



Rupert Sheldrake's Quest for Wholeness in Understanding Consciousness

Alex Gomez-Marin, PHD

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Forty years ago, Rupert published A New Science of Life, the book that brought him international fame. Rupert's proposal was not anti-science but rather an attempt to face up to number of open questions in biology, many of which, four decades later, remain largely unanswered. Two prominent ones are: (i) the insufficiency of "genetic programs" to explain development –a key problem in the life sciences–, and (ii) the systematic failure to find "memory traces" in neuroscience –a key problem in the mind sciences. We have no shortage of unsolved fundamental questions in science today.

A radical proposal

Rupert's 1981 radical re-interpretation of morphogenetic fields was, no doubt, influenced by his time as a Principal Plant Physiologist in India. We all know that plants grow, but how do they do it? Rupert dwelled in an important, and often overlooked, question: *Whence form?*

He drew from arguably one of the greatest ideas in physics, the idea of fields (introduced by Faraday as regions of influence), and postulated a new kind of field, a "morphic field", inspired by the concept of morphogenetic fields established by Gurwitsch, Spemann, Weiss, and others.

Rupert's work is radical, according to the etymology of the word: it goes to the roots and honours them with blossoming fruits. Rupert's morphic fields remind us of Aristotle's entelechy. These subtle patterns are posited to underlie the actual physical, vital, and mental forms we find in nature. Rupert is also a Bergsonian scientist (a very valuable and endangered species). Furthermore, Rupert's biological thought resonates with major philosophies such as Plotinus' & Whitehead's.

Furthermore, Rupert's new science of life is based on the nature of *formative causation* by means of the hypothesis of *morphic resonance*. Morphic resonance is a non-local *connection* across time and space, based on similarity. By means of such a mechanism (or should we say process), Rupert hypothesised that the more frequently a self-organising phenomenon occurs, the easier it will be for it to occur again in the future.

Thus, the nature of formative causation entails a memory principle in nature. This is important.

In his second book, *The Presence of the Past*, published in 1988, the thesis was further developed: all self-organising systems, at all scales, are shaped by morphic fields. Morphic resonance would take place in cells, organs, bodies, behaviours, and mental and cultural lives

(even trans-personally). Rupert's biological hypothesis bootstrapped itself beyond life into the study matter and mind, becoming an organising principle of the whole of nature.

As the subtitle of the book made explicit, the laws of nature might be more like habits than eternal edicts. In an evolutionary universe, why not entertain the idea of evolving laws? After all, the cosmos is not a giant clockwork, but a great organism.

So, what are the properties of these fields? Well, they are: new, non-material, acting at all scales, filled with memory, and they change upon repetition. Importantly, their effects are scientifically *testable*. The theory makes empirical predictions which can be tested and whose results can make a difference. This is not trivial. A detailed list of suggested experiments can be found in the appendix of the latest edition *A New Science of Life*.

For example, train rodents to solve a task in London, and other rodents in Barcelona should solve it more quickly. Expose cells to a stress to which they adapt, and subsequent similar cells should adapt faster. Crystallise a chemical compound for the first time, and it should become progressively easier to do so (and not simply because experimenters get better at it).

Extended minds

Rupert's proposal is still ahead of his time; and particularly relevant to the current study of mind.

Recall that morphic fields allow for non-local connections across space and time. This allows us seriously to entertain the idea that *minds extend beyond brains*. The idea, no doubt, is not new. But the way in which it can be addressed scientifically is. This is how one could think of the possibilities that Rupert's quest offers:

When it comes to *time*, we can conceive the idea of *memory* without "memory traces"!

When it comes to *space*, we can conceive the idea of *perception* without "representation"!

Positively, the proposal suggests an "extended mind", a term Rupert coined in his 1994 book *Seven Experiments That Could Change the World*. The notion was later popularised (and diluted) by philosophers of mind and by cognitive neuroscientists.

If the mind is granted an extension from the brain to the rest of the body, or even to a part of the environment, but can't really do much, then the idea of an extended mind becomes hardly more than vanilla metaphor. If, however, one takes the

idea of the extended mind seriously, then Descartes' "forced divorce" between *res cogitans* (mind) and *res extensa* (matter) can be healed: *res cogitans* is also *extensa*, and vice-versa.

When it comes to *memory*, the brain would act as a receiver or a filter of recollections, but not as a storehouse. The implications for dementia (terminal lucidity), for education (non-local learning), and even for ancestor-work are patent. In neuroscience, resonant patterns could offer new avenues after more than a century searching for the elusive engram. Perhaps memories are not here or there, but everywhere and nowhere. For science writ large, this would bring to bear other forms of causality beyond local and localised chains of cause & effect.

When it comes to *perception*, the images of the external world would be where they appear to be, namely, right there in the world, rather than confined and displayed inside our heads (as if our skull was a kind of virtual reality theatre). If we refrain from conflating minds with brains, the image of the table or the tree that we see "out there" would be *in* the mind. Vision may then involve a double movement, whereby light gets in, but also out, by means of outward projection. Thus, *if* our minds reach out to "touch" what we are looking at, there should be measurable effects.

Rupert proposed "the sense of being stared at" (or *scopaesthesia*) as a phenomenon that could provide direct evidence of the extended mind. Many people have actually felt the looks of others from behind and turned around to discover they were being stared at. Such a "sixth" (or "seventh") sense is taken for granted in children, and embraced in sophisticated traditions like in Buddhism or Hinduism. In India, the looks of a holy person are a blessing. Moreover, many cultures believe in the "evil eye". This is one of the greatest taboos of modern science.

What to do when the beliefs of laypeople and of experts are in conflict?

From natural history to experiment

Rupert takes so-called "persistent culturally universal myths" seriously. His research engages with the public, rather than trying to convert it. He begins from people's own experiences, tracing a "natural history" of the phenomenon. On this point, Rupert's databases collected over the years on animal and human stories a treasure for any proper study of experience.

Beyond surveys and questionnaires, Rupert devised effective experimental

protocols to study *whether* and *how* such phenomena take place in more controlled conditions. We are currently working on these matters, trying to engage with the zeitgeist in current neuroscience and probing these challenging ideas on perception and memory both theoretically and experimentally.

But that's not all.

Rupert followed his insights where they took him. He surrendered to the muses' dictum. The subtitle of his 2003 book, *The Sense of Being Stared At*, reads *and other unexplained powers of the human mind*. As it turns out, his expanded theory of (an extended) mind naturally accommodates "anomalies", phenomena that would be *impossible* in other theoretical frames (if they happen, they couldn't have happened...).

Fie upon Psi!!, such is the attitude of mainstream academia. This has brought Rupert vicious foes (but also lovely friends). What may disturb a dogmatic skeptic more than the idea of a "psychic pet", or "telephone telepathy", especially when eloquently argued, in a joyful and calm manner, by a well-versed scholar?

As Anthony Freeman, a brave editor, put it in the introduction of a special issue in the *Journal of Consciousness Studies* devoted to *scopaesthesia*, Rupert's sense of being stared at, often turns into the sense of being *glared at* by his critics.

Super natural

Skepticism is a virtue but, like chocolate, too much of it can't be good. One must be skeptical indeed, but also skeptical about skeptics, and weary of self-proclaimed debunkers. Some speak loudly but have little to say when it comes to the evidence, except that there is never enough of it. Why spend time looking at the data, when they already know that it is flake, flawed or fraudulent. *Their conclusions are found in their premises*. What, if anything, would make them change their mind? As Iain McGilchrist puts it, one simply does not know enough to be dogmatic.

It may be easy to shame a self-proclaimed psychic in public, but what about hundreds of thousands of laypeople who experience these phenomena, and are interested in them (who, by the way, pay the taxes that allow armchair academics to spend their time dismissing them)?

Rupert's natural exploration of the so-called supernatural is not without a sense of irony. His research deals with what he calls "the mysteries of everyday life". Why study séances if one can study dogs that know when their owners are coming home? The paranormal then becomes quite normal; the supernatural, super natural.

Carl Sagan popularised the mantra that “extraordinary claims require extraordinary evidence”. Drawing from Hume’s argument against miracles (and from Bayesian inference), card-carrying skeptics have such an infinitesimal prior for the existence of such phenomena, that virtually no amount of evidence can update their beliefs. They feel “in-vincible” in that they are “in-con-vincible”. Extraordinary evidence requires extraordinary *funding*, says the Harvard astrophysicist Avi Loeb. As Rupert has demonstrated over the years, it requires extraordinary *courage* too.

As most of you know, Rupert has endured what we today call “cancel culture”. The list is long: He has been accused of heresy by Nature’s editor, banned from TED once his talk was recorded, his public profile has been hijacked by Wikipedia warriors, his work unfairly portrayed by the National Geographic, he has been attacked by prominent magicians (those who believe that the only real magic is fake), he has suffered the hostility of editors not to mention reviewers, he has been de-platformed from public events, ignored when offering a genuine debate, and even avoided by those whose stances had more to do with Rupert’s ideas than his adversaries’.

And yet, as the saying goes, “strong opinions, weakly held”.

The bigger picture

Let me say three more things about this.

First, some argue that science must be wary of change. However, paradoxically, such conservatism is dispensed with when it comes to the dozen dimensions of theoretical physicists, the parallel universes of cosmologists, the science fiction promises of geneticists, and the prophecies of neuroscientists.

Second, one has the impression that certain critics treat nascent ideas as established ones, trying to kill them before they even start growing. It would be like pruning a tree during the flowering season, and then justify the pruning based on the tree’s lack of fruit producing after the pruning.

And third, and more importantly, let us not be mistaken. What is at stake here is not only this or that theory, this or that replication of the evidence, but an entire worldview.

In the bigger picture, Rupert has relentlessly sought to liberate science from the monolithic prison of mechanistic reductive *materialism*, an old *toxic* philosophy dressed as cutting-edge science. This was the aim of his broader critique in his 2012 book *The Science Delusion: Freeing the Spirit of Inquiry* (Science Set

Free, in the US).

What is science’s (biggest) delusion? As Rupert put it: that we already know the answers in principle, and just need to fill in the details in practice.

What are those fundamental answers? That there is no reality but material reality, that nature is mechanical and has no purpose, the evolution is just an accident, and that consciousness is an epiphenomenon, amongst other dogmas.

There is no time here to dive into the historical, political, sociological, and even theological roots of secular humanism here, whereby atheism is rebranded through scientism. Anyhow, this is a vital point that should at least be mentioned.

So, back to Rupert’s scientifically testable hypotheses: what’s the evidence?

There is some (and it is robust, and it has been published as research articles in several scientific journals), but it is not overwhelming. Why? Well, a high profile of ruling heresy hinders the ability to obtain funding, to have a lab, to attract students, and to expect cordial behaviour from scientific colleagues and peer-reviewers.

Democratising science

That’s probably why in *Seven Experiments That Could Change the World*, Rupert sought to upend materialism by means of a democratised scientific practice. Rupert’s dangerous ideas are paired with subversive methods.

The subtitle of the book is very telling: *A Do-It-Yourself Guide to Revolutionary Science*. Disruptive ideas require disruptive data, which in turn require disruptive methodologies and protocols. Rather than professionalised, bureaucratic, and conservative scientists, Rupert turned to *amateurs*, in the etymological sense of the word. He proposed simple experiments that can be carried out by laypeople, with a small budget. Science could then become more public and participatory, “freed from the monopoly of a scientific priesthood”.

One of such experiments had to do with the sense of being stared at (as discussed above). Another one, with phantom limbs (whose potential is still untapped). Rupert’s ideas were not necessarily circumscribed to humans. Rupert’s fascination for homing pigeons, and how they find home, led to another set of experiments. The experiment that caught most attention, however, had to do with *Dogs That Know When Their Owners Are Coming Home*, which became the title of Rupert’s 1999 book. Overall, such a programme offered huge theoretical implications with relatively simple experiments. In addition, it is worth adding that Rupert has been a

pioneer bringing to the fore other related and important topics cannot be covered here, such as experimenter effects and the replicability crisis.

A middle ground?

In ending, let me pose some rather peculiar questions:

Between the “false certainties” of devoted believers and the “certain falsehoods” of dogmatic skeptics, is there a middle ground to be found? And what about the new generations? Still surrounded by truly genius elders, to what extent are all these stories relevant to our beloved millennials? What will the future Dawkins look like? And the future Sheldrakes? Do minority reports lose their power when engulfed by the mainstream?

We need more “Ruperts”, no doubt. And he has certainly served –with joy but not without trouble– as the man holding the barbed-wire so that others had an easier time crossing. But is his model as a scientist replicable? His story (partly design, partly accident), will certainly make history.

He has opened so many doors and windows. He has tried over and over, constantly reimagining his approach in order to carry his ideas forward. His 1981 book offered new landscapes. Not seeking controversy, he knew his proposal would be controversial. The condemnation of heresy threatened anyone willing to follow up with the sigma of pseudoscience. In his 1994 book, he tried again, this time offering specific acupunctural points where applying a little pressure could lead to breakthroughs. His original citizen science took off, but University professors remained silent. In 2012, he offered a comprehensive and compelling theoretical critique of the scientific *status quo* and its delusions.

In a way the change is happening, but slower than one could have expected. For instance, the neo-animism of Rupert’s 1991 book, *The Rebirth of Nature*, is experiencing a revival within the current pan-psychist turn in the field of consciousness studies. In fact, last year Rupert published a paper entitled: *Is the Sun Conscious?* “Obviously not”, he writes, “from the point of view of mechanistic materialism. The very question is ridiculous.” However, he adds: “when applied to the sun, [field theories of consciousness] suggest a possible physical basis for the solar mind.”

Similarly, the mind-expanding dialogues that Rupert had with the mythic Terence McKenna and Ralph Abraham are opportune, given the renaissance of psychedelics, as it is currently being officially pursued by academia and the medical industrial complex.

A vibrant scientific and spiritual life

In sum, as a *theoretician*, Rupert masters the question: “What if?”. As an *experimentalist*, he excels at asking: “What difference does it make?”. This is a rare union of descending and ascending forces: the heavenly worlds of theory are grounded; the earthly worlds of data are elevated.

Rupert has transformed our understanding of matter and mind from the study of life. His quest for wholeness in understanding consciousness is one of his greatest legacies. His proposal of an extended mind also embodies his example of an extended heart.

In his 80s, Rupert maintains a child’s innocence, while being anything but naïve. He is spontaneous and strategic at the same time. Polite as Spaniards see the greatest of Englishmen, his sense of humour elevates his intelligence. It is not an exaggeration to suggest that he is one of the freest and most creative minds living today. His firmness is gentle. His perseverance, commendable. He tirelessly engages with the current research of multiple disciplines at once, while knowledgeable about the classics. And his

patience spans decades.

Those who know him well can attest that his private and public persona do not differ, which is remarkable in our current times of science in the age of selfies. Despite all the struggles and fights he has had along the way (and it has been a long way), he radiates stillness and joy every time he talks. Rupert constantly sets a great example of how to get better, not bitter. He is certainly protected by celestial beings (as he once told me, this is a golden age for praying, as angels and saints are rather unemployed).

Perhaps one of the most practical lessons that can be learned from Rupert is his Aikido stance: not to push against the opposition, but to pull it further instead; directing their own force to see how far they can go. Such is his style: not to refute, but to spur an honest inquiry. Not to “con-vince” but to “in-spire”. This is a double virtue, as not only can he spot and articulate dead ends; he also offers ways forward. Rupert is one of the very few modern alchemists who can transmute dogma into question, taboo into new vistas.

May God continue to bless him and his family, and to all of us. Let us be grateful

and celebrate Rupert’s pilgrimage as our own as well. With his example we learn what it is to live a vibrant scientific and spiritual life.

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Alex Gómez-Marín is a Spanish physicist turned neuroscientist. He holds a PhD in theoretical physics and a Masters in biophysics from the University of Barcelona. He was a research fellow at the EMBL-CRG Centre for Genomic Regulation and at the Champalimaud Centre for the Unknown in Lisbon. His research spans from the origins of the arrow of time to the neurobiology of action-perception loops across species, including flies, worms, mice, humans and robots. Since 2016 he is the head of the Behavior of Organisms Laboratory at the Instituto de Neurociencias in Alicante, where he is an Associate Professor of the Spanish Research Council. His latest research concentrates on human consciousness in the real world.

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