

# Is the evolution of the brain the flaw to whole system thinking, or what we teach it?

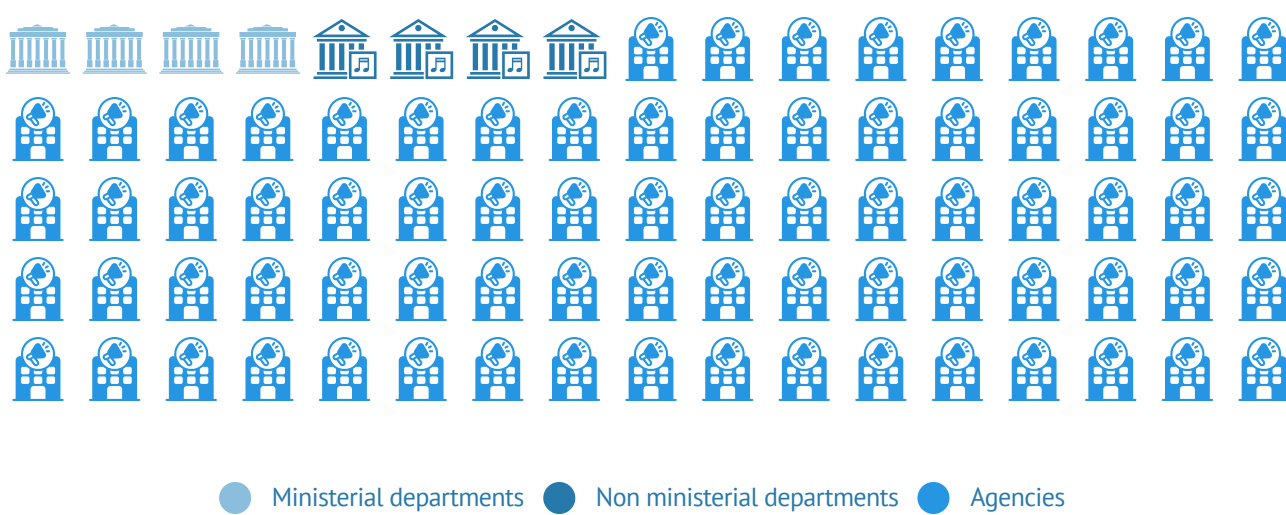
An education system dating back to ancient Greece celebrates experts and specialists. The manifestations of specialisms are language and thinking in pursuit of the single truth only understood by those who share the same journey. However, climate change is crying out for system thinkers not more specialists, maybe it's the cultural revolution that will unlock the excellence of specialists from their irremovable silos?

## A world of specialists

Our society loves a specialist. No school child ever got a prize for generally knowing an answer. Oxford University does not give scholarships to those who roughly know their way around many subjects.

By the time a child in the UK is around 13 years old they will already have made decisions that affect or restrict their career choices. The decisions made by the age of 17 could be life defining – maybe they continue in vocational study, leave the education system entirely, or at the very least further reduce their “choices” to perhaps three or four core academic disciplines. And so, it continues. By the time you've followed the education system to its end you might find yourself getting enveloped in the world of a very particular subset of marine worms. How those marine worms survive will be characterised in a language that not many people (formally educated or otherwise) will be able to understand. For most people, the brain will scramble pretty quickly beyond even the best written abstract on the topic.

These choices and specialisms within our societies appear well-reflected within our institutions and governments. In the UK there are currently 23 “high level” ministerial departments, 20 non-ministerial departments and 419 agencies and other public bodies. Their remits range from health and social care to international trade, culture and building new roads with very fixed boundaries on responsibility.



## So how does a society made up of siloed thinkers and institutions handle a multi-disciplinary and cross-border problem like climate change?

*“A hierarchical organization which seeks to maximise vertical coordination at the expense of horizontal coordination. It is inward-looking and self-contained with little regard for outcomes other than those which affect its own narrowly conceived goals”<sup>1</sup>*

Silos often get criticised for their failure to share information, to resolve disputes and to coordinate effectively. A number of studies have looked to explain the reasons for this and to propose solutions.

Climate change, as a whole system issue, suffers from the typical problems of silos in government. However, this is magnified greatly by the silos that exist throughout our societies and organisations within both private and public sectors. In addition, historical differences and grievances between nations means that there are not only silos within and across typical departmental topics, but also geographical silos that affect the ability of those thematic leaders to speak in harmony with one another at the world level.

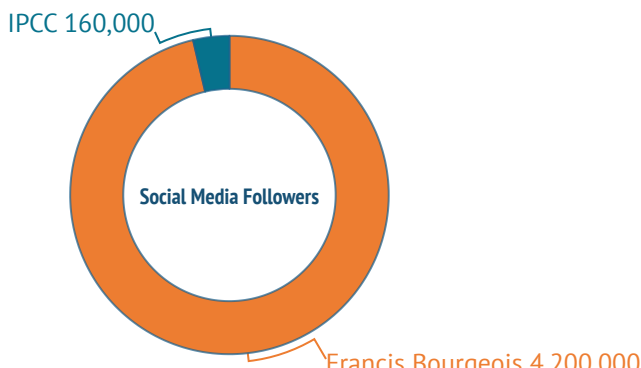
By the very nature of human thinking we will have to exist with silo thinking. In fact, there is a distinct risk that a wrecking ball through silo walls would not work because most humans simply can't exist in a free-flowing and ambiguous systems-thinking world. Indeed, there are reasons not to break down silos. Our best talent exists because of these institutional structures and security they provide to thinking and specialist expertise.

We therefore need to think of different mechanisms through which the talent which exists in sectoral and geographic silos is accessed.

## The cultural revolution

We are in the middle of an industrial revolution. Technology now means we can hold the world's entire opinion on anything in our pocket, machine learning is able to make more informed decisions and the nature of communication has changed forever. As with all industrial revolutions, major technology shifts create major cultural shifts, whether that relates to the modern printing press giving access to newspapers to the masses in the 1st Industrial Revolution, or to the click-bait news a global audience now consumes.

In a world where Francis Bourgeois has 1.6 million Instagram and 2.6 million TikTok followers and the IPCC has only 160,000, it is the influencers of the world who have tapped into a new form of engagement that breaks down intergenerational barriers. Their form and style of communication is more powerful, it would appear, than science based literature.



To accelerate communication of the needs of the planet the revolution is going to need to enable society to place equal value on specialists, generalists and culture in determining the answers to the problems we face.

Better communication through this new cultural revolution will see the whole system connections being established and better planned for across government and economic sectors.

[1] Scott, I., Gong, T. Coordinating government silos: challenges and opportunities. GPPG 1, 20–38 (2021). <https://doi.org/10.1007/s43508-021-00004-z>