

Dennett's Drafters

The Mysteries of the Multiple Drafts Model

§1 Introduction

The mind-body problem is one of the great mysteries. How are my feelings and thoughts related to the nerve cells of my brain? This question not only concerns scientists and philosophers, but everyone... for your consciousness seems very much bound up with who you are. In his book Consciousness Explained Daniel C. Dennett defends his grand theory of consciousness. It is an extraordinary book, in virtue alone of being read by both philosophers and the general audience. In this book Dennett presents us his Multiple Drafts model of consciousness. The Multiple Drafts model is an explanation of how our consciousness works. However, Dennett not only wishes to sketch the mechanisms of our consciousness, he also wants to show new ways of thinking about resolutions to the traditional mysteries of consciousness. This entails a critique on, according to Dennett, the mainstream view of the nature of consciousness; a view he calls Cartesian materialism. Cartesian materialism holds the assumption that there is some sort of 'stage' to which experiences present themselves to a 'mind's eye', an internal viewer. Dennett calls this 'stage' the Cartesian Theater. He vehemently rejects this notion of consciousness as a Theater, for he thinks that this notion is illusionary and does not give us a correct picture of consciousness.

When I discuss consciousness in this paper, I mainly talk about visual consciousness, namely the awareness and appearance of an external world through vision, following Dennett who introduces his model through a discussion of the visual system and keeps his discussion mainly limited to perceptual consciousness.

Thijs Heijmeskamp

In this paper, I argue that Dennett does not provide us with an explanation of consciousness. His model is based on a wrong characterization of our phenomenology and as a consequence he has to rely on the mysterious notion of *probe* in order to 'explain' phenomenal experience. Before I discuss Dennett's Multiple Drafts theory, I first identify the position Dennett argues against: Cartesian materialism. Afterwards I will give a short note on his methodology. Then the Multiple Drafts model will be introduced through the Phi Phenomena. Subsequently, I shall look further into phenomenal consciousness itself. Two questions arise concerning Dennett's Multiple Drafts theory: (1) How exactly is the content of our visual system created? And, (2) how do we form a unified, coherent conscious experience? Dennett has the problem that he cannot provide a satisfactory solution to these two questions. Both questions will be discussed in turn after which I conclude.

§2 Cartesian materialism

According to Descartes human beings are composed of a material body and an immaterial soul. Although the body and the mind can interact with each other, they are fundamentally different substances. The first being the *res extensa*, with its primary attribute extension, and the latter being the *res cogitans*, the thinking substance. The fact that we, human beings, are made up of these two substances separates us from the animals that only possess a body, not a mind. Animals only operate on mechanical notions whereas humans have free will. According to Descartes, the interaction between these two substances has to take place in the human body. Stimuli from the senses have to reach the mind and the (immaterial) mind must have

control over the (physical) body, otherwise humans cannot move about in this world. Descartes pinpointed this place of interaction between mind and body in the pineal gland, an organ that sits in the midline of our brain and is attached to the rest of our nervous system. It is here, according to Descartes, that mechanical input from the body is translated to the mind and input from the mind translated into mechanical action. This is the theory of *Cartesian Dualism*.

Yet locating the place of interaction between mind and body did not help Descartes in solving one of the major problems of this theory: how do mind and body interact? Somehow the states of mind and body must be brought into relation; but if the mind is unextended and the body extended, how can this interaction take place? Placing the interaction in the pineal gland offers no clarification of this mysterious interaction.

Another consequence of Cartesian Dualism – besides the above mentioned troublesome relation between two substances – is that the theory assigns a center to the brain, a central place in the brain that integrates all conscious experience. All traffic from the senses has to pass through the pineal gland. Thus it is the pineal gland that houses consciousness. Although there are not many proponents of Cartesian Dualism nowadays, the idea of a centralized gateway or functional center is still present in many theories of consciousness. Dennett calls "the idea of such a centered locus in the brain Cartesian materialism, since it is the view you arrive at when you discard Descartes' dualism but fail to discard the imagery of a central (but material) Theater where 'it all comes together." (Dennett, 1991, p. 107) What enters this part of the brain is what you are conscious of. The Cartesian Theater is a metaphor for how consciousness sits in the brain. That is, the brain builds up a unified picture, a representation, which is 'viewed' by a central entity in order to become experience. Dennett admits that most likely no one today explicitly endorses Cartesian materialism, but he argues that the imagery of the Cartesian Theater is persuasive and "keeps coming back to haunt us." (Dennett, 1991, p. 107)

But positing such a place of central processing can in the end lead to faulty analysis. Those who subscribe to a Cartesian Theater (whether explicitly or implicitly) can give an explanation of some cognitive ability or process by providing a functionalist analysis, but rely on an internal agent to 'tie

the knots together.' So any loose end which cannot be explained by the functionalist analysis is being attributed to this point of central processing. This point of central processing ends up having the cognitive abilities that needed explanation in the first place. According to the Cartesian materialist consciousness can only be understood by a Theater and an audience, because that which is being projected in the Theater must be viewed by an audience. This audience functions like an internal observer, the homunculus. Only what ends up being projected in the Theater can be conscious. If consciousness can only be understood via a Theater, we can also only understand the observer through the metaphor of a Theater. So the Theater and its audience need another Theater and audience in the head of the audience in order to be understood, leading to an infinite regress of Theaters.

One of Dennett's aims is to get rid of this notion of a centralized place of processing in the brain in order to escape Cartesian materialism. For him, there is no single brain area in which it all comes together. With this decentralized notion of consciousness, there is no need for a Theater and no need for a homunculus to live inside our brains. Dennett's Multiple Drafts model of consciousness must first be understood as an alternative for Cartesian materialism.

§3 Side-note on methodology

One of the reasons the false notion of the Cartesian Theater came into existence, was that people made the mistake of 'naively looking inward'. Dennett denies that people have immediate epistemic access to their conscious states. People can be mistaken about their own mental states. He rejects *introspectionism* – the idea that we have privileged access to our own thoughts and feelings and this access is somehow immune to errors (Dennett, 1991, p. 67). Descartes privileged his own thoughts with his 'Cogito ergo sum' and gave us the Cartesian Theater in the pineal gland. The phenomenologists adopted Descartes' first-person perspective, "in which I describe in a monologue (which I let you overhear) what I find in my conscious experience, counting on us to agree." (Dennett, 1991, p. 70)³ On the basis of reflection on our own experiences, we can come to know what our conscious states are like.

According to Dennett, first-person methods of introspection have no privileged position over third-person methods. In fact, Dennett proposes a third-person perspective when it comes to studying our consciousness and inner world. He calls this perspective heterophenomenology, which stands in contrast to the earlier mentioned introspective phenomenology. Where Husserl bracketed the outer world, Dennett brackets the inner world. Husserl wanted to neutralize his metaphysical and empirical commitments and Dennett wants to neutralize his commitments to the ontological status of mental states. A third-person perspective cannot describe the inner world, so the heterophenomenologist assumes an agnostic attitude towards the ontological status of mental states. He studies not these mental states, but the behavior and beliefs subjects have about their inner world. Reports from subjects on their conscious experience are just further bits of evidence about the inner world. The heterophenomenologist, who wants to study consciousness, distrusts the first-person accounts that people give about their own qualitative experiences; he sees those accounts as idiosyncratic, unreliable and plagued with inconsistencies. The heterophenomenologist fictionalizes the reports of the first-person conscious experiences of subjects. The reports are seen as abstractions that describe the complex cognitive state of a subject. Dennett suggests that we should interpret the reports of first-person conscious experiences in the same way we interpret works of fiction. These reports should be read as novels. Subjects receive instructions from experimenters and give verbal feedbacks, which are all later converted to transcripts and studied by the heterophenomenologist. These heterophenomenologist texts are construed as a world of theorist's fiction (Wah, 2007). For the introspectionist the primary data are the experiences, for the heterophenomenologist the primary data are the utterances and behavior of the subjects they research. Heterophenomenology aims to be a scientific method to study consciousness. The heterophenomenologist does not suppose that the phenomenological accounts people give, have to be shared amongst all.

Although Dennett's skepticism about naïve introspectionism is justified, he may be too quick in dismissing first-person accounts. According to O'Regan & Noë, Dennett wrongly characterizes how things seem to perceivers (2001, p. 965). For instance, Dennett criticizes the notion that the visual field is in sharp detail and uniform focus from the center

to the periphery. But according to O'Regan & Noë, normal perceivers are not aware of their visual fields in this way. They take the world to be solid, dense, detailed, and present. This wrong characterization is the result of Dennett reducing all first-person approaches towards consciousness to naïve introspectionism. O'Regan & Noë propose, instead of naïve introspectionism, an approach consisting in an "attentiveness to the complexity of the activity of perceptual exploration" (2001, p. 965). This approach would allow talk about the facts of our experience at a personal level. It would be possible to formulate substantive empirical questions on the first-person qualitative experiences.

§4 The Phi Phenomenon

Before Dennett discusses his model, he introduces the reader to the optical illusion called the *Phi Phenomenon*. Take two stationary dots separated by four degrees of visual angle. When these spots are lid in rapid succession, it seems there is a single spot moving between two points. When we give these spots different colors, say red and green, another interesting thing happens: the 'moving' spot appears to change color midway. This illusion is also persistent. Even armed with the knowledge of the Phi Phenomenon, you cannot help seeing the moving spot and the moving spot changing color. This is an odd thing, for how can the first spot seem to change color before the second spot is observed? The green spot cannot be attributed as content to any event until the light from the green spot has reached our eyes and triggered a neural response.

Dennett gives us two possible explanations, which he will both discard in favor of his own Multiple Drafts model of consciousness (1991, pp. 116-117). The first explanation is the Orwellian revision and contains a revision of memory. The second explanation is the Stalinesque revision and is a perceptual revision. In the first explanation, shortly after the second spot has entered consciousness, the mind makes up a narrative about the intervening events. It is this new event which enters memory. In the second explanation there is a delay in the brains editing room. The first spot is held in preconsciousness until the second spot arrives. In the editing room intermediate content is created and the finished (illusionary)

product arrives at consciousness. According to Dennett, there is no possible reason to choose one explanation over the other. There is no way to demarcate the place and time in the brain where something enters consciousness (Dennett, 1991, p. 126).

According to Dennett, both the Stalinesque and the Orwellian revision fall away in the Multiple Drafts model, because there is no finish line anymore where everything has to be presented. There is no distinct moment of phenomenal awareness anymore. He claims that there is no real difference between both explanations. Both explanations still presuppose a Cartesian Theater, because both explanations assume a fixed point in the process where content becomes conscious. Dennett's Multiple Drafts model replaces the notion of a Cartesian Theater by parallel, multitrack processes of interpretation and elaboration. All information entering the nervous system is under continued revision (Dennett, 1991, p. 111). There is no center; instead the perspective of the observer is smeared out in time and space. The structure of the mind is not like the structure of a computer with a CPU, but more akin to the model of a Pandemonium.

The Pandemonium architecture was developed by Oliver Selfridge. The Pandemonium is a pattern recognition system that consists of four layers, each layer comprising units called *demons* who 'scream' for attention. The first layer records the sensory input. The second layer consists of feature detector demons, which detect certain features. For instance, one demon detects a horizontal straight line and another detects a curved line. The cognitive demons in the third layer are sensitive to these detected features. Each cognitive demon recognizes a certain pattern. The 'screaming' of a cognitive demon is determined by how much of their pattern is detected by the feature detector demons. Finally there is a decision demon that hears the shouting of the layers below and decides what pattern was presented in the layer below. The Pandemonium itself is far too simple to be a model of the mind, but Dennett is interested in the parallel nature of the Pandemonium and the absence of centralized processing (Schneider, 2007).

Neuroanatomical and neurophysiological research shows that the visual system in the human brain is only loosely hierarchical and functionally more interactive. Visual stimuli, such as the two dots in the Phi

Phenomenon, may initially flow serially through the lowest level of the visual system, but then quickly reach modules on multiple levels (where more specific features are detected). A module is a specialized local section of the brain that detects certain features. These modules simultaneously process information about one and the same stimulus (Akins, 1996). This is what Dennett refers to as parallel, multi-track processes. Each module infers the presence of certain properties and the processing of visual stimuli gradually yield discriminations of greater and greater specificity. Perceptual modules carry out content discrimination, content fixation or feature detection, and cognitive sites make decisions or judgments or perform processes of interpretation and elaboration (Dennett, 1991, p. 134-135). Parts of the brain (modules) go into states that discriminate certain features. First there is the mere onset of stimulus, then location is discriminated, then shape, then color. Later (apparent) motion is discriminated and eventually object recognition takes place. Each module determines a certain feature of the world by ordinary computational means. At any moment there are multiple narrative fragments, or 'drafts', which are in various stages of editing. Some or all of these 'drafts' converge to gene-rate intentional behavior of the organism. The lesson Dennett takes from the Phi Phenomenon is that if one wants to settle on some moment of processing in the brain as the moment of consciousness, that moment is always arbitrary.

Modules that make decisions or judgments still seem to imply a homuncular theory of consciousness. Because persons make decisions and judgments, not parts of the brain. According to Dennett we must not understand decisions and judgment in the case of (perceptual) modules in the full sense that we understand decisions and judgments when it comes to persons. When it comes to the modules, 'decisions' and 'judgments' are metaphors for how a module determines a certain feature of the world. Dennett wants to replace the metaphors of the Cartesian Theater with new metaphors and he does not claim to replace the metaphor of the Cartesian Theater with a nonmetaphorical theory (Dennett, 1991, p. 455). The single-minded agent is to be broken down "into miniagents and microagents (with no single boss)" (Dennett, 1991, p. 458). In the following sections of this paper I address the success of Dennett's new army of metaphors in escaping the fallacies of the Cartesian Theater.

§5 When does consciousness arise?

According to the Multiple Drafts model, perception is accomplished in the brain by parallel, multi-track processes of interpretation and elaboration of sensory inputs. But when consciousness exactly arises, has not been discussed yet. The first problem for Dennett's theory is due to the decentralized nature of the Multiple Drafts theory: it presumes that the visual system processes different properties of stimuli at different sites and at different speeds. How then, is it possible that we have a coherent and unified experience of the world? This problem has both a spatial aspect and a temporal aspect. Spatial in the sense, as we have seen, that if properties of stimuli are being processed at different spatial sites, it is not clear how everything is brought together in a spatially unified whole. Temporally in the sense that since a modular conclusion⁴ about a single event will be produced across a period of time and will be inter-mixed with other conclusions about earlier and subsequent events (Akins, 1996). This is known in the philosophy of mind as the problem of binding: how do various features of a visual scene come together in a unified experience? The process of discriminating content for our visual experience is not unified. So how does a single unified experience follow from a disunified process? There appears to be a gap between modular content discriminations and our personal experiences.

However, Dennett does not see the problem of binding as a real problem, for it presupposes Cartesian materialism. The problem assumes that the spatial unity of a perceptual experience must be mimicked by the spatial unity of the representations. Representations of temporally unified objects and events must occur in the same sequence as those objects and events. The assumption is that the phenomenological properties of our experience must match the physical properties of the neural vehicles (Akins, 1996). Dennett claims that representations of single, spatially unified objects need not themselves be spatially unified or singular. It is through symbolic representation that the brain differentiates the order in which 'conclusions' (Dennett's term) are produced. We perceive an ordered world of objects and events, because those temporal relations are symbolically represented by the brain. It is not the disunity of *content*

discriminations that poses a problem for perceptual experience. It is only the disunity of *content* that provides a problem for understanding the form of our perceptual experience.

Thus Dennett puts aside the problem of binding, for there is no more need for physically unified representations. The problem that remains however is the problem of the unification of representational content. The pandemonium-like model of the brain leaves the brain with many distributed contentful states and modular conclusions. Some of these states die out and leave no further trace. Others leave trace on subsequent verbal reports of experience and memory. As soon as content discrimination has been accomplished, it becomes available for eliciting some behavior. Content arises, gets revised, contributes to the interpretation of other content or to the modulation of behavior, and yields over the course of time something like a narrative stream. At any moment in time there are multiple drafts of narrative fragments at various stages of editing in various places in the brain. It is through the notion of probing that Dennett wants to solve the problem of the unification of content. Probing is a process in which a consistent narrative thread is selected from among many of the states described (Dennett, 1991, pp. 134-135). Probing the narrative stream at different intervals will produce different effects and thus produce different versions of what occurred. Probes do not happen at regular fixed intervals, but are initiated sometimes by a need for action or sometimes by a selfimposed question. It is not necessary that probes give a full account of the events. The task of a probe is to unify information required to perform the task or solve the problem at hand. Probes arise irregularly in response to internal or external puzzles and initiate the integration of select subsets of information.

It is important to note that probing the narrative stream is a process of selection, not rewriting, re-ordering, translating or transporting the information to a central place so that the events can be played in a Cartesian Theater. Any narrative that gets precipitated provides a 'time line', a subjected sequence of events from the point of view of an observer. It is the answer to the probes that makes up our phenomenological consciousness. Probes are the bridge between the sub-personal system, where there are only content discriminations, and

our psychological phenomenal experience, where we have an experience of an objective coherent world. If probes were absent, we would not be conscious of a narrative, since the answers to the probe form a part of a subject's experience. According to Kathleen Atkins (1988) the view that "probes are both necessary and sufficient for conscious experience" can be attributed to Dennett.⁵ Without the probe there is no consciousness.

But, the question remains: when does consciousness exactly arise? Does consciousness arise during the binding of representational content or only after the probe is completed? If consciousness arises during the binding, at which stage of the process does it arise? Surely binding takes time. There seems to be neither a method for answering this question nor any evidence. The binding process is not available to the subject; we are not aware of it. We have no access to the temporal relations among the representational vehicles themselves and the individual conclusions that are reached, nor do we have access to the order in which independent representational contents are unified. Phenomenological accounts, first-person or third-person, are of no help because our experience is that of an orderly world. We are only aware of the results of the process, not the process itself. We see events in the external world, not the binding processes. Although the impossibility to know when consciousness exactly arises poses no problem for Dennett,6 it does point to the mysterious nature of the probe and the essential role it plays in establishing conscious experience. More importantly, it remains unclear how the binding process works. How exactly does the probe unify the content of our representations? It is clear, however, that probing does not create a new representation. Our conscious experience is not the representation of the multitude of representations created by the perceptual modules. The content of our conscious experience is mirrored by their underlying neural representations. Once a feature detection or discrimination has been made by a specialized module in the brain, the information content is fixed and need not be rediscriminated by a central discriminator.

§6 Dennett's black boxes

When we return to the color Phi Phenomenon, both the Orwellian (revision of memory) and the Stalinesque (perceptual revision) explanation fall short, because on a small time scale there is no more distinction between a revision of perceptual input and a revision of memory. The brain does not build up a single final representation of the world; there is no final draft and canonical narrative that a researcher may or may not access. What happens is that the brain creates content, a perceptual module makes a judgment, and this content is available to govern activity and/or leave its mark on memory. Judgments made by perceptual modules only have to be made once. In the case of the Phi Phenomenon the content that is created is the motion between the dots. This means that the sensory input (the stimuli) does not equal perception. The world as we experience it is a grand illusion. Not in the traditional sense that we are given much less than we see, so what we think we see must arise through the workings of our brain. But in a new skeptic sense, that we do not have the experience we think we have; we are radically deceived by our brains about what our experience is (Noë, 2009, pp. 200-201). All of our sensory input goes through a process of interpretation and elaboration.

So perception is a parallel, distributed, erratic and non-linear process with no central locus. This means that it is possible (and very likely) there will be simultaneous information processing of signals carrying information from sequential stimuli. At each stop in the process there are individual perceptual modules, which carry out 'content discriminations', 'content fixations' or 'feature detections', or non-perceptual or cognitive sites which arrive at 'decisions' or 'judgments', or perform 'processes of interpretation and elaboration'. It is these modules together that form something like a narrative stream.

One of the problems is that we do not know what happens inside the modules. For instance, how a module carries out shape recognition remains a mystery. From a retinal image the brain must extract different kinds of information of the visual scene. Which criteria do the modules use to determine which details of the sensory information are salient or not? Dennett does not leave us with an explanation of how the content of our visual system is created. How is it determined what judgments must be formed by modules, and what to edit out or what content to fill in (for instance, the motion and color change in the Phi Phenomenon)? In other words, when do the modules ascribe meaningful content and on what basis? We can imagine that simple feature detection modules carry out some basic form of shape recognition, but how do more complicated cognitive modules or discrimination modules create content? Where do the rules come from upon which they 'act'? For now, these modules are like 'black boxes' for us; we do not know what they look like on the inside.

Dennett's model of the mind seems to be somewhat detached from the world, i.e. the world is only there to provide sensory stimuli and the relation between perception and visual stimuli is merely inferential. It is the visual system that creates content from the sensory stimuli. The criteria for determining the creation and selection of content can only be provided by the brain itself. Criteria are necessary, because there must be a correspondence between the specific stimulus and the created content, because if this relation were arbitrary, the visual system would not work. Positing that the modules themselves establish these criteria, is in itself not an answer for it still does not answer on what basis these criteria are established. The point is: instead of positing a single homunculus, Dennett posits multiple homunculi. Although these homunculi have simpler abilities and powers than the Cartesian homunculus, they carry little explanatory power. The (perceptual) modules still remain a mystery.

§7 Perceptual unity and the self

The modular make up of our visual system can leave us, especially in the short run, with multiple and contradictory conclusions. The only demand that can be laid upon such a system (or better said the system forces upon itself) is the demand for consistency. Because the world is consistent, our experience of the world must also be consistent. So multiple contradictory conclusions cannot coexist in the long run, and consistency checks can identify these inconsistencies. It is the role of probes to perform these consistency checks.

Our conscious experience is a unification of selected parallel and distributed processes. When these processes are probed they form different narratives, which in turn are continuously revised and updated. It is however unclear how these narratives are chosen. If consciousness is merely the

result of edited visual data, there seems to be a need for an editor. Since there is no homunculus, no central place of processing, it is up to the visual modules and the probes to create a coherent unified conscious experience. This implies that the probes need more demands than the demand for coherence in order to select a coherent narrative or to adjust narratives in order to make them coherent. Some data have to be left out of conscious experience and this editing out has to be communicated between different modules in order to form narratives. These probes somehow interact with the content of modules from (in this case) the visual system, somehow combine some content of different modules and elect to ignore other content in cooperation with other probes, while the constructed narrative is under continuous revision. Dennett's probes provide us with an even bigger mystery than his modules. Not only do we not know how these probes work (how they interact with the perceptual modules), but we also do not know what elicits a probe.

When it comes to consciousness, as we have seen, it is the probes that do the heavy lifting. Consciousness arises when the stream of narratives is being probed. But why must the perceptual content be unified as a visual experience? The question why experience is needed in addition to all the computational processes is not addressed by the theory. In other words: what drives the process of the unification of our conscious experience? With the absence of a homunculus, the core of our identity, Dennett speaks of the 'self' as the center of narrative gravity (Dennett, 1991, p. 418). The self is not the source, but the result of the different narratives that are spun by 'us'; it is a metaphorical point where all aspects of our identity converge. This also means that our notion of 'me' can change and is different over the years. The self is formed by the unified narratives and cannot be the driving force behind the unification of our conscious experience. It seems that the probes are endowed with the cognitive powers Dennett want to explain.

§8 Conclusion

Dennett rejects all homuncular theories of consciousness and gives us a decentralized account of consciousness. O'Regan & Noë pointed out that Dennett is too quick in dismissing first-person accounts of our conscious

experiences with his method of heterophenomenology. This leads him to a fundamentally wrong characterization of our consciousness and forces the problem on himself of explaining why our conscious experience is illusionary. Dennett starts out with the critique that it is a false assumption that our visual field is sharp in detail and uniform in focus from the center to the periphery. This leaves Dennett with a problem that follows him throughout his theory in that he has to account for the fact that normal perceivers have this false assumption. But normal perceivers do not take themselves as to experience all the environmental details at once. We see ourselves as situated in an environment.

According to the Multiple Drafts model, perception is accomplished in the brain by parallel, multi-track processes of interpretation and elaboration of sensory inputs. These content discriminations produce something like a narrative stream. Probing this stream at different places and times produces different effects and precipitates different narratives. There are many small agents screaming for attention. What we experience is a product of many processes of interpretation. Frustratingly, Dennett has very little to say about how these content discriminations work and it is unclear what governs the modules. Since the relation between these modules and the world is only inferential, there seems to be a need for a programmer.

Although our first-person account of consciousness says, according to Dennett, very little, about how our consciousness really arises Dennett still faces the problem of accounting for this unified experience. However, the probes seem to have the cognitive powers that Dennett tries to explain with his theory, thus falling into the same trap as the Cartesian materialists. The problem with the homunculus fallacy is that it attributes the whole mind to part of the system, thus offering no explanation at all. If Dennett's metaphorical model of the mind is to be successful in replacing the metaphor of the Theater, it needs to provide elucidation where homuncular theories do not. Dennett's metaphors must be more productive in explaining consciousness in unconscious terms in order for it to be a successful theory. Even if we grant Dennett his point that his model of consciousness is merely intended as a metaphorical model - we are not forced to assign judgments in the strong sense to (perceptual) modules, like we do to persons - he needs to demonstrate that his metaphors are better tools for understanding consciousness.

But these new tools seem to share certain faults with the metaphors used by Cartesian materialists. Although Dennett breaks up the homunculus into smaller homunculi, they maintain much of the mystery. Ultimately, Dennett does not provide us with an explanation why the changing of red to green in the Phi Phenomenon is conscious at all. In fact, Dennett does not appear to need consciousness at all for his model of the mind. In Dennett's functionalist explanation of visual perception it remains unclear why we have conscious experience or need conscious experience. The unification of the multiple drafts through probing is not a conscious experience (we don't have access to the probes) and we only experience its results consciously. Consciousness, understood this way, seems to be a mere side-effect of probes. Dennett's metaphors speak very little of consciousness.

Although the Multiple Drafts model aims to give an explanation of how our consciousness works, the model still relies on mysterious parts, in this case the probes, to account for conscious experience. Dennett fails to give an explanation on how a coherent conscious experience is established from the parallel multitrack processes. He successfully escapes the problem of binding, but cannot count for the unification of content in the brain. It seems that the Multiple Drafts theory requires a drafter.

Acknowledgements

I would like to thank prof. dr. F.A. Muller and Tjeerd Visser for comments on a earlier version, and the anonymous editors of the ESJP for helping me improve this paper even further.

Thijs Heijmeskamp (1988) obtained his BA in Philosophy at the Erasmus University Rotterdam. He is currently enrolled in the MA Philosophy program. His main research interests are in the areas of philosophy of mind and metaethics.

'Dennett's Drafters' was written for the master's course 'Consciousness From All Sides' taught by prof. dr. F.A. Muller.

Editorial note

Since this essay was written by a member of the editorial board of the Erasmus Student Journal of Philosophy, it was subject to a more extensive review procedure. For more information, see http://www.eur.nl/fw/english/esjp/submissions.

Notes

- 1. For example, according to Cartesian materialism, we build up an internal representation corresponding to what we experience. The data for vision are to be found on the retinas. Some scientists abide to the principle of Cartesian materialism and take the problem of the inverted retinal image seriously. The retina is the inner coat of the eye which is light sensitive. Because light passes through the lens of the eye, the image is inverted. According to some scientists, the brain has to adjust for this inversion (Noë, 2009, p. 144). But this problem is based on the misguided assumption that the 'image' projected on the retina, is an actual image. Seeing the retinal image as a picture doesn't explain vision. In order to explain vision, scientists still has to explain how the brain 'sees' the image on the retina.
- 2. Functionalism in philosophy of mind holds that a mental state is not defined by its internal constitution, but by its *function* in the system which it is part of.
- 3. I will not address whether Dennett's characterisation of the philosophical tradition of Phenomenology is correct. I will however address whether Dennett's own phenomenological account of our visual consciousness is correct.
- 4. Dennett denies that for experience we build up a single unified representation. The experience of for instance warm coffee comes about through a variety of sensory modules, each drawing their own perceptual conclusions. These conclusions from shape modules, color modules etc. are not rewritten into a single homogenous representational form.
- 5. It must be noted that Dennett never explicitly states this view in *Consciousness Explained*.
- 6. Dennett claims that no theory of consciousness (which, according to him must be a functionalist explanation) would be able to determine the exact moment of consciousness (1991, p. 401-404).
- 7. Assuming that consciousness can ultimately be explained in unconscious terms, which Dennett aims to do (Dennett, 1991, p. 454).

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