Can Morphic Fields Help Explain Telepathy and the Sense of Being Stared At?

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Introduction

The morphic field hypothesis proposes that minds are systems of fields that are located inside brains but also extend far beyond them, just as the fields of magnets are both within magnets and extend invisibly beyond them, and as the electromagnetic fields of mobile telephones are both within them and extend beyond them.

Minds are extended beyond brains in every act of perception, and the fields of visual perception link the looker to the object that is looked at. Hence something can be affected by looking at it. In animals, human and non-human, the sense of being stared (*scopesthesia*) could well be a result of this process, mediated by perceptual fields, which are kinds of morphic fields.

Morphic fields are fields within and around systems in which the whole is greater than the sum of the parts, including molecules, cells, organs, organisms, and societies of organisms. They contain an inherent memory, given by a process called morphic resonance, namely the influence of similar patterns of activity in self-organizing systems on subsequent similar systems across time and space. This hypothesis predicts, for example, that each species has a kind of collective memory.

If rats ran a new trick in London, for example rats all over the world should be able to learn the same trick quicker. There is already evidence that this happens (Sheldrake, 2009).

In the light of morphic fields, telepathy can be understood as

an interaction between members of social groups within the morphic field of the group as a whole, which interconnects the individual animals (Sheldrake, 2013).

Morphic fields associated with specific intentions could perhaps help in understanding psychokinetic phenomena and remote viewing. But this hypothesis does not provide any immediate explanation for precognition or presentiment.

Intellectual history and ancestry

From the 1964 to 1974, I did research on developmental biology at Cambridge—in particular on the development of plants. I also worked on plants growing under field conditions at an International Agricultural Research Institute in India from 1974 to 1985. But neither my own work nor other research in developmental biology gave an adequate explanation of the development of form. Chemical signals, gene activation, and other molecular processes seemed inadequate. Something more was needed and I was drawn to the long established concept of morphogenetic fields, or form-shaping fields, first proposed in the 1920s. These fields shape the form of developing cells, tissues, organs and organisms. They are within and around the system they are shaping.

Although this concept is widely used by developmental biologists, no one knows what morphogenetic fields are. Most researchers treat them as a descriptive convenience, placeholders for fully mechanistic explanations that have not yet been discovered. I find it more fruitful to think of them as real fields, of a similar degree of reality to magnetic fields, with their own particular properties. These include memories from previous systems that shape the fields themselves. This memory is given by morphic resonance, a connection from past to present systems across space and time on the basis of similarity (Sheldrake, 2009). These fields work by drawing developing systems towards attractors, as described mathematically by the French mathematician René Thom (Thom, 1975).

This hypothesis has many implications for the understanding of biological processes like protein folding, inheritance, collective memory, learning, and memory itself, which on this hypothesis depends on morphic resonance rather than on material traces stored within brains (Sheldrake, 2012).

My interest in psi phenomena arose in the 1980s when I realized that this hypothesis implies that scopesthesia and telepathy should be widespread in the animal kingdom. They are biological phenomena, natural, not supernatural, normal, not paranormal, and probably common to many animal species.

Basic premises and postulates

The basic postulates of the hypothesis of formative causation, the overall name for the hypothesis of morphic fields and morphic resonance, are as follows:

1. Self-organizing systems, including molecules, cells, tissues, organs, organisms, societies and minds are made up of nested hierarchies (*holarchies)* of *holons* or morphic units (Figure 1). At each level the whole is more than the sum of the parts, and these parts themselves are wholes made up of parts.

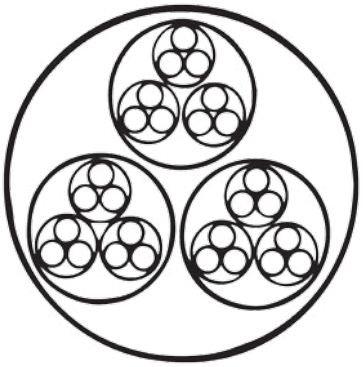

Figure 1. A nested hierarchy or holarchy of morphic units, each organized by a morphic field. These could be subatomic particles in atoms, molecules, and crystals. Or they could be cells, tissues, organs, organisms, and societies of organisms.

2. The wholeness of each level depends on an organizing field, called a *morphic field*. This field is within and around the system it organizes and is a vibratory pattern of activity that interacts with electromagnetic and quantum fields of the system. The generic name morphic field includes
   a. Morphogenetic fields that shape the development of plants and animals.
   b. Perceptual and behavioral fields that organize the perceptions, movements, instincts and learned behavior of animals.
   c. Social fields that link together and coordinate the behavior of social groups such as termite colonies, schools of fish, flocks of birds, packs or herds of animals, and human societies.
   d. Mental fields that underlie mental activities and shape the habits of minds.
3. Morphic fields contain attractors (goals) and *chreodes* (habitual pathways towards those goals) that guide a system toward its end state while maintaining its integrity, stabilizing it against disruptions.
4. Morphic fields are shaped by morphic resonance from all similar past systems, and thus contain a cumulative, collective memory. Morphic resonance depends on similarity and is not attenuated by distance in space or time. Morphic fields are local, within and around the systems they organize, but morphic resonance is non-local.
5. Morphic resonance involves a transfer of form, or in-*form*-ation, rather than a transfer of energy.
6. Morphic fields are fields of probability, like quantum fields, and they work by imposing patterns on otherwise random events in the systems under their influence.
7. All self-organizing systems are influenced by self-resonance from their own past, which plays an essential role in maintaining a holon's identity, continuity and memory (Sheldrake, 2009).

This hypothesis leaves open the question of how morphic resonance actually works. There are several suggestions. One is that the transfer of information occurs through the "implicate order," as proposed by the quantum physicist David Bohm (Sheldrake 2009, Appendix B). The implicate or enfolded order gives rise to the world we can observe, the explicate order, in which things are located in space and time. In the implicate order, according to Bohm, "everything is enfolded into everything" (Bohm, 1980).

Or resonance may pass through the quantum vacuum field, also known as the zero-point energy field, which mediates all quantum and electromagnetic processes (Laszlo, 2007).

Or similar systems might be connected through hidden extra dimensions (there are five in string theory and six in M-theory) (Carr, 2008). It's also possible that morphic resonance depends on new kinds of physics as yet unthought-of.

As applied to the sense of being stared at (scopesthesia), morphic field hypothesis implies that the effects on the subject being stared at depend more on the focusing of attention and intention than on distance. For example, this sense may work just as well over a distance of hundreds of feet as over a few feet if the process of watching is aided by telescopic lenses. It may also work through indirect means, as in television or closed circuit television (CCTV), although more weakly than through direct vision, which establishes a more direct connection (Sheldrake, 2013).

In relation to telepathy, this hypothesis suggests that telepathy will occur primarily between bonded members of social groups rather than between strangers (Sheldrake, 2013).

Telepathy would be expected to occur most effectively between people who are strongly bonded emotionally, like mothers and babies, twins, parents and children, lovers, spouses, and best friends.

The sense of being stared at and telepathy are natural consequences of the hypothesis of morphic fields. Although this hypothesis could perhaps account for clairvoyance, psychokinesis, and precognition, it only does so through chains of additional hypotheses, whereas possible explanations for the sense of being stared at and telepathy emerge naturally and directly from this hypothesis.

Applications

This hypothesis predicts that animals might be able to detect through their own perceptual fields when the perceptual fields of other animals are brought to bear upon them, even if they cannot see, hear, or smell the animal watching them. This field sensitivity may not be consciously perceived and may be part of a background unconscious awareness.

In the course of evolution, a greater awareness of being observed may have been of adaptive value, especially to a prey animal sensing when it is being watched by a potential predator. This ability could have become widespread within the animal kingdom. It could also be expected to be widespread among human beings, and indeed surveys show that over 90% of the population, including children and even people in industrial countries, have reported the experience of being watched from behind or of watching other people who then turn around. There is now good empirical evidence that people can indeed tell, at levels very significantly above chance, when they are being stared at from behind. This ability can also be detected through CCTV through physiological changes in galvanic skin response, which are unconscious (Sheldrake, 2005).

The morphic field approach to telepathy predicts that it is widespread among animals and may enable members of social groups to communicate at a distance. Animals such as pet dogs, cats and parrots that bond with humans will pick up their owners' intentions telepathically, including their intentions to return home. There is now good evidence that dogs know when their owners are coming home even when they are miles away, when they return at randomly selected times, and when they travel in unfamiliar vehicles. The pets seem to detect their owners' intentions telepathically. This hypothesis also predicts that these effects will occur only between animals and people with whom they are strongly bonded, in agreement with the facts (Sheldrake, 2011).

The same principles apply to humans. Telepathy would be expected to occur most effectively between people who are strongly bonded emotionally, like mothers and babies, twins, parents and children, lovers, spouses, and best friends. This indeed seems to be the case, both in spontaneous cases of telepathy and in experimental investigations (Sheldrake, 2013).

Other examples of documents, supportive evidence

There is now much evidence for the sense of being stared at and for telepathy in animals and people, as summarized in my books *Dogs That Know When Their Owners Are Coming Home, And Other Unexplained Powers of Animals* (second edition, 2011) and *The Sense Of Being Stared At, And Other Unexplained*

Powers Of Human Minds (second edition, 2013).

Application to non-parapsychological phenomena and mainstream domains

The hypothesis of morphic fields was primarily developed in relation to chemistry, biology, psychology and social organization. It is primarily about "normal" non-psi phenomena.

Another application of this hypothesis is a new approach to animal navigation. I discuss the question of how animals navigate remains largely unsolved in my book *Seven Experiments That Could Change The World* (Sheldrake, 2002). The most detailed experiments are on homing pigeons. Pigeons can find their home from hundreds of miles away from unfamiliar places. Racing pigeons can return from 600 miles away in about 10 hours, an average speed of 60 mph. They do not search at random; they know where to go. Attempts to explain this phenomenon in terms of a sun compass, memorizing the outward journey, inertial navigation, and the sense of smell have all failed. Some researchers speculate that a magnetic sense could explain navigation, and some migrating animals do indeed seem able to detect the earth's magnetic field. Although a compass sense may help an animal stay on course, it cannot possibly explain navigation itself. Imagine that you parachute into an unknown place and are given a compass. You would immediately know where north was, but this would not tell you where home was. A compass sense could help you if you knew where home was by some other means, but would not help if you did not have a map or some other source of directional information.

My own hypothesis is that pigeons are linked to their homes by morphic fields, built up through familiarity with their home and surrounding area. The pigeons, when taken away from home, remain connected with it through these fields, which give a sense of direction. A crude mechanical analogy is to think of the pigeons as joined to their home by a kind of invisible elastic band. Through this field connection, they feel a pull toward their destination. Attempts to explain navigation without this sense might illuminate some details of the animals' sensory processes, but there is no explanation for the sense of direction itself.

Thus morphic fields might help to solve the mystery of animal navigation. One way of testing this hypothesis is to use a mobile pigeon loft, in which the home is moved from the pigeons rather than the pigeons from the home. I have conducted several experiments with mobile pigeon lofts that have yielded very promising results. In the most recent test, a pigeon loft was mounted on a ship belonging to the Royal Dutch Navy and moved 6,000 miles from Holland to the Caribbean and back again. Pigeons were able to find their home on the moving ship from substantial distances—in one case from 300 miles away over the Atlantic Ocean (Sheldrake, 2002, Appendix).

Future research and applications

1. Experimental tests of scopesthesia in non-human animals. For example, if prey animals, e.g., mice, are placed in a cage and filmed continuously, do they behave differently when they are being watched by a cat behind a one-way mirror, compared with when the cat is prevented from watching them by interposing a barrier between the cat and the mirror? Experiments of this type would open up the possibility of an extended natural history of scopesthesia both through laboratory experiments and observations of wild animals. Such experiments would not

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necessarily confirm the details of the morphic field/extended mind hypothesis, but they would ground the phenomenon more firmly in biology and natural history, whatever the preferred explanation.

2. Experiments on animal telepathy could help to normalize telepathy as a biological phenomenon within social groups. For example, do wolf cubs, when filmed by a miniature camera in their den, show signs of anticipation before their parents return from a hunting trip with food? Is the behavior of wild animals analogous to dogs that know when their owners are coming home?
3. Morphic fields of social groups may help to coordinate flocks of birds and schools of fish, which can rapidly change direction without the individuals bumping into each other. These field-like phenomena occur when the individuals are very close to each other, but experiments on separating schools of fish or flocks of birds into subgroups could reveal whether this coordination to some extent remains at a distance. Similar experiments could be carried out with ant and termite colonies, which may also be coordinated by morphic fields (Sheldrake, 2002, Chapter 3). These phenomena may differ in degree, but not in kind, from telepathy at a distance.
4. In the Appendix to the third edition of my book *A New Science of Life* (called *Morphic Resonance* in the United States) I suggest ten new tests for morphic resonance in the realms of physics, chemistry, biology, psychology, and analogue computing (Sheldrake 2009). If any of these tests support the hypothesis of morphic resonance they would indirectly support the morphic field hypothesis of psi phenomena.
5. Further experiments with homing pigeons are needed to find out whether pigeons can indeed find a home that moves, taking further the preliminary experiments from my own research with the Royal Dutch Navy. Such experiments would be best carried out at sea. Support for the morphic field hypothesis of animal navigation would indirectly support the morphic field hypothesis of psi phenomena.
6. The evolutionary and biological basis of telepathy is probably rooted in the communication of needs or alarms at a distance. Telepathic communication between babies and their mothers seems to occur quite commonly (Sheldrake, 2013), and further research on mother-baby telepathy could help ground human telepathy in a biological and evolutionary context. Similar research on telepathy between lactating mammals of other species and their babies would widen this topic and deepen our biological understanding.

Differentiating from other models of psi

Several models of psi start from physics, in particular quantum physics, whereas the morphic field model starts from a holistic approach to nature that does not seek to explain everything in terms of smaller systems, and ultimately in terms of the smallest of all systems, namely

quantum processes. The morphic field approach also differs radically from the generalized quantum theory model, which is based on non-local correlations rather than causal connections (Walach et al., 2014). The sense of being stared at arises as a response to being stared at: staring is a cause, and detecting it is an effect. Likewise, telepathy is causal: a distressed baby causes its mother's telepathic response.

Nevertheless, the approach to telepathy in terms of morphic fields is similar to Dean Radin's hypothesis of entangled minds, taking quantum entanglement or non-locality as a model that can be applied at systems at much higher levels of complexity (Radin, 2006). In common with the entangled minds model, the morphic field hypothesis predicts that organisms that have been part of the same social system from the past, part of a bonded group, will remain connected at a distance. This hypothesis also predicts that the connections will not fall off with distance, in agreement with many observations on telepathy.

The morphic field hypothesis also differs from "one mind" approaches that treat psi phenomena as aspects of an ultimately unifying mind underlying all things (Dossey, 2014). The morphic field approach does not necessarily depend on a kind of ultimate mind at a higher level, but rather on fields of connection between animals and what they are watching, and also connections between members of social groups.

This hypothesis also differs from physics-based approaches designed to account for precognition and presentiment in terms of causal influences "backward" in time. The morphic field hypothesis has little to say about precognition and presentiment. Morphic fields may be complementary to time-reversal hypotheses.

The morphic field model differs from James Carpenter's first-sight model of psi in its emphasis. The first sight model deals with unconscious mental processing that is scanning inputs, including psi inputs, which are at first preconscious (Carpenter, 2012). It is a psychological model rather than a model of the extended mind or of social fields. But these two approaches seem compatible. Morphic fields and the extended mind would influence first sight.

Further reading

My book *A New Science of Life* (third edition 2009, called *Morphic Resonance* in the US) outlines the hypothesis of formative causation through morphic fields and morphic resonance, reviews evidence from 25 years of research, and proposes ten new tests for morphic resonance. The fullest statement of the hypothesis of formative causation and its application to collective memory, individual memory and cultural inheritance is in my book *The Presence of the Past: Morphic Resonance and the Habits of Nature* (second edition, 2012).

Research on telepathy in animals, as well as animal premonitions and the sense of direction is summarized in my book *Dogs That Know When Their Owners Are Coming Home, and Other Unexplained Powers of Animals* (second edition, 2011).

The extended mind hypothesis and a discussion of human telepathy is summarized in my book *The Sense of Being Stared At and Other Unexplained Aspects of Human Minds* (second edition, 2013).

The empirical evidence for scopesthesia and its theoretical implications were the subject of a special issue of the *Journal of Consciousness Studies* (Vol. 12, No. 6, 2005) in which I wrote two target articles and a response to 14 other articles and comments by other researchers, including skeptics.

I have also published many experimental papers on the sense of being stared at and on animal and human telepathy and which are all available online through my website:

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Papers on stare detection: https://www.sheldrake.org/research/sense-of-being-stared-at
Papers on telepathy in non-human animals: https://www.sheldrake.org/research/animal-powers

Papers on telepathy in humans: https://www.sheldrake.org/research/telepathy

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