INTRODUCTION

COMING TO OUR SENSES

An intention-based approach to yoga

When I set out to write the first edition of *Intelligent Yoga* there were two main themes in my mind. One was to try to reframe yoga in a modern Western context, shorn of Hindu cultural notions, and the other to argue that there was still something profound in the investigation of the human condition using the body as the entry point. I wanted to show how by approaching yoga from the perspective of Western humanistic psychology and philosophy we can keep the discipline as alive and relevant as possible. The second theme overlapped with the first: to argue that modern yoga practice has followed uncritically the physical teachings of a few leading Indian gurus, and that it was time to review and critique these teachings in the light of modern anatomical and biomechanical understandings, and change them when they were found wanting. It seems that our uncritical acceptance of the vertical transmission of knowledge from guru to student closed our eyes to some ideas that would have been challenged if put forward by Western teachers of exercise and movement. It is perhaps ironic that much of what was being taught in the second half of the twentieth century by people like B.K.S. Iyengar, K. Pattabhi Jois and T.K.V. Desikachar – considered the godfathers of mainstream yoga practice today – was a mishmash of Western and Indian ideas, a theme explored in some depth by both James Mallinson (*Roots of Yoga*) and Mark Singleton (*Yoga Body*).

This second edition of my book came about because my thinking has evolved – in line with changing ideas about the way the body/self is organised – since the first book was written five years ago. And also because our understanding of the way pain and discomfort arise has also developed since the first edition. I feel no conflict with the first edition, however; rather, I see this edition as reflecting my thought processes – which inevitably move on and develop over time. I hope that many readers will find the revised book a useful stepping-stone in their own journey towards understanding the complexities that make us human.

WHOLE BODY MOVEMENTS

So, which elements of the book have changed the most since the first edition? The main changes are twofold. The first major development stems from my deepening recognition that no living thing exists in isolation. This is true whether we think of a cell existing within the tissues and organs of the body, or whether we think of communities of people living in their environment on the planet. Wherever we look, we see that the health and survival of living things are dependent on the system within which they are embedded, and that the health of the system is of paramount importance if the organism is going to thrive.

It is true that yoga has historically often posited an integrative view of existence. However, though many teachers pay lip service to a holistic approach, in reality the concept has to some extent been lost in modern yoga practice – and particularly in asana work. Reintroducing the concept has several implications when it comes to teaching or practising asana. It means that when we look at the impact of movement on a human being, we need to take into account how *freely* a person moves, how *much* of a person is involved in the movement, how it makes the person *feel*, and also whether the yoga class as a group feels comfortable and safe. These are the sorts of considerations that move to the front of my thinking when I teach. These days, I very rarely think about a 'bit' of a person. For example, I wouldn't teach a class for 'hamstrings', 'the core', 'hip joints' or any other part of the body; I think this is a mistake in thinking. When we think in terms of parts of the body, we can fall into something called the 'mereological fallacy', a concept used to describe the tendency to ascribe to a part of a thing the quality of the whole. In living things, solutions are rarely found in a part, because the part has no meaning when looked at alone – it only has meaning when considered as part of the whole. Solutions are usually found in the *relationship* between parts. So in yoga, if someone has a knee problem, it is not usually helpful to focus on the knee, but it might be very helpful to look at the relationship between the knee and the rest of the body as the person moves.

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This way of looking at things has moved me further away still from the Western reductionist view of anatomy – where we learn about origins and insertions, agonists and antagonists – towards a view where we think more about the *intention* of a movement, and then about whether a body is compliant with that intention. In other words, does the whole body become involved in the efficient carrying out of a task? And if not, how can we improve the response of the person to the task?

BOTTOM-UP PROCESSING

The second theme that has developed since the first edition is a more consolidated move towards 'bottom-up processing' – as opposed to 'top-down processing'. Bottom-up processing describes the way an organism responds to its environment through its senses. In its simplest form it is drinking water when you are thirsty, resting when you are tired or laughing when you are happy. To do these simple things you first have to notice how you feel; then you have to act appropriately on your feelings in order to feel comfortable again. It is related to the previous argument in that for living things to be connected through systems, there must be a method of connection – a way that we can engage with our environment. In human beings this method of connection happens via our nervous systems. (There are molecular forms of communication as well, but these are not perceptible in the same way.) We notice and respond to our environment through our sensory nervous system and what we notice is then acted on through our muscular system. How well we can respond is clearly going to be related to how accurately we notice things, and this is where yoga practice remains such a useful tool.

We can think of the sensory nervous system as having two main aspects. One aspect concerns the five senses that are most familiar to us, and that help us engage with the world – sight, sound, hearing, smell and touch, with a sixth less obvious one being proprioception, the sense of the relative position of one's body in space and movement. The other aspect of the sensory nervous system is concerned with interoception, or the way we notice the *internal* state of our body. This may be an awareness of anxiety through faster breathing, a change in body temperature and a faster heart rate, or a sense of relaxation because the opposite has occurred.

The whole point of the sensory nervous system is to inform us how we need to modify behaviour to maintain homeostasis.

How we *process* what we notice will be modified by past experiences and sometimes distorted unhelpfully. For instance, after the terrible events of 9/11, some people who had watched the events in New York City unfold in front of them later found themselves suffering from what came to be termed 'blue sky anxiety'. The catastrophe of the two planes flying into the Twin Towers happened against a clear blue backdrop, and some people's minds then started to subconsciously associate clear blue skies with danger.

Whilst it may have been helpful for our primitive ancestors to have clear associations between places and danger, in the modern world this is less often the case, and we can find ourselves triggered into inappropriate responses to particular stimuli by previous association. When this happens we need to re-notice our feeling states and slowly learn to dissociate them from any triggering circumstance.

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BELOW
Responding to thirst by drinking water is a simple example of bottom-up processing.

LOSING OUR SENSES

Modern living has muted our ability to sense things well. Our nervous system evolved under evolutionary pressure and our hunter-gatherer ancestors will have honed their senses in life or death situations; their footsteps would have often had to be silent, their movements fluid so as not to attract attention, and their hearing perfectly attuned to their surroundings. In the modern world, on the other hand, we walk on flat, safe surfaces; our movements can be clumsy, at no real cost to our survival; and we have no need to hone our senses, as we are 'kept safe' by any number of warning signs – beeping sounds, hand-rails and announcements telling us to 'mind the gap'! (Experiments concerned with reversing this societal trend have been undertaken. The Dutch road traffic engineer Hans Monderman pioneered the idea of doing away with traffic lights and other road markings, to see if drivers then pay more attention. Accident rates plummeted.) It seems that this 'muting' of our sensory signals in our modern world leads to a gradual confusion of how we actually feel in ourselves, resulting in odd migrating pains in our muscles and joints, recurring headaches and digestive ailments, and psychological feelings of disquiet, anxiety or depression.

There is another way we become disconnected from our bodies, which has attracted a lot of attention in the last decade, and that is through emotional trauma. If something deeply shocking happens to us, we tend to shut down the part of the brain that helps us make sense of internal feelings. In effect, we try to hide from our feelings. Although this may be useful in the short term, because those feelings may threaten to overwhelm us, in the long term it means we become unable to interpret our 'gut feelings' accurately. In such cases we can easily overreact to stimuli, and develop panic attacks or other disturbing bodily symptoms in response to apparently innocuous events. We will look at this in more detail in chapter three, but it is worth mentioning here that many people are now arguing that somatic intervention into psychological and physical trauma is deeply effective. Amongst the leading lights in this field are Bessel Van Der Kolk, Stephen Porges, Peter Lavine and Stanley Keleman, all of whom have contributed enormously to the field of trauma therapy.

LEFT
Modern technology, such as traffic lights and mobile phones, mute our ability to develop sensory awareness.

LEARNING TO RE-NOTICE

So how do we reconnect ourselves if we have become fragmented by life? I would certainly put my weight behind the perspective that we have in one way or another to learn to re-notice ourselves. And yoga is extremely well placed to facilitate this, particularly if it means paying attention to things we have previously left unacknowledged and that we take for granted – the sensations we have when we practise. This might mean noticing the feeling of muscles stiffening as they take up the work of a posture, then releasing and softening again as the work subsides. It might be the feeling of contact with the floor through a foot or hand, or any other body part that is in contact with the ground. Other things we can notice are the fluidity of a movement, the acceleration and deceleration of the body in transition from one place to another, the sense of weight through bones, and the feeling of spaciousness or constriction in the chambers of the body. In our yoga practice we are to some extent trying to pay attention to ourselves in the way our ancient ancestors might have had to in order to survive. Moving through the jungle or the savannah in a way that does not draw attention to oneself requires a particular sense of embodiment and care in quiet, smooth movement. There is an alertness and presence apparent, but not the type of frowning concentration often present in modern life.

This approach to yoga, a 'bottom-up approach', is a marked shift away from the 'exercise' approach, peppered with basic Eastern philosophy, so popular in mainstream modern yoga practice. It has more in common with other Western systems like the Alexander Technique, the Feldenkrais Method,

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Somatics and Body-Mind Centering. I am no longer interested in the focus on structure, and on stretching and strengthening the muscles and fascia of the body. Of course, if you work with the body, it will change: muscles will become stronger and range of movement will improve if these things are needed – but only if the function demands it. Lengthening and strengthening are not the aim, they are the side effects of practice. What I am interested in is working with the nervous system, because it is becoming increasingly apparent that it is here that most of our problems and, conversely, solutions lie. This approach to yoga also encompasses a more serious attempt to integrate us as human beings, firstly with ourselves, the body/mind; then with our fellow humans; and finally with the greater world outside. This book approaches this subject as follows.

In **chapter one**, I will take issue with the reductionist/structuralist model that still seems so prevalent in modern yoga practice, and identify how it has come about and why it has so often gone unchallenged. Unfortunately, one of the main places that this model has become entrenched is in yoga teacher training programmes, where the emphasis still seems to be on the origin, insertion and function of particular muscles, and where students are encouraged to focus on which muscles are involved in which asanas. The problem with this way of thinking is that if a student cannot perform an asana they will tend to look for the ‘bit/muscle’ that is wrong, and this leads to a misunderstanding of how the body is organised. So in chapter one I want to put forward a more helpful way of approaching asana (i.e. physical yoga practice) that is more in line with the way we are really organised. This focuses on *functional* human movement and how these patterns are organised in the brain, with an emphasis on body compliance, or how much of the body participates in any given movement.

In **chapter two**, I want to argue for a different way of seeing anatomy in relation to movement, which focuses on putting things together rather

RIGHT
People from hunter-gatherer societies often have a greater sensory connection to their surroundings.

ABOVE
Yoga can help us become more fully integrated as human beings.

than taking them apart. I particularly want to emphasise the role of the nervous system in this process, with attention paid to the way we map the body in the sensorimotor cortex. We will look at how muscles respond to support by relaxing, and how this tends to free up movement. In this way of looking at asana we see bones as a means of support, which if used appropriately will reduce tension in muscles. We will see fascia/connective tissue as a means of providing tensional support and distribution of forces across the body, and the muscles and nervous system coordinating intention in the most efficient way possible. I also introduce the idea of compliance and differentiation and ways of thinking about how to achieve this.

In **chapter three**, I explain how breathing and postural support influence each other. We need to move away from the idea that there are postural muscles, respiratory muscles and functional muscles as separate categories. All muscles will, when necessary, be recruited for the task at hand, whether it be a yoga posture or pulling a weed out of a flower bed. No muscle is assigned a special task on its own; instead, muscles are recruited to help carry out the intention of the person as competently as possible.

This is not the view we get from anatomy books that describe a bicep as an elbow flexor or the quadriceps as knee extensors; that view is misleading and unhelpful. Breathing is a global event causing shape change in both the upper and lower chambers of the body. This chapter thus also looks at the relationship between these two chambers and how they influence each other, and in particular how we can free up the breath by using bandhas in our yoga practice. Other aspects related to breathing, such as the health of the organs, are also examined.

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In **chapter four**, I address how things can go wrong in the body, leading to pain, and what we can do about it. In the last decade, a great deal of research has moved our understanding of pain and discomfort forward. New paradigms to explain pain have emerged, as have ideas on dealing with trauma. Neuroscientists have mapped the brain more thoroughly and there is growing recognition that the physiological body, with all its sensory input, plays a vital role in the formation of emotions and certain aspects of consciousness. When the body or the emotions become ‘disregulated’ in life, and we become unwell, how we attend to the feelings we notice in our body can play a major part in our recovery.

If we take these ideas on board it will inevitably change the way we practise and teach yoga. Again, we will find ourselves drawn away from the idea of yoga as an ‘exercise system’ towards the idea of yoga being a route to help us become fully integrated as human beings.

In **chapter five**, I want to stand back and look at human beings in relationship to the world, finding a thread that joins physiology with psychology and philosophy – not as separate subjects but as a way of being in the world, a way of being that has at its source the intention of reducing suffering and promoting flourishing. It is also helpful to look at our evolutionary history to see how human beings have become what we are. This helps provide some context to both body and mind and enables us to see what it is that we share with other humans – the things that are common to us all. Then we can reflect on our individual history and see how our lives have shaped us as individuals. The dance between conforming to our species and culture, and maintaining our individuality, is what keeps our practice alive, fresh and ever-interesting.

In the second, practice-focused section of the book, I emphasise the importance of having a clear intention to our practice, and a coherent thread that runs through it. I explain my thoughts on this, and on the particular type of attention required to elicit meaningful change in our behaviour and yoga practice, in **chapter six**. I also discuss the theme of grounding here, showing that muscles are unable to relax unless they are supported by the ground via our skeletal system.

I then practically examine individual asanas, breaking this section down into the following chapters. **Chapter seven** covers what I have termed ‘tension-losing asanas’; that is, a group of postures and movements whose primary purpose, from my perspective, is to help us to really differentiate between relaxed, working and tense muscles, to allow us to become more efficient in our movements and to reduce habitually held tension. These asanas have a different focus to the bulk of yoga asanas that I practise, which are based around functional movement, and it is these asanas that are covered in **chapter eight**. As it is a big chapter, I have broken it down into five sections: side bends, extension asanas, flexion asanas, rotation asanas and sitting asanas. That leaves balances, which are covered in **chapter nine**. Finally, in **chapter ten** I describe the breathing techniques Uddiyana Bandha and Kapalabhati, both of which are useful for helping to free up the respiratory system. I end with the classic end-of-class relaxation posture, Savasana.