2016 U3A Course based on

Dancing With the Unknown

A Book about FEELINGS and the Everyday Experience of MIND and SOUL

Session 11 – August 15, 2016

What we experience with our mind depends on where we choose to put our attention. This is the most important conscious part of the process of mind, for which we must take responsibility, of course. The everyday love we were discussing in our last session is a conscious doing – a series of actions – or an art, as Erich Fromm puts it, which he says we need to keep practising to become good at it. I've talked a lot about subconscious aspects of our emotional mind and the mysterious nature of feelings – forces that are not entirely under our control – but we do have a considerable ability to take control of what our mind is doing by using the rational thinking part of our brain.

This is not as easy to do as we would like because our emotions and feelings are influencing what we attend to and our senses and our ANS are responding to whatever happens in the world around us. Something attracts our attention unexpectedly or distracts our mind from what we intended to do. You might be trying to read a book while the dog next door is barking incessantly or, in today's world, some bit of technology is beeping or flashing in the background. If you are rather addicted to something – even playing a word game on the computer as I am – your attention may be drawn to that, seemingly against your will. We get our wants mixed up with our needs a lot of the time. We also develop habitual ways of doing things and these create repetitive patterns in our attention so we are looking out at the world in much the same way every day, unless something unusual happens. All these forces are a challenge for us even though we know in the back of our minds that where we choose to direct our attention will make a big difference to the experience of our mind and soul.

So today I will be talking about this all-important process of ***attention*** (which is Chapter 12 in the book), why we need the two sides of our brain and the way technology shapes our minds. First I want to review some of the principles that were explained earlier in the Course that have brought us to this point.

In describing that dark period of my earlier life when I was trying to find outside remedies for my bad feelings I said that recognising the **unknown** was an antidote to my narrow-minded self-consciousness. I experienced ego-deflation and let go of some of the scientific hubris of the professional world that I lived in to develop a more comfortable relationship with my own mind that respected unknown influences, which I often call God, though I've never really been what you would call a religious person; I refer to my relationship with the unknown – respecting it and learning to love it – as **spirituality**.

The best way I know to describe spirituality is that I came to see myself as a very small part of something much bigger than myself – an incredible, living world, a biosphere and a community of other human beings. In other words, my attention changed from a focus on my personal problems towards an awareness that I was actually dependent on my relationships with everything else. I said that my imagination had dried up because its sphere of attention became narrower and more selfish and I described how other people helped me to escape from this unhappy place. It is one of the pillars of this Course that we need to attend to relationships in order to strengthen ourselves. I explained some of the biology that shows how this works.

This is where I introduced the idea for you to think about that there are three levels of relationships that affect us: the relationship with other people and things in the world is one, the relationship with oneself is another, and the third is the relationship with everything else, which is too big to comprehend so I call it the unknown.

Our sense of meaning that comes to us via our mind is a subjective set of feelings that cannot be entirely explained by reason or by science. We know more about how everything works today than ever before, but as Owen Barfield said, our 'emphasis on physical causes and effects involves a corresponding inattention to their meaning.' We don't know what things mean by knowing the mechanism of how they work because life is an organic whole that includes a range of experiences that happen quite mysteriously. I've always marvelled at the wonder of music in our lives and the indescribable sense of beauty that we come to know through our practice of the arts; these are not explained by science.

My recovery from the darkness of mind was a shift in my attention process away from some of the details towards the big picture that includes the unknown. I've been speaking about context because I think our society's exaggerated attention to the mechanistic way of thinking in terms of cause and effect has diminished our sense of context, yet every decision we make and everything we do is heavily dependent on the context at that point in time. The sensitivity required to practise love is a good example. Every situation is slightly different – it is such a subtle process. That is why we need our feelings to guide us at all times.

So directing our attention is a delicate combination of recognising the details and at the same time being aware of the context in which those details arise. The starting point for our attention is an awareness of possible danger so the subconscious mind takes the lead in this regard with a process built in to our ANS that Stephen Porges calls our neuroception. It is activated whenever we notice another human being because our first instinct is to check whether this person is safe to be with or not. Then it is that *new soothing ANS* that Porges described that enables us to make a closer connection. As long as we feel safe we can explore different connections and take in some, but not all, of the other things that are happening around us. So the first requirement for being able to direct our attention is that we feel safe.

Many structures in the brain are involved in both the subconscious and the conscious parts of this attention process. Our amygdala, which generates our fear response, the hippocampus, where memories are activated so that past experience is taken into account, the frontal cortex where the conscious decision-making eventually plays out and the cingulate cortex play important roles. When brain activity is described in that way, as it usually is, it's easy to forget that we actually have two of each of those structures. We have two amygdalas and two areas described as cingulate or frontal cortex – everything is in duplicate. This is because there are two sides or hemispheres of our brain and, although they are connected by a central trunk of nerves, each side has a good deal of autonomy in what it does. Researchers have been trying to work out for centuries why there are essentially two brains, albeit interrelated, and what each side might be doing differently. Expert opinion is still divided regarding this, but there is no doubt the two sides of our brain function differently.

One clue about this came from studying the nerves that connect the right side with the left side. Networks of nerves in the brain can speed up what they're doing or slow it down; there are stimulating neurotransmitters and inhibitory transmitters. This is one of the difficulties for interpreting brain scans – when you see activity you can't be certain whether it's a surge or a brake being applied. It turns out that the nerve trunk connecting the two sides of the brain is mostly inhibitory. In other words, rather than encouraging the activity of the other side, these nerves are resisting it and steadying it. A simple way of understanding this process is to think of the way you steady one hand with the other hand to perform a delicate operation with your fingers. It's likely that the two sides of the brain are different so they can guide one another as required.

You have probably heard and read about right brain and left brain for many years. The simplistic idea that language is produced by the left side while the right side handles the pictures was largely discredited as more was learned, though there is a certain amount of truth in it. After the earliest experiments with split brains seemed to suggest big differences and a folk-psychology grew up around this idea such that artists were called right-brainers and very logical thinkers were called left-brainers even though further research did not really support this, many serious researchers shied away from this field of work altogether. Everything our brain does involves both sides, but not equally and one side or the other seems to take the lead at different times. This affects the way we pay attention.

It is a British researcher, Iain McGilchrist, who now leads the way for our understanding of this very intriguing question of why we have two hemispheres and what they do. My friend Col Jennings visited McGilchrist on the Isle of Skye so he can tell us about the man himself. His background is very interesting. He was a literary scholar at Oxford in younger life before retraining in medicine and becoming a neuroimaging researcher in the US. Then back in Britain he became a respected psychiatrist in London and now a full-time author I think due to the success of his monumental book: *The Master and his Emissary – The Divided Brain and the Making of the Western World*. More than half of this book is devoted to explaining the history of our Western culture – literature, art and music – which has been shaped by the way we are using our brain and mind. There are also blogs, interviews and articles and a shorter e-book by McGilchrist called *The Divided Brain and the Search for Meaning – Why are we so Unhappy*?

When I was researching stress I was attached for a time to a Neuroscience and Behaviour Unit at the University of New England led by Professor Lesley Rogers who was a world authority on brain laterality in birds and animals. Most of the nerves to and from the left side of our body go to the right side of our brain and vice versa. The way that birds and some animals see things is simpler than humans in that each eye is entirely controlled by the opposite side of the brain. Therefore Lesley Rogers and others were able to show, for example, that birds use their left brain for attending to fine detail such as pecking and picking up seeds and their right brain for keeping in touch with others of their kind, watching for predators and surveying the world in general. Iain McGilchrist refers to this work in his book and there is a another clue in this about our own attention process.

Attention is not just another brain activity – it sets the stage for all brain activity because our mind can only work with the connections it has made, which are selected from a much larger range of possibilities. Our mind is not like a camera or a tape recorder capturing everything it is exposed to – it is highly selective, based on its previous experience. Making connections is what our mind does and making connections is *attending*. What we perceive the world to be depends on where we are directing our attention and this also predisposes to the next moment of our attention as well. As McGilchrist said, 'we can only know the world as we have inevitably shaped it by the nature of our attention.' And we ourselves are being shaped in that process; we became ourselves as a result of all that has happened in our relationships with one another and with the rest of the world. The Spanish philosopher, José Ortega y Gasset, wrote a century ago: 'tell me to what you pay attention and I will tell you who you are.' Also, we fail to notice what we have failed to notice so we have blind spots that may only come to light when there is a crisis of some kind.

What we are trying to do is to see both the trees and the forest. We need the detail and we need the big picture, but it's difficult to take in both at once – we either attend to precise details to carry out purposeful manipulation or we apprehend the wholeness and the context to create a broader meaning. It seems from McGilchrist's overview of this field that our left hemisphere facilitates our logical attention to detail, including the words we use, while the right hemisphere opens our imagination through a stronger awareness of the whole, which includes the unknown.

Our feelings and emotions and our relationships depend much more on the right hemisphere than

the left. All the feelings around social engagement (except anger) show up mostly on the right side when the brain is scanned so much of our shared meaning that includes empathy and other aspects of love is led by our right brain. The kind of shared meaning that is more objective that we need to work together is enabled mostly by the left side of our brain because it creates logic and organisation. Because the whole is more apparent than the details when the right side is leading, our appreciation of beauty and all our artistic pursuits stem from there. Crucially, the ability to learn something new, to be creative and to feel that you know the meaning of something all require the deliberate involvement of our right hemisphere.

I assume, along with McGilchrist, that this meaning-generator is the natural leader in the proper use of our mind and the detail-manager is its very valuable subordinate. His book title, *The Master and his Emissary*, is taken from an ancient tale in which an underling gradually usurps his master's authority and tries to run the whole show. Its subtitle regarding '*the making of the Western world*' refers to the way that Western culture has gradually become shallower and more mechanistic and we are losing some of our spirituality and ability to find meaning as we favour our left brain more and more at the expense of the right. McGilchrist's carefully substantiated opinion is a challenge to the mainstream of neuroscience where the left hemisphere is often referred to as 'dominant' and the 'seat of rationality.'

The left brain is very good at utilising what it already knows, where certainty and logic are required, but its blind spot is being self-satisfied, convinced by its own internal consistency – a state of mind that appeals to our egoic self. It builds a world that is more and more like itself, not realising that it lives in a hall of mirrors where the exits are concealed (to use McGilchrist's apt metaphor). The right brain is needed for recognising non-literal relationships such as metaphor and analogy, for generating feelings, appreciating art and music and understanding the nuances of social engagement. It is sensitive to what is new or mysterious so it is essential for learning and the satisfaction it brings us is not the narrow selfish kind of knowing, but the sense of belonging to something bigger than ourselves that provides a deeper kind of meaning.

Each of us is using our whole brain all the time, but as we choose where our attention will be directed we concentrate the activity more on one side or the other and that influences the kind of world we inhabit and the kind of relationships we have with it. Scientific hubris is a good example of this in that we think we know more than we really do; humility is required to appreciate the beauty and the wonder of any new insight and to understand that we still know only a little of the 'never-ending story.' I think our greatest scientific discoveries were made by people who knew this because they paid attention to what was happening in both sides of their brain.

In an everyday sense, if we focus too much on the detail of what is happening – every word that is said, for example – we will often misinterpret the context and the meaning that are crucial for the relationship. If you focus on what is wrong with other people and the world you will only see more and more difficulties. If you can pause from time to time to put things into context, appreciate the wonder of the great unknown and notice the beauty that surrounds us in the natural world. your mind will be more contented and happy.

In my dark times I tried harder and harder to control the specific details of my life that I thought were the cause of my problems until I eventually saw a bigger picture in which there was a larger-than-self sense of responsibility and authority that I felt I could no longer ignore and had to trust. A saving grace was that I always loved music and could be moved by anything I felt was beautiful; I was perhaps overly sentimental, but at least the right side of my brain was not defunct. Yet I lost the proper use of my mind by putting too much emphasis on knowledge and manipulation and paying too little attention to humility and spirituality.

Being a scientist my mind had to organise things and it is a feature of left brain activity to aggregate and sort the bits into categories to create the artificial sense of order that we like so much for our work. But this comes at the expense of seeing individual items properly. Over time the categories

become so real to us that we end up, against our better judgment, pigeonholing things and idly ticking boxes rather than examining the items closely. So the right brain actually sees more clearly than the left in that it recognises that there is a whole to be found in each individual part. It is also needed to notice the unusual and to appreciate uncertainty. It allows us to say 'I don't know' whereas the left leads us to conclude that there is nothing more we need to know because the preconceived order holds sway – an attitude that is better suited to controlling than to caring.

Also as a scientist I was keen on defining and naming things precisely. This can be very useful, but it also puts limitations on the meanings we can form. John O'Donohue wrote about the way the mind's fixity about anything robs us of the freedom that our imagination needs to play its role. He says 'we bind our lives in chains of forced connections' with the kind of rigidity that arises when we favour the left side of our brain. He adds that 'certainty freezes the mind' and 'the business of the soul cannot be framed.' What is nameless is important because it allows one's meanings to grow and develop in the natural course of events. There is a lot more to say about all of this, which we will take up later in the Course.

BREAK

Technology influences many aspects of our lives and in recent years the small screen on a smartphone, tablet or computer has hijacked our attention more dramatically than any other invention in our history. The change has happened so quickly it's hard to believe that many people in a modern society spend more of their day looking at a silver screen than doing any other activity. An article in the newspaper the other day suggests that people spend four times as long looking at a screen than they spend engaging with another person. Our social engagement is affected profoundly by connecting through an intermediary device a lot of the time.

There are quite a few books about the effects this is having on our brains, our mind and our society and I haven't read half of them, I must admit, and we don't really have time in this Course to consider all of them. The books I am mentioning today I only have as e-books so they are not on display for you to look at. In a book called *The World Beyond Your Heads – How to Flourish in an Age of Distraction*, Matthew Crawford said there is a serious crisis of attention in our society today. He points out that one insidious danger is the fact that our interpersonal connections are channelled and regulated by the engineers who design the systems of social media and electronic commerce. Because our culture arises in a general sense from our conversation we will all be affected by this covert influence.

I don't want to be a pessimist so far as our mind's interface with technology is concerned, because I believe the mind, especially while we're young, has an enormous ability to adapt successfully. But we do have a responsibility to safeguard the biological necessities of maintaining autonomy and strong connections even as we extend the reach and the convenience of our connectedness through artificial means. I share with Sherry Turkle, who wrote *Alone Together* and, most recently, *Reclaiming Conversation*, at least some of her concern that so many young people prefer the asynchronous, text-based, 'disembodied' mode of conversation ahead of actually speaking to someone (even on the phone), apparently because they find it 'less demanding emotionally' and 'more efficient.' I guess it's true that the emotional part of the connection is the most demanding and the least efficient part, but to try to distance yourself from it, which the IT barons call 'reducing friction,' will be a considerable challenge for the health of our minds. Someone said that inveterate texters might be 'all thumbs' when it comes to face-to-face relations!

Our ever-expanding reliance on automation has brought many changes over the years in the way we use our minds, especially with regard to our attention. It was designed to make our lives easier – less burdensome – as it also improved productivity, but in doing this it has made the mind's

connection with the natural world less secure in some quite alarming ways. Nicholas Carr explains in his book *The Glass Cage* how the use of autopilots has actually de-skilled pilots, professional people from architects to doctors don't bother to make some judgments they used to make because an 'expert system' has already made the decision for them and satellite navigation systems have eroded our sense of where we are as we travel around – to mention only a few.

My doctor spends less time looking at me when I visit him now because he needs to spend more time looking at his computer. Automation gets between us and our world in a way that weakens our connectedness because actually handling things is a quite different experience from reading about them; it's also obvious that we will lose skills that are not being used. In another book, *The Shallows*, Nicholas Carr explains how the internet is changing the way we think and read and remember things.

The kind of problems I encountered with the improper use of my mind had a lot do with where I was putting my attention and in my recovery from them I have come to value the more holistic and more imaginative aspects of my mind that McGilchrist suggests are available to us through utilising the right side of our brain. There is another issue regarding our attention that comes sharply into focus as we grapple with the new interfaces that technology presents. It is that what we think we *want* – for example more ease and less effort – is in some ways quite different from what we actually *need* for the wellbeing of our mind and body. In Carr's words: 'automation has often given us what we don't need at the expense of what we do.'

Both our needs and our wants emanate from the hidden reaches of our mind and it is often difficult to distinguish one from the other. Eating and drinking are essential appetites, but if we eat a very unbalanced diet – too much sugar, for example – our wants and cravings may cause problems, as I know only too well. Certain areas of the brain that are rich in dopamine receptors are known to be involved in pleasure-seeking and all forms of addiction are associated with an overactivity of these areas. When undesirable habits become serious problems as in my earlier life it may be impossible to change this by thinking about it and this is where I found an understanding of the embodied nature of cognition to be so helpful. I had to enlist my body in the process of change. It is by *doing* things differently that your mind develops new habits because this brings your feelings and emotions into play, which simply thinking about it can't do. I'll come back to this later under the heading, Courage to Change.

I think the fact that our mind is much more than just the superficial, thinking part and it involves our whole body will help to protect us against the worst excesses of 'frictionless' communication because we will be forced to do some things differently to maintain the emotional health of our population.

In the next session we will look more closely at some aspects of our mind that cause us to suffer and we will consider how these can be recognised.