Thinking Beyond the Brain: Embodiment and the Psycho-Somatic

Laurence Johnson

When mind and body are in dispute, desire arises for stable points of reference like disciplinary boundaries. This paper contends that the sense of the integrity of a ‘body’ of thought or of a critical textual corpus is not a spatial-corporeal metaphor, but is an aspect of the way in which disciplinarity represents modes of being in the world, which, like all human activity, involve actualisation of the mind and body. Such actualisation is described here as ‘embodiment,’ which is defined as the ways in which the unconscious posits its exterior. Critical theorising about mind and body must include an account of the relationship between ‘theorising’ mind and body and ‘being’ embodied. This paper makes this point by using ‘polytextual’ readings of texts that discuss phenomena (such as phantom limbs) which render problematical the intuitive understanding we have of our minds and bodies.

‘It is no more incumbent upon science to find a soul in the body than to find God in the world. True, science does not tell the whole story. But, alas, it is a story that cannot be told except per speculum in aenigmate.’
In an episode of the popular television science series *Ultrascience* (Discovery Channel, Foxtel, 26 March 1999) results of tests to determine the viability of implanting silicon chips into the brain were described as ‘surprising.’ When placed on a silicon chip, the elementary stuff of which brains are made (neurons) gravitated toward electronically stored information, as if driven by an instinctual compulsion to ‘talk to each other.’ The neurons behaved as though their primary instinct is not to preserve their own kind but to follow all paths toward complexity. Thus, they were said to demonstrate constructive and communicative drives, a characteristic backed up by the observation that isolated neurons tend simply to stop, as though they had ‘programmed themselves to die.’ The presenter declared that such discoveries emerge ‘as powerful new brain technologies unlock more of the mind’s secrets.’

From a critical psychological perspective, the claims made in texts intended for popular consumption such as this one may seem all too easy to grasp as a substitute for ‘hard’ scientific research, and just as easy to dismiss as so much popularised hyperbole. This ‘critical psychological perspective’ includes arms of psychology which have developed a common interest in reflexively interrogating psychological practices and exploring possibilities for dialogue with other disciplines. As this simple definition suggests, the various schools of critical psychology are also characterised by a fundamental belief that their critical activity proceeds from a sufficiently stable point of reference to enable self-reflexivity, and that this point of reference is organised around a framework that enables demarcations between one’s own and ‘other’ disciplines.

This sense of disciplinary propriety is what might ordinarily prompt psychologists to prick up their ears at the claims made in popular science texts that ‘powerful new brain technologies’ are only now unlocking the secrets of the mind. Such a claim obviously threatens the sensibilities of those who feel that the ‘secrets’ of the mind are properly the domain of the psychological rather than the physical sciences. Critically-minded thinkers may at least pause over the unquestioning conflation of the brain with the mind at the core of these claims, as though no measure is taken of the long-standing debate that has come to be known as the ‘mind-body problem.’ Of course, it is unlikely that many psychologists would feel the need to respond
to a popular science program, for reasons that will probably range from a refusal to engage in dialogue with physical science (imagined to be equally stubborn in its refusal to entertain core philosophical questions) to simple disregard for ‘unimportant’ or ‘naive’ products of popular culture.

The point I want to make here is that this sense of disciplinary propriety is what may be at stake in debates over the mind-body problem. I do not mean simply that these debates place disciplinary borderlines in dispute, although the uncertainty surrounding these boundaries provides a starting point. My broader argument will be that when mind and body are in dispute, in particular, a stark desire emerges for stable points of reference like disciplinary boundaries or fields of discourse among the disputants. This argument will be constructed upon a premise that the sense of exteriority and interiority, or of the integrity of a ‘body’ of thought, or of a critical textual corpus are not simply spatial-corporeal metaphors defining a discipline. Rather, they are aspects of the way in which disciplinary activity functions as a mode of being in the world, which, like all human activity, is linked to the processes actualising human minds and bodies. For the purpose of this argument, I shall consider these processes in toto under the blanket of a single term: embodiment. Although my understanding of the term shall become more apparent, I will define it loosely here as the ways in which the unconscious posits its own exterior.

As I have indicated, the mind-body problem throws the uncertainty of the disciplinary boundaries of those involved in the debate into sharp relief. If there is an unwillingness on the part of psychologists to respond to popular scientific texts which oversimplify or conflate notions of mind and body, another reason may be that the mind-body problem has been debated in an increasingly closed forum, an index of the reluctance of those involved in the debate to broadcast the fact that they have a problem which they seem unable to collectively resolve. In The Mind-Body Problem: A Guide to the Current Debate, Richard Warner and Tadeusz Szubka (1996) survey the state of the debate, suggesting that there are too many schools of thought involved, and the stakes are too high, to expect that something like a unified mind-body theory is attainable. The editors claim that what is at stake is no longer the answer to the relation of mind and body, but what status to give to the questions we ask: what is at stake, then, is the ‘explanatory adequacy’ of any discourse to account for the mental.

Several of the contributors to this collection argue that we may indeed never be able to account for mental or non-physical phenomena from the
Colin McGinn (1996), in particular, claims that the problem cannot be solved, yet that such insolubility is precisely the condition of uncertainty with which the mind is positioned in relation to its physical origins. Using formal propositional logic, McGinn demonstrates that conscious reason is inherently incapable of accounting for itself (qua consciousness) in regards to its physical status. Yet he concludes that we may only talk about the relation of mind to body in terms of observable physical effects, a problem for neuroscience (not philosophy). This conclusion follows logically from the premise with which his argument commences, that minds ‘are biological products like bodies’ (100). While I do not wish to rail against this physicalist approach, I shall pursue a parallel argument, based on McGinn’s own claims about the condition of uncertainty which surrounds the origins of consciousness. Thus, I question whether the corollary that consciousness has biology as its only source can be stated with any degree of certainty.

In a postscript to his essay, McGinn admits that he was wrong to have assumed that the limits appertaining to conscious reason applied equally to all representational systems, and he adds that genetic coding and subconscious brain representations may ‘contain the kind of philosophical information denied to conscious reason’ (115). His aim is to wrest initiative in the mind-body debate away from the proper domain of reason (philosophy) and situate it with the physical sciences (such as genetics or brain science). Yet McGinn realises that to satisfy demands of ‘explanatory adequacy,’ he must appeal to philosophy in qualifying the kinds of information that physical sciences should be able to extract from genes or brain matter. After all, genes or brain matter (neurons) are not seen as adequate in themselves to account for the origin of consciousness, but when we view them as systems of representation or codes, unconstrained by the limits of conscious reasoning, they begin to fit the criteria for explanatory adequacy. I argue here that we might just as adequately consider the unconscious as containing precisely the kind of philosophical information denied to conscious reason. Furthermore, as we shall see, investigations into unconsciousness account for the formation of representational systems by reckoning the condition of representation per se.

Importantly, however, I do not pretend that this argument provides any kind of solution to the mind-body problem. Like McGinn, I suggest that the problem is insoluble, and I propose merely an alternative account of why such insolubility emerges inevitably from how, in everyday life as thinking social beings, we conduct and construct ourselves in the world. To enable discussion
of the relations between disciplines in these terms, I will use the concept of ‘critical polytextualism’ developed by Rex and Wendy Stainton Rogers in *Stories of Childhood* (cited in Morss 1996, 138-41). Critical polytextualism refers to the ‘multiplicity of interpretations’ always in operation in any social or critical practice, suggesting that these multiple interpretations mark themselves *textually* as one text among others within the category of interpretation.

Rather than dismiss the popular science television program on the grounds of ignorance, irrelevance or naiveté, I want to provide a polytextual reading to illustrate the utility of the concept here. To do this, I will briefly compare the claims made in the episode of *Ultrascience* with Sigmund Freud’s development of the concepts of *eros* and *thanatos*. This comparison provides a minimal and somewhat reductive example of a polytextual reading, yet this reduction will help to isolate the key problematic of the ‘explanatory adequacy’ of a discourse when this adequacy is defined in terms of the inadequacies of other discourses. This is not to suggest that an explanatory method that is self-aware about its own inadequacies is necessarily closer to the truth of its object than one that believes itself to be thoroughly adequate; it is rather to suggest that the truth we find is a product of our methods for finding the truth. If our method is defined (polytextually) in opposition to another discourse, the truths we find will be defined in the same way. By definition, two people looking at an object from different perspectives will not see the same object, and neither will see the whole of this object, yet we may learn more about the people than the object itself by looking closely at the perspectives from which each sees the object.

In the episode of *Ultrascience*, tests into the viability of new brain technologies revealed two related types of activity from neurons: attraction to electronically charged inorganic matter and the inability to continue to function in isolation. Moving from observation to explanation, these types of activity are labelled ‘behaviours’ to which a particular type of motivation can be attributed. Attraction to electronically charged matter is described as a constructive, communicative impulse, a description aided by calling the charge ‘information.’ The inability to function in isolation is then cast as the negative side of this same impulse: when it is unable to ‘talk’ the neuron will ‘die,’ as if ‘programmed’ to do so. Of course, this movement from observation to explanation provides the ground for the claim that these new brain technologies (as the instrument of observation) are unlocking secrets of the mind (emerging in explanation).
More than a century earlier, in his ‘Project for a Scientific Psychology’ (1895), Freud posited three types of neurones ($\varphi$, $\psi$, and $\omega$), corresponding to the functioning of the nervous system - he called these the ‘agencies’ [Instanzen] of the psychic apparatus in the *Interpretation of Dreams* (1900) - mediating between sensory perceptions and the treatment (cathectic) of internalised material. Yet even as he was finishing his ‘Project,’ Freud was concentrating his thoughts less on defining the types of neurons than on mapping the functions to which they corresponded. From *Interpretation of Dreams* onwards, he formulated his topography of the psychical apparatus: the conscious, pre-conscious and unconscious, subdivided by imperatives of the id, ego and superego, and serving competing interests of the life drive (*eros*) and death drive.

Elizabeth Wilson (1998) provides a compelling case for reading the Freudian canon and its topography in a way that suggests he never altogether abandoned his neurological ‘Project’ (133-44). Wilson points out that in Freud's model for a scientific psychology, neurons are unable to carry the origin of consciousness except inasmuch as they provide the agencies for the differences between endogenous and external excitations of Qn (quantity). Thus, he ‘dislodge(s) a strict biological essentialism from the neuron,’ on the path to critiquing neuropsychological localisation (Wilson: 143). Freud’s ‘Project’ does not recruit the physical science of neurology in order to render the psyche intelligible: it inverts this trajectory ‘and uses the psyche to render traditional neurology intelligible’ (144). The unpublished model for a scientific psychology was therefore a blueprint for Freud’s metapsychology, in which the relation of neurology, biology or physiology to the psyche are viewed with ambivalence, but never fully disregarded. As a result, for Wilson, the ‘Project’ manifests ‘a certain dilemma (of mind and body, neurology and psychology) that a hundred years later is no closer to being addressed properly inside psychology’ (139).

Returning momentarily to the episode of *Ultrascience*, I suggest that the way in which its conclusions are drawn can be compared with Freud’s theoretical investigations into the drives on at least two levels. On one level, the two drives that are attributed to the neurons - constructive and destructive - may seem uncannily similar to the primary drives around which Freud formulated and then revised his hypothetical topography of the psychical
apparatus. On another level, these drives are identified according to the logic of reductive biologism: physical science is recruited in order to render the secrets of the mind intelligible. The popular science program uses observation of the brain to mark explanations of mental processes as properties of the object rather than as products of interpretative discourse.

That these two discourses could mirror each other so closely with respect to their object (neurons) and explanations (two primary drives), yet represent diametrically opposed standpoints (reductive biologism versus a direct inversion of the same), is an example of the ‘critical polytextualism’ identified by the Stainton Rogers. As I have indicated, in my understanding of this term, polytextualism suggests not only the multiplicity of critical interpretations in operation in any practice but also the relativity of these interpretations to each other, intertextually. Contradictory interpretations of the same phenomenon are adequate in themselves, in so far as they are true to their perspective, yet no interpretation is ever fully adequate with respect to the phenomena they purport to explain. Such inadequacy arises not simply from the status of representations of things, but also from the degree to which representations (as texts) refer to other texts. Understanding the polytextualism of a critical text enables us to consider its relation to the broader body of texts - its corpus (a deliberate metaphor, to which I will return) - to which it belongs. For the Stainton Rogers, such consideration leads to further and more elaborate explanations by taking measure of the range of interpretations available. What thus emerges from an understanding of critical polytextualism is not a replacement of one inadequate explanation with a more complex explanation that is better only in so far as it is aware of its inadequacy; rather, in the words of John Morss (1996), it is the rejection of all pretensions to realism which makes this approach ‘closer to literary styles of analysis such as deconstruction’ (141).

This suggestion is not intended to unduly privilege literary styles of analysis over other interpretative practices. Rather, it is intended to highlight the problems confronting the disputants in the debate over mind and body, given the need to present their arguments textually - that is, to engage with the polytext produced by the discourses in dispute - and to produce a corpus or body of texts of one’s own. For this reason, I have been quite deliberate in my choice of texts for use in the first example of this mode of reading: two discourses which may seem in some degree irrelevant to the debate proper, yet which provide extremely strong positions (in opposition) on the concepts of mind and body.
What I want to do now is open this minimal polytextual reading out by introducing the concept of embodiment, which I have already defined loosely as the ways in which the unconscious posits its own exterior. I am aware that this is not a definition of the term with which many will have immediate agreement. Yet it strikes me that the reason for this may be that there have been few attempts to actually produce a clear definition of embodiment in spite of the fact that issues of the body have been prominent in critical theory and feminist theory for decades and, of course, in the terms of the mind-body problem for centuries. For some schools of thought, there would be no need to develop a definition beyond that provided by common usage: to make corporeal or incorporate (as in, to include in a body). For some, as we have seen, the solution to the mind-body problem is no more nor less than to incorporate the mind.

For my part, the need to define embodiment emerges alongside the considerations of critical psychologists and feminist theorists who continue to interrogate the received ‘truths’ about being human inside a human body. In summarising the writings of Rosi Braidotti, Elisabeth Grosz and Moira Gatens, among others, Kathy Davis (1997) points out that theorising about the body is all too often a ‘disembodied activity’ much in need of an account of individuals’ (including the theorist’s own) embodied experiences:

Understanding what embodiment means to individuals depends upon being able to sort out how sexual, ‘racial’ and other differences intersect and give meaning to their interactions with their bodies and through their bodies with the world around them. Conditions of embodiment are organized by systemic patterns of domination and subordination, making it impossible to grasp individual body practices, body regimes and discourses about the body without taking power into account. By assuming that the theorist is also embodied, feminist theory opens up possibilities for exploring new ways of doing theory. (1997: 14)

I will argue in what follows that critical psychological theorising about the mind and the body must recognise (or indeed proceed from) an account of the relationship between theorising mind and body and being embodied. The argument hinges on a further series of polytextual readings of texts that
discuss phenomena, such as phantom limbs, which render problematical the intuitive understanding we have of our minds and bodies.

A recent episode of another popular science series, Mystery of the Senses (Lifestyle Channel, Foxtel, 21 March 1999), discussed the degree to which the brain was the extra-sensory source of what we otherwise sense as reality. Referring to phantom limbs, the presenter explained that perceptions of reality do not devolve from the physicality of the outside world (through the senses) but come from ‘within here’ (he was pointing to his head). For the presenter, this ‘here’ referred to the brain, to which he added that electrical stimulations by electrodes on the surface of the brain are not registered by the subject as sensations on or in the brain but elsewhere on the body (as an itch on the nose, or a twitch in a finger, for example). The implication is that our sensory relation to the external world is determined by electrical activity in the brain rather than by what is given from without - in any case, we find that the question of our status in the world is only for the physical sciences to address.

The claims made in this program may simplify the case, but they do seem to reflect the prevailing views of many scientific researchers into phantom limb phenomena at least until the last decade of the twentieth-century. Peter Lloyd stated that among the different approaches to the mind-body problem, physicalism, the view ‘that the mind is really a physical phenomenon going on inside the brain,’ was the prevailing view (1993: 17). In terms that are similar to those expressed in Mystery of the Senses, Lloyd first presents a case for physicalism based on some simple ‘tricks’: damage to nerve fibres may cause the brain to construe pain in the area of the body where the incoming nerves are rooted, unaware that these signals originate somewhere along the damaged fibres en route; the phantom limb sensations of amputees clearly do not originate in the missing limb itself; and electrical stimulation of an incoming nerve will cause the brain to project sensation onto that part of the body from which that nerve impulse should have originated (18). The conclusion to be drawn from these ‘tricks’ is straightforward enough: ‘What this shows us is that the mind is not really dispersed throughout the body but is centralised in the brain. The brain constructs an illusory distribution of mental sensations over the body’ (18).

Lloyd’s simplistic presentation of the physicalist approach may echo the presenter who points to his head to designate the origin of sensory perceptions, yet his purpose is quite different. He also presents detailed evidence of ‘actual experiments on living brains’ to examine the physical...
correlates of the conscious mind and finally to dismantle identity theory which posits a one-to-one relationship between locations on the brain and mental phenomena. Lloyd’s strategy is effective: the more straightforward the physicalist argument seems to be, the more compelling becomes the concrete evidence of actual experimentation in arguing against these ideas. Of course, Lloyd does not reject all the tenets of physicalism, only the push toward localisation in identity theory. The point is to demonstrate that the mind and the brain are not identical, but to also show that there is a more direct relationship between the mind and the brain than between the mind and the rest of the body.

Such claims prompt the following question: how are we to distinguish between the brain and the rest of the body? For neurology, in particular, the question has unnerving - I use the term deliberately - consequences. At what point do we consider that the networks of nerve fibres, which extend throughout the body, can be distinguished from the brain or the body in our understanding of their functions? If the nervous system is understood as a function of the way in which brain processes control and respond to bodily stimuli, is it possible to think of a ‘body’ that is not already contained by our thinking about brain processes? Significantly, one of the effects of asking these questions - the explanatory adequacy of which can be measured in the degree to which brain and body are defined in their interrelationships - is that the imperative to consider the mind seems to fall by the wayside.

Wilson (1998) provides a comprehensive account of how an account of the human psyche can be restored to the agenda of neurological science, by deconstructing the dilemma of mind and body, neurology and psychology, which, as we have seen, can be attributed to Freud’s ‘Project for a Scientific Psychology’ from over a century ago. The advantage of the Freudian model, particularly via the deconstructive approach Wilson takes into consideration, is that its defining characteristic is not the location of neurons but the relations between them. Thus, the key to understanding the relation of mind to body is not in locating the mind but in coming to terms with the forces that animate biological matter on the path to cognition. The neurological science to which Wilson adheres is connectionism, a group of relatively new theories of cognition based on models ‘sometimes referred to as neural networks or parallel distributed processing (PDP) models,’ since these theories privilege the connections between units in attempts to understand cognitive functioning (Wilson 1998: 5-6).
My interest is in Wilson’s synthesis of deconstructive and psychoanalytical modes of analysis together with the neurological science from which Freud took his initial steps on the royal road to the unconscious. Returning to phantom limb phenomena, I think this synthesis can be mobilised within the much older tradition of conceptualising mind and body as an embodied practice. At the very foundation of dualism, for example, the phantom played a crucial role, since it was with the example of the phantom limb that Descartes attempted to divorce the mind from the brain by linking the former with the entire body rather than one of its higher organs. Nevertheless, as Elizabeth Grosz states, Descartes’s psychophysical dualism situates the interaction of mind and body in the brain, as it is in this organ that ‘movements’ resulting from peripheral stimulations are centred (1994: 63). Descartes thus clings to the brain as the primary surface upon which the mind and body interact. It is as though the founder of dualism wanted to render problematical the relation of mind and body based on the example of accounts of non-physical phenomena (phantom limbs), but found that if he reasoned empirically the phenomena only make sense by recourse to explanations in terms of the physical effects of non-physical phenomena and the degree to which these effects are located (perhaps, originally) in the brain.

Yet even at the foundation of the dualism of mind and body, Descartes problematises this distinction in a way that can be understood if we read the Cartesian text as a text. In Descartes, as Gary Shapiro has argued (after Jean-Luc Nancy), the program of anatomising mental phenomena is not only theorised but actively thematised, such that the discourse itself can be seen to constitute the corporeality of the represented body:

‘While I am writing,’ writes Descartes in his Rules for the Direction of the Mind, as he implicates an entire apparatus and instrumentality by which he realizes himself as the one whose thoughts are embodied by being written and being read. In ‘Dum Scribo’ Nancy traces how far Descartes (who perhaps should not be called a Cartesian here) ‘mind and body take form together - in writing which is imprinted.’ Descartes’s word for body, of course, is corpus. Descartes can be reread and rewritten in his corporeality, as a thinker who fantasized his body as a pen and for whom the prosthetic language in which he describes his bodily activity is not a mere metaphor. (1994: 61)
Beyond empiricism, then, Descartes performs the textuality of the body by inscribing in and through the written word the corporeality of the text (corpus). Even at the inception of dualism, the performativity of the critical text thus hints at a corporeality that inheres in something other than flesh and bone. Descartes’s ‘prosthetic language’ is not simply a metaphor precisely because it presents a written text as an extension of the corporeal, whereby inscription equals embodiment. In other words, Descartes’s text is also his own phantom limb.

This equation of body and text, of embodiment and inscription, also emerges inevitably from clinical studies into phantom limb phenomena. During the last decade, the most prolific experimenter and theorist of phantom limbs has been Vilayanur Ramachandran, whose recent *Phantoms in the Brain* (with Sandra Blakeslee 1998) contains accounts of much of this past research. Ramachandran has collected many further examples of the sorts of ‘tricks’ to which Peter Lloyd referred in 1993, yet his focus remains on clinical applications of these phenomena. Perhaps the most famous of his experiments is the use of a mirror in a box to enable amputees to ‘see’ the phantom limb—they see a reflection of their surviving limb in the same location as the phantom limb. What this enables the patient to do is overcome the resilient ‘body image,’ the result of which is that residual pain or paralysis associated with the phantom limb dissipates. The key to success in such experiments is attributed to the illusory nature of the view we have of ourselves, which Ramachandran calls ‘perceptual plasticity’: ‘All our perceptions - indeed, maybe all aspects of our minds - are governed by comparisons and not by absolute values’ (1998: 167).

Importantly, this plasticity poses a dilemma from an empirical standpoint, since we are unable to determine an objective correlate for the body image (an ‘absolute value’) that can be measured and verified scientifically. Yet the claim that perceptions, maybe even all aspects of our minds, are governed by comparisons is amenable to a deconstructive (or at least a somewhat analytical) approach to psychical phenomena. It is no surprise to find that Ramachandran describes the brain functions that produce phantom limbs and similar phenomena as part of a process akin to Freudian defence mechanisms. Rather than develop a composite neurological theory of repression, however, Ramachandran’s primary interest remains the clinical possibilities for a physiological approach to these phenomena. Indeed, in an earlier paper he proposes that a physiological intervention, ‘left ear coloric stimulation, may
eventually be used actually to replace psychoanalysis as a device for reviving repressed memories and for producing insight’ (1994: 330).

Responding to Ramachandran’s work on phantom limbs, Gail Weiss reiterates the point that the success of these experiments is not a triumph of body over body image but ‘the construction of a new morphological imaginary, one that offers new sites of projection and identification and new bodily possibilities’ (1999: 37). Weiss emphasises the plasticity of the body image itself as much as the perceptual faculty through which it is realised. The notion of a body image has frequently in the past been used as an index of the unity of a blueprint that we possess within ourselves of the whole of our bodies. Under the rubric of such terms as ‘schemata,’ ‘homunculus,’ ‘neuromatrix,’ ‘genego’ (genetic ego) and others, a number of models have been developed to account for a map of our bodies to which our brain refers in making sense of external stimuli or perceptions. For Weiss, Ramachandran’s clinical evidence supports the long-standing philosophical tradition from Descartes to modern phenomenology, which does not deny the materiality of the body but designates the ‘imaginary’ as the overarching domain within which the whole of our perceptual life is played out. By understanding this domain morphologically, we form a picture of that aspect of the body image, governed by comparison, which can be analysed: that is, we can begin to analyse the mechanisms, rules and limits to change.

Summarising various accounts of phantom limb experiences, Grosz notes that the phantom is not really an image or recollection of the absent limb, since it is often distorted (1994: 71). Such distortions - the phantom may be lighter, more sluggish, or larger or smaller than the missing limb - are only measurable as distortions by referring in the past to properties and dimensions of the missing limb. Thus, distortion expresses a ‘nostalgia for the unity and wholeness of the body, its completion’ (73). The phantom experience is ‘a memorial to the missing limb, a psychical delegate that stands in its place …. the narcissistic reassertion of the limb’s presence in the face of its manifest biological loss, an attempt to preserve the subject’s narcissistic sense of bodily wholeness’ (73). Phantom limbs manifest or intensify, after partial loss, a narcissistic function of embodiment: the degree to which our body image exceeds the container of the flesh, or to which ‘reality’ merely extends corporeality via the body-text or corpus.
Perhaps the relationship between the corporeal and the textual, when referring to body image theorising, is still difficult to express in such concrete terms as these. Yet we may need to look no further than the testimonies supplied as clinical evidence by the *subjects* of the experiments that we have been describing, to find a compelling expression of the relationship I am attempting to elaborate. Invariably, under experimental conditions or in tests relating to phantom limb phenomena, the principal determinant for the presence and behaviour of the phantom is the verbal report given by the test subject. Certainly, observers cannot determine the presence of the phantom in the same way other intact organs or limbs can be observed, measured, probed, or scanned in their (scientifically) detached entirety. The phantom thus represents an excess, for it exceeds the observable boundary (the skin) by which the body appears to be limited, and its reality cannot be ascertained with reference to this boundary. The appropriate phrase for referring to the phantom is nothing like ‘take my hand’ or ‘how many fingers do you see;’ instead, it is only with ‘take my word for it’ that the individual who possesses a phantom can bear witness to its presence and to the quality of the sensations or movements the phantom registers.

The reliance by those testing for the (absent) presence of phantom limbs on individual testimonies is worth noting here because it suggests that accounts of phantom limbs are not merely diagnostic (‘tell me if this hurts’ and such like) but core features of reality testing in the actualisation of a phantom for both the subject and the observer. Thus, we may presume that in normative functioning of the body image, our sense of our own corporeality as well as that of others is inextricably linked to a mode of representation. Weiss refers to embodiment in these terms as ‘intercorporeality,’ inasmuch as every body image is always an image of a particular body, ‘a body that is different from all others and that is lived in idiosyncratic ways,’ yet which is negotiated and changing since it occurs ‘among body images, body image ideals … and the cultural imaginary that actively supports them’ (1999: 66). The discursive practices by which we theorise the body image does not take place independently from these processes, for they contribute to the establishment of particular ways of thinking about the body.

One implication of the studies into phantom limb phenomena is that the way in which we assume our selves to be embodied *in toto* is contingent upon a textualised body image that only coincides *through expression* with the physical surface of our bodies. What remains to be shown here is how theorisations of mind and body may access the morphological imaginary
governing this coincidence. My suggestion is that we might usefully discuss this possibility by considering how issues of embodiment relate to a psychoanalytical understanding of mind and body. Consideration of psychoanalytical uses of the terms “psyche” and “soma” will allow us a chance to glimpse (if only awry, in a sense) the unconscious source of embodiment, by thinking of a textualised body image that is at once concurrent with consciousness and the outer surface or limit that the unconscious imposes upon itself precisely so that it will be closed off from external phenomena and from consciousness.

My use of the term *psychosomatic* will not be diagnostic, in the sense that a physician may classify a particular physical condition as psychosomatic where a psychical source for physical symptoms may be assumed in the absence of any apparent physical source. Julia Kristeva has concisely stated that a ‘psychosomatic condition’ - just like wounded ‘narcissisms,’ ‘false personalities,’ or ‘borderline states’ - derives from ‘the inability to represent’ (1995: 9). As a psychoanalyst herself, Kristeva may seem justified in reclaiming the category of the psychosomatic from the field of medicine which has taken the term for its name. Yet this focus on the ‘inability to represent’ is a response to the pressures upon psychoanalysis that Kristeva sees as having accompanied the ‘recent advances in neurobiology and pharmacology’ (1995: 30). By this I mean that Kristeva’s theorisation of the psychosomatic condition contributes to her push for psychoanalysis to develop broader relevance, beginning with a reconsideration of the concept of the drive as a response to new brain technologies. The drive, in Kristeva’s terms, ‘is a pivot between “soma” and “psyche,”’ between biology and representation - the highest level of organization and permanency to which Freudian listening and theory can aspire’ with ‘biology’ defined by Kristeva as ‘drives and energy, if you wish, but always already a “carrier of meaning” and a “relation” to another person, even though this person may be yourself’ (1995: 30).

When Kristeva describes the psychosomatic condition as an inability to represent, then, she is responding to the diagnostic practices of analysts and physicians for whom bodies are merely biological entities with which things commonly go wrong. I understand that for most people the term ‘psychosomatic’ means (at best) a non-existent complaint that is simply imagined, or (at worst) madness. No longer does the expression ‘in the head’ cover the terrain of the psychosomatic in the popular imagination now that science has told us that it is only the brain (*qua* the mind) that we find if we
look inside our heads. Kristeva reminds us, however, that a diagnosis of a psychosomatic condition is to both ‘psyche’ and ‘soma’ what a diagnosis of a heart condition is to a normally functioning heart. The normative status of the psychosomatic is precisely the opposite of its status in diagnostics - if the psychosomatic ‘condition’ is understood as an inability to represent then the normative function of the relationship between psyche and soma must be the very condition of representation itself. This claim responds to the problems perceived by Kristeva by invoking the drive’s pivotal role betweend biology and representation.

Yet the lesson of critical polytextualism now comes clearly to the fore: it is simply not sufficient for our purposes here to arrive at the conclusion that the relationship between psyche and soma constitutes the condition of representation, if we arrive at this point by way of negating a diagnostic discourse. Why, then, should we privilege the Freudian drive or the psychoanalytic understanding of the psychosomatic over those bodies of texts to which Kristeva responds? The point to be made is that Kristeva recognises that the drive is ‘always already’ a ‘carrier of meaning’ even if it is understood biologically, in terms of the carriage of energy. To be understood psychoanalytically - in terms of that which is radically unavailable to conscious reason - the terms ‘psyche’ and ‘soma’ have been subjected to what Nicolas Abraham (1994) has called ‘designification.’

For Abraham, the terms used in psychoanalysis do not acquire new meanings, because ‘they do not strictly speaking signify anything, except the founding silence of any act of signification’ (1994: 84). This is to say that psychoanalysis strips words of what they may signify to conscious reasoning, thereby addressing (although, by definition, never expressing) the unconscious source of representations. ‘Psyche’ and ‘Soma’ pass into psychoanalytical understanding by being stripped of the meanings attributed them by ‘naive empiricism’ or phenomenology:

The somatic must be something quite different from the body proper, which derives from the psychic as one of its functions, the psychic having been described by Freud as an exterior layer, an envelope. The somatic is what I cannot touch directly, either as my integument and its internal prolongations or as my psyche, the latter given to the consciousness of self; the somatic is that of which I would know nothing if its representative, my fantasy,
were not there to send me back to it, its source as it were.
(Abraham 1994: 87)

Abraham notes that one term exempted from designification is the term for what passes between psyche and soma in their interrelation: ‘only the representative, the mediator between the two poles x, seems to have preserved its meaning, inasmuch as it is a term known by comparison with a known relation of mediation’ (86).

What is inherent in the relation of the psychic to the somatic is therefore nothing more nor less than the very fact of this relation, as it inheres in a representation of the somatic in the psychic and the psychic in the somatic. By designifying the term ‘psychosomatic’ via the form of the term ‘Psycho-Somatic,’ Freud’s anti-semantic discourse identifies the representative (Kristeva’s ‘carrier’) as that which is ‘always already’ anterior to meaning. The ‘meaning’ may vary - a memory trace, a body image, a partial object, a compulsion … in short, the psychical ‘reality’ - but the fact of the representative remains constant. We now begin to arrive at an understanding of the everyday psychical necessity of embodiment. If the carrier is constant, then there would seem to be no end to its carriage. This seeming endlessness is just the character that Freud ascribed to the drives, for which the goal is never so important as the getting-there - philosophically, this is called desire; in biological terms, this represents ‘energy’ animating flesh. Of course, the drive is necessarily driven-toward, for which purpose a goal is inscribed in the principle of getting-there - representation presupposes its object, which the drive posits irreducibly as an exteriority to itself. As a result, the principle of an exterior limit to the drive is included in its very movement. For Abraham, this limit is manifested in the first instance in the formation of an interior-exterior layer - the two directions toward which the limit extends - of the psychical enclave of the unconscious. The relations between the somatic and the psychic are embedded upon this nucleus, in a series of peripheries, of which the outermost formation (or envelope) is the ego.

We should not forget, of course, that for Freud the ego which envelops the psychical apparatus is ‘first and foremost, a bodily [körperliches] ego; it is not merely a surface entity [Oberflächenwesen], but is itself the projection of a surface’ (in Anzieu 1989: 85). While the somatic is not understood psychoanalytically as the body proper, we do find that in the ego the surface of a body is represented as the exterior limit of the psychical. Embodiment as I have been describing it in this essay is the realisation of the Freudian ego,
which we now understand to be the outermost layer posited by the unconscious. Importantly, this process is at once bodily and psychical, with the drive creating the very need for layers to be posited equally capable of being understood as both desire (philosophically) and energy (physiologically).

I also want to emphasise that for Abraham the formation of the ego - this projection of the bodily surface at the limits of the psyche - is the same process as acquisition of the metaphors of word-formation. Reviving Sandor Ferenczi’s definition of introjection as the ‘process of broadening the ego,’ Abraham and Maria Torok (1994) explain that in libidinal attachment the child confronts its own inability to internalise the exteriorised object through the mouth, for which it compensates by filling the mouth with word sounds. Word-formation is thus inseparable from embodiment, each constituting one side of the formation of the ego. To conclude, then, the corpus of psychoanalysis locates the terms with which we might represent embodiment as the same process in which realities are constituted in words and thoughts - as representations. For psychoanalysis, the shaping of the ego takes place in the process by which the subject first acquires words in forming a metaphorical relation with the outside world. Conscious reason is carried out within this relation, and it is therefore coterminous with the projected surface that the interior posits as its outer limit.

I suggest that the disciplinary boundaries or fields of discourse that generate the sense of propriety that I discussed at the beginning of this paper are products of this drive toward an exteriorised limit. As we have seen, this is the same as saying that disciplinary limits are in some sense a function of the process of embodiment. Interrogations of the mind-body relation take place within discourse, and are therefore embodied practices in their own right. Yet interrogations of the other side of representation risk getting under the skin of the text, as it were, and forcing us to abandon the critical corpus or body of texts (that is, the polytext) marking out the surface upon which our discourse inscribes itself and those of us who speculate within this domain. What is at stake is not simply the opening out of the boundaries of one discipline in response to a challenge presented by another; rather, it is the radical abandonment of all boundaries that have traditionally separated one discipline from another, one corpus from another, or one body of ideas from another. If we find that we are still protective of this body of ideas, it may only be because we are still too attached to the idea of the body.
This essay expands upon a paper presented at the Millennium World Conference in Critical Psychology at the University of Western Sydney, Nepean, on 1 May 1999.

Notes

1. See, for example, Galen Strawson, ‘The Experiential and the Non-experiential,’ (69-86); Steven J. Wagner, ‘Supervenience, Recognition, and Consciousness,’ (87-98); and Colin McGinn, ‘Can We Solve the Mind-Body Problem?’ (99-120); and the editors’ summaries of these essays (3-5).

2. For discussion of these terms see, for example, the following: on Frederic Bartlett’s ‘schemata’ see Wilson (1998, 171-77); on the traditional ‘homunculus’ see Damasio (1996); on ‘neuromatrix’ see Melzack (1993); and on the ‘genego’ see Hearne (1999).


References


