AI vs. the Left and Right Hemispheres of the Human Brain

Section 1

> *. . . every known creature with a neuronal system, however far down the evolutionary tree one goes and however far back in time, has a system that is asymmetrical." ~* ***The Master and His Emissary: The Divided Brain and the Making of the Western World****, p. 49*

That quote and others below are from psychiatrist and neuroscientist Iain McGilchrist, author of *Ways of Attending: How our Divided Brain Constructs the World* and other books. McGilchrist has spent his professional career learning about the different characteristics of the Left and Right hemispheres of the brain, how they experience the world, and how, ideally, they work together. We'll start with some perspective on **language**, a major tool of the LEFT hemisphere -- the left hemisphere does all the talking, which causes problems for stroke patients with certain left hemisphere damage -- and then a look at the different types of experience the two hemispheres provide.

> *. . . we have developed language not for communication, not even for thinking, but to enable a certain type of functional manipulation of the world. Language is like the general's map at HQ:* ***a representation*** *of the world. It is no longer present, but literally "re-presented" after the fact. What it delivers is a useful fiction. ~* ***Ways of Attending: How our Divided Brain Constructs the World****, p. 23*

> *The left hemisphere is always engaged in a purpose: it always has an end in view, and downgrades whatever has no instrumental purpose in sight. The right hemisphere, by contrast, has no designs on anything. It is vigilant for whatever is, without preconceptions, without a predefined purpose. The right hemisphere has a relationship of concern or care . . . with whatever happens to be. ~* ***The Master and His Emissary****, Pp. 174 - 175*

If one had to encapsulate the principal differences in the experience mediated by the two hemispheres, their two modes of being, one could put it like this. The world of the left hemisphere, dependent on denotative language and abstraction, yields clarity and power to manipulate things that are known, fixed, static, isolated, decontextualised, explicit, disembodied, general in nature, but ultimately lifeless. The right hemisphere, by contrast, yields a world of individual, changing, evolving, interconnected, implicit, incarnate, living beings within the context of the lived world, but in the nature of things never fully graspable, always imperfectly known -- and to this world it exists in a relationship of care. ~ ***The Master and His Emissary****, Pp. 174 - 175*

Music and poetic language are both part of the world that is delivered by the right hemisphere, the world characterised by betweenness. ~ ***The Master and His Emissary, p. 73 (Chapter 2)***

But it is not just because it exists in betweenness that music is the concern of the right hemisphere. Its indivisible nature, the necessity of experiencing the whole at any one time, though it is forever unfolding in time, a thing that is ever changing, never static or fixed, constantly evolving, with the subtle pulse of a living thing (remember, even musical instruments are present to the brain as living things), the fact that its communication is by its nature implicit, profoundly emotive, working through our embodied nature - everything about music, in short, makes it the natural 'language' of the right hemisphere. ~ ***The Master and His Emissary****, p. 73*

So the meaning of an utterance begins in the right hemisphere, is made explicit (literally folded out, or unfolded) in the left, and then the whole utterance needs to be 'returned' to the right hemisphere, where it is reintegrated with all that is implicit - tone, irony, metaphor, humour, and so on, as well as a feel of the context in which the utterance is to be understood. ~ ***The Divided Brain and the Search for Meaning****, p. 29*

The left hemisphere is not impressed by empathy: its concern is with maximising gain for itself, and its driving value is utility. ~ ***The Master and His Emissary, p. 145***

If the detached, highly focussed attention of the left hemisphere is brought to bear on living things, and not later resolved into the whole picture by right-hemisphere attention, which yields depth and context, it is destructive. ~ ***The Master and His Emissary, p. 182***

. . . as a society, we are becoming more like individuals with right hemisphere deficits. Anecdotal evidence from the teaching profession suggests that between a quarter and a third of children aged as old as five to seven are now having to be taught how to read the human face, something that until recently would have been necessary only in the case of children with autism. And about a third of all children now have difficulty carrying out tasks that a decade ago virtually every child in a mainstream school would have been able to do easily - tasks that depend on sustained attention. Add to that research suggesting that young people today are less empathic than children thirty to forty years ago. If a neurophsychologist had to choose three things to characterise most clearly the functional contribution of the right hemisphere, they would most probably be the capacity to read the human face, the capacity to sustain vigilant attention, and the capacity to empathise. ~ ***The Master and His Emissary, Preface, location 408***

Psychopaths and Sociopaths

What is an intelligence without empathy?

Answer: At the very least, a psychopath. Or worse: a sociopath.

Definitions:

You'll find other definitions for these two words, but I use them this way:

- ***Psychopaths*** **are people with certain kinds of frontal lobe deficits**, either genetically or from damage of some type or other, **that dim or eliminate the sense of empathy and positive connection to others**. Under this definition,

psychopaths aren't necessarily murderous maniacs (as often portrayed in film) but a psychopath who ALSO has serious emotional damage IS likely to be exceptionally harmful, including possibly a serial killer or other criminal.

- ***Sociopaths* are people who are actively and harmfully pathological in their interactions with others**. This comes from emotional damage, although HOW someone responds to damage is unique to that person. Two people can be bullied growing up and one can become a bully, while the other might become someone who PROTECTS others from bullies. One can know the broad strokes of psychology but each person is unique in their DNA, their experiences, their response to those experiences, and so on.

As we've already seen, the left hemisphere is without empathy; it doesn't actively want to hurt others (baring emotional damage, toxic cultural norms, or other incentives), but it doesn't MIND hurting them.

For a broad example of how left-hemisphere dominance can harm entire societies, consider:

The Alphabet Versus the Goddess: The Conflict Between Word and Image by Leonard Shlain, which documents how over-emphasis on written language, of all things (especially alphabetic language) and de-emphasis on **image** created societies that curtailed the rights of women, which began correcting when limitations on image creation were loosened.

(**Third Commandment**: **Thou shalt not make unto thee any graven image**, or any likeness of any thing that is in heaven above, or that is in the earth beneath, or that is in the water under the earth.)

For an interesting look at a non-criminal (so far as we know) psychopath, consider The Psychopath Inside: A Neuroscientist's Personal Journey into the Dark Side of the Brain by James H. Fallon -- who discovered, while reading a brain scan he took as part of a study, that HE is a psychopath. He has murderers in his family history, but **he** himself is an apparently-normal man with a wife and children and with a respectable scientific career.

Section 2

The Two Hemispheres bring Two Different Worlds into Being

> *. . . the right hemisphere is more in touch with reality, and the left hemisphere more concerned with the internal consistency of whatever virtual model of the world it happens to be working with at the time. ~* ***The Matter With Things: Our Brains, Our Delusions, and the Unmaking of the World****, p. 104*
>
> *In the absence of the left hemisphere, things come alive. ~ Ibid, p. 160*
>
> *The intuitive mind is a sacred gift, and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift. ~ Albert Einstein, as quoted in* ***Drawing on the Right Side of the Brain*** *by Betty Edwards*

The hemispheres view the world very differently, and how we view the world makes a difference.

For example:

Imagine **a lion on a preserve approaching a human** who raised it, but whom it hasn't seen in years: At first, before recognizing the particular person approaching, that human is, for the lion, a category: ***prey****, potential food*.

Then, upon recognition, that approaching human CHANGES (in the world as experienced by the lion) into **a beloved, long-lost friend**.

One objective reality, two very different SUBJECTIVE realities.

The difference in those subjective realities has HUGE consequences in the *real world*: in one, the human gets killed and eaten by the lion; in the other, the human gets a warm and enthusiastic welcome from an old friend.

Another example:

A hungry robin hops in the grass, searching for food. It needs to be tightly focused on the patch of grass it is studying, seeing the grass in a particular way -- as a hunting ground, on which it looks intently for specifics, AND it needs to be WIDELY focused, open to whatever might present itself (such as a predator) from elsewhere -- and it needs to do BOTH AT THE SAME TIME.

Nature's answer to this problem is simple: the robin's brain is divided into two different hemispheres, each with its own TYPE of consciousness. (Each hemisphere by itself is capable of sustaining consciousness). The hemispheres experience and attend to the world very differently. Each has its own values and expectations and reasons for doing things, but both are involved, at some level, in almost everything we do and experience. The two streams of consciousness are seamlessly woven together into the single over-all consciousness that makes up the robin's (or a human's) moment-by-moment experience.

Nerves from the brain to the body cross over, so that the left hemisphere controls the right side of the body, while the right hemisphere controls the left side. (For left handers, this may be different but not in every case).

The *left* hemisphere is (again) the tool-using, tightly focused, grasping/hunting, detached, non-empathic, utility-seeking side, which experiences a condensed, limited, artificial model of reality.

The right hemisphere is the wide-angle, open-to-whatever-is, alert-for-what-is-new, *interconnected with all it sees* hemisphere, with empathy for life and without an agenda but rather an openness to and participation in the flow of things.

The robin uses its right eye/*left hemisphere* to hunt for worms and bugs in the grass, while using its left eye/*right hemisphere* to "keep an eye out" for whatever else is going on around it.

Section 3

Back to Computers

Computers are not conscious, do not experience the world, and have only language (including digital languages) to work with; thus, they have no right-brain attributes: no empathy, no appreciation for the implicit, no feelings. They can imitate behaviors that suggest such attributes, but imitation is not reality.

A thermostat on your living room wall can detect the temperature and trigger your heater or air conditioner when a particular temperature is reached, but it will never know how it **feels** to be cold or hot.

Furthermore, computer responses are not entirely predictable and never have been. From the earliest days, there have been bugs and glitches and unexpected behaviors and this continues, even in the largest and most wealthy tech companies, despite huge teams of programmers writing and testing programs, on through alpha testing and beta testing with thousands or millions of people using the programs for months -- and STILL unexpected and unwanted behavior shows up in the 1.0 release, and then in every release after that.

Unexpected and unpredictable *inputs* are one reason for this; the huge variety of hardware and software that most programs encounter and must deal with is another. But LLMs in particular are *probabilistic* in their responses.

Today's AI programmers seem oblivious to both computers' lack of consciousness and to the limitations on programmer control over output.

Section 4

AI Programmers do not understand human consciousness . . . or AI, for that matter.

From **Can AI be Aligned with Human Values?** in *Activist Post*, May 27, 2025. Includes video of Claude programmers discussing "alignment."

> *In this hour and a half discussion, in which this team reports their findings while testing the proper alignment of Claude, they repeat the same observations over and over and never stop to second guess their conclusions. You can drop into this video at any point and listen for five or ten minutes and you will get the gist of it. The computer model thinks! It feels! It wants! It tells lies!*
>
> *. . . No one in the Silicon Valley cult who is discussing this situation ever stops to ask, What are our human values? They must think the answer to that part of the problem is self-evident. The Tech Oligarchs have been censoring online behavior they don't like and promoting online behavior they do like ever since social media rolled out. Humans Values = Community Standards. (Don't ask for the specifics.)*
>
> *Having already figured out how to distinguish and codify good and evil online, computer engineers are now busy working on how to make sure the AI models they are creating do not depart from their instructions.*
>
> *Unluckily for them, Generative AI is a bit wonky. It is a probabilistic search engine that outputs text that has a close enough statistical correlation to the input text. Sometimes it outputs text that surprises the engineers.*

The engineers are trying to understand how Claude works -- how its internal processes actually function, despite having designed and written those processes themselves -- since Claude is not always behaving as they expect. They ASK Claude to describe how it thinks . . .

. . . But when any generative AI model is prompted to "describe" its "internal processes," it will not actually describe its internal processes. It can only do what it is designed to do, which is to imitate human speech. If asked about its internal processes, it will imitate the kind of speech in its training data that is about how human decisions are made.

Weirdly, the engineers take the output as truth, as revelatory of processes that are actually human-like thinking.

This is very, very strange.

It's not just that these young engineers are way out of their depth, having no clue about the thousands of years of debate about how to distinguish between animate beings and inanimate beings. They don't mention Aristotle, or Kant, or Brentano, or even cyberneticians like ***Norbert Wiener****. It's much worse than that. Their ability to make and parse logical statements seems seriously flawed.*

Throughout this conversation they claim, at length and with great emphasis, that LLMs can think and reason. They ascribe feelings and intentions to a computer network.

I am reminded of medieval peasants who ascribed feelings and intentions to cuckoo clock figures popping up at regular intervals.

. . .The way the engineers anthropomorphize the LLMs seems delusional. Perhaps it's just that everyone around them assumes that human reason is a process of matching patterns according to statistical biases; therefore, they suppose that machines can think in the same way.

Humans do not think like that. See my other substack articles here and here. And some scientific work here.

Snippet from a 25-year-old column on 21st century technologies:

The Future Doesn't Need Us (Bill Joy, in Wired Magazine, April 2000)

> *The 21st-century technologies—genetics, nanotechnology, and robotics (GNR)—are so powerful that they can spawn whole new classes of accidents and abuses. Most dangerously, for the first time, these accidents and abuses are widely within the reach of individuals or small groups. They will not require large facilities or rare raw materials. Knowledge alone will enable the use of them.*
>
> *Thus we have the possibility not just of weapons of mass destruction but of knowledge-enabled mass destruction (KMD), this destructiveness hugely amplified by the power of self-replication.*
>
> *I think it is no exaggeration to say we are on the cusp of the further perfection of extreme evil, an evil whose possibility spreads well beyond that which weapons of mass destruction bequeathed to the nation-states, on to a surprising and terrible empowerment of extreme individuals.*

An opposite view: Incredibly positive article about AI, along with a collection of resources.

> *"AI isn't the threat; it is the Ark."*

https://cognitivecarbon.substack.com/p/cognitive-carbons-ai-resources

> *Cognitive Carbon's AI resources This is a collection of recent AI articles or videos that I found compelling, which form a reference set for people to understand some of the radical viewpoints that I've been talking about. CognitiveCarbon Jun 04, 2025*
>
> *This is not a typical article.*

Instead, it is kind of a "reference library" post that I may continue to add to. I used this to set a foundation for Scott Zimmerman leading up to his recent interview of me on rumble/X. https://rumble.com/v6uayuj-untethering-is-a.i.-the-ark-or-the-end.html

The pace of development in AI is inconceivably fast now—in order to understand where we are and where things are going requires a radical viewpoint re-alignment.

For reasons that I will cover in other posts, the timing of what is happening in AI is critical for the survival of humanity.

But not in the way that you've been led to think. AI isn't the threat; it is the Ark.

Here are some posts about AI from my own substack catalog that are foundational:

On Linear Algebra - includes links to 3blue1brown videos about how LLMS work

Game Theory and AI - offers a view on why the "2030" initiative people did what they did—they knew, before you did, that AI was coming, and how it might empower you.

They tried to front run it. They lost.

Exascale Computing - A speculative look at what the massive compute power and data storage that the NSA amassed in Utah could be used for, beyond simple "signals intelligence"

On the nature of Doubling time (unpublished draft) - an article that attempts to explain the pace of change that is coming in AI

An analogy that I use often to explain my own experiences in software development with AI: 12 months ago, AI tools in software development were like having a bright teenager assistant who wanted to get into Software

Development after college—useful, but annoying at times, and copy/paste was the main method to use them.

Now, it's like having a team of PhDs who write the code for me while I direct the actions of the "Agent". From that, to this... in 12 months. A human would have required 8 years of study to get here from there in terms of the observed compentency-gain gradient.

Example of how it has changed my productivity:

The productivity gain (time to completion of high-quality code) example:

2017: it took 5 guys and 18 months to develop a data-heavy, business class application

2025: now it takes 1 guy (just me), 6 months. Next year it will be 1 month, or less.

acceleration: My ability to 'create' code was recently 25x my former pace, with another recent 4x boost using Claude Sonnet 4 (bringing the boost to near 100X.)

Projects that used to take weeks/months now take hours. And I'm not writing the code anymore...

Another new example: Grok's new ability to generate charts (data analytics) is going to decimate the data analyst job sector. 10 years ago, the IT sector had Hadoop. You needed a master's degree to understand how to use it, and what it did.

*Now **anyone** can get the power of that kind of deep Machine Learning processing by asking LLMs the right kinds of questions.*

The resources below are not ranked/listed in order of preference, they are just listed in the order that I searched for them.

(many links, including videos, follow at link above)

Related links:

https://search.brave.com/search?q=ai+drones&source=desktop

https://nypost.com/2025/06/02/opinion/drones-the-new-twist-in-warfare-as-ukraines-hit-on-russia-shows/

https://www.theverge.com/news/680258/amazon-training-package-delivery-humanoid-robots

https://www.nbcnews.com/tech/tech-news/far-will-ai-go-defend-survival-rcna209609

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