Workshop on the Philosophy of Learning Analytics, 12th International Conference on Learning Analytics & Knowledge (Online March 21-25, 2022). <u>http://nlytx.io/pola_lak22</u>

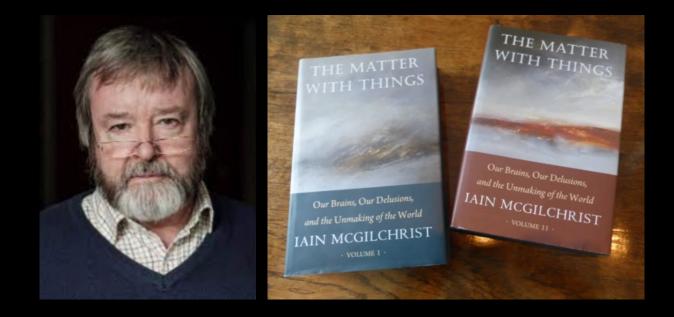


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Iain McGilchrist (2021), *The Matter With Things: Our Brains, Our Delusions, and the Unmaking of the World.* Perspectiva Press.



https://channelmcgilchrist.com/the-matter-with-things/

From a purely anatomical perspective...

- The brain is asymmetrical in almost everything that can be measured, at many levels, in both its structure and function. Why?
- The power of the brain exists only through making connexions (between neurones) – and the reach of that power depends on the number of connexions it can make. Yet it is deeply divided down the middle. Why?
- The principal band of fibres that connects the two hemispheres at their base in humans, known as the corpus callosum, has got proportionately smaller, not larger, over evolution – and is, in any case, to a large extent inhibitory in function. Why?

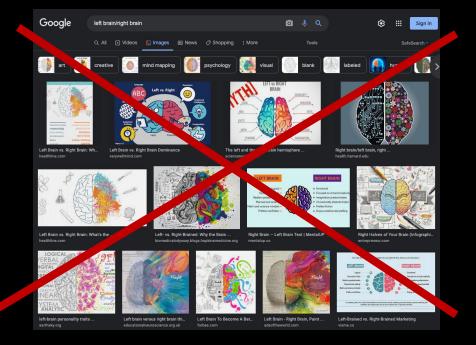
The brain sciences now confirm that both hemispheres are engaged in almost all activities, *but they attend to the world in very different ways*

McGilchrist's argument is that the Left Hemisphere (LH) should be the servant of the RH, and that awareness of the very different dispositions that each brings illuminate many of the debates and dilemmas of our times

Moreover, physics and the arts tell a converging story about the urgent need to re-engage RH modes of thinking and being

The hemisphere hypothesis: it's no accident that across civilisations, two different ways of attending to the world are in recurring tension

No: we're not talking about Left Brain/Right Brain pop psychology and management snakeoil!



The world as seen by the left hemisphere

"... static, isolated, fragmentary elements that can be manipulated easily, are decontextualised, abstracted, detached, disembodied, mechanical, relatively uncomplicated by issues of beauty and morality (except in a consequentialist sense) and relatively untroubled by the complexity of empathy, emotion and human significance [...] It is an inanimate universe - and a bureaucrat's dream. There is an excess of confidence and a lack of insight."

The world as seen by the right hemisphere

"All is flowing and changing, provisional, and complexly interconnected with everything else. Nothing is ever static, detached from our awareness of it, or disembodied; and everything needs to be understood in context, where, if it is not to be denatured, it must remain implicit. Here, wholes are different from the sum of the parts, and beauty and morality, along with empathy and emotional depth, help us to intuit meaning that lies beyond the banality of the familiar and everyday. It is an animate universe - and a bureaucrat's nightmare."

RH+LH \rightarrow arguments to restore Intuition and Imagination as vital ways to understand the world

Science

Reason

Intuition

Imagination

Baby steps to thinking about the implications for LA...

(focusing on the hemisphere hypothesis, there is much more in the book to consider)

The LH and RH worlds might be taken as provocations for LA

- We should be acutely aware that LA risks amplifying the worst of the LH disposition: data science, analytics and AI are becoming "the bureaucrat's dream..." confidently mistaking the map for the territory
- The RH disposition can balance the tendency to frame teaching and learning in LH terms (yet we know abstraction is not always bad)
- Hence... we must frame and design LA that balances LH+RH dispositions
- How do we train professionals with epistemic and computational humility?
- Cultivating critical engagement by users with LA tools, such that they can question automated reports and recommendations, until the tech has proven itself trustworthy.
- What might "RH LA" look like?

Baby steps to thinking about the implications for LA...

(focusing on the hemisphere hypothesis, there is much more in the book to consider)

Our education system is part of the problem: what is LA's role as an agent of change?

- What does LA look like which will advance the revaluing and rebalancing of *Science, Reason, Intuition and Imagination?*
- How do we train education professionals, leaders and policymakers to know the limits of datafication, analytics and AI?