Who do you believe?

By David Hearne, Researcher, Centre for Brexit Studies

As a species, we are pretty incredible. The fact that I am writing this (and you are reading it) is testament to that fact. Our ability to communicate is phenomenal.

The fact that I am not merely writing this but am typing it – watching individual letters appear as I move my fingers on a keyboard – is astonishing. That this is happening on a screen and I can edit my words as I go along is even more so.

You might be reading it on a miniaturised version of the device I'm using – in which billions of transistors switch back-and-forth and electrical signals are sent to a screen in order to produce patterns that your brain decodes as language. Unbelievable. In my pocket lives a similar device that is able to take photographs and send them as well as access much human knowledge.

That such devices not only exist but are produced in vast quantities and at prices low enough for billions of people to own one is something that is beyond the wildest imaginings of our ancestors. As a species, we produce enough to feed, clothe and house the world (amply) with resources left over for luxuries. We don't, but that's another story.

We are endowed with physical attributes that render us dangerous enemies in the animal kingdom. Most of us are capable of doing mathematics (by which I mean multiplication and division) that would bedevil other species. Yet we are also endowed with major weaknesses.

We are incredibly "bad" at time. By this I mean that we repeatedly and consistently violate "sensible" treatment of time. In common with many primates, we appear to discount time hyperbolically rather than exponentially, for example. There are perfectly good biological reasons for this[1] and it is optimal in several situations[2] but it means that we exhibit unstable preferences and decisions over time.

The problem is that we don't exist in the world we have evolved to deal with. Hyperbolic discounting might work well in the animal kingdom, but it works against you when you're a student wanting to revise for exams. These responses are hardwired into us – it isn't our *fault* that we act in a time-inconsistent manner.

On a related subject, we struggle with risk. It is well-documented that our attitudes to risk/reward are not symmetric, but we also appear to make quite strange (and serious) errors on a consistent basis when faced with uncertainty.

We are also "bad" at certain forms of coordination. We are very successful when coordinating small groups. It is no accident that we form tribes.

This breaks down when trying to coordinate large numbers who do not know each other. If the human race could coordinate properly, we could eliminate Covid (and myriad other diseases). Certainly, this was a possibility earlier during the pandemic. Look at Wuhan where such coordination was coerced.

Finally, we have a tendency to emotional reasoning. This is far from an avowed negative – our ability to "feel" is powerful and hugely valuable. When we lack domain-specific knowledge (and sometimes even when we have domain-specific knowledge) we rely on what *feels* like the right decision (who we trust is an important part of this). Aligned to this we tend to privilege and overemphasise our own experience.

It often boils down to whether we *believe*, one way or another. Yet belief is the language of religion and the divine – things beyond human comprehension and knowledge. Not merely things we do not know, but things we *cannot* know.

All of these are evident in tackling many of the world's problems. Take climate change – it involves credibly committing to take action (now and in the future). Not good for a species that discounts hyperbolically!

It also entails asymmetric risks and great uncertainty. We know that greenhouse gas emissions are having a profound impact on our

climate, but we don't know specifics (including what tipping points we might reach and when). We also know that the risks are asymmetric – things could turn out slightly better than we predict or a *lot* worse. That should affect our behaviour.

Our inability to coordinate also hurts us here. Getting all countries to agree (and enforce) measures is profoundly difficult. There are big incentives to "cheat" and not reduce emissions by as much as we should. That might be rational from an individual perspective, but it is socially harmful. Such cheating is rarer in small groups because the costs of ostracism are enormous.

Finally, few of us are equipped to analyse the data or the models it underpins – this requires specialist knowledge and a good deal of time. As a result, we fall back on our emotional reasoning. How do you *feel* about climate change? What do you *believe* and who do you trust? What are your own experiences? None of us like hearing bad news, especially if our livelihoods are at stake and the experience of a hard winter can cause us to underplay climate change, even when this is not rational or supported by data.

The same phenomena are at work in Brexit, both in terms of the decision itself and in terms of preparation. It's easy to see why we're unprepared: hyperbolic discounting and uncertainty over the final settlement are not our friends here.

It's also easy to see the coordination problems involved: both in negotiations (both sides are better off with an agreement, and yet it's entirely feasible that there won't be one) and preparations.

After all, for preparations to be successful, the British government and French (and others) alongside the overwhelming majority of businesses need to ensure everything works smoothly. Yet it only takes a handful to have filed paperwork incorrectly to create a backlog that affects disparate businesses in different sectors.

As for the decision itself, it is clear that Brexit as a phenomenon sparks huge emotions. How many people can honestly – hand on heart – say that they regard the whole thing with completely cool detachment.

Yet in actuality, it is a remarkably dry and, dare I say it, boring subject. It is about legal frameworks, proper procedures and econometric analysis (technically CGE models are not econometric but many of the inputs are estimated based on econometric results). Very few have the time or background to fully master one of these domains let alone all of them.

The reality then is that people made (and make) choices based on feelings and trust. What information do you trust? We are told, one way or another, to *believe*.

1. Dasgupta, P. and E. Maskin, Uncertainty and Hyperbolic Discounting. American Economic Review, 2005. ***95****(4): p. 1290-1299.*

2. Sozou, P.D., On Hyperbolic Discounting and Uncertain Hazard Rates. Proceedings: Biological Sciences, 1998. 265(1409): p. 2015-2020.