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PHANTASY AND WISH: A PROPER FUNCTION ACCOUNT

FOR HUMAN A-RATIONAL PRIMARY PROCESS MEDIATED MENTATION¹

Linda A.W. Brakel

I. Introduction: Background

Freud throughout his career as a theorist (and a clinician) often dealt with mental states that are not rational but instead a-rational or irrational. As early as 1900, he clearly differentiated these sorts of phenomena from those of our usual rational, waking life, claiming that there were actually two types of mentation. The more familiar, everyday type of thinking he termed ‘secondary process’ mentation. The secondary processes consist of mechanisms, states, processes and contents that largely constitute our rational thoughts. The other type, he termed the ‘primary processes’, and Freud posited that these primary processes predated developmentally and then co-existed with the secondary processes. Following Freud’s conception of the primary processes, although clearly mental and intentional with representational content, they lack one or more of the hallmarks of the rational. Thus whereas secondary process rational mentation (1) is tensed (i.e., is about what occurs in a specific real time—past, present, or future), (2) is reality tested, (3) originates from a single agent’s experientially continuous viewpoint, and (4) tolerates no contradictions; primary process mentation demonstrates at least one, and often several or all of the following.

- (1) Primary processes are without tenses. They involve no conception of past or future, only a tenseless and unexamined present.
- (2) In primary process mentation there is no reality testing—no attempt to regulate representations for considerations of truth. More specifically, no distinctions can be made among what is, what is not but is possible, and what cannot be.
- (3) Primary processes do not originate from an agent’s experientially continuous viewpoint. There is yet to be a stable self capable of grasping (in any fashion) continuity-in-experience, a minimal requisite for ‘self’ to stand out against a protean background of not self.
- (4) Standard logic is not employed in primary processes. Most notably, contradictions are tolerated.²

¹ I thank Jennifer Church, Krista Lawlor, William Lycan, Ruth Millikan, an anonymous reviewer, and especially David Velleman for many helpful comments and criticisms on this paper.

² Sigmund Freud, ‘The Interpretation of Dreams’, *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, Vols. 4 & 5 (1900) 1–626, ed. J. Strachey (London: Hogarth Press, 1975).

Having set out some basic characteristics of primary process mentation, I want to make clear that the goal of this paper is not to argue for or against its existence. Rather I am arguing for the *coherence* of the notion of the primary processes as mental states with content.³ For the mere concept of primary processes as contentful but non-rational already raises a critical issue upon which two important contemporary views in the philosophy of mind diverge. The first of these views, that of attributionism, would deny the possibility of mentation that is a-rational yet representational. For attributionists of every stripe—certainly for Davidson (1970, 1973, 1974, 1975, 1982), the most extreme adherent, but no less for the moderates, Dennett (1978, 1987) Cherniak (1981) and Stich (1983)⁴—mental contents are to be determined by interpretations based on attributing and then assuming holistic rationality. Insofar as attributionism holds that mentation must be interpretable in order to be contentful, and must be largely rational in order to be interpretable, this view would prevent the theory of primary processes from getting off the ground.

The first goal of this paper is to refute the attributionism objection. I will do this by presenting an alternative account that can accommodate the primary processes as contentful without losing ground to the problem of indeterminate interpretations. The alternative account is Ruth Millikan's proper-function naturalism. Millikan's view can be understood as adopting a different normative assumption from that of the attributionists' assumption of interpretable holistic rationality. Rather Millikan's program makes the normative assumption of selective success utilising evolutionary explanation. This undermines the attributionist claim that mental content is contentful exclusively in virtue of being rational and thereby interpretable, and opens the way for contentful states

² *continued*

As surprising as the fourth feature might seem, it can be seen to follow from any one of the other three primary process characteristics mentioned (and of course any combination thereof). If one lacks the capacity to grasp one's own experiences as having continuity, for example, there is no unitary agent holding both X and a contradiction of X to be true. Likewise, and even more basically, before attempts to regulate representations for considerations of truth, any proposition that is considered merely 'is'. While an external view would regard this as a default consideration-as-true, from the internal viewpoint there is no attempt or even capacity to get the truth conditions right. This being the case, take some X that 'is' (i.e., is considered-as-true); but if a contradiction of this X is also considered in this manner, prior to considerations of truth and falsity, this $\sim X$ 'is' (i.e., is considered-as-true) no less. Finally tenselessness too can yield tolerance for contradiction. If every moment is an unexamined timeless present, a 'now' with no history and no future, X held at moment t will not be negated by $\sim X$ being held at $t+1$, nor will the $\sim X$ of moment $t+1$ be negated when at $t+2$ X is held. I thank Jennifer Church (personal communication) for this final point.

³ Content should be understood in the usual way. I am not holding for any special, new 'primary process' type content.

⁴ See Donald Davidson, *Actions and Events*, Chapters 11 (1970), 12 (1974), 13 (1973) (Oxford: Clarendon Press, 1980); *Truth and Interpretation*, Chapter 11 (1975) (Oxford: Clarendon Press, 1984); and 'Paradoxes of Irrationality' in *Philosophical Essays on Freud*, eds. R. Wolheim and J. Hopkins, 289–305, (Cambridge: Cambridge University Press, 1982). See Daniel Dennett, *Brainstorms* (Cambridge MA: MIT Press, 1978); and *The Intentional Stance* (Cambridge MA: MIT Press, 1987). See Richard Cherniak, 'Minimal Rationality', *Mind* vol. 90 (1981), 161–83. See Stephen Stich, *From Folk Psychology to Cognitive Science: The Case Against Belief* (Cambridge MA: MIT Press, 1983).

that are a-rational.⁵ But to complete the Millikan-style proper function naturalistic case for a-rational primary process contentful states, a viable proper function explanation for the primary processes must be added. Indeed, then, the second goal of this paper is to provide just such a proper-function account for these a-rational aspects of human mentation.

II. The Attributionism Objection

Attributionism, even in its mildest version, poses serious problems for the primary processes in two ways. (1) Attributionists base the ascription of mental content upon an assumption of rationality. (2) Attributionists take up only two types of propositional attitudes, *belief* and *desire* (or some attitude functioning as such), as the units of interpretation. The first feature of the view is a problem because primary processes are by definition contentful states that are not rational. The second feature is a problem because primary processes *do not take the form of belief or desire*. Given that primary process mentation is marked by no reality testing, in fact no attempt to regulate representations for considerations of truth, neither beliefs nor desires can be among the propositional attitudes that comprise the primary processes. This is the case because beliefs are precisely those propositional attitudes which aim to get their truth values right and desires are those propositional attitudes which, if they are to get fulfilled, are predicated upon beliefs. But another pair of propositional attitudes, *phantasy* and *wish*, do admit of primary process content. I will take up primary process content in these proposition types in a section below.⁶

The basic tenets of attributionism can be seen most clearly in Davidson's work.⁷ Thus minimal attributionism holds that:

⁵ I will use a-rational rather than irrational. Irrational implies the rational gone wrong. A-rational refers instead to states not-yet rational and not-yet irrational.

⁶ See also Brakel, 'Phantasies, neurotic-beliefs, and beliefs-proper', *The American Journal of Psychoanalysis* (2002), in press. It is conceded that the a-rational primary processes cannot be subject to belief/desire interpretations. However, it is not conceded that contentful states are constituted only in virtue of satisfying explanations predicated on belief/desire interpretations. As will be argued below, contentful states can also be constituted in propositional attitudes of the form phantasy/wish.

⁷ The views of Davidson to be presented in this paper are representative of what is basic to attributionism. Other attributionists change certain features of the attributionist program without really changing what is at the core. Chermiak (1981), for example, relaxes the criteria for what counts as rational. Dennett (1987, p. 98) agrees with Chermiak. Stich (1983), a projectivist, suggests that projecting one's own beliefs and mental contents will provide less stringent rationality requirements than assuming rational contents in others. And yet these relaxed-criteria versions of rationality all amount to rationality-attributing nonetheless. Hence they pose the same difficulties for the a-rational primary process.

Davidson is however the most extreme attributionist with respect to other of his views not to be taken up in the body of this paper. Perhaps most striking are his claims on what it takes 'to have a belief'. He (1975, p. 170) says, 'Can a creature have a belief if it does not have the concept of belief? . . . it cannot . . . Someone cannot have belief unless he understands the possibility of being mistaken, and this requires grasping the contrast between truth and error—true belief and false belief.' Clearly these requirements limit those to whom Davidson will ascribe beliefs to humans, and rather mature humans at that. Dennett (1978, p. 271), at the other pole, counts as a believer any ' . . . system whose behavior can be . . . explained and predicted by relying on ascriptions to the system of *beliefs* and *desires* . . .'

- (1) content is constituted only when content can be attributed;
- (2) in order for content to be attributed, interpretable beliefs must be ascribed; and
- (3) that belief ascription can take place only in the context of holistic rationality.⁸

Before I attempt to undermine the attributionism objection to the very notion of primary processes, I want to point out that the fundamentals of attributionism have some appeal. It is the attributionists, and Davidson in particular, who, for example, have cogently maintained that the very concepts of a-rational, irrational, and inconsistent mental content states *depend* upon a background of rational mental states against which they can be contrasted. Thus from his 1970 essay ‘Mental Events’ Davidson states (p. 221):

Crediting people with a large degree of consistency cannot be counted mere charity: it is unavoidable if we are to be in a position to accuse them meaningfully of . . . some degree of irrationality. Global confusion . . . is unthinkable, not because imagination boggles, but because too much confusion leaves nothing to be confused about . . .

But what sort of dependence is Davidson really implying here? Certainly it seems incontrovertible that even Freud’s initial *recognition* of the concepts of inconsistent, irrational, and a-rational human mental states depended on the contrasting background of consistent and rational human mental states. But this epistemologic dependence is more modest than the ontologic dependence Davidson holds. Unless a subject can be shown to have a holistic background of consistency and rationality, belief ascription will not be possible, hence mental content will not be attributed. Then, because mental content attribution is what constitutes mental content, it is not just that the mental content of that subject will remain unknown—*there will be no mental content* for this subject at all. Note that by these criteria children under the age of around three years, primates, adults in dream-states, and certainly mammals in other orders, etc., will lack mental content states.

Still Davidson does acknowledge the existence of (what he must regard as infrequently occurring) irrational mental states. Holding in his essay on ‘Paradoxes of Irrationality’ that ‘. . . irrationality appears only when rationality is evidently appropriate’ (1982, p. 299), he wants to extend his view of mental content in order to account for the irrational-but-mental. That this effort might prove problematic, he recognizes, stating that on the one hand, if he explains irrationality too well, he fears he will have reduced the phenomenon to rationality. Yet on the other hand, if he finds that what is irrational is merely incoherent, then irrational phenomena will cease to be recognizable as mental for him, and will thereby cease *to be* mental at all.

Nonetheless Davidson fashions a compromise solution with the use of what he considers some psychoanalytic, Freudian-style concepts. For Davidson, human agents are capable of irrational acts owing to a split in ‘mental structures’ into two or more semi-autonomous ‘mental structures’. Some of these semi-autonomous structures can even be unconscious. What is vital for Davidson, whether a structure is conscious or unconscious, is that each such semi-autonomous unit is an internally coherent *rational system of beliefs and desires*, where *within each such structure psychological reasons are rational causes*.

⁸ Regarding these three points see especially Davidson (1974a, pp. 231 and 237) and Davidson (1973, p. 259).

Between different structures, on the other hand, there are *non-rational causes*. These non-rational causal relations between different structures (and between the contents of the different structures) produce and account for irrationality.⁹

While Davidson does believe in a sort of Freudian unconscious—a semi-autonomous unconscious structure containing beliefs and desires that are irrational in relation to an agent's conscious attitudes—it is a Freudian unconscious much coloured by Davidson's own attributionism. The unconsciously sequestered mental contents are for Davidson not only rational within their own semi-autonomous unit, they comprise an internally consistent *rational system of beliefs and desires*. Thus here no less than elsewhere, attributionism precludes Freud's notion of the primary processes, in which the primary processes, whether conscious or unconscious, are neither rational, nor in the form of beliefs and desires. Moreover, while the concept of the unconscious for Freud was not static over his long career as a theorist, it certainly can be said that at no time did he characterise the unconscious as a coherent system of rational (secondary process) beliefs and desires.

Irrational and a-rational states occurring more than just very infrequently would, from Davidson's position allow too many interpretative hypotheses—in other words, indeterminacy would threaten. His principle of charity argument, central to his attributionism,¹⁰ clearly arises from this threat. At first Davidson's argument for the principle of charity seems to aver to the need for *some* normative constraint to narrow the domain of eligible interpretations. Says Davidson (1967, p. 27) in 'Truth and Meaning', '... we must maximize the self-consistency we attribute to him [an alien], on pain of not understanding *him*. No single principle of optimum charity emerges; the constraints therefore determine no single theory [of meaning].' And again in 'Belief and the Basis of Meaning' (1974b, p. 154), without mentioning rationality, he stresses that, 'Each interpretation and attribution of an attitude is a move within a holistic theory, a theory necessarily governed by concern for consistency and general coherence with the truth . . .' (Both of these papers are in the *Truth and Interpretation* collection.). But it becomes clear that Davidson is really holding for only one type of normative constraint—the charitable attribution of holistic rationality. In 'Psychology as Philosophy' (1974a, p. 231) he states that we charitably and '... necessarily impose conditions of coherence, rationality, and consistency.' Later (p. 237) he adds: '... if we are intelligibly to attribute attitudes and beliefs, or usefully describe motions as behaviour, then we are committed to finding, in the pattern of behaviour, belief, and desire, a large degree of rationality and consistency.' Still later (p. 239) he states: 'The constitutive force in the realm of behaviour derives from the need to view others, nearly enough, as like ourselves'—i.e., 'mostly rational'. Finally, in yet another 1974 article, 'On the Very Idea of a Conceptual Scheme' (in *Truth and Interpretation*) one can see that for Davidson the notion of *some* charitable principle for

⁹ See Davidson (1982, pp. 290–304). Also, as long as intra-structural causal relations between states (belief/desire or belief/belief) are most often rational, Davidson does allow that non-rational causal connections occasionally take place intra-structurally between states. However as Jennifer Church (in 'Reasonable Irrationality', *Mind* vol. 96 (1987), 354–66) points out, this strategy cannot help Davidson account for the systematic, consistent, even predictable nature of much irrationality.

¹⁰ Davidson's principle of charity argument appears in many places in addition to those that I've cited. See, for example, 'Thought and Talk' (1975, particularly p. 159) in *Truth and Interpretation*. And see, 'Mental Events' (1970, particularly pp. 221–3), and 'The Material Mind' (1973, particularly pp. 257–9), both in *Action and Events*.

providing normative constraint has collapsed into his particular choice of rational normativity charitably ascribed. He writes (p. 197): ‘... charity is not an option, but a condition of having a workable theory ... Charity is forced on us; whether we like it or not, if we want to understand others, we must count them right [rational] in most matters.’

Davidson’s charitable assumption of holistic rationality deals with the indeterminacy problem successfully and appealingly. But is Davidson’s normative rationality constraint the only normative constraint that can address indeterminacy? In what follows I will show that Millikan’s view embodies a far different normative constraint against indeterminacy, but one no less effective. In Millikan’s program evolutionary success supplants rationality success as the normative principle charitably attributed. Contents are determinate not necessarily owing to consistent coherent rationality, but rather insofar as the proper function of such contents can occasion selective reproductive fitness. There is still a pattern to behaviour, a consistency and coherence, and there is still the charitable assumption that other beings are ‘like us’—it is just that ‘like us’, selective fitness normativity, rather than rational normativity, allows the possibility of a-rational content.

III. Undermining The Attributionism Objection

Central to the core of attributionism is the claim that for a mental state to be interpreted as contentful it must be part of a holistically rational system of beliefs and desires—even if the rationality is charitably assumed. Attributionism thereby poses a serious objection to the primary processes as conceptualised by Freud. The primary processes are a-rational by definition—no amount of charity will change this; and the primary processes do not take the form of beliefs and desires. How can they be interpreted as contentful?

An answer to this question, which amounts to a refutation to the attributionism objection, is the focus of this paper. The answer comes in two parts. First, I will claim, that *contra* the attributionist exclusivity claim for mental contents being determinately interpretable only as they are rational, the primary processes as conceptualised by Freud can in principle be accommodated by another contemporary view of mental content, Ruth Millikan’s naturalist proper-function view. In Millikan’s account the indeterminacy problem is solved with a different normativity constraint—the assumption of adaptive and selective fitness success, which neither precludes nor requires rationality. However there is a specific addition to Millikan’s program needed in order to argue that the primary processes are interpretable in terms of selective success and as such contentful. This addition is a proper function explanation for the primary processes. Second, then, I will propose just such an explanation for primary processes with a proper-function account of phantasy and wish, an attitude pair analogous to belief and desire but mediated by primary process.

I shall proceed with a review of Millikan’s position.

Millikan’s Proper-Function Account of Representation

To fully appreciate the Millikan view,¹¹ it is useful to look at her concepts of proper function and Normal conditions as they apply to simpler organ mechanisms and states. The function of sweat glands is to secrete sweat. But with regard to ‘proper function’ for

¹¹ See Ruth Millikan, *White Queen Psychology and Other Essays for Alice*, Chapters 3, 4, 5, and 9, pages 51–121 and 172–92 (Cambridge MA: MIT Press, 1993).

Millikan this is only part of the story. For the sweat glands to be indeed properly functioning, 'Normal' conditions for the sweat secretion are required. Thus the body being overheated, sweat secreted, and the body then returning to its regular temperature are among the Normal conditions under which sweat gland secretion can be considered to be properly functioning. On the other hand, if there is a tumour at the temperature-sensing centre such that a regular temperature or even a low temperature leads to sweat gland secretion, even though the sweat glands themselves are fully operative, they are not functioning under Normal conditions. As Millikan (1993, p. 73) says, '... though it is a proper function of the sweat glands to secrete sweat, this is so [Normally] if and when the body is overheated.' Now this distinction is important because only organisms with sweat glands properly functioning *under Normal conditions*, and not organisms with merely functioning sweat glands, were (and are) aided in their proliferation in part because of these properly functioning sweat glands. In other words, the Normal conditions are those conditions under which the inherited proper function confers the selective advantage.

Turning now to belief manufacturing mechanisms, their function is to manufacture beliefs. But quite like the case above, only organisms with properly functioning belief manufacturing mechanisms *under Normal conditions* were (and are) aided in their proliferation in part because of these properly functioning belief manufacturing mechanisms. Belief manufacturing mechanisms function to produce beliefs, but not all beliefs are properly functioning under Normal conditions. Normal conditions, those which conferred (and confer) selective fitness, are those in which the truth conditions of the representation (belief) match those obtaining in the world. Thus only mechanisms manufacturing these true beliefs are those belief-manufacturing mechanisms that are properly functioning under Normal conditions. In Millikan's words (1993, p. 73):

... it is a proper function of the belief-manufacturing mechanisms in John to produce beliefs-that- p only if and when p , for example beliefs that Jane is in Latvia only if and when Jane is in Latvia ... To turn this around, a belief that Jane is in Latvia is, and is *essentially*, a thing that is not Normally in John unless Jane is indeed in Latvia.

But note that for Millikan there is nothing a priori or necessary in believers holding true beliefs or in coming by these beliefs rationally. Rather true beliefs and the rationality they usually entail are contingently determined biological norms. The Normal conditions for beliefs—those conditions which confer selective advantages to belief holders—are those in which the truth conditions of the belief (representation) are constituted by the truth conditions of the world. But, it just happens to have been the case (and presumably continues to be so) that our ancestors capable of having these rationally mediated true beliefs, and exercising this capacity enough of the time, had selective advantages such that the mechanisms supporting rationally mediated true belief generation were reproduced.

Actually, Millikan's view on rationality could not be more different from that of the attributionists. For the attributionists it is the rational which provides the underpinnings for intentionality and mental representation. Millikan (1993, p. 109) paraphrases the serious attributionist worry concerning her view thus: 'How could anything exhibit intentionality ... that was not, at least to an approximation, rational? Is not rationality, as

Dennett claims, “the mother of intention” . . . ¹² Millikan’s various comments on toads and lead pellets can be used to address this worry in two steps. First, she can show that by her criteria toads, even though they cannot differentiate lead pellets from bugs—owing to a powerful reflex mechanism they will swallow countless numbers of both kinds—have contentful representations of bugs. She (1993, p. 94) explains, ‘. . . a certain kind of small, swift image on the toad’s retina, manufactured by his eye lens, represents a bug, for that is what it must correspond to if the reflex it (invariably) triggers is to perform its proper function normally . . . ’ In other words, at time *t* when the image corresponds to a bug and not a lead pellet, the toad’s representation producer properly functions and produces a properly functioning, i.e., fitness enhancing representation of a bug. At time *t+1* when the new image corresponds to a lead pellet, the toad’s representation producer still functions properly and a bug is represented again—but this time the representation is not a properly functioning one, for abnormal conditions (namely lead pellets not bugs present) have obtained. Only those representations of bugs that have contributed to toad nutrition and thus to toad reproductive success are Normal condition representations. But the representation of bugs when only pellets are present are representations of bugs no less; the difference is these bug (pellet) representations are abnormal condition representations. Second, she can show that she has made no claim whatsoever for toads having rational capacities. Regarding a toad swallowing lead pellets, Millikan (1993, p. 76) holds, ‘His inner activity does not include separable states or features, one to correspond to his belief that the pellets are bugs, another to his desire to eat bugs’. In contrast, she (1993, pp. 76–7) states, that with humans:

beliefs are separate entities from desires and . . . beliefs and desires are things that can interact with other beliefs and desires to form new beliefs and desires. That is beliefs and desires can participate in inference processes . . . Indeed . . . the ability to combine beliefs and desires in novel ways, is surely the essence of rationality.

With her use of minimalist naturalist criteria Millikan has been able to effectively divorce representations, complete with fixed determinate intentional content, from rationality.¹³ Whereas for attributionists,¹⁴ content fixing is owed to ascribing beliefs, assuming (charitably) general rationality, and then success in belief interpretability; Millikan

¹² Dennett’s phrase is from Dennett (1978, p. 19).

¹³ The ‘divorce’ between representations and rationality may not look like a divorce at all, particularly with higher level representations like beliefs, since for Millikan beliefs clearly do participate in rational inference processes. But although Normal condition properly functioning beliefs are rational, that they are rational is purely contingent in the Millikan program. Rational true beliefs just happen to be the sorts of beliefs that have contributed to the selective fitness of their holders. Since these are the conditions that happen to be the fitness conferring/Normal conditions, these conditions are those that constitute the truth conditions for representations in beliefs. (For beliefs then, rather than a married or divorced couple, representation and rationality are more like two people who just happen to be next-door neighbours and find that they actually like one another.) It is the case for Millikan that other, lower level representations (like bugs represented by frogs) are not even contingently related to rationality; and I will claim below that there are also even fully propositional contentful states which are unrelated to rationality.

¹⁴ William Lycan (in a review of an earlier version of this paper) suggested that Dennett, unlike Davidson, can obtain this sort of divorce too as Dennett’s ‘subpersonal agencies have states with real (nonattributive) intentional content’. Something more like a legal separation might be more apt, for Dennett’s view affords him only perceptual contents, not contentful propositional states.

resolves the indeterminacy problem and fixes content in a different way. The truth conditions of a representation are constituted by the Normal conditions for that representation—in other words the particular conditions under which fitness success just happened to be conferred. (Again in the case of beliefs, Normal conditions are those in which the truth conditions of the representations match those of the world.) For Millikan the normative assumption of selective success replaces the normative assumption of rationality success; and her normative constraint narrowly determines the content of representations, resolving the indeterminacy problem with equal success. Thus frogs narrowly represent both bugs and metal pellets as ‘bugs’—the former are Normal representations; the latter abNormal—in Millikan’s system there is no disjunctive wide indeterminate representation ‘bug or pellet’.

Note that freed of the burdensome charity of presuming holistic rationality, Millikan (1993, p. 91) can state that:

. . . it is not necessary to assume that most representations are true. Many biological devices perform their proper functions not on the average but just often enough . . . it is conceivable that the devices that fix human beliefs fix true ones not on the average, but just often enough.¹⁵

Further, Millikan has no trouble accounting for false representations. A toad who represents lead pellets as bugs shows a frequent form of misrepresenting yielding false representations. The analogue with people and their beliefs is straightforward. False beliefs and irrational beliefs are beliefs for Millikan; and they need not indicate any problems in the mechanisms needed for believing (or even true believing), because false beliefs and irrational beliefs can arise from various external abNormal conditions. What can be said of false beliefs and irrational beliefs is that they are beliefs which are incapable of performing their functions in a Normal way. This means they have not been and cannot be the sorts of beliefs that play a role in the selective evolutionary fitness of their believers. On the other hand, rationally mediated true beliefs—only because just enough of these states have had content vital to survival and reproductive success and hence have played a role in their believers’ adaptive fitness—are the only beliefs that can be said to be properly functioning under their fully Normal conditions.

Extending Millikan’s Account to Primary Process Mental Content
Part One: Phantasy and Wish, a Different Pair of Attitudes

It is clear that the Millikan view raises no essential or devastating objection to the conception of primary processes as a-rational, yet intentional with referring mental content. The Millikan program can be applied to something that is not a rational system, like the primary processes; and for Millikan a mental state can be mental without the content having had to result from successful interpretation of rational belief. In fact, given that for Millikan successful fixing of mental content is divorced from interpreting the rational successfully—depending instead on the use of the content as fixed under Normal

¹⁵ It is presumed that Millikan’s biological success criterion for beliefs being true ‘. . . not on the average, but just enough’ is a far less stringent requirement than the attributionist’s interpretation of success criterion, which demands that most beliefs be true.

conditions toward biological/selective success¹⁶—primary process mental content too, if a proper function account for its use is given, could be accommodated by Millikan's view.

But before such a proper function account for the primary processes can be provided, there is one further matter which must be addressed, and this concerns the types of propositional attitudes used in understanding primary process mentation. As alluded to above (see p. 3), primary process mentation does not take the form of belief and desire. Yet for the attributionists belief and desire constitute the essential attitude pair. No other attitude pair will serve because *belief* plays a unique and central role in the attributionist program. Although Millikan too devotes much attention to belief and desire, nothing in her theory necessitates that this pair plays a core role.

With respect to belief and desire, that they are a natural focus for theorists owes not merely to convention, but instead reflects the readiness with which beliefs and desires lend themselves to intentional and motivational analyses. However, because beliefs by their very nature carry with them a special relationship to truth, beliefs may not in fact be the appropriate attitude pair upon which to base an understanding of mental contents in general.

Following Velleman,¹⁷ it can be seen that many propositional attitudes can be classified as belonging either to the cognitive group—where *p* is believed-true, supposed-true, hypothesised-true, imagined-true or phantasised-true, which in each case implies that *p* is to be in correspondence with the world; or to the conative group—where *q* is desired-true, or wished for-true, implying that the world is to be brought into correspondence with *q* (pp. 7–8). What differentiates the various cognitive attitudes from one another? One critical point is that belief stands out from all of the others with respect to its relationship to the truth. When I suppose *p* to be true, I can do this with no commitment whatever to my views on *p*'s truth. For the sake of an argument, discussion or game I can suppose *p* true, even when I know *p* to be false. With hypothesising *p* true, I do have more at stake; I am betting on *p* to be true and trying to get *p*'s truth-value right, but admitting that I need more evidence. But with belief there is no equivocating. I cannot believe *p* to be true unless I am trying to get *p*'s truth value right, unless I am aiming at the truth. As Velleman (1998, p. 8) then states, supposing and hypothesising involve, '... regarding a proposition as true irrespective of whether it *is* true, whereas believing involves regarding a proposition as true with the aim of so regarding it only if it really is'.

Now let's look at the other end of the cognitive attitude spectrum. Imagining *p* true, and even more so, phantasising *p* true are cognitive attitudes with a relationship to truth that is most different from the relationship between belief and truth. When I phantasise *p* true, as with supposing *p* true, I have no commitment as to whether or not I take *p* to be true. But phantasising *p* true is very different from supposing *p* true. Whenever I suppose

¹⁶ Indeed, success in interpreting the rational, vital to the attributionist's program, does not play a role for Millikan. However there is a very different sense in which 'interpretation' is involved in the Millikan program, namely in what is seen as constitutive of Normal explanations for biological success. With the typical standards of the philosopher of biology she holds, for example, that Normal explanations are the most simple and proximal explanations. These are indeed rational and interpretative constraints upon what can be considered a Normal explanation; but clearly this is a very different level from attributionist interpretation of what must be presumed to be holistically rational in every mentating subject.

¹⁷ 'How Belief Aims at the Truth', unpublished manuscript (1998).

some proposition to be true, although I have no stake in the truth or falsity of that which I suppose, considerations of truth and falsity are integral. Supposing is after all the active choice to suspend existing truth discerning exercises and to just stipulate p as true. With phantasising p true on the other hand, rather than being actively suspended, considerations of truth and falsity have never been present; they cannot have been suspended because they have played no part in the phantasy. When I phantasise p true not only am I not interested in the truth value of p , I am not interested in truth values at all. The capacity to phantasise p true is prior to the capacity to consider truth and falsity, and prior to the capacity to actively engage in exercises aimed at discerning truth.¹⁸

All of this suggests a developmental sequence in the cognitive attitudes. Supposing p true and hypothesising p true both require first acknowledging truth and falsity, and then adopting a particular stance about truth and falsity as regards p . In the case of supposing-true, considerations of the actual truth value of p are suspended and p is just taken to be true. With hypothesising-true, there is the informed guess that p is true and the call for further evidence. Believing p true requires evaluating p with respect to p 's truth or falsity and believing p only if p is evaluated as true. And belief aims at getting this right. Phantasising p true (and some playful imaginings that p) require only having the propositional content p , and that is all. In phantasising-true and imagining-true¹⁹ there are no attempts to evaluate p 's truth or falsity and no aims at getting this evaluation right, because there is not yet the capacity to evaluate truth values or to aim at the truth. So whereas a being must be capable of believing before supposing or hypothesising is possible, phantasising and (at least some types of) imagining precede believing. Velleman (pp.11–12) puts it this way: ‘... imagining precedes believing in the order of development ... We should therefore conceive of belief as reality-constrained imagining ...’

This view is not uncontested. Beneath the disagreement, however, lies a common confusion between (1) phantasising and imaginings that are done without any consideration of truth values, and are therefore less sophisticated than beliefs, and (2) various instances of fictionalisations and pretendings that, because they require the suspension of considerations of truth, are actually more like supposings and are indeed far more sophisticated than beliefs. Note in support of the distinction and the developmental sequence proposed, is the fact that adults are far better than children at devising complex, coherent works of fiction, while children, often ‘lost’ in such playful imaginings, do a much better job of phantasising that they are trains, elephants, or dinosaurs, or even fast, huge, and hungry ‘dinosaur-trains’.

Again since Millikan’s naturalist proper function view has no intrinsic need to focus on the attitudes of belief and desire, and since there should be no reason in principle that phantasy and wish analyses could not be included, the proper function account for primary process mentation that I will provide will use the attitude pair phantasy and wish.

¹⁸ The ‘true’ part of phantasising-true and imagining-true pertains only to the proposition’s truth-value as regarded externally, objectively. It does not pertain to the phantasiser’s subjective, internal evaluation of truth, as there is none.

¹⁹ See footnote 18.

Extending Millikan's Account to Primary Process Mental Content
Part Two: A Proper Function Account for Phantasy and Wish

Although phantasising and believing are both cognitive attitudes with important parallels, they have very different proper functions and very different Normal conditions for the exercise of their proper functions. This is also true for certain of their individual states, phantasies and beliefs. A Normal condition for the proper function of believing that p , and for the proper function of the belief that p , is that p will be believed-true just in those cases that p truly obtains now. It is clear that beings with properly functioning belief mechanisms and belief states have, under this Normal condition, selective advantages.²⁰ It is owed then to the biological success conferred by the proper function of beliefs *under this Normal condition*, and quite independent of any intrinsic relationship to rationality, that the contents of beliefs are secured. Further, to the extent that the mechanisms for believing and particular belief states continue to function properly under *this Normal condition*, they will presumably contribute to selective fitness and therefore participate in their own proliferation. The particular belief states in which this is best demonstrated are belief states with contents vital for biological fitness. So for example, there are selective advantages for beings who not only have general mechanisms for beliefs which will under Normal conditions be true beliefs, but who have in particular capacities for beliefs which will be true Normally about the health of conspecifics who are potential mates, the dangerousness of rapidly approaching predators, and the speed of catchable prey.

In order to understand the parallel situation for phantasising and particular phantasy states, the promised proper function account for phantasising and the phantasies produced is now due. This account begins by stating the proper functions of phantasising and phantasies. The proper function of phantasising is to produce phantasies, states which I have been claiming have fixed content in the absence of rationality. Phantasies are properly functioning only when they demonstrate one or more of the four characteristics of primary process mentation enumerated at the beginning of this paper (*supra* p. 1) summarised as follows. Properly functioning phantasies are: (1) without tenses—phantasised only in an unexamined tenseless present; (2) not reality tested, in other words phantasised without attempts to regulate representations for truth considerations, such that phantasies are neither correct or incorrect; (3) not phantasised from an agent's singular and continuous view point; and (4) phantasised such that phantasies admit of contradictions and other lapses in ordinary logic.

Having listed these proper functions for phantasies, there are two major questions for our proper function account to address. First, how can the content of such properly functioning a-rational phantasies be fixed? Second, how can such properly functioning phantasies contribute to the selective fitness of beings that can and do phantasise? As the content of beliefs is fixed by the conditions that are Normal for the proper functioning of beliefs, the Normal conditions for the proper function of phantasies will likewise fix their content. But this can only be the case if under their Normal conditions properly functioning phantasies confer selective fitness advantages for phantasisers. Thus to

²⁰ Strong arguments against this assumption that true belief believing enhances selective fitness are offered by Stephen Stich, *The Fragmentation of Reason* (Cambridge MA: The MIT Press, 1990). See especially pp. 55–70.

address both questions I turn now to demonstrating that there are particular conditions under which the proper function of phantasising and phantasies do confer advantages; and as such these Normal conditions will fix the content of the phantasies, quite without rationality.

There are three fitness-conferring conditions for the proper function of phantasy that must be specified, all rather unlike any Normal condition for beliefs:

- (1) Whereas a fitness-conferring condition for belief is that p will be believed-true now just in cases where p truly obtains now, for phantasy a selective advantage accrues only in the opposite case: that p will be phantasised-true now only in those cases in which p does not now obtain.
- (2) Although as just indicated one of the fitness-enhancing conditions for the proper function of phantasy p is that p does not obtain now at time t , another condition for the properly functioning phantasy p to confer selective fitness is that p will obtain later, say at time $t+1$.
- (3) Finally the third condition under which the proper function of phantasy p provides fitness advantage is that the phantasy with content p at time t will have afforded some useful practice for the phantasiser, when at time $t+1$, some time after the phantasy p , p does obtain.

Before I elaborate on these somewhat unusual fitness-enhancing Normal conditions for phantasising and phantasies, let me square this *proper function under Normal conditions* explanation for phantasising and phantasies with that of the more familiar proper function Normal explanation for believing and beliefs. With phantasies and phantasising (as with beliefs and believing) it is not the case that all phantasies will be states derived according to proper function under Normal conditions. Phantasising p true will, for example, be functioning under abnormal conditions, if either p does obtain now simultaneous with phantasising p at time t , or if p never obtains in the future.²¹ Also (and again parallel to the belief case), only those phantasies functioning properly under Normal conditions will contribute to the selective fitness of the phantasisers and thereby to reproducing more beings with properly functioning phantasies and the mechanisms supporting them. Finally (and once more as is the case for beliefs), the clearest contributors to selective fitness are those properly functioning Normal condition phantasies whose content is most relevant to vital areas of reproduction and survival, e.g., content about the selection of mates, the avoidance of predators and other dangers, and the obtaining of food.

But do we see such phantasies? Yes, we see such phantasies in action during play activity. Many species of birds and mammals, of course including humans, engage in play. Zoologists have observed that play activity is very often of a form that—although it confers no immediate benefits in terms of nutrition, gaining resources, avoiding danger, or

²¹ The fitness-enhancing condition of a phantasy p at time t , requiring that p will obtain later, say at $t+1$, is a Normal condition different from any Normal condition for belief. For whether or not a particular phantasy p is properly functioning under this Normal condition cannot be determined at the time of the phantasy, time t . Such determination cannot take place until some time in the future, time $t+1$.

attracting conspecifics *now*²²—does constitute a practice for any or all of these activities, all of which will be very serious business *later*.²³ So, for example, children, young dogs, and in fact many species of mammals play at fighting and they do this play-fighting with beings who are not enemies. This sort of play, a phantasy lived-out, meets the primary process criteria necessary to be considered a properly functioning phantasy: X is engaged in ‘fighting’ (of the play-fighting phantasy type) now, at a time when there is no real fighting, with an ‘enemy’, Y, who is no real enemy. X is engaged in a properly functioning primary process phantasy. Or take three other examples, all with content relevant to biological fitness and all frequently encountered in animals including (with only slight modifications) humans: (1) Z participates in play where Z mock chases mock prey; (2) P pseudo flees from pseudo predators; and (3) R mounts several practice mates, simulating copulation.

All four of these play-phantasy cases meet the criteria for primary process proper functioning phantasies: (1) The play-phantasy is engaged in by beings who are unlikely to have a unified continuous experience of their agency. (2) The play-phantasy likely takes place in a tenseless present. (3) Ascriptions of truth and falsity are not applied. (4) The contents are not reality tested—the mock chases, mock prey, pseudo predators, and practice mates are not real chases, real prey, real predators, or real mates.

But are these properly functioning phantasy-play activities taking place under the fitness-enhancing Normal conditions? The first one is in place: it is not the case that real fighting with a real enemy is going on now. The second and third Normal (selective advantage conferring) conditions for the proper function of phantasies are best considered together. The second Normal condition specifies that during phantasy *p* at time *t*, *p* does not obtain; but *p* does obtain later at time *t+1*. And the third Normal condition further stipulates that when *p* does obtain later at time *t+1*, conditions will be fully Normal only if the prior phantasy *p* at time *t* will have provided the phantasiser a useful practice for *p*, when at time *t+1* *p* then does obtain. Thus as X’s primary process phantasy-play of today will aid X in the future by having served as a practice—(1) where X play-fights *now* with those who are non-enemies, (2) where X will *later* have to actually fight real enemies for survival, and (3) where X will fight the real fight more effectively, enhancing survival and reproductive chances, owing to the play-fighting practice—in these cases X’s primary process phantasies will have been properly functioning under their full Normal conditions.

Given then that: (1) there are conditions for the proper function of primary process phantasies which provide selective advantage for beings so phantasising; and (2) that these conditions are so determined as the Normal (although certainly not the typical) conditions for the proper function of primary process phantasies, the content for primary process phantasies can be fixed appropriately;²⁴ and in the absence of rationality.

²² This definition of play activity is from Robert Fagen, *Animal Play Behavior* (Oxford: Oxford University Press, 1981).

²³ This is demonstrated convincingly for rhesus monkeys in R. Symon, *Play and Aggression: A Study of Rhesus Monkeys* (New York: Columbia University Press, 1978).

²⁴ This analysis, analogous to that regarding beliefs, secures content for those primary process phantasies that are not properly functioning and/or not operating under Normal conditions, such as faulty and false beliefs are not without content. Note that this analysis also allows for the very real possibility that most primary process phantasies are not both properly functioning and Normal.

Finally, and very briefly, let me take up desire and wish. Although these are both conative attitudes and importantly similar, there are significant differences with respect to their proper functions and Normal conditions. About desire Millikan (1993, p. 67) suggests that:

... the most obvious proper function of every desire ... is to help cause its own fulfillment. For ... the mechanisms in us that manufacture desires ... have proliferated because the desires they produce are sometimes relevant to our flourishing and reproducing, and because relevant desires have sometimes participated in processes that ultimately effected their fulfillment.

In terms of Normal conditions for the fulfilment of desires, Millikan (1993, p. 68) explains that frequently these are not met and consequently desires are often unfulfilled. 'Very often the proper functions ... are not performed. Indeed, perhaps most desires ... are born into a world in which conditions, outer and/or inner, are not Normal for their fulfillment.'

One Normal condition for the proper function of wishes is also to cause their fulfilment. But note the following difference: in order to fulfill a desire, beliefs about the real world pertaining to what is desired need to conform to those states of affairs of the real world. Thus if I desire *q*, a drink of water, and I believe *p*, that a working water fountain is nearby, my desire for water will likely not be fulfilled (and certainly will not be fulfilled Normally) by seeking that water fountain, unless my belief that *p* is correct. Similarly, should I desire to be King of the Hill such that I can then select and keep the best mate, have the choicest food, and scare off predators, the beliefs that (1) in order to do this I must fight with and defeat my rivals, and (2) that I have the power to do so, must conform to reality, if my desire to be King of the Hill is to be met. A wish, on the other hand, needs for its fulfilment only that the non reality-tested world-as-phantasised conforms to what is wished. My wish to be King of the Hill can be fulfilled by different primary process phantasies. I can phantasise that X is King of the Hill and my rival, when X is really not the King and is my friend; and I can have a phantasy of victory over X as we engage in a mock fight. Or, I can phantasise that my current powers are much greater than Z's, the real but far off King of the Hill, and I can continue my phantasy by imagining my successful challenge of Z. Or I can phantasise that Y, who really is fighting Z for the crown, will, after deposing Z, bestow the title on me. Hence wishes can be fulfilled far more often than desires. Wishes can even have a causal role in producing phantasies in which they will be fulfilled. Clearly desires can have no such proper function role with respect to belief production. However, fulfilment is not the only Normal condition for the proper function of wishes. As is the case with phantasies, for wishes to be properly functioning a Normal condition pertaining to the future must be added. Only those wishes which, now, are fulfilled as part of a primary process mediated wish/phantasy, *and* whose present content will *later* serve the practice function for survival and reproductive selective fitness, will be wishes properly functioning under full Normal conditions.

What I have been arguing for concerning a proper function account for the mechanisms producing primary process mediated phantasies and wishes and for some of the phantasy and wish states produced, can best be summed up by making additions (shown by brackets) to Millikan's own (1993, p. 67) statement cited just above:

... the mechanisms in us that manufacture desires [and those producing primary process mediated phantasies and wishes] ... have proliferated because the desires [and phantasies and wishes] they produce are sometimes relevant to our flourishing and reproducing, and because relevant desires [and primary process mediated phantasies and wishes] have sometimes participated in processes that ultimately effected their fulfillment.

Primary process phantasies and wishes are relevant to our survival and reproductive success when they are properly functioning under conditions by which they are fitness enhancing practices for the future. Playing-phantasising p , where the content of p concerns vital matters, can enhance biological fitness if the three following conditions are met: (1) if the phantasising p takes place at a time t when p does not yet obtain; (2) if p does obtain at a later time, $t+1$; and (3) if, when p does obtain at $t+1$, the phantasy p at time t will have provided a practice for p , a practice which affords selective success. Insofar as these conditions for the proper functioning of primary process phantasies and wishes are the Normal conditions, it is these Normal conditions which will fix the content of these phantasies and wishes appropriately, *in the absence of rationality*.

If this proposed proper function Normal condition account for primary process mediated mechanisms for phantasy and wish (and for some of the phantasy and wish states produced) goes through, Millikan's view of mental content can readily accommodate the primary processes as a-rational, yet having mental content. And if the Millikan position can indeed so accommodate the primary processes, the attributionist objection—so serious an objection that it challenges this very conception of the primary processes—can be considered undermined and refuted.²⁵

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²⁵ I will close by addressing an important objection raised by an anonymous reviewer of an earlier draft of this paper. He/she states that, 'This account seems to be along the right lines and therefore quite promising ... [but] the author does not link the account with any of the actual contents characteristically ascribed to Freudian phantasy or primary process thought. It is unclear how well, say, any of Freud's primal phantasies can be understood in these terms; ... even Oedipal phantasies ...' I have two responses, related to one another. First, I am proposing here only *one way for a certain category of wishes and phantasies* to plausibly have a proper function in the Millikanian sense. For other categories of wishes and phantasies, even if the play-as-practice explanation will not serve, there is no reason to rule out the plausibility of a different sort of Millikanian proper function account. (For example, a plausible proper function account might be advanced for certain types of primary process phantasies and wishes in terms of their contents providing material for creative thought.) Second, I have attempted in this paper *only* to refute the claim that the very notion of primary process content is incoherent. I have used *some* Freudian primary process contents (and indeed not the most familiar) in refuting this claim. To attempt to provide proper function accounts for other Freudian primary process contents, including those that are most characteristic, seems a worthy task—but one requiring a follow up paper.