Iain McGilchrist: The divided brain

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Dr Iain McGilchrist began his academic career as a Fellow of All Souls College, Oxford, teaching and writing about English literature. In *Against Criticism,* he expressed his misgivings about the academic study of literature, especially its neglect of how individual, embodied beings encounter the unique, incarnate work of art. He studied philosophy, trained in medicine, and became a psychiatrist. He has since twice been re-elected to Fellowships at All Souls, has been a Research Fellow in Neuroimaging at Johns Hopkins, and a Consultant Psychiatrist and Clinical Director at the Bethlem & Maudsley Hospital. He works privately as a psychiatrist in London.
His latest book, *The Master and his Emissary: The Divided Brain and the Making of the Western World,* explores the different versions of the world which are made available to us by the cerebral hemispheres, and their influence on the history of ideas and of philosophy in the West.

Serge Prengel, LMHC is the editor the *Proactive Mindfulness* project.

For better or worse, this transcript retains the spontaneous, spoken-language quality of the podcast conversation.

Serge Prengel: Hi Iain.

Iain McGilchrist: Hello, hi.

Serge: So, Iain you have given a lot of thought to what it's like to be human.

Iain: Yes. My career took me round a number of different, interesting areas from that point of view. I originally went to Oxford to study philosophy and theology but changed my mind and studied English literature – which, of course, is in many ways the study of human beings, their minds and their feelings. I returned to an interest in philosophy, this time with psychology; and I ended up studying medicine and becoming a psychiatrist, working in neuroscience, which is another way of looking at human beings and their feelings and their communications. And I think they could be considered fairly contrasting. I've certainly found it interesting, the different cultures in the humanities and in the sciences. I think it's been a great help to me that I didn't even begin to study medicine until I was about 30, and had already a background in philosophy and literature. In fact, one of the things that led me to medicine was dissatisfaction with a certain way of thinking about ourselves and art. In fact, art is, of course, not very unlike human beings. Art works are actually more like people than they're like things, a point which Aristotle first made. But, of course, in academia one starts taking an analytical approach to, say, a poem and then is surprised to find that it doesn't yield anything very like what it was that moved you, or seemed important to you, in the first place. And one of the problems, I thought, was that people approached poems as if they were disembodied, and as though they affected us as disembodied brains interested primarily in ideas. Whereas it seemed to me that a poem – or any work of art, a painting or ..... or whatever, a piece of music – is an embodied, incarnate thing, which can't be paraphrased or turned into something

virtual. It's exactly what it is and nothing else. And it has an effect on us as embodied beings. So the importance of embodiment to a human being was a key thing in my study in the arts, and led to me wanting to study medicine.

Serge: So a sense of, in a way, strangely enough that studying the arts led to a way of focusing on the arts in a way that deprived them of what it is that gives them their vibrancy and their aliveness, and turning them into disembodied stuff.

Iain: Yes, yes. There's an English poet called Ted Hughes. He studied English at Cambridge, and after two years of this he had a dream in which a fox came to him in the night, came into his room and put its bloody, charred paw on the essay he was writing, and said "why are you killing us?" I had a sort of similar feeling about this; and I wrote a book, in fact, called *Against Criticism,* which was about what the problem with that was. And, as I say, it had something to do with taking a thing that was unique and incarnate and entirely individual and turning it into something generalized and abstract. And that led me to look at the so-called 'mind-body problem'. But the trouble there was that philosophers were all too disembodied in their approach; and I thought the thing to do was to go and look at this from a more embodied point of view, which of course meant studying medicine and seeing there, as near first hand as one can, what actually happens when something goes wrong with somebody's brain or their body and it affects their mind. Or something goes wrong with their mind and it affects their body. That's how I ended up being a psychiatrist.

Serge: So obviously we have, right there, the germs of what you later explore of that disembodied thing; that idea of two ways of looking at things, that cutting down into little parts or looking at the whole. That's a big theme.

Iain: Yes, it is. The theme of my work has always been anti-reductionist. I've always been puzzled, all my life, by the notion that things were 'mere' this, or 'just' that, or 'only' anything else. And that is, indeed, a procedure one is right to be suspicious of. As Wittgenstein was fond of remarking, nothing can ever be reduced to anything other than what it is. Indeed, what intrigued me was that, in writing about literature, I was constantly fighting with language; because in trying to make explicit what this problem with criticism was, language was always leading me back to everyday meanings; whereas I was trying to get beyond those meanings to something that our language doesn't normally seem to encompass. And I was sitting one day in college at lunch with a colleague, who was a sinologist, and he said "Ah, I understand well what you mean - the concepts you're striving for. They exist in Chinese, but they don't exist in English." I thought that was very interesting, and I started to study, in a very amateurish way, Oriental literature and was relieved to find that, yes indeed, the concepts do exist there.

And then when I got to the Maudsley Hospital in London, where I was working, and the Institute of Psychiatry, I was very fortunate to come across the work of a colleague, John Cutting, who had just written a now famous book called *The Right Cerebral Hemisphere and Psychiatric Disorders,* and I thought I'd go and hear him talk. I was completely amazed by what I heard him say, because in medical school we heard virtually nothing about the right hemisphere. It was said to be a bit vague and not very intelligent, and it was sort of interested in mainly arty things, but really all the sort of heavy intellectual stuff was done by the left hemisphere. And here he was, saying something very much more subtle. He had basically spent his professional life attending to what happens to people who have something wrong with their right hemisphere – a stroke or tumor, or something that disables part of their right hemisphere. And noticing what actually happens to how they experience

the world and other human beings. It was fascinating, because this related very much to the issues I had been concerned with – about the way in which we criticize analytically a work of literature. Because he was saying "Well, there's the left hemisphere, and it can understand literal meanings. But it can't understand implicit meanings. It doesn't understand metaphor, *tone*, tone of voice, inflection of the voice, expression in the face, body language. All those indirect expressions are appreciated mainly by the right hemisphere. Also the right hemisphere is interested in the unique and the particular, rather than the generic and the abstract. It is more involved with the embodied person: for example, it has richer associations with the limbic system and the hypothalamic-pituitary- adrenal axis which regulates our autonomic reactions to experience, and it contains the 'body image'. So I was thinking, "My God, here's half of the brain that we've been writing off, and it's actually *fundamental* to what it is to be a human being". And indeed I later learned a fascinating truth that most people are unaware of: that it's actually easier to rehabilitate a person who has had a *left* hemisphere stroke – even though it means that they're going to, usually, have problems speaking, and problems using their right hand – it 's easier to rehabilitate them than it is to rehabilitate somebody who has had a *right* hemisphere stroke, because such people *don't understand the world*. They don't understand what's being said and they completely lack insight into their incapacities. In other words, they're blind to them, and that element of denial is another very important difference between the hemispheres.

Serge: So I want to just summarize a little bit what I heard. There's a sense of..you know you started talking about noticing two ways of thinking and interested in embodiment. And, in this, you find an embodiment of how these two ways of thinking are correspond to the two hemispheres. And in a way, even though the right hemisphere is one that, in our culture, we pay less attention to it is in many ways a primary source of how we function effectively because this is how we grasp a situation as a whole as opposed to, in a way, the details of it.

Iain: That's absolutely right. The only thing I would change there is 'thinking' – you're dead right to talk about 'two ways of thinking' in one sense, because it's certainly not about 'thinking versus feeling'. It's about a relatively unsophisticated, mechanical way of thinking versus a much more complex, dynamic way of thinking. In fact, it's a sort of dialectical way of thinking, such as we find in the philosophy of Hegel and his contemporaries. So it *is* about two ways of thinking - but *more* than that, it's about two ways of *being in the world*, if I may use that expression. Not thinking, or feeling, or any of these things primarily. It's about a whole disposition of the whole human being towards other beings and towards the world at large.

Serge: So two ways of being in relationship with the world, and not just in relationship in a passive way, but understanding the world and interacting with the world.

Iain: Yes, in fact, one of the differences is that the right hemisphere understands that there are these constant, complex, reverberative interactions. The left hemisphere tends to see linear, systematic ways of being, such as, you know, I push object A, which hits object B, and so forth. So it has a sort of Newtonian conception of how we interact with the world! Whereas the right hemisphere's way of thinking would be, if you want to carry on that simile from physics, would be more like the world that modern physics sees …

Serge: Yeah. So something that's going to be more complex.

Iain: Complex. Yes, and less certain. This is very important. The left hemisphere, I believe, has evolved in order to enable us to have quick, precise interactions, which enable us to feed and manipulate things. In other words - to catch prey, pick up seed, pick up a twig to build a nest, grasp hold of something and build. So in order to perform manipulative interactions with the world, we need a sort of precision, but in fact that precision is illusory; it doesn't actually exist. Nothing is as clear or black-and-white as the left hemisphere wants to see it. And it's the right hemisphere that's much more at home with things that are only partially expressed, which are contradictory in nature – because, after all, often a thing and its opposite may coexist, and be equally true – an idea that the left hemisphere struggles with, but the right hemisphere is at home with.

Serge: So, in a way that's –

Iain: That's important in dealing with human experience – not to get into this idea, that I'm sure all your listeners will be familiar with, sort of cutting off the bits that don't cohere with the rather simple idea we have of ourselves, and that are in fact indicating things that at first sight may not seem welcome – but need incorporating into one's idea of oneself and others.

Serge: Yeah, yeah. So a sense of being able to get a sense of the situation as a whole -

Iain: Yes, absolutely. We believe we must have construed the world by understanding one little bit and then another, and putting it together, because when we think about the process consciously, that's how we reconstruct it. But there are ways to demonstrate that that can't in fact be the case. We have a sense of the whole, and we refine that by further feedback from the environment. We see it whole first and are guided to look at certain areas of interest and in detail *later*. But, in our attempt to understand what's going on, when we reflect on it, we use…we rebuild it from pieces, which is just not the case.

Serge: Yeah. So as I listen to you express this, you know, part of the question is of course, in a way, how does this apply to what we do but I would like to maybe put the question not so much in terms of professional life and patients but even on a personal life. Certainly, for me, the way I relate to this is a sense that it's a validation of that part of me that is more intuitive or that wants to have a feel of a situation, have a sense of it versus say the criticism that the only way to apprehend truth and reality is to have that linear logic.

Iain: Yes, certainly. One of the things I hope for as an outcome of my book is to help people understand that it's only *one half* of one's brain, the left hemisphere – and, indeed, the half that literally *sees less* and *understands less* – it's only according to the left hemisphere that truth is achieved by that kind of logical analysis. And there is, of course, value to such analysis. I'm not in the business of trying to discredit either clarity or rational thinking. They're extraordinarily important. But they aren't, ultimately, a way of arriving at the truth. They're helpful servants. They're not good masters. And I think my message is that the right hemisphere is both the one that grounds our experience and ultimately the one that helps make sense of it. It sends things off, if you like, to the left hemisphere for intermediary processing, which can be very useful. The left hemisphere unpacks things. It helps us to see more of what's there. But on its own the left hemisphere can't understand things. It can't relate them to the whole picture: for that one needs the right hemisphere. And, as you know, it's the thesis that I unfold in the second part of my book – the book's in two halves, the first part on neurosychology and philosophy, really, and the second part on the history of our culture – there I'm looking at the main movements in the history of ideas

through the lens of what we've learned about ourselves through this differentiation between the left and the right hemispheres. It's my contention that, in the current age, we rely much too much on left-hemisphere forms of analysis only. And that is dangerous, because it not only sees only part of the truth, but it is *not aware of the things that it is not seeing*. In other words, there are 'unknown unknowns' that are very important. And if we were more willing to open ourselves to the right hemisphere's way of understanding things, and to be less dogmatic and less certain about the things that our left hemisphere tells us, we'd be wiser human beings.

Serge: Yeah. So we're not talking about shifting from one to the other, but we're talking about expanding and living more with that understanding that comes from the right hemisphere and interacting with that perspective

Iain: That's right. It's not about preferring one, and, you know, somehow disapproving of the left hemisphere. You should only disapprove of the left hemisphere when it thinks it knows everything. So it's about partnership – we need both hemispheres. We need to be able to use them both flexibly, and people who are able to do this are people who are best able to understand life and to make wise judgments. This used to be thought of as the aim of education, and the ultimate goal of the human being was to get what was known as 'reason' or 'judgment'. This was not mere rationality, not just the mechanical reasoning of the kind a computer does, it's more like what Aristotle called phronesis, which is a kind of wise blending of one's capacity to reason with the fruits of experience. And I'm afraid that that part – the fruits of experience – is consistently undermined in the way we approach the world nowadays. We think we can account for everything using algorithms. But actually we can't.

Serge: Right, right. You know that the algorithm is only reflecting how much of the basis of experience is

Iain: Yes. Again it's a rough-and-ready sort of tool that works well at the sort of intermediary level, but it will not allow one to get beyond it. The difficulty with this kind of thinking is that it enables one to be very mediocre, but it doesn't allow one to get beyond that. Now we have the drive always to operationalize everything from – you know – from the interaction between the therapist and the patient to the way a judge makes a judgment in a case. The tendency to go for ever more 'guidelines', which are, in fact, more like 'tramlines', is not helpful. It is no longer about the individual therapist with that individual, about an interaction, a relationship – that's the important thing, rather than the gathering of information, or the imparting of information, which goes on as a secondary activity: it's not the core of what happens. And it's not the core of what happens in any sophisticated area of life – for teachers or doctors or lawyers or, for that matter, for librarians or potters or social workers or whoever. So we need to re-sophisticate our idea of what a human being is. And what the world in which we live is. It's not just a heap of resource for us to exploit.

Serge: So, in other words, one way to apply this to our work in professional work in psychotherapy is not to think of it in terms of recipes or methods or approaches that would come from it. But a sense of putting our focus and appreciation on the process, on what happens as a result of the very specific interaction that we have between therapist and client and looking at it in terms of what the implicit process that's there.

Iain: Yes. I don't decry all models. Of course they're useful tools. Once again, they're useful at the sort of *middle level*. The simplest way of explaining this is by analogy with a performing musician.

One is first attracted to a piece one wants to play because of the whole thing and one's relationship with it. Then if one's going to learn to play it, one needs to spend many hours in analysis, taking it apart, practicing this little part over and over again, looking at the enharmonic shifts, and so forth. And all that is terribly useful. But, at the end of the day, when you come to perform, you've got to have all that completely out of your mind. Otherwise you deliver a frightful performance. And the same is true of...many, many areas of life, including the area of therapy. It's useful to have repertoires, techniques at one's fingertips, creative instances to apply in practice. But one needs to be more flexible, alert, intuitive and perceptive when one's actually immersed in the business of consulting.

Serge: So we get to, essentially, 'Zen and the Art of Archery'.

Iain: Yes, it's very like that, I think. It's all there in Oriental wisdom. What I've tried to do in my book is arrive there, but by looking the other way – in huge technical detail at the brain, at what science can tell us, which is actually very much the same message, I think. And it's also the process of philosophy. Philosophy, in our time, is often thought of as a purely analytic process – and, for some philosophers, that's all there is. But that can lead to certain perceptions that – increasingly philosophy has come to the conclusion that – that's a dead end. And most of the great philosophers of the last hundred years, despite being trained in that method, have ended up saying, at the end of their lives, that poetry is more helpful than analytic philosophy. That was certainly the conclusion of Heidegger. But it was also the conclusion of Wittgenstein. And one can see this process in others: in Hegel and Schopenhauer and Nietzsche. So some of our western philosophers, and much of the tradition of Daoism and Zen, come together in this, and come together interestingly with modern physics. And, I would say, the findings of neuroscience. The trouble is, curiously, in biology, we're a bit lagging behind, I would say – in the general culture of the 'life sciences'. In the 'non-life sciences', in physics, they gave up on the dead universe a long time ago. But, curiously, in the *life* sciences, a lot of people practice a way of thinking which is reductionist and mechanistic. It's a paradox, actually.

Serge: It is, and at the same time, it is strange to see how, for instance, if people..you know when you go to a hematologist, and they study the blood, the blood actually doesn't exist in and of itself, but everything else that's happening in the body.

Iain: Well, yes, and when one talks about the brain – one ought to mention that when one uses the word 'brain', one's actually speaking of the brain and the body together, because much of what the brain is dealing with is also going on in the heart, and gut, and so on. So, yes, we and our memories and our consciousness are, no doubt, not confined just to the brain.

Serge: So as we come to an end to this conversation, is there something you would want to say to conclude?

Iain: Well, I suppose there's a paradox. People often say to me: "So what are we going to do about it?", you know, in a kind of anxious way; and I think it's not a very helpful approach. I think that's the way we get ourselves into all kinds of messes, because then 'experts' pop up, saying there are 'Eight Things We Need To Do To Save The Planet'. And this is really just a way of satisfying the left hemisphere, which is not really listening to the full story and seeing the picture as a *completely different* view, but instead thinking, "How can I hang onto the current paradigm, and tinker about with this bit here, and make it work?" As a therapist and as a doctor I know – and, as I'm speaking to

colleagues, I would say we all know – there's no good telling people, though you may be able to see it the very first time you meet them, that there's certain things it's very important for them to stop doing, and certain things they should start doing. There's no good telling them that. You're in the business of raising awareness, and only when they get to see the things that you can now see will they start to change. So here, too, I'm in the business of raising awareness; and what I would say is that I'm here to encourage people. If they want to read more about it, have a glance at my book, but the thesis of it, essentially, is that we're being sold a very reduced version of ourselves and of the world, and that this is *not* the most sophisticated or intelligent way of thinking about the world. Quite the opposite - it is in fact a fiction, an illusory fiction, that is bred by part of the brain that's mainly interested in grabbing things. Nothing against grabbing things – we all need to get food and build houses and that way we have a civilization. But it's only part of the story. The thing I like is a phrase I picked up only after I'd written the book – I discovered that Einstein had said that whereas reason is a faithful servant, intuition is a sacred gift; that we live in a world that's lauded the servant, but has forgotten the gift. I think that's the world we live in now.

Serge: So really essentially it's turning established wisdom on its head and talking about the idea that actually which one is the servant and which one is the master, and you can actually expand your world by paying attention to that other way of interacting with the world.

Iain: Yes, indeed. Yes, Yes.

Serge: Thanks Iain.

Iain: Thank you very much.

This conversation was transcribed by Tina Lee.

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