs and desires) to an entity by adopting the intentional stance. Dennett is claiming that there is no 'mental reality' that is separate from how things seem to me, that is, what I believe myself to be experiencing or the set of beliefs that make up my heterophenomenological reports. As discussed in Chapter 2 there are no real seemings; there is no seeming to seem (i.e. objectively subjective). Consequently there is only our heterophenomenological reports about the real world.

A second possible objection may be that I have merely given 'consciousness' a

new definition that does not capture our common everyday usage of the term. This is true, I have redefined consciousness giving it a linguistic connection but in doing so I have provided us with a more coherent definition of consciousness. In arguing that language is required for consciousness we no longer have to hold onto our folk psychological or common understanding of consciousness. Our common usage of the term consciousness is not grounded on sound philosophical argument. As a result our common usage of the term consciousness can be very ambiguous. Thus if we were to adopt my notion of consciousness we could avoid that ambiguity. Many terms have been redefined in order to provide a more precise definition. Consider the definition of the term 'work'. Any current high-school physics textbook will tell you that the term 'work' has a specific meaning. Work is done on an object whenever a force makes that object move. Work (W), which is measured in joules, is the result of a force (F), which is measured in Newtons, applied to an object multiplied by the displacement (Δd) of that object. For example work is done when a car's engine makes the car accelerate, when a crane lifts up a steel beam, when an archer draws back a bow, and when the arrow is released from the bow. This technical definition of work does not coincide with how we colloquially use the term work. Consider that your car is stuck in a snowbank and you ask some of your friends to push you out. They push as hard as they can but the car does not move. In this case, a force is applied but no work is done because the car does not move. In our everyday usage your friends would certainly claim to have done a lot of work trying to push your car out of the snowbank. Thus we can see how a technical

definition of a term does not coincide with how it is used everyday. We can apply this analogy to the new technical definition of consciousness that I have presented. By adopting this new coherent and precise definition we can avoid the ambiguity present in our everyday usage of the term consciousness.

A third possible objection may be that I have presented a ‘circular argument’. I have argued that language is required for consciousness, while the method I have used to arrive at this conclusion is intrinsically linguistic (i.e. Dennett’s heterophenomenological method). The supposed ‘circular argument’ may go something like this: (1) the only method we have accepted for accessing consciousness is heterophenomenology; (2) heterophenomenology relies exclusively on the interpretation of linguistic reports; (3) thus we can conclude that consciousness is linguistic in nature. We can address this objection by considering an analogy with Darwin’s theory of natural selection (Dennett discusses Charles Darwin’s theory in great detail in *Darwin’s Dangerous Idea*). Darwin’s theory of natural selection argues that successful organisms in the struggle for life will differ from the unsuccessful ones hence there is a natural selection of the fittest organisms. The organisms that survive (i.e. continue to live) are essentially the best suited to reproduce in whatever particular environment they find themselves. Darwin’s idea of natural selection has often been referred to as ‘survival of the fittest’. Many scientific theories and concepts are full of interconnected notions and Darwin’s theory of natural selection is not immune and thus may also be accused of producing a ‘circular argument’. The circular argument may go like this: (1) beings who survive are the fittest.

(2) thus the fittest beings are those who survive. In these general terms Darwin's theory of natural selection appears circular in nature. The general objection that a theory is circular in nature is one that is not uncommon to many scientific hypotheses. However if we set aside this *general* objection and examine only *particular* cases this circular argument quickly disappears. For example, if we wish to discover whether a short-necked giraffe or a long-necked giraffe is the fittest for survival we only need to look at which type actually survived. Since there are no short-necked giraffes (most likely because they could not reach the same viable food source as long-necked giraffes) then Darwin's theory of natural selection proves to be a useful tool. It allows us to claim that long-necked giraffes are better suited for survival than short-necked giraffes. In much the same way that we applied the theory 'survival of the fittest' to the particular giraffe case, consider the application of the thesis 'language is required for consciousness' to the particular case of Kamala. When Kamala develops the ability to use and understand a language she becomes conscious. In these particular cases there is no circularity present. We must therefore view such theories as pragmatic or useful tools by which we can understand how the world works. We must think of my thesis as a net we throw over the world in order to analyze it. My thesis then stands as a pragmatic way of explaining consciousness.

Chapter 3

This chapter focused upon the relationship between language and consciousness.

Rosenthal illustrated how creature consciousness and state consciousness are often .

intertwined in our everyday usage and understanding. This chapter explored how

Rosenthal's notion of reporting and expressing of mental states still has not done away

with the Cartesian notions of consciousness. Rosenthal by attempting to do away with

Dennett's first-person operationalism actually discredits his own theory by opening the

door to the Cartesian notion of a finish line for consciousness. Based upon Dennett's

heterophenomenological method and pandemonium model of language production we

must arrive at the conclusion that consciousness has a linguistic connection. Finally this

chapter concluded with the main thrust of my argument by claiming that language is

required for consciousness.

Conclusion

My thesis has arrived at the conclusion that *language is required for consciousness*. As a result of my view of consciousness a number of interesting implications emerge. Clearly normal human beings who can use and understand language can be considered conscious entities. If you are reading this sentence congratulations you are a conscious entity! This view of consciousness includes deaf and hearing impaired individuals. I take 'sign language' to be exactly what it is - a non-verbal language. Sign language has a generative syntax into which meanings can be plugged. Therefore deaf individuals who have developed the use and understanding of sign language must be considered conscious entities. This view of consciousness does not necessarily exclude individuals who have suffered from a stroke. Stroke victims may lose their ability to speak but not their ability to understand language. This view includes aliens or extra-terrestrial entities provided they have developed a language with a set of grammatical rules and meanings. It also includes any artificial intelligence programs that have learned how to communicate by way of a language. If a computer can use and understand a language and not merely parrot words or give signals then we should consider it to be a conscious entity. However, on the other hand, this view of consciousness excludes a number of individuals. This view of consciousness excludes animals, fetuses, and infants; it essentially excludes all those who do not possess the ability to understand language. Those with autism (if they lack the ability to understand

language) would not be conscious. Consciousness, as I have defined it, may be an impossible task in virtue of the nature of autism. Individuals who are born with brain injuries that prevent them from developing a language would not be considered conscious. Feral or wild children who continue to remain in isolation from human contact and do not develop a language cannot be regarded as conscious entities.

Since consciousness and language go hand-in-hand, consciousness is something that appears to come and go with language. We, as entities, can all ‘experience’ moments of non-consciousness, when we are in non-REM sleep or if we are in a deep coma we are not conscious. Remember, from Chapter 3, that I defined the term ‘entity’ as creature conscious if at least one of its mental states is state conscious. Therefore when we are in non-REM sleep or a deep coma we are not aware of being in a mental state; we cannot have a mental state that is state conscious. However when we emerge from non-REM sleep or a deep coma we return to a mental state that is state conscious. Amnesia victims, as long as they do not lose their ability to understand language, would remain conscious. Even if an amnesia sufferer did lose the ability to understand language (i.e. returning to a infant-like state), it may still be possible for him to re-learn language and thereby return to a state of consciousness. If consciousness is something that grows and develops then it is also possible that consciousness is something that shrinks and withers. This is most likely to occur in the later stages of life, if at all. For example for those who suffer from Alzheimer’s or dementia there may be the possibility of losing their consciousness if they lose their ability to understand language. Thus consciousness, like language, is

something that is fluid and dynamic; consciousness and language are intimately connected.

In the first chapter I discussed how both Dennett and Rosenthal advocate the dissolution of traditional Cartesian notions of consciousness. I introduced Rosenthal's higher-order thought theory and Dennett's multiple drafts model, heterophenomenological method, and intentional stance. Both Dennett and Rosenthal believe that their respective theories provide for a better alternative than the traditional Cartesian notions of consciousness. Dennett's intentional stance provides us with a powerful strategy for interpreting behaviour. It allows us to attribute a mental life to an entity without attributing consciousness to that same entity. Dennett's intrinsically linguistic method gave us a hint as to what to explore next.

In the second chapter I focused upon language. In particular I argued that language, which is different from signalling, is unique to the normal human mind. We cannot consider animal signalling a language; even though animal signalling does have semantics, it lacks a syntax. I then asked the question: how is language produced? Dennett's pandemonium model claimed that language is produced unconsciously thus removing our reliance upon our folk psychological intuitions. I demonstrated how Rosenthal unsuccessfully attempts to combine his folk psychology with Dennett's pandemonium model. Dennett's pandemonium model posits an anti-private language argument and as a consequence requires a public arena where language must take place.

In the third chapter I explored the relationship between language and

consciousness. I presented how Rosenthal believes that creature consciousness and state consciousness are often intertwined in our everyday understanding of consciousness. Rosenthal's notion of expressing and reporting demonstrates how verbally expressed states can be conscious. But Dennett argues that Rosenthal's structure for expressing and reporting reveals that Rosenthal is still haunted by Cartesian ghosts. Dennett's first-person operationalism allowed us to claim that there are no facts of the matter about when an object reaches consciousness. Language is then the only way a third-person observer can tell if an entity is conscious. Language is also the only way a first-person experiencer can tell if he or she is a conscious entity. Thus language is required for consciousness.

The thrust of my argument has been - language is required for consciousness. I have examined Dennett's and Rosenthal's theories of consciousness only to discover that Rosenthal's folk psychology still clings to traditional Cartesian notions of consciousness. Consequently I have provided a more coherent understanding of consciousness that allows us to cast out these Cartesian ghosts that have haunted our traditional notions of consciousness for hundreds of years. The prevalent images of a 'mind's eye' and a 'Cartesian theatre' no longer have a supernatural grasp upon our new thinking about consciousness. Our new view of consciousness is then grounded upon a sound method of philosophical investigation, one that takes into account the first-person and third-person perspectives that are a cause for concern to other theories of consciousness. Therefore we must look to Dennett for a better way of explaining consciousness. We cannot fault Rosenthal for seeing the merit of Dennett's argument and attempting to incorporate his

folk psychology with Dennett's theory of consciousness. However Rosenthal ultimately fails in attempting to provide us with a coherent combined theory of consciousness because he does not fully exorcise his Cartesian ghosts. Dennett's theory of consciousness then provides us with an improved way of separating out the term 'mental' from the term 'consciousness'. If we follow the intentional stance we can interpret the actions of an entity by treating it as a rational agent whose behaviour is governed by intentional states. Thus we can attribute beliefs and desires to an entity without yet attributing consciousness to that same entity. Following from Dennett's heterophenomenological method we gain the sense that Dennett is leading us toward a linguistic connection to consciousness. Language, as a method of communication, is different from signalling. Animals can only signal but humans can both signal and use language; language is then unique to human beings. Even though signalling entails a semantics, it does not contain a syntax. Thus we can attribute meanings and beliefs (via the intentional stance) to the verbal utterances of non-linguistic creatures. Dennett's pandemonium model of language production declares that language is produced unconsciously. Dennett's method implies that language must occur in a public arena. Since language and consciousness are connected concepts and language has a public nature, consciousness must also have a public nature. Rosenthal claims that there is a distinction between expressing and reporting even if this distinction does not hold true in colloquial terms. Rosenthal's distinction between expressing and reporting demonstrates once again that he has not fully exorcised his Cartesian ghosts. Dennett argues that

Rosenthal's HOT theory is cause for concern because it allows for a causal chain where error may enter. This prompts Dennett to claim that there are no facts of the matter about what our conscious experiences are at any particular moment. Therefore only Dennett's MDM, pandemonium model, and heterophenomenological method provide us with the best way to explain consciousness. We are left with the conclusion that consciousness entails the ability to use and understand language. Thus the ability to use and understand a language is the only way we, as third-person observers and as first-person experiencers, can verify if an entity is conscious. This new way of looking at consciousness can be likened to a net that is cast onto the world; it is a pragmatic tool for examining consciousness.

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