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# ‘Mind as Feeling’ or Affective Relations?

## A Contribution to the School of Andersonian Realism

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**ABSTRACT.** Andersonian realism is a determinist, empiricist position that acknowledges the important distinction between qualities and relations. However, Anderson’s ‘mind as feeling’ thesis, proposing that the mind’s qualities are emotional, is problematic since it fails to account for ‘feelings’ themselves. O’Neil’s (1934) alternative relational account of affects, in conjunction with Maze’s (1983) theory of instinctual drives, provides a coherent platform for developing a comprehensive realist account of affects. In discussing the relation between affects, cognition and motivation, affects are viewed as drive-evaluative phenomena, and ‘feelings’ are known bodily states arising in conjunction with motivationally driven environmental evaluations. The role that affects play in a revised desire/belief model of behaviour explanation is discussed.

**KEY WORDS:** affects, Andersonian realism, desire/belief model, mind as feeling, relations

The Australian school of Andersonian realism, developed from the philosophical stance of Scottish-born John Anderson (1927/1962a, 1930/1962d), is a thoroughgoing determinist and empiricist position, which recognizes the often under-appreciated distinction between *qualities* and *relations*. Stated briefly, ‘a quality is an intrinsic feature of a thing, it belongs to the thing itself, whereas a relation holds between two or more things’ (Mackie, 1962, p. 266). This distinction holds a central place in Anderson’s (1927/1962a) conception of cognition as a relation between a knowing subject and situations known, a position which, in conjunction with his rejection of dualisms (proposing instead a single, yet infinitely complex, spatiotemporal universe), and his proposal that our knowledge of the world is direct (whilst not denying that we are, at times, in

error), constitutes a radical departure from mainstream approaches within cognitive psychology (see Anderson, 1929/1962c, 1930/1962d, 1936/1962f).

In recent years this realist position has been defended and extended considerably by Maze (1983, 1991), Michell (1988) and McMullen (1996a), but whilst considerable in-roads have been made in formulating a realist account of 'cognition' (Maze, 1983; Michell, 1988), 'error' (Galloway, 2000; Michell, 1988; Rantzen 1993), 'memory' (McMullen, 2000; Michell, 1988), 'motivation' (Mackay, 1996; Maze, 1983, 1987a), 'meaning' (Mackay, 2003; Petocz, 1999), 'measurement' and philosophy of science (Hibberd, 2001, 2005; Maze, 2001; Michell, 2000, 2003), the theory of *affects* or emotions has received considerably less attention. Assuming the tripartite division of mind into cognition, conation and feeling, Anderson's (1934/1962e) position proposes that whilst cognition and conation should be considered as relations (between a knower/striver and a known/striven for situation), it is the feelings themselves that constitute the 'real *qualities* of mental processes' (p. 73), a position finding most recent defence in this journal by McMullen (1996b). Alternatively, O'Neil (1934) presents the view that feelings, as with both cognition and striving, are certain *relations* that minds engage in with the environment, a view that has been subsequently implicated in a number of approaches to mind influenced by the Andersonian position (e.g., Maze, 1973, 1987b; Michell, 1988). The crux of this dispute is captured by McMullen (1996b), who states, with respect to the realist position, '[t]he basic issue is whether emotions are qualities or relations' (p. 165). This paper evaluates both the 'mind as feeling' and 'feeling as relation' accounts with the aims of: (a) demonstrating that the 'mind as feeling' position cannot account for 'feelings' themselves and so should be rejected; (b) refuting objections to the relational view of affects raised by proponents of the 'mind as feeling' position; (c) synthesizing and systematizing the relational view of affects, an undertaking not previously achieved; and (d) extending the relational view of affects through situating affects within a revised desire/belief model of behaviour. The position proposed is that affects are best understood as complexes of qualitative (bodily) states standing in certain (cognitive) relations, which, as drive/evaluative phenomena, may go on to regulate behaviour. However, to appreciate this requires first introducing the Andersonian position of cognition as a relation to serve as a foundation for the discussion.

### **The Andersonian View of Cognitive Processes**

A prominent feature of Andersonian realism is the view that cognition, which includes general acts of knowing (such as believing, thinking and remembering), should be understood as a *relation* between a cognizing subject (the knower) and an object term (the known), each existing independently of the act of *knowing*. As Anderson (1934/1962e) points out, since nothing can be

constituted by its relations, 'what knows, as well as what is known, must have a character of its own and cannot be defined by its relation to something else' (p. 69). Any relation involves at least two or more distinct *terms* that must have their own intrinsic properties (to constitute what stands in the relation), and the relation, itself 'is not a kind of *stuff* that binds the terms. It is just how the terms are with respect to each other' (Michell, 1988, p. 234).

In the case of 'knowing' (or 'perceiving', 'believing', etc.), both a *subject* and *object* term can be identified (Anderson, 1927/1962a), the *subject* being that which knows (generally taken as the living organism, or more specifically the brain, or some part thereof) and the *object* being the state of affairs known. Being *known* is a specific relationship entered into, and not a property of things, and since any discussion of knowing implicates *both* a knower and a situation known, cognition cannot be reduced to either one of the terms of the relationship. Here the relational view clarifies the brain's relationship to mentality, since, as Petocz (2006) notes, 'neural processes are necessary but not sufficient for mental processes, and the neurophysiological data pertain to the *subject term only* of the cognitive relation' (pp. 50–51). That is, although neural processes may constitute one term of the cognitive relation (i.e., the knower), the cognitive relation is not reducible to them. At the same time, although psychological relations cannot be reduced to physical entities, this is not to say that they then exist in some type of Cartesian mental universe. Just as spatial *relations* exist in the same spatiotemporal universe as the *things* standing in those same relationships, so too do psychological relations:

... there is no suggestion that the psychological and the physical are distinct realms of existence. They are simply different kinds of events. They both exist and interact in the same spatiotemporal order. In the same way social relations and phenomena are not reducible to either psychological or physical phenomena. (Michell, 1988, pp. 237–238)

Hence, the Andersonian position subverts the problem inherent in the Cartesian position concerning how mind and body interact, since psychological events are located in the same spatiotemporal universe as every other occurrence.

In conjunction with this, the Andersonian position proposes that our knowledge of the world 'is not mediated by cognitive representations internal to the mind or brain' (Michell, 1988, p. 227), but instead involves a 'direct relation between the knower and some independently existing situation' (Michell, 1988, p. 240; a thesis referred to as *direct realism*). This stands in stark contrast to the *representationist* framework, where knowledge of the world is mediated by internal representations (e.g., Locke, 1690/1947), a position that currently dominates mainstream cognitive psychology. In contradistinction, direct realism proposes that the objects of cognition are never 'inner' mental objects or entities but rather situations in the world (see Michell, 1988). As

Anderson (1927/1962a) writes, 'we never know "ideas" but always independent things, or rather states of affairs' (p. 32). The recognition that what is known are real-world objects or situations avoids the problem encountered by those proposing that 'mental entities' (such as 'ideas', 'percepts', etc.) act as the objects of cognition—specifically, the dilemma that such 'entities' are *uncharacterizable*; the only feature attributed to them being the relations that they are said to enter into (e.g., to be known, or to represent; Anderson, 1927/1962a). As McMullen (1996a) writes:

No account of their positive nature, the properties or qualities of such entities is possible, because their sole existence consists of the *relation* they stand in between the knower and the known, or perceiver and perceived, i.e., nothing can be said about them apart from what they do; their definition is exhausted in the formula that they exist through relating the perceived (known) to the perceiver (knower). They have no independent characters of their own, hence it can be seen that to invoke them as entities is to commit the fallacy of *constitutive relations*, i.e., to treat relations as if they were terms, entities possessing independent natures of their own. (p. 61)

Rather, then, than knowing 'mental entities', and given that we do not have internal sense organs for knowing our own neural processes directly, 'the object of cognition is always an event external to the subject's nervous system' (Michell, 1988, p. 234). This is not to say, though, that we only know the environment *outside* of the skin. Rather, just as we may know the environment external to our bodies, we may also know the environment within the skin, an environment which is just as much a part of the objective world as any other situation. However, given the rejection of mental entities, in knowing our bodies we do not know 'sensations' *per se*, but, rather, we 'sense' the environment around us; the 'organic sensations', 'regarded as objects, are *the organic processes themselves*' (Anderson, 1934/1962e, p. 74), and such mechanisms and pathways for the brain's knowledge of bodily states (i.e., *interoception*) are well established (see Cameron, 2001).

Accounting for phenomena such as *phantom-limb* pain, where painful sensations are 'perceived in the missing body part' after amputation (Gallagher, Allen, & MacLachlan, 2001, p. 522), does present a theoretical challenge for the Andersonian position since the realist here must be capable of specifying what is known when the object of cognition does not appear to presently exist (as in the case of hallucinations and memories). There have been numerous responses to this issue (e.g., Galloway, 2000; Michell, 1988; Rantzen, 1993), and while a detailed exposition is beyond the scope of this paper, given the direct realist thesis that *remembering* involves 'an epistemically direct relation to past events' (Michell, 1988, p. 240), then phantom-limb pain may involve both cognizance of some past situation when the limb was present, as well as prevention of cognizing the actual present state of affairs (Michell, 1988; see also Wilcox & Katz, 1981, for further discussion of the direct realist position

concerning remembering the past). Furthermore, what Chalmers (1996, 2002) refers to as the 'hard problem' of consciousness, for example, accounting for how physical processes in the brain can give rise to states that have 'a *phenomenal character*, with *phenomenal properties* (or *qualia*) characterizing what it is like to be in the state' (Chalmers, 2002, p. 248), is also approached differently from the Andersonian perspective. Here it is argued that we do not know mental 'qualia' *per se*, but, rather, what is experienced is the world itself (although accounting for the precise 'flavour' of experience is still required). Insofar as consciousness involves knowing our own mental processes, however, the realist position proposes that this involves being aware of various mental *relations* (e.g., knowing that one knows, etc.; see Michell, 1988). It is, also, of course, a legitimate question to ask 'how' the brain, in conjunction with the perceptual apparatus, is capable of experiencing the world, either within or without the skin, but this remains solely an empirical question.

### 'Mind as Feeling'

Whilst cognition and conation (or striving) are viewed as activities of minds (i.e., as certain relations), Anderson (1934/1962e) believes that the 'mind' that knows and strives consists of the feelings themselves. That is, it is the emotions that are the *subject* terms entering into cognitive and conative relations: '... we may go on to express the position by saying that emotions (or feelings) know, emotions strive and, in general, interact with other things' (Anderson, 1934/1962e, p. 73). Part of Anderson's argument here involves accounting for the subject term (the knower) in the cognitive relation. It cannot be an 'abstract ego', since 'there is no logical basis for supposing the existence of a non-passionate judge or "rational" faculty' (Anderson, 1928/1962b, p. 219), and since cognition and conation are necessarily relational terms they cannot characterize the mental. Feelings, accordingly, are left by default as the obvious candidates as to that which does the knowing and striving.

A serious concern for the 'mind as feeling' account emerges, however, when considering the relation between emotions, brain states and 'feeling-tones'. It is clear that defenders of the 'mind as feeling' account consider a *felt* dimension to be a *sine qua non* of emotions, since whilst 'feelings (e.g., anger and fear) are qualitatively different from one another ... they still have the general feeling-quality in common' (Anderson, 1934/1962e, p. 74; cf. McMullen, 1996b, p. 156). Furthermore, McMullen (1996b) claims that emotions, characterized by this 'feeling-tone' property, are 'properties of brain states' (p. 166), in the same manner as colour is part of a thing's physical structure:

Colours are never found, so to speak, disembodied, as hovering above physical structures. They are always physical structures—solids, liquids, gases, that are coloured. Just as we can say, then, for example, that certain physical

states are coloured, we can say that certain physical states are mental. As far as we know, these latter physical states are a subclass of brain states. (p. 157)

That is, if we are to take the colour analogy seriously, then the 'feeling-tone' is a property of the brain in the same substantive sense as neural structures or chemical compounds may be. However, although 'located in brain states' (McMullen, 1996b, p. 156), McMullen concludes that emotions are not reducible to such states. He illustrates what he means here by drawing a distinction between the two statements 'emotions are brain processes' and 'emotions are *nothing* but brain processes': 'The first is consistent with Anderson's claims that emotions are located in brain states and have their own qualitative "feeling-tones". The second proposition, that of reductionist physiologism (or 'eliminative materialism'), denies the existence of feeling-tones' (p. 158). The question that then arises is: how are we to conceive of such 'feeling-tones'?

It is not entirely clear what either Anderson (1934/1962e) or McMullen (1996b) means here, although McMullen, following Anderson, does make it clear that this position is not proposing 'non-physical mental properties', but rather 'that all mental properties are physical, and some physical properties are mental' (p. 157). This could be taken to mean, as suggested by O'Neil (1934), that 'mental' brain states are those involved when the organism engages in mental acts (i.e., physical 'mental' properties, which can be considered qualitative features of the subject term). However, to say that a brain state has a certain feeling-tone brings into question what is precisely meant by 'feeling' here. If certain brain states are 'coloured' by feeling-tones, in the sense that they are a property of such brain states (in the way chemical or electrical workings may be), then such feeling-tones are *not* typically anything known when 'feeling'. As noted earlier, on the realist account, whatever is known is generally *external* to the nervous system (Michell, 1988), and if 'feeling-tones' are located in the brain, then we rarely know them directly since such brain states are typically only known incidentally through events such as head trauma. In other words, since there are no sense-receptors in the brain, nothing is literally 'felt' there. Furthermore, the issue becomes even more obscure because, as McMullen (1996b), following Anderson, notes, we 'do not need to know anything about neural processes *in order to experience emotions*' (p. 158, italics added). Here 'emotions' are the *object* of experience, known apart from brain processes, and, consequently, it would appear then that in the 'mind as feeling' thesis, emotions are ontologically obscure: emotions are both 'located' in brain states, whilst being knowable independently of them. As a result, the 'mind as feeling' position appears to fail to account for 'feelings' themselves.

If all the 'mind as feeling' position means here is that certain brain states *underlie* emotional experience, then we could possibly call such brain states 'emotions', but still be no closer to understanding 'feelings' themselves. A 'feeling-tone', if it is to literally involve something *felt*, cannot be located in

the brain, and to feel something is not the same as having a brain flooded with certain chemicals, although the latter may be a causal condition for what is felt. We may, for example, 'feel' the *effects* of specific chemicals in the brain, but these effects are not the brain states themselves, but more likely bodily processes accessible via internal sense organs (e.g., interoception). Hence, the problem for the 'mind as feeling' account is the gap between brain states and the feelings themselves.

### The Relational View of Affects and the Role of Cognition

In contradistinction to the 'mind as feeling' account, an alternative view proposes that affects are certain *relations*, a thesis proposed by O'Neil (1934) in reaction to Anderson's thesis:

Just as striving (search and avoidance) implies a striver and a striven for, so feeling (pleasure and unpleasure) implies a feeler and a felt about. For just as seeking or an avoiding is inconceivable without something seeking or avoiding, so a being pleased or a being unpleasured is inconceivable without something being pleased or unpleasured: and similarly just as a mind cannot strive without striving for something, so a mind cannot be pleased or unpleasured without being pleased or unpleasured with something. (pp. 281–282)

Here, 'pleasure' and 'unpleasure' are the primary felt aspect of affects, and an emotional act involves a subject pleased or unpleasured by some situation (cf. Maze, 1973, p. 189). The relation of pleasure and unpleasure to affects has long-standing support (e.g., Brenner, 1974; Jacobson, 1953; James, 1884; Moore & Fine, 1990; Penrose, 1931; Rosenblatt, 1985), and whilst such a distinction provides only a very broad first approximation to a comprehensive account of affects (Panksepp, 2005), knowledge of brain areas and neurotransmitter functioning associated with pleasure and unpleasure are well established (Berridge, 2003; Swards & Swards, 2002).

An upshot of the relational position is that emotions must be inextricably cognitive phenomena, since to be 'pleased' or 'displeased' with a situation is to stand in a certain cognitive relation to it. As others have recognized, we cannot feel something towards an object without cognition: 'As soon as we spell out what frightens, irks or gratifies the person, our report of his emotion will imply that he is thinking in some manner about the item' (Thalberg, 1977, p. 35). That is, for a subject *S* to be pleased (or displeased, etc.) with some situation *x* implies, epistemologically, that *S* *knows* *x*, since the relationship of 'being pleased with', itself, is a certain judgement of that given situation. This is not to say, though, that *S* must know everything about *x*, or even have knowledge of being pleased with *x*. As the relational view of cognition makes clear, 'awareness' or 'being known' is not a property of anything,

and so in knowing something, that same act of knowing is not automatically known. That is, in *S*'s knowing *x* there is no necessity that *S* knows that it knows *x*—if that were to be the case (as the Cartesian view would propose), then an infinite regress of 'knowing that one knows' follows (see Maze, 1983; Michell, 1988). Instead, on the Andersonian account, for that same act to become known requires a further mental act such that *S* knows that *S* is pleased with *x*. In any case, our ordinary affective descriptions implicate this 'aboutness' of the relational account; to be pleased, or angry or to love all implicate an object that is pleasing, or an object of anger or love. As Brentano (1874/1973) writes:

Every mental phenomenon includes something as an object within itself, although they do not do so in the same way. In presentation something is presented, in judgement something is affirmed or denied, in love loved, in hate hated, in desire desired and so on. ... No physical object exhibits anything like it. We can, therefore, define mental phenomena by saying that they are those which contain an object intentionally within themselves. (pp. 88–89)

As such, our affective descriptions, implicating objects, require, at minimum, that the object is known. Hence, the argument presented here is that any relational account of affects implicates 'knowing', and affects appear to be, at least in part, a peculiar type of cognitive relationship between a subject and their environment. However, rather than being neutral, the cognitive element appears to involve what has been variously described as a 'mental evaluation' (Ramzy & Wallerstein, 1958, p. 172), 'appraisal' (Lazarus, 1982, p. 1021; 1991, p. 352) or a 'feeling with a cognitive attitude' (Novey, 1959, p. 103; cf. Cavell, 1993; Deigh, 2001; Panksepp, 1999; Schulkin, Thompson, & Rosen, 2003). That is, what may be called the 'affective attitude' involves a subject oriented towards the object of the emotion in a particular evaluative way.

The 'mind as feeling' position does not rule out that emotions can enter into relations, but, as stated earlier, the emotions are not the relations themselves but rather constitute the subject terms entering into those relations (Anderson, 1934/1962e; McMullen, 1996b). As the subject terms, they exist independently of any affective relation and do not require 'objects'; hence the 'mind as feeling' account is not challenged by the apparent finding of 'objectless' emotions (e.g., 'nameless fears'), and instead uses this phenomenon as evidence against the relational view (e.g., Anderson, 1934/1962e; McIntosh, 1935). However, whether 'objectless' emotions are truly objectless needs careful consideration. Take, for instance, 'objectless anxiety'. Since anxiety has a sense of *expectation*, it is difficult to conceive of this emotion without falling back upon some conception of a fear of some future event occurring. As Freud (1926/1959) notes:

Anxiety [*Angst*] has an unmistakable relation to *expectation*: it is anxiety about something. It has a quality of *indefiniteness and lack of object*. In

precise speech we use the word 'fear' [*Furcht*] rather than 'anxiety' [*Angst*] if it has found an object. (pp. 164–165)

That is, the lack of object is only apparent, since to make sense of 'expectation' requires something 'expected', no matter how poorly defined it may be (i.e., 'expectation' is a relational term since it is tied to expecting *something to occur*). Consequently, anxiety must have an object, however indefinite, and the fact that we may not have knowledge of the object simply points to the position discussed earlier that consciousness is not a property of things, but rather a relation entered into, and that there is no logical necessity that knowledge of the object be known (i.e., one may be angry with *p*, without knowing that one knows *p*). In fact, psychoanalysis assures us that this is at least sometimes the case and that the therapeutic task is to uncover such unknown objects of emotions, knowledge of which may be obscured by factors such as repression:

... we are not content to know that a patient is anxious. We wish to know, and we bend our analytic efforts to learn, *what* he is afraid of. ... The fact that a patient himself is unconscious of the nature and the origins of his fears does not deter us. We proceed on the assumption that anxiety is not merely an unpleasurable sensation, but that it includes ideas as well. (Brenner, 1974, p. 534)

However, although a cognitive element is implicated within any account of affects, to delve deeper into the evaluative and 'felt' aspect of emotions entails a discussion of pleasure and unpleasure, which, as will be argued in the case of affects, is directly related to the topic of motivation.

### **Affects and Motivational States**

It has long been recognized that emotions and motivational states are intimately bound. O'Neil (1934), for instance, writes that 'most emotions are not simply a matter of feeling, but are in addition conational. Fear without the impulse to evade the threatening object is no fear, anger without the impulse to remove the obstructing object is no anger' (p. 281). The term 'motivation' itself is nebulous, but one position, influenced by Anderson's commitment to determinism, proposes that behaviour is mechanistically *driven*, a position that rejects any notion of self-determining or self-directing behaviour and instead looks for causal antecedents, although not precluding cognition (Maze, 1983). In line with this, Maze (1983, 1987a) has developed Freud's (1915/1957) notion of 'instinctual drives', and this position has been subsequently adopted by a number of realist theorists as the motivational source of human behaviour (e.g., Michell, 1988; Petocz, 1999). Conceptualized as

neuro-physical 'biological engines' which mechanistically initiate and propel behaviour, these drives are also postulated as the substructures within the brain that *know* the world via the perceptual apparatus, thus accounting for the *subject* terms of the cognitive relation (Maze, 1983, p. 162).

The main indication that affects are intimately linked to drive processes is the long-standing observation that affects typically arise in relation to frustration and gratification (Arlow, 1977; Jacobson, 1953; Zepf, 2001). Here the relationship between drives and affects has generally been seen to centre upon drive gratification being associated with *pleasure*, whilst drive frustration is associated with *unpleasure* (Freud, 1905/1953, 1915/1957), and O'Neil (1934) similarly recognizes that 'the more intense feelings arise when strivings have been blocked or impeded (an enforced prolongation of tension), or when blocked or impeded strivings are suddenly satisfied, *i.e.*, in situations where the striving is accentuated' (p. 285). In particular, different states of drive activation appear to determine why one situation may evoke different emotional responses. As Maze (1987b) notes:

A particular kind of happening might sometimes make a person angry and sometimes not, depending on what pursuit he was engaged in. If I were hungry and wanted to eat, and somebody came and laid out dishes of food on my table, I should be quite pleased, but if I were not hungry and wanted to work on that table, and someone came and insisted on covering it with things to eat, I should probably be angry. (p. 57)

What this suggests is that affective responses are determined by what can be called the *drive/environment relation*. McMullen, however, does not believe this to be a problem for the 'mind as feeling' account, since given Anderson's (1938/1962g) understanding that causality involves both cause, effect and what he terms the *causal field* (within which both cause and effect operate), 'then we realize that in the example we have two different causal fields: the man when hungry, the work-oriented man when not hungry, and accordingly the different emotional effects are produced' (McMullen, 1996b, pp. 160–161). However, this recourse still posits emotions as *effects*, and whilst this does not mean that affects cannot be the cause of other things (as will be discussed later), an appeal to the 'causal field' fails to appreciate that Maze's example demonstrates that affects are *brought into being* through drive/environment interactions, rather than standing as enduring subjects of the affective relations themselves (see also Michell, 1988, p. 232). As such, integrating cognitive and motivational factors, affects appear to be drive-evaluative states reflecting the response of the drive systems to environmental stimuli related to gratification or frustration.

One benefit of proposing a relationship between drives and affects is that it posits a clear direction of the relationship between the two. Just as 'learning theory' accounts—which emphasize reinforcement and punishment in regulating behaviour—require (and implicitly assume) an account of primary

drives such as hunger and pain avoidance (to explain why any situation is either reinforcing, punishing or neutral—see Maze, 1983), the same can be said of emotions. Drives and conditioning help explain why any given situation is gratifying or frustrating and give rise to certain affective experiences (cf. Maze, 1973, 1987b). Accordingly, a drive account fleshes out Panksepp's (2003) claim that '[a]ffects reflect our internal feelings of goodness and badness ... typically through organismic interactions with the outside world' (p. 6), since 'goodness' and 'badness' are grounded within our motivationally driven policies. Furthermore, a drive account helps substantiate Lazarus's (1991) claim that an 'emotion requires an evaluation of the personal significance of what is happening' (p. 354), or 'an evaluation of the significance of knowledge about what is happening to our well-being' (p. 354). Postulating drives as the motivational bases of affective evaluations gives substance to what 'personal significance' actually means by locating it in basic bodily/motivational conditions. It is the frustration or gratification of drives that determines and provides a working and potentially testable hypothesis concerning the policy of our emotional experiences. Additionally, drive states explain why, as O'Neil (1934) observes, affects differ in intensity. There are, for instance, degrees of anger or anxiety, and so any account of affects should be capable of explaining this phenomenon. Whilst it is unclear how the 'mind as feeling' approach might explain this, a drive account could suggest that the *intensity* of the affective state is related, in part, to the level of drive excitation, frustration and the excitation/satiation ratio involved (cf. O'Neil, 1934). As a general rule, the greater the state of frustration or gratification (or anticipation thereof) that any situation evokes, the greater the corresponding level of affect intensity to be expected. However, an account of drives and affects does not require the view that the relations between drives and affects be either necessarily conscious or obvious. Just as our actions are shaped by experience, so too may environmental factors (e.g., culture and socialization) shape what is considered legitimate and forbidden sources of pleasure and gratification, obscuring the primary aim of the drive and generating compromised avenues of satisfaction (see Maze, 1983; Petocz, 1999).

### Consolidating the Affective Relations Account

Given this relationship between drives and affects, the aim of the present section is to provide a coherent and consolidated position of 'affect as relations' within a drive account. If, following O'Neil (1934), 'to feel' is a relation between a 'feeler' and a situation 'felt', then appreciating this *relational* character of affects means stipulating both the affective *relation* and the *terms* standing within such relations. For instance, when a person says that he or she feels 'anger', questions can be asked concerning the *subject* feeling anger, and the *object* (the 'anger' itself, or what it is directed at).

To begin with, the proposed drive account addresses Anderson's criticism that a relational account of affects fails to account for the *subject* terms of the affective relation. As noted earlier, Anderson's 'mind as feeling' position was developed, in part, to account for the *subject* term standing in both the cognitive and striving relations. Anderson (1934), in reply to O'Neil (1934), believes that in this respect the relational account of affects fails to account for the subject of cognition, and both Anderson and McMullen suggest that O'Neil leans towards an 'abstract ego', a position criticized earlier. However, whereas O'Neil did not have the theoretical structures to comprehensively refute Anderson's objection (although he did suggest that certain brain structures might constitute the knower or knowers), a drive account fills this gap by suggesting that it is the instinctual drives themselves which stand as the subject terms within the cognitive relation (Maze, 1983, 1987a); it is the drives (multiple) that utilize cognition in their search for gratification and avoiding frustration. This account of mental plurality avoids the difficulties faced by other accounts of multiple knowers (see Boag, 2005), and further helps explain part of the complexity of affective experience. Since any situation can possibly gratify one drive, whilst frustrating another, the recognition of a multiplicity of drive evaluations allows for the postulation that affective states can be complex, incorporating a mix of emotions (e.g., mixtures of fear and joy, love and hate), following from a mix of drive evaluations and giving rise to a variety of 'emotional shades'.

Since, however, the drives in Maze's (1983) theory are primarily brain states, and are not the situations known when feeling, the answer to what is 'felt' when discussing 'feelings' as object terms must be situations in the world, and given the earlier proposed relationship between drives and affects, what is known when discussing 'feelings' are the felt or known dimensions of the instinctual drives, manifested in bodily states and accompanying cognitions. Such reactions, as *felt*, are located in bodies, and the 'sensations' of pleasure and unpleasure are specific organic processes themselves (cf. Anderson, 1934/1962e, p. 75), which provide an indicator of relative gratification and/or frustration associated with any given situation. This position has received recent support by the theory of 'somatic markers' put forward by Damasio and colleagues (Bechara, Damasio, & Damasio, 2000; Damasio, 1994, 1998, 2001), who propose that emotions are pleasurable or painful somatic responses to situations, determined by an organism's 'drives' (or what Damasio calls 'instincts' or 'basic regulatory mechanisms'; 1994, p. 116). In fact, Damasio's distinction between 'emotion' and 'feeling', the former being the object of the latter (Damasio, 1994, p. 139), implicitly recognizes the relational character of affects. Since the neurophysical drives are connected to various distinct physiological systems (Damasio, 1994; Sowards & Sowards, 2003), we can posit qualitatively distinct bodily responses, which provide a qualitative basis for distinguishing different feelings. Thus, there may be

qualitatively distinct feelings determined, in part, through the distinct drives involved and their distinct bodily connections. This, if anything, is a valuable contribution from the 'mind as feeling' account (i.e., qualitatively distinct object terms). Unlike the 'mind as feeling' account, however, the object terms felt are not qualitatively different *brain states* (although these may be a necessary condition for the affective experience), but, rather, qualitatively distinct organic processes involved with the different drives.

Emotions, however, are generally considered more than simply bodily responses (cf. Cavell, 1993), and the nature of the affective attitude must also be taken into account. In terms of the relationship between bodily drive responses and objects of affects, we can posit that the drives, with respect to their motivationally driven policies, learn relationships between bodily states of frustration and gratification and situations that invoke them. That is, objects associated with drive gratification become associated with 'positive' emotions, whilst those associated with drive frustration become associated with 'negative' emotions. Similarly, Damasio (1994, 2001) discusses 'acquired emotional associations' (1994, pp. 134–8), leading to what he calls 'secondary' (or learnt) emotions 'connecting specific classes of stimuli with specific classes of somatic states' (1994, p. 177). Within a drive account, this means that a drive learns that some situations *satisfy* (produce 'agreeable' bodily states) whilst others *frustrate* (produce or prolong 'disagreeable' bodily states). With repeated experience, a drive learns that a bodily state *x*, related to frustration or gratification, arises in relation to some situation *y*, and consequently learns to expect that *y* leads to *x*. On re-exposure to those situations, the learnt bodily state is remembered, giving rise to motivationally driven evaluations (the affective attitude) and responses to the anticipated situation.

Again, however, given the Andersonian position that 'to be known' is not a quality or property of things, there is no necessity for knowledge of the various elements of the affective relationship to exist. One may be angry without knowing that one is angry, or be angry with *x* without knowing that one knows *x*. Similarly, one may know a bodily response without knowing that it is an affective response, and so on, due to factors such as repression discussed earlier. What this further indicates is that a relational view of affects has certain clinical implications: certain affective disorders can be conceptualized in terms of what elements of the affective relation remain unknown. For instance, alexithymia appears to involve knowing bodily states, yet not their emotional relationship to other things (Hyer, Woods, & Boudewyns, 1991).

### **Further Extension of the Relational Account: Affects and the Desire/Belief Model of Behaviour**

What is at times referred to as the folk-psychological model of behaviour (i.e., behaviour explicable in terms of desires and beliefs) proposes that

*intentional* action arises from a motivational state or ‘desire’ component, guided by an instrumental cognitive or ‘belief’ component. Here, when explaining person *P*’s doing *A*, it is understood that: (i) *P* desires *B*; and (ii) *P* believes that doing *A* leads to *B*. Within a drive account, the ‘belief’ component specifies the known possible means of satisfaction (or of avoiding frustration). Beliefs, however, although necessary, are not sufficient for explaining behaviour since they are *policy neutral* (simply about states of affairs) and cannot explain why, for any given belief, one person acts in one particular way and another differently (Mackay, 1994; Maze, 1973, 1983, 1987a):

Any information which can be put into the form *X leads to Y* can be used either in promoting *Y* or in avoiding it. ... The belief, for example, that a certain diet will increase body weight may lead one either to adopt that diet or to avoid it, depending on one’s already existing motives or drive state; it may produce opposing behaviours in the same person at different times. Thus, as it is identically the same belief operating in each case, it cannot be said to imply either policy. Factual information in itself is policy-neutral; it can initiate behaviour only if it is perceived as relevant to one of the person’s existing policies—that is, as relevant to the success of some action pattern specific to a currently active drive state. (Maze, 1987a, p. 191)

Explaining how a person acts on a particular belief (i.e., explaining their policy) requires an additional motivational component (i.e., the ‘desire’). The Andersonian advance here is to reject ‘desires’ as sufficient motivational constructs, since they are relationally defined (e.g., *S* desires that *p*) and cannot be invoked as antecedent entities motivating behaviour without invoking the fallacy of constitutive relations, or violating Hume’s injunction that cause and effect are logically distinct (see Mackay, 1996, p. 10). That is, if a ‘desire for *B*’ is to be able to stand in a causal relationship to *B*-type behaviours, then it must be describable by reference to its own intrinsic properties, not just relationally to the future event itself, ‘which of course means *without referring to its relation to B-type acts*’ (Maze, 1983, pp. 24–25). Accordingly, Maze’s drive concept provides a coherent basis here for explaining behaviour, since as *physiological engines* they are describable in terms independent of the behaviours that they are said to cause (see Boag, 2005; Maze, 1983).

Although beliefs and motivational states are both necessary for explaining behaviour, such an account appears to lack a formal role for the place of affects. On the one hand, Maze (1987b) suggests that the drives are the ‘basic operators’ in behaviour, whilst the affects are ‘merely a byproduct’ (p. 57). On the other, McMullen’s (1996b) own position accepts at least two sources of motivation: Maze’s physiological drives *and* emotions: ‘I accept Maze’s view that the motivational springs of behaviour are a few physiological drive centres. To leave it at that I think is also oversimplified: there has to be a place for the myriad of emotions with their feeling-tones’ (p. 166).

There are, however, problems with granting a 'striving' character to feelings, since even if we do accept the existence of an 'angry' quality of mind, it is difficult to construct an account of feelings as motivational (driving) systems, simply because there is no clear manner for determining a feeling's policy. On the Andersonian position, any proposed motivational system must be capable of explaining deterministically how any such systems are directed (e.g., how objects are 'selected'), and the intensity and perseveration of any response. What, for instance, determines the object of anger, or anger's behaviour, or its intensity? The motivational policy of anger cannot be any particular behavioural expression, for as McMullen (1996b) notes, there is no one-to-one correspondence between a given behaviour and an emotion. Moreover, McMullen's own examples illustrate the difficulty here. Although we might say that 'greed' causes a person to act in particular ways (cf. McMullen, 1996b, p. 165), to explain the affective policy of greed (why the person is greedy in one direction and not another) appears to require an additional motivational component, whereas drives, as defined by Maze (1983), allow a working model of understanding the direction or policy of all behaviour, including our affective responses, consistent with a deterministic psychology.

This is not to say, however, that affects do not exert a causal influence over behaviour, and here McMullen's position can possibly be developed by proposing that affects, although not the driving systems behind behaviour, may nevertheless regulate the drives and their behaviours through acting as a set of environmental conditions themselves. Given determinism, any effect itself is a set of causal conditions, which will go on to cause other things (cf. Maze, 1983; Michell, 1988). In the case of affects and drives, then, it follows that any affect produced by the drive-environment relationship provides a new set of environmental (bodily) conditions within which the drives operate, and which may go on to act as a set of exciting or satiating conditions themselves. Rather than 'mere byproducts', then, our 'emotional lives' may act as a set of continuous 'exciting' conditions, which in turn may explain the ongoing activity of the drives, since such bodily environments may act to trigger or add impetus to any given drive behaviour. For instance, the state of 'greed', acting as a noxious bodily stimulus, and accompanied by certain beliefs, may perpetuate greed-like behaviours, as long as the stimulus source is not removed. To some extent this position is similar to Freud's account of the 'unpleasure-pleasure' principle (Freud, 1920/1955), where psychical activity is said to be guided by painful and pleasurable sensations, a position which in many respects has been re-invoked by the 'somatic marker' hypothesis, which posits that previous experiences of pleasurable or unpleasurable bodily responses (associated with certain situations) guide 'decision making' (Bar-On, Tranel, Denburg, & Bechara, 2003; Bechara, Tranel, & Damasio, 2000; Damasio, 1994, 1998; Paulus & Frank, 2003). However, rather than affects simply guiding the drives, the position proposed here is that the relationship between the drives and the world is, itself, affective, since the drives know the

external world through their immediate bodily environment. To say, then, that a person is 'in love' may be taken to mean that the drives' relationship with the love-object is 'coloured' (mediated) by the complex of bodily and cognitive experiences associated with the object. Moreover, such affective relations may either facilitate or inhibit certain drive responses. So whilst the motivational structures are the drives, the experiences of pleasure and pain, in relation to other acts of cognition (i.e., beliefs), may regulate and guide drive behaviour, as well as providing the specific qualities of the affective relationship itself. Accordingly, explaining human action must also take into account an affective component; we are not non-emotional computing machines but motivated and emotional ones, acting and reacting in ways that demonstrate our sensitivity to the world around us.

What follows from this is that our emotional responses, acting as a set of conditions that the drives operate within, may directly influence other acts of cognitions. As Panksepp (2003) writes, 'emotions are not just disturbances of the interior milieu, they also help control the way we perceive the world' (p. 9). Recognizing affects as emotional shading that colours the drives' view of the world helps explain the supposed dichotomy between 'irrational' affects and 'rational' impassionate cognition which has historically dominated Western thinking. Bertrand Russell (1927), for instance, writes:

The emotions are what makes life interesting, and what makes us feel important. ... But when, as in philosophy, we are trying to understand the world, they appear rather as a hindrance. They generate irrational opinions, since emotional associations seldom correspond with collocations in the external world ... with the sole exception of curiosity, the emotions are on the whole a hindrance to the intellectual life. (p. 228)

In the account of affects presented here, this 'irrational façade' of emotions is only apparent (cf. Damasio, 1998); since cognition is in the service to the instinctual drives (Maze, 1983), we have a vested (or motivated) interest in all activities that we undertake. The so-called 'irrational affects' merely indicate that the world does not always correspond to the way we wish it to be, or that the drives may be guided by false beliefs, making emotional reactions appear inappropriate. For instance, although an angry reaction to a compliment may appear irrational, it makes sense if we know that the person believes the compliment to conceal an insult. Similarly, the 'objects' associated with affects are displaceable: for instance, hostility towards one object could be displaced onto substitutes due to psychodynamic factors such as repression, leading to 'false connections' (Freud, 1915/1957, 1926/1959; cf. Damasio, 1994). The so-called 'irrationality' of affects demonstrates that such phenomena play an important mediating role between the drives and other situations in the world.

## Summary

Whereas Andersonian realism has helped clarify our understanding within many areas of psychology, Anderson's 'mind as feeling' theory is problematic because it fails to elucidate what feelings, in fact, are. An alternative relational approach to affects implicates cognition (affective evaluations), which, in turn, further necessitates a motivational component to explain any affective 'policy'. Maze's (1983) conception of drives ('biological engines') provides a comprehensive basis for explaining both the affective policy and the intensity of affects, as well as clarifying the subject terms of the affective relation. What is felt, however, are specific bodily processes, related to the motivational systems, in conjunction with the environment (Damasio, 1994). Affects can thus be considered the experienced element of motivational processes, providing an indication of the relevant significance of situations to our motivational states. Throughout our development, situations that are learnt to be gratifying become associated with positive affects, whilst situations learnt to be frustrating become associated with negative affects, and affects are presumably more or less intense in relation to the drive intensity involved. Viewed in this manner, affects are complex phenomena incorporating drive, bodily and cognitive-evaluative processes, appearing to have a direct regulatory function in accounts of human behaviour.

## References

- Anderson, J. (1934). Note. *Australasian Journal of Psychology and Philosophy*, 12, 287–288.
- Anderson, J. (1962a). The knower and the known. In *Studies in empirical philosophy* (pp. 27–40). Sydney, Australia: Angus & Robertson. (Original work published 1927)
- Anderson, J. (1962b). Determinism and ethics. In *Studies in empirical philosophy* (pp. 214–226). Sydney, Australia: Angus & Robertson. (Original work published 1928)
- Anderson, J. (1962c). The non-existence of consciousness. In *Studies in empirical philosophy* (pp. 60–67). Sydney, Australia: Angus & Robertson. (Original work published 1929)
- Anderson, J. (1962d). Realism and some of its critics. In *Studies in empirical philosophy* (pp. 41–59). Sydney, Australia: Angus & Robertson. (Original work published 1930)
- Anderson, J. (1962e). Mind as feeling. In *Studies in empirical philosophy* (pp. 68–78). Sydney, Australia: Angus & Robertson. (Original work published 1934)
- Anderson, J. (1962f). Causality and logic. In *Studies in empirical philosophy* (pp. 122–125). Sydney, Australia: Angus & Robertson. (Original work published 1936)
- Anderson, J. (1962g). The problem of causality. In *Studies in empirical philosophy* (pp. 126–136). Sydney, Australia: Angus & Robertson. (Original work published 1938)

- Arlow, J.A. (1977). Affects and the psychoanalytic situation. *International Journal of Psycho-analysis*, 58, 157–169.
- Bar-On, R., Tranel, D., Denburg, N.L., & Bechara, A. (2003). Explaining the neural substrate of emotional and social intelligence. *Brain*, 126, 1790–1800.
- Bechara, A., Damasio, H., & Damasio, A.R. (2000). Emotion, decision making and the orbitofrontal cortex. *Cerebral Cortex*, 10, 295–307.
- Bechara, A., Tranel, D., & Damasio, H. (2000). Characterization of the decision-making deficit of patients with ventromedial prefrontal cortex lesions. *Brain*, 123, 2189–2202.
- Berridge, K.C. (2003). Pleasures of the brain. *Brain & Cognition*, 52, 106–128.
- Boag, S. (2005). Addressing mental plurality: Justification, objections and logical requirements of strongly partitive accounts of mind. *Theory & Psychology*, 15, 747–767.
- Brenner, C. (1974). On the nature and development of affects: A unified theory. *Psychoanalytic Quarterly*, 43, 532–556.
- Brentano, F. (1973). *Psychology from an empirical standpoint* (A.C. Rancurello, D.B. Terrell, & L.L. McAlister, Trans.). London: Routledge & Kegan Paul. (Original work published 1874)
- Cameron, O.G. (2001). Interoception: The inside story—a model for psychosomatic processes. *Psychosomatic Medicine*, 63, 697–710.
- Cavell, M. (1993). *The psychoanalytic mind: From Freud to philosophy*. Cambridge, MA: Harvard University Press.
- Chalmers, D.J. (1996). *The conscious mind: In search of a fundamental theory*. Oxford, UK: Oxford University Press.
- Chalmers, D.J. (2002). Consciousness and its place in nature. In D.J. Chalmers (Ed.), *Philosophy of mind: Classical and contemporary readings* (pp. 247–272). New York: Oxford University Press.
- Damasio, A.R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Putnam.
- Damasio, A.R. (1998). Emotion in the perspective of an integrated nervous system. *Brain Research Reviews*, 26, 83–86.
- Damasio, A.R. (2001, October 25). Fundamental feelings. *Nature*, 413, 781.
- Deigh, J. (2001). Emotions: The legacy of James and Freud. *International Journal of Psychoanalysis*, 82, 1247–1256.
- Freud, S. (1953). Three essays on the theory of sexuality. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 7, pp. 124–248). London: Hogarth. (Original work published 1905)
- Freud, S. (1955). Beyond the pleasure principle. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 18, pp. 1–143). London: Hogarth. (Original work published 1920)
- Freud, S. (1957). Instincts and their vicissitudes. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 14, pp. 159–215). London: Hogarth. (Original work published 1915)
- Freud, S. (1959). Inhibitions, symptoms and anxiety. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 20, pp. 76–175). London: Hogarth. (Original work published 1926)

- Gallagher, P., Allen, D., & MacLachlan, M. (2001). Phantom limb pain and residual limb pain following lower limb amputation: A descriptive analysis. *Disability & Rehabilitation*, *23*, 522–530.
- Galloway, G. (2000). Direct realism and the analysis of perceptual error. *Theory & Psychology*, *10*, 605–613.
- Hibberd, F.J. (2001). Gergen's social constructionism, logical positivism and the continuity of error: Part I. *Theory & Psychology*, *11*, 297–321.
- Hibberd, F.J. (2005). *Unfolding social constructionism*. New York: Springer Science.
- Hyer, L.A., Woods, M.G., & Boudewyns, P.A. (1991). PTSD and alexithymia: Importance of emotional clarification in treatment. *Psychotherapy: Theory, Research, Practice, Training*, *28*, 129–139.
- Jacobson, E. (1953). The affects and their pleasure–unpleasure qualities in relation to psychic discharge processes. In R.M. Loewenstein (Ed.), *Drives, affects, behavior* (pp. 38–66). New York: International Universities Press.
- James, W. (1884). What is an emotion? *Mind*, *9*, 188–205.
- Lazarus, R.S. (1982). Thoughts on the relation between emotion and cognition. *American Psychologist*, *37*, 1019–1024.
- Lazarus, R.S. (1991). Cognition and motivation in emotion. *American Psychologist*, *46*, 352–367.
- Locke, J. (1947). *An essay concerning human understanding*. London: J.M. Dent & Sons. (Original work published 1690)
- Mackay, N. (1994). Cognitive therapy, constructivist metatheory, and rational explanation. *Australian Journal of Psychology*, *46*, 7–12.
- Mackay, N. (1996). The place of motivation in psychoanalysis. *Modern Psychoanalysis*, *21*, 3–17.
- Mackay, N. (2003). Psychotherapy and the idea of meaning. *Theory & Psychology*, *13*, 359–386.
- Mackie, J.L. (1962). The philosophy of John Anderson. *Australasian Journal of Philosophy*, *40*, 265–282.
- Maze, J.R. (1973). The concept of attitude. *Inquiry*, *16*, 168–205.
- Maze, J.R. (1983). *The meaning of behaviour*. London: Allen & Unwin.
- Maze, J.R. (1987a). The composition of the ego in a deterministic psychology. In W.J. Baker, M.E. Hyland, H. van Rappard, & A.W. Staats (Eds.), *Current issues in theoretical psychology* (pp. 189–199). North Holland: Elsevier Science.
- Maze, J.R. (1987b). John Anderson: Implications of his philosophic views for psychology. *Dialectic*, *30*, 50–59.
- Maze, J.R. (1991). Representationism, realism and the redundancy of 'mentalese'. *Theory & Psychology*, *1*, 163–185.
- Maze, J.R. (2001). Social constructionism, deconstructionism and some requirements of discourse. *Theory & Psychology*, *11*, 393–417.
- McIntosh, G.F. (1935). The relation of psychology to philosophy. *Australasian Journal of Psychology & Philosophy*, *13*, 93–110.
- McMullen, T. (1996a). Psychology and realism. In C.R. Latimer & J. Michell (Eds.), *At once scientific and philosophic: A festschrift for John Philip Sutcliffe* (pp. 59–66). Brisbane, Australia: Boombana.
- McMullen, T. (1996b). John Anderson on mind as feeling. *Theory & Psychology*, *6*, 153–168.

- McMullen, T. (2000, July). *The 'specious present': Realism and memory*. Paper presented at the XXVII International Congress of Psychology, Stockholm, Sweden.
- Michell, J. (1988). Maze's direct realism and the character of cognition. *Australian Journal of Psychology*, *40*, 227–249.
- Michell, J. (2000). Normal science, pathological science and psychometrics. *Theory & Psychology*, *10*, 639–667.
- Michell, J. (2003). The quantitative imperative: Positivism, naive realism and the place of qualitative methods in psychology. *Theory & Psychology*, *13*, 5–31.
- Moore, B.E., & Fine, B.D. (Eds.). (1990). *Psychoanalytic terms and concepts*. New Haven, CT: American Psychoanalytic Association.
- Novy, S. (1959). A clinical view of affect theory in psycho-analysis. *International Journal of Psychoanalysis*, *40*, 94–104.
- O'Neil, W.M. (1934). Mind as feeling? *Australasian Journal of Psychology and Philosophy*, *12*, 280–287.
- Panksepp J. (1999). Emotions as viewed by psychoanalysis and neuroscience: An exercise in consilience. *Neuro-psychoanalysis*, *1*, 15–38.
- Panksepp, J. (2003). At the interface of the affective, behavioural and cognitive neurosciences: Decoding the emotional feelings of the brain. *Brain & Cognition*, *52*, 4–14.
- Panksepp, J. (2005). Affective consciousness: Core emotional feelings in animals and humans. *Consciousness & Cognition*, *14*, 30–80.
- Paulus, M., & Frank, L.R. (2003). Ventromedial prefrontal cortex activation is critical for preference judgements. *NeuroReport*, *14*, 1311–1315.
- Penrose, L.S. (1931). Freud's theory of instinct and other psycho-biological theories. *International Journal of Psycho-analysis*, *12*, 87–97.
- Petocz, A. (1999). *Freud, psychoanalysis, and symbolism*. Cambridge, UK: Cambridge University Press.
- Petocz, A. (2006). Commentary on 'Freudian dream theory, dream bizarreness, and the disguise-censor controversy'. *Neuro-psychoanalysis*, *8*, 49–53.
- Ramzy, I., & Wallerstein, R.S. (1958). Pain, fear, and anxiety: A study in their interrelationships. *Psychoanalytic Study of the Child*, *13*, 147–189.
- Rantzen, A.J. (1993). Constructivism, direct realism, and the nature of error. *Theory & Psychology*, *3*, 147–171.
- Rosenblatt, A.D. (1985). The role of affect in cognitive psychology and psychoanalysis. *Psychoanalytic Psychology*, *2*, 85–97.
- Russell, B. (1927). *An outline of philosophy*. London: George Allen & Unwin.
- Schulkin, J., Thompson, B.L., & Rosen, J.B. (2003). Demythologizing the emotions: Adaptation, cognition, and visceral representations of emotion in the nervous system. *Brain & Cognition*, *52*, 15–23.
- Sewards, T.V., & Sewards, M.A. (2002). The medial pain system: Neural representations of the motivational aspect of pain. *Brain Research Bulletin*, *59*, 163–180.
- Sewards, T.V., & Sewards, M.A. (2003). Representations of motivational drives in mesial cortex, medial thalamus, hypothalamus and midbrain. *Brain Research Bulletin*, *61*, 25–49.
- Thalberg, I. (1977). *Perception, emotion and action*. Oxford: Basil Blackwell.

- Wilcox, D., & Katz, S. (1981). A direct realist alternative to the traditional conception of memory. *Behaviorism*, 9, 227–239.
- Zepf, S. (2001). Incentives for a reconsideration of the debate on metapsychology. *International Journal of Psycho-analysis*, 82, 463–483.

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