CHAPTER 4 – THINKING BEYOND THE MIND-BODY SPLIT: THINKING WITH THE HEART

The logic of the heart would appear not to be strictly Boolean in form, but this is not to say that it has no structure... There are many ways of 'knowing' anything.

- Silvan Tomkins¹

The body is a part of the earth. It is the earthly home for the soul. It knows more about life on earth than the mind. When in doubt, we ask the body.

— Dr Lewis E Mehl, Cherokee physician and healer²

In western culture, part of the legacy of the mind/body split is that emotions are often seen as the enemy of truth or reason. 'Being emotional' is generally considered to be synonymous with 'being irrational'. For novelists, however, it is reason or intellect (or too much of it) that is usually seen as the enemy of good art. For many people art is about passion, sensuality, emotion and instinct: all associated within Cartesian dualism with the body. The mind/body split here becomes a struggle between the head and the heart, between analysis and creativity; an opposition that has provided the framework for countless pejorative statements about what good fiction writing involves. 'Good novelists' (as opposed to hacks or propagandists, or failed novelists), we are frequently told in writing classes and at festivals, don't know, or shouldn't know what they are doing. 'Good novelists' write by instinct. (Especially true, it seems, for women writers, who are considered to be naturally more earthy, and more ruled by their hearts.)

In this chapter I want to look at ways of conceptualising the body as an open system. These include some powerful ideas from spiritual traditions such as Buddhism, and concepts of the emotional body (the body with a mind of its own) that dissolve this automatic dichotomy between head and heart, and open up ways to think with the heart, feel with the mind.

I will be looking briefly at the work of Silvan Tomkins and Affect systems theory; Candace Pert and her work on the biochemical or bioneurological nature of emotions; and Antonio Damasio's work on the neurology of decision making.³ I am interested in the way that these theories support the concept of the body as an active and essential participant in the process of determining value (what we care about) and thus in the formation of memories, social relations, beliefs, knowledges and ethics.

From this I would like to explore what this might mean for the practices of both writing and reading, looking at these as akin to meditation: as psycho-physiological practices which can be undertaken with a specific intent without necessarily being overwhelmed by intellect; and as practices which have the potential to facilitate shifts in the way we feel, how we think and what we value. In short, I would like to explore what it means to be *moved* by what we read.

Exploding the mind-body opposition

Classical physics, as previously discussed, regards the body (like all matter) as passive and inert, a machine-like container and boundary of individual consciousness. The will to power within classical science to view nature as a closed (and hence controllable) system can be seen, for instance, in the way that even when the body is regarded as 'bundles of genetic information' these so often become viewed mechanistically, as if it is possible to remove or alter one piece (such as 'the breast-cancer gene') to inhibit or prevent a causal effect without impacting on or causing other effects.

In quantum physics, post-structuralism and ecological spirituality, however, the body's meaning is much more open; fluid rather than fixed. It is something continually constituted and reconstituted (performed and re-performed, produced and reproduced) through relationships, experiences and discursive practices. The body may seem relatively stable in practice, but our bodies are forever growing and decaying; ingesting and excreting; colonies of other bodies live in and on them; atoms are constantly being exchanged; and no performance or version of the human body ever repeats or reproduces itself exactly.

The seemingly clear boundaries of the body become profoundly blurry from this perspective. If the atoms of my body are constantly being exchanged with yours and with others in the world (and other aspects of the world), then in this sense we are always a dynamic part of each other; always existing not as something separate and solid but as a complex system of interactions and tendencies.

Even in the absence of spiritual beliefs, most people when they think of their body-self usually include a flexible space or energetic aura, rather than see themselves as ending firmly at the skin's boundary. This is what makes it is possible for someone to 'invade' your body-space without touching your skin. The boundaries of this energetic body are constantly changing according to circumstances: expanding when there is a sense of connection, contracting when threatened or repulsed. So your body occupies more 'space' when you walk in a park, or engage in sex, and less when you sit on a crowded tram, or are with someone you actively dislike (someone you shrink from).

For Breema, a bodywork practice and philosophy originally from Afghanistan, the body, 'like the Universe, is made of matter, energy, Consciousness and Awareness in the process of constant change.'

In Buddhism the body, like the self (and like everything in the material world) is an 'interdependent arising'; with each of us a 'collection of five changing processes: the processes of the physical body, of feelings, of perceptions, of responses, and of the flow of consciousness that experiences them all.'5

Buddhism teaches that the body is not something solid that can be possessed; nor can the mind be reduced to neurology or brain activity. The mind in its subtle or root form (the Self, as opposed to the temporary self or superficial mind) is pure awareness: formless and boundless. The same stuff that everything else is ultimately made up of.

In this sense, the body-self is a zone, marked by breath, speech, movement, sensation, affect, awareness, consciousness and cognition. A strategic relationship or perspective, a complex system of narrative events.

(I am this place I occupy, and the way in which I occupy it.)

While the relatively new or re-emerging field of mind-body medicine (or mind-body-spirit medicine) seeks a more hologenic notion of the body-self – so that every part is regarded as containing the intelligence of the whole – the ultimate 'truth' of the body is unknowable because none of us can step outside of it to observe it. So the holistic view of the body might best be seen as a purposeful concept, rather than a true replacement of the Cartesian model; with the claim being that when all the levels of existence of the body and mind are in harmony there is more efficiency and more comfort.⁶

Thus to seek to deconstruct or collapse the mind/body dichotomy need not be a quest to make it all into the same stuff (dissolving the difference) but could begin with teasing out the complexity and systemic interdependence of our embodiment as sentient beings.

Instead of *two* aspects (mind and body), or *one* (bodymind), it might be more fruitful to see embodiment as consisting of a multiplicity of factors or layers of energetic and intelligent material. For instance, the neurological-mind or ego-consciousness; the body-mind (the network of information-carrying peptides that communicate between the different systems of

the body and brain, as will be discussed below); and the pure consciousness, higher-Self, or quantum self that exceeds the 'skin-bag' and is not bounded by time-space. And then the minds within these minds: the unconscious mind; the several inter-dependent layers of the body's communication network; the consciousness some argue exists within every cell.⁷

In other words, the way to collapse the notion of two separate things might not be to fuse them into one (separate) thing, but to explode them into *multiple* things, and into no one thing. As everything and nothing; that is, nothing separate.

Deconstructing the mind/body dualism also requires releasing the idea that any one aspect – in this case, the cognitive mind – is the controlling, dominant, defining or superior aspect.

The 'nature' of the body as we experience it (personally, and across different cultural or historical periods) is a narrative constantly being written and rewritten by our being in the world; including through our participation in a range of discursive practices – scientific, medical, religious, as well as multiple discourses around sexuality, maternity, romance, sport, fashion, and so on. (With breasts, of course, as an important and recurring character within these narratives.)

As John Schreiber and Denise Berezonsky put it: 'In our ordinary level of consciousness, we imagine the body to be a separately existing object, and we identify with it, believing we are this body. We regard everything else as "other", and create tension and fear.' 8

Or as David Bohm reminds us regarding 'nature': 'There is very little left on earth that hasn't been affected by how we were thinking.' To which one could add – insofar as discourses are also affective processes – 'and by how we were feeling'. Indeed it is only be removing affect (or intelligence) from the body – by viewing it as passive – that classical science is able to stabilise it and conceptualise it as fixed and closed.

The notion of affect, however, disrupts that attempt at closure.

The Affective System and Human Being

Silvan Tomkins (1911-1991) has been called the 'American Einstein' for his brilliant formulation of a systematic way of understanding the affective quality of bodies as integral to the complexity of human being, and as the primary motivator of behaviour. ¹⁰

In some ways you could liken Tomkins' theory of affect as being to Freudian drive theory what Quantum physics is to Newtonian physics: the elaboration of a complex dynamic network of 'incompletely overlapping central assemblies' instead of a more linear cause-and-effect program.

'Affect' here refers to the observable and/or measurable physiological (or somatic) component of an organism's response to an object or stimulus within its environment – that is, the usually fleeting, possibly biological or innate, involuntary part of one's response.

Tomkins describes the mechanism of affects as the 'sets of muscle and glandular responses located in the face and also widely distributed through the body, which generate sensory feedback which is either inherently "acceptable" or "unacceptable". ¹² These bodily affective responses occur before you have time to process or comprehend the response as a thought, causing a flood of chemicals through your body, and triggering specific muscles to contract such as those that make you smile and light up in response to joy; make your stomach clench, your heart race and your palms sweat in response to fear; make you look down and blush when shamed, and so on. ¹³

If 'affect' is the bodily or physiological reaction, 'feeling' could be described as the subjective awareness that the affect has been triggered (the ability to comprehend the affect), while 'emotion' is the complex articulatable aspect (even if it isn't articulated) – the personal and cultural meaning and management of that response. Emotion also derives from (and is intensified by) the memory of previous experiences of the affect, including the feedback of the affective responses of others to one's own affective response, and the way it becomes habitually patterned and combined ('scripted') in with other affects. (The way shame, for instance, can become shifted into anger, distress or disgust, and then turned inwards in a toxic mix as self-hatred, or expressed outwards as hostility and contempt.)

Which is to say that emotion is the meaning given to the affect and the way it is managed within the wider narrative of the self.

Thus affects are linked to the cognitive process, but are not simply caused by it as in the cognitive view of emotion; and it is through this that affect theory gives a distinct and dynamic role to the body.

Tomkins defined nine separate affects as part of his 'human being theory': two positive affects (creating 'acceptable' or positive feelings), one neutral, and six negative affects. These are:

Interest-excitement

Enjoyment-joy

Surprise-startle (the neutral one)

Anger-rage

Distress-anguish

Fear-terror

Shame-humiliation (NB shame here means anything that even momentarily disrupts our enjoyment of an object of interest¹⁴)

Disgust

Dissmell (the reaction when something is found disgusting without even tasting or sampling it).

These nine distinct affects form a basic palate which, when intensity is also added in as a variable, enables an almost infinite variety of subtle and complex combinations and patterns. ¹⁵

Affect theory shows how these instinctual bodily reactions are an integral component of the continuous cultural and personal processes of ascribing meaning and value – by physically alerting us to what we care about, and through the creation and modification of habitual scripts or patterns of biopsychosocial response. It is through these scripts that we interpret, evaluate, produce and seek to control and manage our responses as emotions, via a constant process of analysis and synthesis of our own and others' reactions

Affects such as anger, fear, shame, etcetera may be primal and involuntary and thus unable to be modified, but the way we feel about them, and the way we manage them socially can be acted on by the intellect. For Tomkins it is this aspect of complex choices within a system capable of error that is central to what it is to be human.

In a delightful speculation on what would be required to construct an automata (or computer) that had the ongoing learning ability of humans – that is, the ability and freedom to generate information, not just to utilise it – Tomkins outlines his idea of the continuous but uncertain (i.e. unpredictable) feedback system between affect, cognition and our interactions with others. It is this imperfect feedback system together with the continual motivation to increase

acceptable affects and decrease negative ones that Tomkins sees as being integral to the unique learning capacity of humans. That is, it is the very fact that we have the capacity (and freedom) to care about things – and to make errors of judgement – that ensures the complexity of the system which in turn makes it so highly evolved and so capable of further evolution. ¹⁶

Psychoneuroimmunology and the body's information network

As a young scientist in the 1970s, Candace Pert, author of *Molecules of Emotion*, played a key role in the landmark discovery of the brain's opiate receptors, the proteins able to pick up and bind with opium molecules and thus create the drugs effect on the organism. ¹⁷ In the decades following she was involved in the systematic mapping of a range of neuropeptides or ligands and their specific receptors. What she and others in the field found that was revolutionary in terms of the dominant model of the way the mind and body work together, was that these receptors and peptides existed not just in the brain, but in every system and major organ within the body. ¹⁸

The previous model saw the nervous, immune and endocrine systems as autonomous, with the brain as the central controlling mechanism and sole source of collection, storage and processing of information. The discovery that identical peptides and receptors existed all throughout the body suggested instead the existence of a bodywide communication system – a multi-directional, non-hierarchical network of information exchange, with chemical messages and interactions going back and forth between the brain, the body, and between the different systems of the body.

As well as suggesting reciprocity between each of the systems of the body, the notion of chemical transmitters as the carriers of information posited a much more complex system of communication than the previous model which saw communication as an energetic (electrical or telegraphic) function. An electrical 'switch' has only two options – on or off – whereas chemical messages are far more complex, varied, nuanced and flexible. ¹⁹ In the same way that the limited palate of affects can give rise to an almost infinite range of combinations and permutations, these chemical messengers can also combine into sophisticated 'languages'.

Sahand Boorboor uses Tomas Kuhn's model of scientific revolution (rather than gradual accumulative increase) ²⁰ to describe the way this shift from the belief in an autonomous immune system to a concept of an integrated one took several decades to gain even a tentative acceptance within the mainstream. It so contradicted the accepted classical view of the body, that it was only in the face of decades of accumulated experimental evidence that the hostility

and disdain with which the findings were initially met was overcome, and the field of psychoneuroimmunology was given a tentative place. ²¹

Even now, orthodox western medicine tends to either only evoke the mind-body connection when it suits – for instance, by claiming that the effectiveness of therapies that don't fit the dominant paradigm are only due to the placebo effect (but ignoring the placebo effect in evaluation of medically sanctioned treatments such as chemotherapy)²² – or see mind-body connections simplistically, as the 'power of positive (or negative) thinking', a one-way street of 'mind over matter'.

What psychoneuroimmunology suggests, however, is something much more complex, dynamic and sophisticated: a 'network hookup of multi-systems' (*Molecules*, 177) – the body with mind (or minds) of its own.

From observing the way these transmitters are distributed throughout the body – for instance, heavily concentrated along sensory pathways, places such as the lining of the gut, and the parts of the brain 'that have been implicated in the expression of emotion', Pert goes further and suggests that perhaps peptides and receptors are the 'biochemical basis' or 'substrate' of emotion²³ (or of affect, to use Tomkins' terminology).

For Pert, '...[W]e might refer to the whole [peptide-receptor] system as a psychosomatic information network, linking *psyche*, which comprises all that is of an ostensibly nonmaterial nature, such as mind, emotion, and soul, to *soma*, which is the material world of molecules, cells, and organs.' (185) Emotions (or affects) are 'the cellular signals that are involved in the process of translating information into physical reality, literally transforming mind into matter. Emotions are at the nexus between matter and mind, going back and forth between the two and influencing both.' (189)

Body memory, beliefs and 'gut thinking'

Psychoneuroimmunology also supports the notion that the cells and systems of our bodies, not just our brain, have the capacity for storing memory. According to Pert, memories are stored throughout the body, 'particularly in the ubiquitous receptors between nerves and bundles of cell bodies called ganglia which are distributed not just in and near the spinal cord, but all the way out along pathways to internal organs and the very surface of our skin.' (143)

If the body has the ability to store memory, it also has the ability to learn, and hence the potential for belief and intention.

Pert and Tomkins' notions of body memory is also borne out by therapies such as Gestalt and Kinesiology, which have devised ways to tap into memories and beliefs that become available when a body part is focussed upon, touched or given attention.²⁴ Kinesthetic knowledge or memory also includes basic things like the way we drive a car, tie our shoelaces, touch type, remember how to ride a bike, and so on.

As Feldenkrais practitioner, Ruthy Alon has remarked, 'It has been said that our body is our big brain, and inside our cranium is our small brain.' Whereas Pert has commented that perhaps the body itself is the unconscious mind²⁶; although it may be more appropriate to say 'an unconscious mind', as it would seem likely that mind is not singular but multi-faceted.

While these ideas may for many years have contradicted the dominant scientific sense, they have always had an intuitive basis in common sense, as well as being deeply ingrained in the metaphoricity of our language.

When my gut tells me something, it seems that these days it is not only the superstitious who say it is worth listening. Pert comments on the density of chemical receptors in the intestines²⁷, while Deepak Chopra suggests that the gut can often be more accurate than the brain, because 'it hasn't yet evolved to the stage of self-doubt.'²⁸ Whether it is more accurate or simply faster – not being concerned with details²⁹, as Elizabeth Wilson puts it: 'Mood is not added onto the gut, secondarily disrupting its proper function; rather, temper, like digestion, is one of the events to which the enteric substrata are naturally (originally) inclined.'³⁰

I feel it in my bones – In two minds – Something heart-felt – Can't quite put my finger on it – Feeling out of touch – Shrinking from something (especially if it leaves you cold) – Or playing with an idea – Tossing it around – Getting a sense of it – Grasping it – Or opening yourself to it: embracing it.

For dancer and academic Peggy Hackney, "Information" may be located in books, but "knowledge" resides in a personal claiming of that information through interactive involvement with it, forming a feelingful relation with it and encoding the knowledge bodily."

New ideas are physically as well as mentally challenging, and digesting a new idea can give rise to a range of feelings. As a writer I have often had the experience of feeling a restless

compulsion to ground myself back in my body when something challenging or exciting emerges in my writing – an unbearable urge to get up and move around, make a cup of tea (in the days when I used to smoke: to have a cigarette). It's almost as if the body resists it and has to readjust before the idea can settle and be embraced and incorporated, and become a part of the organism.

As a psycho-physiological practice (the body has to sit and be fairly still, so while it may not seem to be involved, it is involved at a very high or specific level), the excitement of creative writing and theorising can often be deeply unsettling in its intensity. In writing (as in tantric sex) one of the challenges is to learn to be relaxed for extended periods with a state of heightened arousal, resisting the urge to fold it into something known, to reduce or contain the sense of openness, but just to allow it to be there.

For writing is a way of interacting with the world where you extend out to engage with the technology of language and print, including the spatial and conceptual tools in a word-processing computer, rather than just something that is the expression of what goes on in a single isolated 'mind'. It is an interactive process, a constant projecting into the past and the future, a conversation with an invisible or imaginary reader-other (made up of potentially multiple reader-others), as well as a conversation with an infinite array of textual-others. In Elizabeth Wright's phrase, 'bodies speaking to other bodies.' ³²

Writing also can involve a whole range of affects, running the spectrum from excitement to stomach-clenching fear and long bouts of shame as it can never live up to the desire for perfection. The body may at times seem to be absent, but it never is, constantly feeding its information into the mix.

Emotions and decision making, and the formation of knowledge

In his book *Descartes' Error*, neurologist Antonio Damasio proposes that 'reason may not be as pure as most of us think it is or wish it were, that emotions and feelings may not be intruders in the bastion of reason at all: they may be enmeshed in its networks, for worse and for better.' ³³

Like the work of Tomkins and Pert, Damasio's experimental and theoretical work in neurology explores the linkages between thinking and feeling. Disrupting the classical notion of the body controlled by the brain, Damasio's work has led him to suggest provocatively that it is rather the brain that is 'the body's captive audience'.³⁴

Or as Pert – coming from a different angle – puts it, 'emotions are constantly regulating what we experience as "reality". The decision about what sensory information travels to your brain and what gets filtered out depends on what signals the receptors are receiving from the peptides.' (*Molecules*, 147) The efficiency of this filtering process is determined by the quality and quantity of the receptors, which in turn is 'determined by many things, among them your experiences yesterday and as a child, even what you ate for lunch today.' (142)

Indeed, as Damasio demonstrates, while emotion may potentially flaw decision making, it is also a necessary condition of it, the very thing – by signalling to us what we most value, and thus providing motivation and a means of assigning priority – that enables a decision to be made and action to be taken at all.

All thinking requires the setting of limits. As Gary Zukav puts it: 'To understand something is to give up some other way of conceiving it.' ³⁵ Without a point of view – derived from experience and our interpretation or selective memory of our experiences – and an emotional attachment to this point of view, we'd be like Funes the Memorious, from a story by Jorge Luis Borges, who could forget nothing and was thus 'incapable of thought.' ³⁶

Pure logic can send you powerless, as pure logic cannot of itself prove anything or create anything. The only way logic can help you to decide which choice is better is when it is combined with memory and affect, and thus with values. Logic has no notion of 'better' inherent in it. In order to use logic purposefully, you have to first decide on your motivating goal: where you want to get to.

The problem is not that emotions limit our thinking – that is one of their jobs; what matters is which emotions (or emotional scripts) we allow to limit our thinking; and the related question of how conscious of this we are. If most of us are ignorant of the role played by our emotions in our beliefs and decisions, the real problem is that we don't *feel* ignorant.³⁷

Nevertheless, we reach our emotional limits of knowledge long before we reach our intellectual limits.³⁸

Every new piece of information has to be able to be somehow slotted in to our existing field of beliefs and ideas in order for it to be taken on board. So something that strongly contradicts our belief system will set off an anxious or hostile affective trigger, and hence require a lot more evidence behind it before we accept it than with something that readily fits in with our beliefs and is thus more affectively satisfying or pleasing.

The emotional content of knowledge and of knowing has become a recurring theme throughout the research and writing of my novel, something I constantly come up against, and constantly have to work my way through.

As a researcher I have to keep being aware of my own emotional investment in certain ways of perceiving the world, and keep working on ways to provide as much of a counterbalance to this as I can. For instance, I have to be constantly on guard against too readily accepting evidence that suits my case, and making sure I thoroughly scrutinise it and actively look for opposing views and evidence to test it against. I know I can never be objective, but I can at least try to be aware of my biases.

Fiction as a technology of imperfection

As a writer of fiction, I am also aware that this is a text that is likely to be read by people with a wider range of emotional investments in the topics than would be the case if it was a work of non-fiction, neatly compartmentalised within a single discipline and field. Some of the material I am dealing with in this novel (for instance, about the cancer industry) is deeply provocative, and deeply challenging to cherished beliefs, assumptions and established networks of authority and trust. While non-fiction provides a kind of structured safe area for this kind of writing – roped off, as it were, so if you enter you do so at your own risk – to incorporate this kind of challenging information into a novel can be particularly confronting, because so unexpected.

But one of the advantages of fiction is that it can be multivocal. With a novel I am able to introduce and play with more alternative or esoteric ideas by giving them to one of the many characters (in this case, to Maddie, the narrator's aunt, who has breast cancer). So the ideas are introduced and explored but in a way that doesn't require agreement or sympathy with them in order to have a way into the narrative (there are multiple ways that these ideas can be engaged with and multiple opportunities for critiquing them). In this way it is less disruptive of reading pleasure, and less threatening for both readers and for myself. I don't think I ever would have been able to bring spiritual notions, for instance, into my exegesis if I hadn't had the means to first safely explore these through a distancing but appealing character such as Maddie has become.

I'm also able to explore the more orthodox or 'rational' ideas – by giving them to Bruce – without having to subsume them with Maddie's into one non-contradictory 'correct' view. Fiction is a place where conflicting and contradictory ideas can simply co-exist (between

characters, of course, but also even within characters). In fact writing fiction compels me to respect and spend time trying to understand as well as I can views oppositional to my own, for to do justice to Maddie's courage, I have to do justice to Bruce's arguments, he can't simply be a straw man.

A fictional world is an imperfect system, full of characters who, in order to make the work powerful, must be capable of error (of being led in different directions by their emotions).

Fiction is an open system of ever changing limitations; a constant movement between merging, differentiation and integration. In this sense, it is an apt metaphor for embodiment.

As Tomkins has described it,³⁹ an automaton can utilise what it knows, but can't create or move into new knowledge. It can't evolve. It can accumulate, but it can't revolutionise.

To shift the way we think and to move into new territory requires emotion, openness, imperfection: the very reason that Buddhism speaks of the *great gift* of embodiment. ⁴⁰ For though life in the body contains the inevitability of suffering (error), it thus also provides us with the perfect technology for learning.

What does it mean to be open-minded?

It is impossible not to have preconceptions, the challenge is to keep them from becoming fixed – to keep these as fluid and open as possible – to see them always as theories.

And while it is not possible for open-mindedness (a lack of emotional commitment or investment in a perspective) to be a permanent state without our losing the ability to think constructively at all, it can be a momentary state: an affect perhaps akin to startle-surprise⁴¹, or wonder. An affective state that doesn't last but which provides a moment of opportunity for a reset to occur, a change in direction. And even a shift so small that it is not consciously noticed can cause a large change over time – like the small degree of change of a boat's rudder that can cause you to end up somewhere completely different.

Aikido master, Thomas Crum says: 'It takes a special mind-body state to be able to respond to conflict as opportunity, to acknowledge and embrace it, and to be willing to learn and change. That state of being is centering.' 42

As a martial arts practice, Aikido provides a wonderful example of the mind and body perfectly supporting each other, producing a sense of profound connectedness and calm that

can be incredibly powerful. But this is not a seamless state of being. Asked by a student 'You never lose your balance. What is your secret?' O Sensei, the founder of Aikido replied, 'I am constantly losing my balance. My skill lies in my ability to regain it.' ⁴³

Modifying affect: making choices about how to think and feel

When our experiences and emotions throw us off balance, how do we choose a state of calm connectedness?

You cannot will a change of affect – that is, can't modify an affect through cognition (by *wanting* not to feel a certain way): for instance, by trying to think or reason yourself out of feeling angry. You have to feel your way out of it, and use your mind or will to support this goal.

For a start, you can change what you do with your body, which can make a difference to your affect. One of the sayings of Gestalt therapy, for instance, is 'fear is just excitement without the breath' (or with your breath held). Exercise, improving your posture, laughing, punching a cushion, being hugged, walking, controlled breathing (counting to ten) – these are just some of the ways we use our bodies to modify our affect.

Also, while you cannot consciously stop yourself from feeling angry, fearful, hurt, sad, and so on, you do have some degree of choice in how you manage and deal with these feelings. So while you can't modify your affect by thinking, you can analyse and modify the script associated with that affect, and hence alter your future experiences of it.

Indeed, the complex feedback network between affect and experience means that the lasting way to alter an affective habit is to alter your experiences. But these experiences include the memory of previous affects, and these memories are deeply embedded in our bodies. To radically shift a deeply embedded feeling (one embedded by past toxic scripting), it first has to be accepted and felt. There is no substitute for staying with a feeling, and simply feeling it, although for most of us this is the most difficult thing in the world. But a feeling is a physical energy, and it cannot be willed away, it has to be changed into another energy. And this too is bodywork.

The good news is that every time you alter the affect related to an experience, the experience itself changes – that is, your perceptions, memories and focus change, which changes your experience of the experience.

The practice of meditation, and the art of being 'lost' in a story

In most spiritual traditions, meditation – as a psycho-physiological practice – is a key way of achieving a shift in feelings (including thinking or attitude); while for post-structuralism, a similar key is often found in art practices, including writing, or writing about art practices, such as with cultural and textual criticism and exegesis. Indeed performative or ficto-critical texts are often referred to as 'meditations' on a subject.

Meditation is a way of opening the mind, allowing shifts to occur, or training the mind to be available to such shifts.

In meditation the feeling of connectedness becomes for a while more interesting than the experience of self, and the feelings arising from identification with a self (and identification with this life) become less interesting and are thus allowed to dissipate. 'Enlightenment,' Charlotte Joko Beck explains, 'is, after all, simply an absence of any concern for the self.'

Likewise, there are moments in meditation when the feeling of the possibility of all things becomes more interesting than the desire to keep things solid and familiar.

This is a physical as well as mental process: the act of 'sitting', or time-space component, is essential, although it also requires an act of will in order to sit and seek stillness. So meditation is a very embodied experience (often focussing on the breath, or a mantra or sound, bringing all of your attention to this), at the same time as a transcendent experience (dissolving the body until you become pure consciousness, pure awareness, and merge with all things).

In some ways meditation mimics the absorption you can get from being involved in a good book or story, which can take your further into the realm of feeling and the senses, at the same time as it can lift you up and take you out of your own body. If you sit long enough, you can easily 'lose yourself' in a good book.

Writing also involves body and mind, feelings and cognition, head and heart. While the critical and creative faculties may cancel each other out in the moment, they can work to support each other in a feedback loop. (Much like the practice of writing this exegesis is both informed by the insights arising from writing the fiction, and then works back onto revisions and new aspects of that fiction). It is possible for the head to be in the service of the hearts' needs.

I am always fascinated by the phrase 'bleeding heart intellectual' – someone accused of being too greatly led by emotions, at the same time as being too rational and abstract. How can that be? It would seem that in practice we all know that the head and the heart work together, the issue is which emotions do we allow to lead us, and what kind of thinking.

The opposite to the 'bleeding heart intellectual' is the 'practical commonsense' man or woman, who accepts fear as a legitimate and unavoidable emotion to use as one's guide, and accepts the separateness of humans: at the end of the day, it's every man for himself, or it's every family for itself, or every nation-state.

Another saying or popular piece of wisdom is that in the end there are only two emotions: love and fear. Or to put this another way: connectedness, and disconnectedness.

And decisions made out of fear will in the long run always be inferior to decisions made out of love or compassion.

Thinking with the heart, feeling with the mind

Meditation is a way to shift the tendency to cling to one viewpoint – which is a tendency of self (as opposed to Self) – by strengthening the experience and awareness of the connectedness of all things. It is possible that by building a restful experience of no fear (even if just for moments at a time) – no threat from any thought or idea or Other, which is what makes one close up – it can strengthen one's clarity and ability for logical thinking, ⁴⁶ at the same time as it strengthens one's ability to be compassionate.

As such it provides a model of the head and the heart working in tandem – a form of thinking with the heart; or the head in the service of the heart – its 'captive audience' ⁴⁷. The head finding a way to make the heart's goals reasonable.

Fiction, too, can sometimes create a safe place for experiencing feelings – for experiencing connectedness, a wider or multiple perspective, and for experiencing choice rather than nochoice. It can 'disturb us in our selfishness' 48.

Like meditation, the aesthetics of writing can be a mode of paying attention, attuning, listening, exercising both our sense of wonder and our passions – so that we can find moments of stillness (God in the details), beyond words, where everything feels balanced, ineffable, and – for a space – up for grabs. A bodymind practice that can make the system more available for a shift to take place.

For it is when we are moved by the affective content of what we are reading so that we respond bodily to the text – laughing, crying, feeling sad, anguished, hopeful, afraid, excited, and so on – that we can most effectively absorb, process and generate information and ideas. Indeed it is when we are being deeply moved that anything is possible.

¹ From *Shame and Its Sisters: A Silvan Tomkins Reader*, Ed. Eve Kosofsky Sedgwick & Adam Frank (Durham: Duke University Press, 1995) 55.

² Cited by Kat Duff, *Alchemy of Illness*, 25.

³ Silvan Tomkins, *Affect Image Consciousness*, Volumes 1-4 (New York: Springer Publishing Company, 1962-1992). Candace Pert, *Molecules of Emotion: Why You Feel the Way You Feel*. (NY: Scribner, 1997). Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain*, (NY: Avon Books, 1994).

⁴ John Schreiber & Denise Berezonsky, 'Self-Breema – Exercises for Harmonious Life', *Positive Health*, 28 Sep. 2005

http://www.positivehealth.com/permit/Articles/Bodywork/schreiber61.htm.

⁵ Jack Kornfield, *A Path With Heart: A Guide Through the Perils and Promises of Spiritual Life* (London: Rider, 1994)199. (Emphasis in the original.)

⁶ This is the essence of the first of the nine principles of Breema: 'body comfortable'. See Schreiber and Berezonsky.

⁷ See for instance, Jonathan C.W. Edwards, 'Is Consciousness Only a Property of Individual Cells?' *University College, London*, 5 Aug. 2005 http://www.ucl.ac.uk/~regfjxe/aw.htm.

⁸ Schreiber and Berezonsky.

⁹ In an interview in the documentary *Art Meets Science* (as cited in chapter three).

¹⁰ Silvan Tomkins' collected writings were published in four volumes, the first two in the early 1960s, the last two in 1991 and 1992. *Shame and Its Sisters: A Silvan Tomkins Reader*, edited and introduced by Eve Kosovsky Sedgwick and Frank Adams, was published in 1995 and introduced this work to cultural studies. In my reading of Tomkins I have also been assisted by the following articles and websites: Anna Gibbs, 'Fictocriticism, Affect, Mimesis: Engendering Differences' *TEXT* 9.1 (April 2005) 19 Apr. 2005 http://www.griffith.edu.au/school/art/text/ and 'Contagious Feelings: Pauline Hanson and

the Epidemiology of Affect' *Australian Humanities Review* (December 2001) 3 May 2005 www.lib.latrobe.edu.au/AHR/archive/Issue-December-2001; Elspeth Probyn, 'Dis/connect: Space, Affect, Writing', *Spatial Cultures Conference*, 2-3 Jun. 2001, 5 Sep. 2005 https://home.iprimus.com.au/painless/space/elspeth.html; Postings by Turbulent Velvet, *UFO Breakfast website archives*, 2002, 11 Sep. 2005 http://www.ufobreakfast.com/archive/00000208.htm; Duncan Lewis, 'Memory Feedback Loops: Reading Proust with Silvan Tomkins' Cognitive System', University of Alberta, 5 Sep. 2005 http://www.arts.ualberta.ca/igel/igel2004/Proceedings/Lucas.pdf; and Malcolm Gladwell. *Blink: The Power of Thinking without Thinking* (USA/Australia: Allen Lane, 2005).

¹¹Tomkins, Shame and Its Sisters, 43.

¹² Tomkins, Affect Image Consciousness 1:243, cited Lewis.

¹³ See Malcolm Gladwell's *Blink!* for stories about Tomkin's extraordinary ability to 'read' faces and Paul Eckman's precise detailing of these facial affects following Tomkins.

¹⁴ Compare with Tomkin's example: 'one started to smile but found one was smiling at a stranger.' (*Shame* and Its Sisters, 135.) For shame to come into play interest must be there to begin with, and still be partially there. Shame inhibits but doesn't stop interest. The notion of shame is hugely significant in the development of Tomkins' theory – see Sedgwick and Frank's introduction to *Shame and Its Sisters*, 21, also chapter 6, and passim. The notion of shame is also key to Affect theory's use in Community Conferencing and as a foundation for the Restorative Justice movement. See Turbulent Velvet's weblog for an interesting discussion of the political implications of shame compared to disgust/dissmell.

¹⁵ The colour-palate metaphor was made by Turbulent Velvet.

¹⁶ Shame and Its Sisters, 40ff.

¹⁷ Pert describes her early career, including her discovery of the opiate receptors in the first part of *Molecules of Emotion*.

¹⁸ Ibid... Chapter 7, and passim.

¹⁹ This point is made by Deepak Chopra in *Quantum Healing*, chapter 4, 57ff. Chopra practiced for many years as endocrinologist and has made extensive use of this notion of chemical communication exchange in his theories of mind-body healing. He also wrote the preface for Pert's book.

²⁰ Tomas Kuhn's book, *The Structure of Scientific Revolutions* was published in 1962.

²¹ Sahand Boorboor, 'Integrating the Incompatible: The Rise of the Incorporated Immune System' *JUR* 1.1 (Fall 2002) 6 May 2005 http://sa.rochester.edu/jur/issues/fall2002/sahand.pdf.

²² Or in a different vein, by saying that plastic surgery enhances mental health and happiness.

²³ Pert, *Molecules*, 178ff. This suggestion was first included as part of the conclusion to a paper by Pert and Michael Ruff published in the *Journal of Immunology* in 1985.

²⁴ Gestalt does this through techniques such as having the client subjectively identify where an affective emotion, such as grief or anger, feels like it is held in the body, and then instructing them to 'breathe into' that area. Kinesiology uses a form of 'muscle-testing' while the practitioner runs a series of yes/no questions through his or her mind in order to hold a 'conversation' directly with the client's body. While kinesiology, in particular, contradicts the dominant medical view of the mind/body relationship, many people who have experienced it will testify to its uncanny accuracy and effectiveness. Cranio-sacral therapy also can trigger memories or profound and sudden affects that cause the client to cry without consciously knowing why.

²⁵ Ruthy Alons, *The Feldenkrais Movement Tapes* [sound recording] (Box Hill, Vic.: Melbourne School of Tactile Therapies, 198-).Feldenkrais is a method of 'body awareness' and 'functional integration' developed by Moshe Feldenkrais, designed to teach the body to move more efficiently and effortlessly. See also Ruthy Alons, *Mindful Spontaneity: Lessons in the Feldenkrais Method* (Berkely, Ca: North Atlantic Books, 1995).

²⁶ Caren Goldman, 'Molecules of Emotion: An Interview with Candace Pert', 4 Sep. 2005 http://www.ikosmos.com/wisdomeditions/essays/mw/goldman01.htm.

²⁷ Molecules, 188.

²⁸ Chopra, in an interview, *Science Bookshop*, ABC-Radio National (17 Dec. 1981).

- ³⁰ Elizabeth Wilson, 'Gut Feminism', *Differences: A Journal of Feminist Cultural Studies* 15.3 (2004), republished *Sydney University website*, 10 May 2005 http://www.arts.usyd.edu.au/departs/rihss/ewgut.pdf> 85.
- ³¹ Peggy Hackney, 'Moving Wisdom: The Role of the Body in Learning' *Transforming Education* (Winter 1988) 26ff, republished *In Context*, 5 May 2005 http://www.context.org/ICLIB/IC18/Hackney.htm.

²⁹ See for instance Gladwell's *Blink!* in which he develops the concept of 'thin-slicing'. Gladwell sees this as a function of the unconscious brain, but it could also be extended to encompass the body's ability (as an unconscious mind) to rapidly signal value and meaning by focusing only on the key information.

³² Elizabeth Wright, *Psychoanalytic Criticism: Theory in Practice* (NY: Methuen, 1984) xi.

³³ Antonio Damasio, Descartes' Error: Emotion, Reason, and the Human Brain, (1994) xii.

³⁴ Ibid... p xiii.

³⁵ Zukav, *Dancing*, 328.

³⁶ 'Funes the Memorious' in *Fictions*, by Jorge Luis Borges (London: John Clader, 1965) 102, as cited by Stephen Muecke in 'Experimental History?' *Australian Humanities Review* (July 1996) 10 Feb. 1998 http://www.lib.latrobe.edu.au/AHR/archive/Issue-July-1996/muecke.html, who in turn is citing John Frow from his essay 'Toute la Mémoir du Monde'.

³⁷ See a discussion of this in Malcolm Gladwell's *Blink!*, 71 and passim.

³⁸ I am indebted here to Richard Moran, author of *Executioner's Current: Thomas Edison*, *George Westinghouse and the Invention of the Electric Chair* (Knopf, 2004) for his comment on *The Buzz*, ABC Radio National, 1 May 2004, which I've adapted. Moran said, 'And I believe that most of us, certainly Edison, we reach our psychological limitations a lot earlier

than we reach our intellectual ones so that we have certain psychological predilections that prevent us from using our full intellect.'

³⁹ Shame, 40 ff. See above.

⁴⁰ Likewise, one of the definitions of enlightenment is to be free of anxiety about imperfection.

⁴¹ See Tomkins, in *Shame*, 107-8 for a description of Surprise-startle as an affect. Note I am here extrapolating from Tomkins work, or interpreting it, rather than describing it.

⁴² Thomas Crum, *The Magic of Conflict: Turning a Life of Work into a Work of Art.* (NY: Touchstone, 1987) 54.

⁴³ Cited Douglas Stone, Bruce Patton and Sheila Heen, *Difficult Conversations: How to Discuss What Matters Most*. (London: Michael Joseph, 1999) 122.

⁴⁴ Personal communication from Sydney-based Gestalt therapist, Phil Oldfield, circa 1994.

⁴⁵ Charlotte Joko Beck, *Nothing Special: Living Zen*, Ed. Steve Smith (San Francisco: HarperSanFrancisco, 1993) 60.

⁴⁶ There are numerous experiments that have demonstrated improvement in clarity, perceptual and motor skills as a result of consistent meditation practice. See for instance, Peter Russell, *The TM Technique* (London: Routledge, 1976/1985) 85. According to Russell, Maharishi, the founder of Transcendental Meditation, 'sees an increased orderliness of thinking to be the result of an increased orderliness in brain activity (illustrated by the increase in synchrony and coherence of the EEG patterns [between left and right brain]), and claims that this orderliness is itself a direct consequence of giving the nervous system deep rest.'

⁴⁷ To adapt Damasio's phrase, cited above, about the brain as the body's captive audience. *Descartes' Error*, xiii.

⁴⁸ Beck, *Nothing Special*, 60, on the role of a Zen centre or a good teacher.