Part Eight: Practical Applications

Chapter 27

Psi in Everyday Life

Nonhuman and Human

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Psi is often expressed in everyday life. For example, many dogs and cats seem to anticipate when their owners are coming home, waiting by the door or window before the person is within earshot or within the range of smell (Sheldrake, 1999a). Most people have had the experience of thinking of someone for no apparent reason who then calls on the telephone, and they have reacted by saying something like "I was just thinking about you!" (Sheldrake, 2003a). A large majority of the population has experienced turning round to find they are being stared at, or they have stared at other people from behind and found that they turn around (Sheldrake, 2003a).

In this chapter I discuss research on the natural history of such everyday phenomena, and show how they can lead to more detailed, experimental investigations. Do some animals really know when their owners are coming home in a way that cannot be explained in terms of sensory cues or routine expectation? Can people really anticipate who is calling them on the phone at levels above chance? Is the sense of being stared at real? The available evidence suggests that the answer to all these questions is "yes." The study of the natural history of psi phenomena provides many suggestive leads for more detailed experimental investigations.

Previous Research on Humans

In the 1977 edition of the *Handbook of Parapsychology*, Louisa Rhine discussed spontaneous cases of psi in the context of research methodologies. Rhine also summarized the work of several other researchers who had collected case material, including the work of psychiatrist Berthold Eric Schwarz, who had kept a diary of seemingly telepathic incidents that occurred with his own children from birth until the ages of 7 and 9 (Schwarz, 1972).

Schouten (1981) reviewed 1,000 cases collected at Freiburg, Germany (the "Sannwald" collection) and also sampled about 15 percent of the cases in the Rhine collection of more than 10,000 reports, mainly concerning telepathy and precognition (Schouten, 1982). In both collections, negative events predominated: 49 percent of the German cases and 38 percent of the Rhine cases concerned deaths, and serious accidents and illness were 14 percent and 27 percent respectively. "Trivial" incidents, which are of course more common in everyday life, made up only 14 percent of the Sannwald collection and 11 percent of the Rhine collection. As Schouten pointed out, these collections of cases were probably biased towards more serious incidents, because these seem more remarkable and tend to be remembered better than "trivial" cases. Likewise, in his analysis of the classic collection of cases published by members of the Society for Psychical Research under the title "Phantasms of the Living" (Gurney, Myers, & Podmore, 1886), Schouten found that serious cases were reported more than non-serious ones, which were more easily forgotten (Schouten, 1979).

Many surveys have shown that psi-related experiences are reported by large numbers of people, often by a majority of the population. In a survey of about 1,500 adult Americans in 1987 published by the University of Chicago's National Opinion Research Center, 67 percent of respondents said they had had psi-type experiences (Greeley, 1987). Comparable percentages were found in surveys in Europe (Haraldsson, 1985), Asia (McClenon, 1993), and Australia (Thalbourne, 1995). In surveys in 13 European countries and in the United States, more women than men said they had had telepathic experiences, except in Holland and Norway, where the percentages were the same (Haraldsson & Houtkooper, 1991). Since the 1990s, new collections of case histories and surveys have revealed much more about the natural history of psi among domestic animals and humans, opening up new possibilities for experimental investigation.

Previous Research on Everyday Psi in Nonhuman Animals

Until recently, almost the only research on psi in everyday life in animals had been an analysis of case reports by Rhine and Feather (1962). They described five kinds of behavior suggesting psi:

1. Behavior that suggests a reaction to impending danger to the animal or its owner.
2. Behavior that suggests a reaction to the death of the owner at a distance.
3. Behavior that suggests anticipation of the owner's return.
4. Homing behavior.
5. Psi trailing, involving cases in which an animal left behind follows its owner to a totally new location that the animal had never visited previously. Rhine and Feather (1962) found 25 well-authenticated cases involving over 30 miles of travel.

Zoologists have made extensive studies of homing behavior, mainly by homing pigeons (for a review, see Sheldrake, 2011), but none of these other suggestive leads was followed up until the 1990s.

The Natural History of Psi in Nonhuman Animals

As a biologist, I am convinced that the best starting point for scientific enquiry is a study of the natural history of the phenomena [see chapter 11, this volume]. Apart from Rhine and Feather's (1962) survey, there seem to have been no systematic attempts to collect or classify data from people who had many opportunities to observe the behavior of animals. I undertook such a survey myself. My assistants and I interviewed hundreds of people with extensive experience of animals, including dog trainers, search-and-rescue dog handlers, police dog handlers, blind people with guide dogs, veterinarians, kennel and stable proprietors, horse trainers and riders, farmers, shepherds, zookeepers, pet shop proprietors, reptile breeders, and pet owners. Through appeals in the media in the UK, U.S., Switzerland, Germany, and France, I received several thousand more reports. All these reports have been stored on a computerized database. By April 2014, my database contained more than 5,000 case histories, classified into 71 different categories.

This database is a non-random sample and gives no information about the frequency of these reported patterns of behavior in a random sample of pets. Therefore, my assistants and I surveyed over a thousand randomly chosen pet owners in Britain and the U.S. to find out how common various kinds of unexplained behavior were (Brown & Sheldrake, 1998; Sheldrake, Lawlor, & Turney, 1998; Sheldrake & Smart, 1997). Of course, the fact that people say their pets show particular patterns of behavior suggestive of telepathy or precognition does not prove that the behavior really is telepathic or precognitive, but these reports and surveys form the basis for more rigorous experimental investigations to find out whether or not the reported behavior can or cannot be explained in terms of "normal" sensory transmission of information or by routine expectation or chance coincidence.

Dogs That Know When Their Owners Are Coming Home

The most convincing evidence for telepathy between people and animals comes from the study of dogs that seem to know when their owners are coming home. This anticipatory behavior is common. Many dog owners simply take it for granted, without reflecting on its wider implications.

The context for this behavior is the way that many dogs welcome their owners home with great enthusiasm. Unless they are well disciplined, they try to jump up and lick their owner's face, just as puppies greet their parents, with their tails wagging so vigorously that the whole hindquarters become part of the movement. Wolf greetings are similar. When cubs are weaned, they start soliciting food from their returning parents or other members of the pack. Most attention is directed to the highest-ranking animals (Serpell, 1986). Thus the greeting behavior that dogs display towards their owners has a long evolutionary ancestry. But many dogs go further than greeting their owners on arrival by anticipating their arrivals, seeming to know when they are on the way home even when they are many miles away.

Many dogs' anticipations occur when people at home have no idea when the absent person will be arriving. I have received numerous accounts from the families of lawyers, taxi drivers, military personnel, journalists, midwives, and other people who do not work fixed hours. They all say that the dog lets them know when their family member is on the way home. For example, Rebecca Kavich said:

> I could always tell when my husband was on his way home because his dog would tell me! His business is approximately a 10-minute drive from home and about 15 minutes before he got home our Husky, Zero, would start to get agitated and excited. He'd follow me around and run back and forth to the front door waiting and looking, and waiting. Tony would come home at different times each day depending on his schedule but it seems Zero sensed when Tony was closing up and heading home.

People who work in boarding kennels have frequent opportunities to observe the behavior of dogs prior to the return of their owners from holidays or other journeys. We interviewed kennel proprietors in Britain and the United States and found that most had noticed that some dogs seemed to know when their owners were coming to pick them up. Typical comments

included the following: "Some get more alert when it is the day for them to go home." "There's an air of expectancy a few hours beforehand." "Some of the dogs do act differently on the day when they are going home."

Perhaps some dogs in kennels behave differently because the kennel staff gives them more attention when they are about to be picked up, but sometimes owners return unexpectedly early, and some dogs still seem to know. Sam Hyer recalled that one "relatively calm dog ... stood by the door for three hours. I took it out several times but it did not need to relieve itself and in two hours his owner drove in two days early. I had no idea that the owners would be early."

From informal surveys of friends, colleagues, and people at my lectures and seminars I found that between a third and two thirds of dog owners said they had noticed this anticipatory behavior in their dogs, but although such informal surveys give a rough indication, they are a nonrandom sample. To avoid such possible sources of bias, my assistants and I interviewed random samples of the population, using standard telephone surveying techniques. We did this in four different geographical and cultural environments: North London, northwest England, Santa Cruz in California, and the Los Angeles suburbs.

The first question we asked pet owners was: "Have you or anyone in your household ever noticed your animal getting agitated before a family member has arrived home?" Those who answered "yes" were then asked: "How long before you/they arrive is the pet agitated?" Despite the great differences between the places surveyed and the fact that the surveys were carried out by different people, the results were in remarkable agreement. About half the dogs were said to show anticipatory behavior before their people came home; the overall average was 51 percent. The highest percentage was in Los Angeles (61 percent) and the lowest in Santa Cruz (45 percent). These figures may have underestimated positive responses, because people who live alone do not usually know whether or not their animal anticipates their return. Most dogs that anticipated their owners' returns did so less than 10 minutes before they arrived, but between 16 and 25 percent were said to do so more than 10 minutes in advance (Brown & Sheldrake, 1998; Sheldrake, Lawlor & Turney, 1998; Sheldrake & Smart, 1997).

Such reactions are unlikely to be due to sounds and smells. Ten minutes before their arrival home by car or public transportation, most of these people would have been at least a mile or two away, and some were much more distant. Most dogs have a much better sense of smell than we do and it is likely that they could smell their owners, or their owners' vehicles, from further away than a person could. But just how far?

Dogs normally use their sense of smell for tracking, sniffing the ground and following a trail. But to smell someone returning home, they would have to sniff the air. Assuming that the wind is blowing in the right direction and that they are outdoors, or indoors with the windows open, over what range might they be able to smell an approaching person or car? The best estimates I have been able to obtain suggest that this distance is considerably less than a mile, even with the most sensitive of all breeds, the bloodhound. In the UK, the Essex Police Dog team conducted trials of bloodhounds. If somebody was hiding in a hedge, a bloodhound up to half a mile downwind could sometimes pick up the scent of that person, but only if the wind was blowing in the right direction and if the person was stationary. Smell might help explain why some dogs react only a minute or two before their owners arrive, but many react 10 minutes or more in advance, when the person is several miles away. Moreover, they do so irrespective of the wind direction, and can still do it when the windows are shut. Their anticipation cannot reasonably be explained in terms of smell.

Most dogs can hear sounds too high-pitched for us to detect, as in dog whistles that emit sounds above the frequency range humans can hear, but they may not be able to hear sounds much further away than humans can. Celia Cox, a British vet, tested the hearing of thousands of dogs and estimated that their sensitivity to noise levels is similar to that of people. She doubts that they can hear their owners approaching from very far away: "People have told me that their dogs know when they are coming home even before they have turned into their road, but I think it is highly unlikely that this is purely due to hearing" (Sheldrake, 1999a, p. 19). Thus, natural history suggests that in many cases dogs seem to anticipate their owners' returns in a way that cannot be explained by routine, the anticipations of people at home, smell, or hearing. But only experimental tests can give decisive evidence.

Pam Smart and I carried out experiments with return-anticipating dogs to find out whether they really did anticipate their owners' returns, even when they could not sense it by "normal" means. The first and most extensive tests were with Pam's own terrier, Jaytee, near Manchester, England. Preliminary observations revealed that Jaytee usually started waiting for Pam just before she set off homewards, apparently when she formed the intention to do so. He did this whatever the time of day on 85 out of 100 return journeys. On some occasions he failed to react he was sick; on others there was a bitch on heat in the next flat, showing that Jaytee could be distracted. But on 85 percent of the occasions he seemed to anticipate Pam's return (Sheldrake & Smart, 1998).

In formal, randomized tests, Pam went at least five miles away from home. While she was out, the place where Jaytee waited was filmed continuously on time-coded videotape. She did not know in advance when she would be going home and she did so only when she received a message from me via a telephone pager at a randomly selected time. She travelled by taxi, in a different vehicle each time, to avoid any familiar car sounds. On average, Jaytee spent 96 percent of his time away from the window, and was at the window only 4 percent of the time during the main period of Pam's absence. When she was on the way home, he was at the window 55 percent of the time. This difference was very significant statistically ($p < .0001$; Sheldrake

& Smart, 2000a). In tests carried out with the same dog under similar conditions by Richard Wiseman, a prominent skeptic, and his assistant Matthew Smith (Wiseman, Smith, & Milton, 1998), Jaytee was at the window only 4 percent of the time during the main period of Pam's absence, as in our own experiments, and 78 percent of the time when she was on the way back, again a statistically significant effect (p = .02; Sheldrake & Smart, 2000a). Pam Smart and I carried out many further filmed observations of Jaytee's behavior. Again and again, on film and under controlled conditions, Jaytee anticipated Pam's returns (p=.000003). In control tests, filmed when Pam was not coming home, he showed no tendency to wait by the window (Sheldrake & Smart, 2000a). We did similar experiments with other dogs, most notably a Rhodesian Ridgeback called Kane, who also waited at the window when his owner was on the way home at nonroutine times in a way that was far above chance (p = .0002; Sheldrake & Smart, 2000b).

Could it be that dogs know when their owners are coming home because of precognition of the actual arrival, rather than picking up the thoughts or intentions of their owners in real time? Perhaps in some cases this is so. But real-time telepathy seems to me a more likely explanation when dogs respond at the time their owners are setting off, or when they are simply intending to set off before they have actually done so. Real-time telepathy also seems a more likely explanation for the responses of animals that react, as many seem to, when their people reach a crucial stage in their journey home, such as disembarking from a plane, boat, train, or bus (Sheldrake, 1999a).

Skeptical Claims

In the tests conducted by Wiseman and Smith, Jaytee showed the same pattern of behavior as in our own tests. Nevertheless, they claimed through a press release and media interviews that they had debunked the "psychic pet phenomenon," a claim that was widely reported in newspapers in Britain (for references see Sheldrake, 2011). They arrived at this conclusion by using an arbitrary criterion for Jaytee's success: if he waited at the window for more than two minutes before Pam set off to come home, for no reason apparent on the videotape, then he had given a false alarm and failed the test (Wiseman et al., 1998). They disregarded all their own data after this point, even though the data showed that Jaytee was waiting by the window most of the time when Pam was on the way home (Sheldrake, 1999b, 2000a). Wiseman and his colleagues have continued to portray their tests as a refutation of Jaytee's abilities (Wiseman, Smith, & Milton, 2000; Wiseman, 2011). Several independent authors agree that Wiseman, Smith and Miltons's data show the same pattern as our own; they have concluded that Wiseman et al.'s claims to have refuted the "psychic pet phenomenon" are misleading, to say the least (Carter, 2007, 2010; McLuhan, 2010; Storr, 2013). The conjurer James Randi is the only other committed skeptic who claimed to have refuted the ability of dogs to know when their owners are coming home is. When challenged he could not substantiate his claims (Sheldrake, 2011, p. 315), and has later admitted to lying (Storr, 2013, p. 368).

Cats, Horses, and Parrots That Anticipate People's Returns

Many cats anticipate the returns of their owners, but fewer do so than dogs. In my database there are 664 cases of return-anticipating cats, compared with 1,249 cases of dogs. In our random household surveys in Britain and the U.S., overall 55 percent of dogs were said to show return-anticipatory behavior compared with 30 percent of cats. There was a similar difference between dogs and cats in all four locations (Sheldrake, 1999a).

This does not necessarily mean that cats are less sensitive; they may simply be less interested. Some cats ignore their owners' returns when they come home from work or shopping, but they are spectacularly successful at anticipating when they are coming back from holidays or long absences; they seem to know many hours in advance. For instance, a couple in England left on a sailing trip, planning to be away for several months, but with no idea when they would return. Their neighbor fed their cat Thomas. Jacqui Geater told me that when they came home after about three months, "We found a loaf of bread and a bottle of milk waiting for us in the flat. We were amazed because nobody knew when we were getting back, not even us. When I asked my neighbor how she knew we were coming, she said, 'We didn't know, but Thomas did.' He never went near the car park at the front of the flats, but that day he sat there, looking up the road the whole day. 'So we knew you were arriving today,' she concluded" (Sheldrake, 2013, p. 209).

Some parrots also anticipate their owners' returns. Some even signal the arrival of someone either by calling his or her name or by making some other announcement (Sheldrake, 1999a). Joanna Burger, a biology professor and the author of *The Parrot Who Owns Me*, told me how her African Grey, Tiko, was waiting to welcome her home after an exhausting journey, standing on the railing at the foot of the stairs. "I don't know how he knew," her partner said, "but 10 minutes before you walked through the door he opened his cage in the dark and flew to the banister, calling softly for you. I looked, but there was no taxi outside" (Burger, 2002, p. 240).

Some other members of the parrot family, such as cockatiels and parakeets, also anticipate their owners' returns, as do some members of a few other species of birds, notably mynah birds. Some horses anticipate their people's arrivals, either when they come to feed them or visit them in their paddocks, or when they return from absences of weeks or months.

The species that react to their owners' returns are also those that form the closest bonds with humans. A few members of other species show anticipations of return if they are strongly bonded to the person returning, including geese, hens, hand-

reared lambs, rabbits, guinea pigs, and ferrets. But snakes, for example, are essentially solitary and do not even bond to other snakes, and I know of very few cases of return-anticipation by snakes. Fish kept as pets literally live in a different element, and I know of no cases of fish that know when their owners are on the way.

It would be surprising if all the very different species that anticipate arrivals had evolved this ability in response to domestication. Perhaps this might be plausible in the case of dogs and cats, which have been domesticated for thousands of years, but many pet parrots were captured in the wild, or have been bred in captivity for only one or two generations, so the ability to anticipate returns could hardly have evolved in so short a time.

Even some wild animals that have been raised by humans show this kind of behavior, such as Elsa, a lion cub brought up by Joy Adamson in Kenya. In her book *Born Free*, she describes how, during an absence in Nairobi, Elsa followed her husband around and went for a walk with him each evening, "but on the day of my return, she refused to accompany him and set herself down expectantly in the middle of the drive. Nothing would move her." Later, when Elsa returned to life in the wild, the Adamsons went to visit her every few weeks, and she usually arrived in their camp several hours afterward, "giving us a great welcome and showing more affection than ever" (Adamson, 1960, p. 28). Joy was convinced that Elsa "sensed our arrival in some mysterious way," even when she was far from the camp when they arrived there (Adamson, 1960, p. 137).

It seems likely that arrival-anticipation is a part of many species' natural behavior in the wild. Young animals, for example wolf cubs, may well anticipate the arrival of parents or other elders with food after a hunting trip. But practically nothing is known about such anticipations by animals under natural conditions. This would be a fruitful field for research.

Animals That "Read People's Minds" and Respond to their Intentions

Many people think that that their animals "read their minds." The perceptiveness of pets normally depends on a combination of influences, including body language, particular words, tones of voice, deviations from routine, and telepathy as well. As we have already seen, some animals pick up people's intentions when they are miles away.

Some cats strongly dislike going to the vet. Dozens of cat owners have told me that their cats simply vanish when they are due to be taken for their appointment. After several experiences of their cats disappearing, people try to avoid giving clues, but often their efforts are in vain. This is inconvenient not only for owners but also for vets.

How common is this kind of behavior? We carried out a survey of the veterinary clinics listed in the North London Yellow Pages, asking whether they found that some cat owners cancelled appointments because the cat had disappeared. Sixty-four out of 65 clinics had cancellations of this kind frequently. The remaining clinic had given up an appointment system for cats: people simply had to turn up with their cat, and thus the problem of missed appointments had been resolved (Sheldrake, 1999a).

The most common way in which dogs respond to their owners' intentions is not through aversions but through their enthusiasm for walks. Most dogs are excited by the prospect of a walk and they react with eager anticipation when they see their owners preparing to take them out or hear words such as "walk." Some are taken as a matter of routine at the same time every day, at which time they get excited. But many dog owners do not take their dogs out at routine times, and some have found that their dog's excitement begins *before* they have given any obvious signs, such as putting on their coat or getting out the leash. We have over 170 such reports in our database. Most informants were well aware of the possibility that body language could give the game away, but some have come to the conclusion that this cannot always be the explanation, because their dogs still react when sleeping or out of sight.

With dogs that respond in this way, it is possible to do simple experiments in which the dogs are kept where they cannot hear, see, or smell their owner, and are videotaped continuously. Then at a randomly selected time the owner starts thinking of taking them for a walk, and after a delay of, say, five minutes, actually does so. Does the videotape show that the dogs show signs of excitement before going on the walk, and after their owner had formed the intention to take them? Jan Fennell of England has already carried out some preliminary experiments of this kind in which the dogs were shut up in an outbuilding where they were filmed continuously. She thought about taking them for walks at randomly selected times, five minutes before actually doing so. In four out of five tests, the dogs moved closer to the door and sat or stood in a semicircle around the door, some with their tails wagging in a state of obvious anticipation for 3–5 minutes before Jan came and opened the door to let them out for their walk (Sheldrake, 1999a).

It makes a big difference in the lives of domestic animals whether their owners go out, especially if they go away on holiday or on other protracted journeys. Many dogs and cats seem to pick up their owners' intention to leave. No doubt this often happens because the animals see obvious preparations such as the packing of suitcases. But in our database there are over 150 reports from pet owners who think the animals know even before they have seen any telltale signs.

In the surveys we carried out in Britain and the United States, one of the questions we asked was: "Would you agree or disagree that your pet knows you are going out before you show any physical sign of doing so?" This question covers several different phenomena: going away on a journey, going out and leaving the animals behind, and going out and taking the ani-

mals with them. On average, 67 percent of dog owners and 37 percent of cat owners agreed. These were the highest percentages of positive answers to any of the questions we asked about the perceptiveness of pets (Brown & Sheldrake, 1998; Sheldrake, Lawlor & Turney, 1998; Sheldrake & Smart, 1997). But although this is one of the most common ways in which animals react to people's intentions, it is one of the hardest to test experimentally because it is difficult to keep the person away from the pet for hours or even days before the time of departure.

Many animals also seem to know when they are going to be fed, often showing their anticipation through excited behavior. This expectation may often be a matter of routine, or seeing, smelling, or hearing the person preparing the food, or responding to some other signal from that person. But it may also depend on a more subtle detection of intent.

The most striking examples concern not regular meals, but treats or tidbits. Cats show very similar behavior. In principle it should be possible to run videotaped experiments to test whether some of these responses are indeed psi-mediated, as opposed to being based on sensory cues or routine.

Some language-using parrots respond to their people's moods, feelings, and intentions by making appropriate comments. In some cases their ability seems to be telepathic. The most remarkable animal I have come across is an African Grey parrot, N'kisi. His vocabulary of around 1,500 words is probably the largest ever recorded. When he was only about two years old, his owner, Aimée Morgana, noticed that he seemed to respond to her thoughts or intentions by saying what she was thinking. He slept in her bedroom and woke her up on several occasions by commenting loudly on what she was dreaming.

She and I set up a controlled experiment in which she viewed a series of photographs in a random sequence while she was in a different room on a separate floor, being filmed continuously. The pictures were in a random order and represented 20 words in N'kisi vocabulary, such as "flower," "hug," and "phone." Meanwhile, N'kisi, who was alone, was also filmed continuously. N'kisi said one or more of the key words in 71 trials, and scored 23 hits, in which the key words he said corresponded to the target pictures. This hit rate was very significantly higher than expected by chance, as shown by a randomized permutation analysis in which the words said in each trial were randomly assigned to pictures shown in the whole series of trials. In only 5 out of 20,000 random permutations were there were as many hits as N'kisi actually scored, giving a p value of .00025 (Sheldrake & Morgana, 2003).

Animals' Reactions to Distant Death and Distress

The responses of animals to the death or distress of their people at a distance are not exactly everyday events, but in the context of other evidence for psi between people and animals they provide particularly striking examples. I have received 129 accounts of the reactions of dogs to the death of an absent person to whom they were attached. The animals showed various signs of distress for which there seemed to be no obvious reason, and most of them made unusual sounds, including howling (in 36 percent of the cases), whimpering, whining, crying, and growling. Typically, the dog's behavior could only be understood in retrospect, usually when a phone call came to break the news (Sheldrake, 1999a).

There are 48 cases in my database of dogs reacting to distant emergencies in a comparable way by showing signs of distress or restlessness. The cases included fires, heart attacks or other medical crises, attempted suicides, and car or motorcycle accidents. For example, Marguerite Derolet, of France, told me that one day her dog "went crazy.... I was very frightened because I couldn't calm him down." Soon afterwards, she received a phone call to say that her husband, a taxi driver, had had a serious accident about five kilometers from home at the "exact same minute" that the dog began behaving so excitedly.

Some cats also responded to distant deaths by making unusual sounds, such as howls, plaintive meows, or whining, or by showing other signs of distress. With cats, as with dogs and with people, the ability to react to a person's death does not seem to fall off with distance. In some of the cases in my collection the person dying was thousands of miles away, yet his or her cat still seemed to know (Sheldrake, 1999a).

The Natural History of Human Telepathy

In most, if not all traditional societies, telepathy seems to be taken for granted and put to practical use. Travelers in Africa have reported that people seemed to know when a people to whom they were attached were coming home (e.g. Van der Post, 1962, pp. 236–237). The same occurred in rural Norway, where there is a special word for the anticipation of arrivals: *vardøger*. Typically, someone at home heard a person approaching the house, and coming in, yet nobody physically did so. Soon afterwards the person really arrived (Hygen, 1987). Similarly, the "second sight" of the some of the inhabitants of the Scottish Highlands included visions of arrivals before the person in the vision arrived (Lang, 1911).

Unfortunately, most anthropologists who have lived with traditional peoples have not studied these aspects of their behavior, or at least they have not reported them. In an attempt to find out more about telepathy in modern societies, I launched a series of appeals for information through the media in Europe, North America, and Australia. Over a period of 15 years, I built up a database of human experiences, similar to my database on unexplained powers of animals, with over 5,000 case histories, classified into more than sixty categories.

Many cases of apparent of telepathy occurred in response to

other people's needs. For example, hundreds of mothers told me that when they were still breastfeeding, they knew when their baby needed them, even from miles away (Sheldrake, 2002). They felt their milk let down (the milk let-down reflex is normally triggered by hearing the baby cry). When mothers who were away from their babies felt their milk let down, most of them took it for granted that their baby needed them.

With the help of a midwife, I carried out a study of nine nursing mothers in North London over a two-month period. While the mothers were away from their babies, all the times at which their milk let down were recorded; meanwhile the baby-sitters noted when the babies showed signs of distress. After eliminating events that could have been due to synchronized rhythms in mother and baby at regular feeding times, most of the unexpected milk let-downs did indeed coincide with the babies' distress. The statistical odds against their occurring by chance were a billion to one (Sheldrake, 2003a).

Psychic connections between mothers and their children often seem to continue even when the children have grown up. Many stories in my database concern mothers who went to their children or telephoned them when they were in distress, when they could not have known by any conventional means. Other collections of stories give similar examples of psychic links between mothers and children (Eason, 1999).

A telepathic connection between mothers and their babies makes good sense in evolutionary terms. Mothers who could tell at a distance when their babies needed them would tend to have babies that survived better than the babies of insensitive mothers. Until the invention of modern telecommunications, telepathy was the only way in which people could be in touch at a distance instantly. In most respects telepathy has now been superseded by telephones—but it has not gone away.

Telephone Telepathy

The most common stories about apparent telepathy concern telephone calls. Hundreds of people have told me that they had thought of someone for no apparent reason, and then that person rang in a way that seemed uncanny, or else they knew who was calling when the phone rang, before they looked at a caller ID display or answered. I followed up these stories with a series of surveys in Europe and in North and South America. On average, 92 percent of the respondents said they had thought of someone as the telephone rang, or just before, in a way that seemed telepathic (Brown & Sheldrake, 2001; Sheldrake, 2003a).

When I talked to friends and colleagues about this phenomenon, most agreed it seems to happen. Some accepted that it was often telepathic or intuitive; others tried to explain it "normally." First, they said you think about other people frequently; then sometimes, by chance, somebody rings while you are thinking about them; you imagine it is telepathy, but you forget the thousands of time you were wrong. The second argument is that when you know someone well, your familiarity with his/her routines and activities enables you to know when s/he is likely to ring, even though this knowledge may be unconscious. I searched the scientific literature to find out if these hypotheses were supported by any data or observations. I could find no research whatever on the subject.

I designed a simple procedure to test both the chance-coincidence and the unconscious-knowledge hypotheses experimentally (Sheldrake & Smart, 2003a). I recruited volunteers who said they quite frequently knew who was calling before answering the phone. I asked them for the names and telephone numbers of four people they knew well, friends or family members. The participants were then filmed continuously throughout the period of the experiment alone in a room with a landline telephone, without a caller ID system. If there was a computer in the room, it was switched off, and the participants had no mobile phone. We selected one of the four callers at random by the throw of a dice and rang up the selected person and asked him/her to phone the participant in the next couple of minutes. The caller did so, the person's phone rang and before answering it she had to say to the camera who, out of the four possible callers, she felt was on the line.

By guessing at random, volunteers would have been right about one time in four, or 25 percent. In fact, the average hit rate was 45 percent, very significantly above chance level ($p = 1 \times 10^{-12}$; Sheldrake & Smart, 2003b). None of the volunteers was right every time, but they were right much more than they should have been if the chance coincidence theory were true. This above-chance effect has been replicated independently in telephone telepathy tests at the Universities of Amsterdam, Holland (Lobach & Bierman, 2004) and Freiburg, Germany (Schmidt, Erath, Ivanova, & Walach, 2009).

In some of our tests, there were two familiar callers and two unfamiliar callers whom the participants had never met but whose names they knew. The hit rate with unfamiliar callers was near the chance level; with the familiar callers it was 52 percent, about twice the chance level (Sheldrake & Smart, 2003b). There was a tendency for a response bias in favor of familiar callers, but when this was taken into account, there was still a very significantly higher hit rate with familiar than unfamiliar callers (Sheldrake, 2003b).

For some of our experiments we recruited young Australians, New Zealanders, and South Africans living in London. Some of their callers were back home, thousands of miles away, and the others were new acquaintances in England. In these tests, the hit rates were higher with their nearest and dearest far away than with people in Britain they had met only recently, showing that emotional closeness is more important than physical proximity (Sheldrake & Smart, 2003a, 2003b).

Telepathy also seems to occur in connection with other communication technologies. Many people say they have thought of someone who then emails them, or sends them a text message. Experiments with emails and text messages using similar methods to the telephone tests have also given positive, highly

significant results (Sheldrake & Avraamides, 2009; Sheldrake, Avraamides, & Novak, 2009; Sheldrake & Smart, 2005). As in telephone tests, the biggest effect was with familiar people, and it did not fall off with distance. The same was true of automated telepathy tests on the Internet (Sheldrake & Beeharee, 2009; Sheldrake & Lambert, 2007). As far as I am aware, no committed skeptics claim to have refuted the existence of telephone, email, SMS, or Internet telepathy.

The Feeling of Being Stared At

Most people have felt someone looking at them from behind, turned around and met the person's eyes. Most people have also experienced the converse: they have sometimes made people turn around by staring at them. In extensive surveys in Europe and North America, between 70 and 97 percent of adults and children reported experiences of these kinds (Braud, Shafer, & Andrews, 1990; Cottrell, Winer & Smith, 1996; Sheldrake, 1994). In surveys I carried in Britain, Sweden, and the United States, these experiences seemed to be most common when people were being stared at by strangers in public places, such as streets and bars. These experiences happened more when people felt vulnerable than when they felt secure. When people made others turn around by staring at them, both men and women said that curiosity was their most frequent reason for staring, followed by a desire to attract the other person's attention. Other motives included sexual attraction, anger, and affection (Sheldrake, 2003a). In short, the ability to detect someone's attention was associated with a range of motives and emotions.

In some oriental martial arts, students are trained to increase their sensitivity to being looked at from behind (Sheldrake, 2003a). And some people observe others for a living. The sense of being stared at is well known to many police officers, surveillance personnel, and soldiers, as I found through a series of interviews with professionals (Sheldrake, 2003a). According to experienced surveillance officers, this sense also works at a distance when people are watched through binoculars. Also several soldiers told me that some people could tell when they were being looked at through telescopic sights. Many celebrity photographers have had similar experiences. One long-lens photographer who worked for the *Sun,* the most popular tabloid newspaper in Britain, said that he was amazed how many times his quarries would "turn round and look right down the lens," even if they were looking in the opposite direction to start with, and he was up to half a mile away in situations where it is impossible for people to see him (Sheldrake, 2003a).

Many species of non-human animals also seem able to detect looks. Some hunters and wildlife photographers are convinced that animals can detect their gaze even when they are hidden and looking at animals through telescopic lenses or sights. One British deer hunter found that the animals seemed to detect his intention, especially if he delayed shooting when he had them in his rifle sights: "If you just wait a fraction too long, it will just take off. It'll sense you."

Conversely, some photographers and hunters feel when wild animals are looking at them (e.g., Corbett, 1986). The naturalist William Long, wrote that when he was sitting in the woods alone, he often felt that something was watching him, and found that he was indeed being watched by a bird, fox, or squirrel (Long, 1919). In their surveys in Ohio, Winer and his colleagues found that more than a third of their respondents said they had felt when animals were looking at them. About half believed that animals could feel their looks, even when the animals could not see their eyes (Cottrell et al., 1996).

If the sense of being stared at is real, then it must have been subject to evolution by natural selection. How might it have evolved? The most obvious possibility is in the context of predator-prey relations. Prey animals that detected when predators were looking at them would stand a better chance of surviving than those that did not (Sheldrake, 1999a).

In principle, it should be relatively easy to investigate the sensitivity of prey animals to unseen stares from predators both in the field and in the laboratory. For example, tests could be done with a cat and a mouse. The mouse could be in a cage videotaped continuously. The cat could be separated from it by an airtight window and a one-way mirror, so that the cat could see the mouse but the mouse could not see, hear or smell the cat. Then, in a series of trials, an opaque barrier would be placed in front of the cat, so that in some trial periods it could see the mouse and in others it could not. Would the mouse behave differently when being watched by the cat? As far as I know, no such studies have yet been carried out.

Experimental Tests of the Detection of Stares

Since the 1980s the sense of being stared at has been investigated experimentally through direct looking and through closed circuit television (CCTV; Braud, Shafer, & Andrews, 1990, 1993; Sheldrake, 1994). In the scientific literature it is variously referred to as "unseen gaze detection" or "remote attention" or "non-visual detection of staring" or "scopaesthesia" (from Greek *skopein* = to view and *aisthetikos* = sensitive; Sheldrake, 2005b).

In direct-looking experiments, people work in pairs, with a participant and a looker. In a randomized series of trials, blindfolded volunteers sit with their backs to the lookers, who either stare at the back of their necks, or look away and think of something else. A mechanical signal—a click or a beep—marks the beginning of each trial. Within a few seconds the volunteers guess whether they are being looked at or not. Their guesses are either right or wrong, and are recorded immediately. A test usually consists of twenty trials.

These tests are so simple that a child can do them, and thou-

sands of children already have. In the 1990s, this research was popularized through *New Scientist* magazine, BBC TV, and Discovery Channel TV and many tests were conducted in schools and as student projects at universities. Altogether, tens of thousands of trials were carried out (Sheldrake, 1999c, 2000b, 2001a, 2005a). The results were remarkably consistent. Typically, about 55 percent of the guesses were right, as opposed to 50 percent expected by chance. Although the effect was small, it was highly significant statistically because it was so widely replicated. In more rigorous experiments subjects and starers were separated by windows or one-way mirrors, eliminating the possibility of subtle cues by sound or even smell. They were still able to tell when they were being watched (Sheldrake, 2005a).

The largest experiment on the sense of being stared at began in 1995 at the NEMO Science Centre in Amsterdam. By 2005, more than 18,000 pairs had taken part, with positive results that were astronomically significant statistically. The most sensitive participants were children under the age of 9 (Sheldrake, 2005a). Surprisingly, the sense of being stared at works even when people are looked at on screens, rather than directly. CCTV systems are routinely used for surveillance in shopping malls, banks, airports, streets, and other public spaces. We interviewed surveillance officers and security personnel whose job was to observe people on screens. Most were convinced that some people could feel when they were being watched (Sheldrake, 2003a). The security manager in a large firm in London had no doubt that some people have a sixth sense. "They can have their backs to the cameras, or be scanned using hidden devices, yet they still become agitated when the camera is trained on them. Some move on, some look around for the camera."

In laboratory tests, many people respond physiologically to being watched through CCTV, even though they are unconscious of their response. In these experiments, the researchers put a volunteer in one room and a looker in another where the volunteer could be watched through CCTV. The volunteers' galvanic skin response was recorded, as in lie-detector tests, enabling emotional changes to be detected through differences in sweating; wet skin conducts electricity better than dry skin. In a randomized series of trials, the starers either looked at the participant's image on the TV monitor, or looked away and thought of something else. The volunteers' skin resistance changed significantly when they were being looked at. A meta-analysis of 15 CCTV staring studies showed that there were positive effects in most of them, and there was an overall positive effect that was statistically significant (Schmidt et al., 2004; chapter 18, this volume). The fact that gaze detection works through CCTV shows that people can detect other people's attention even when they are not being watched directly.

Skeptical claims. In response to the growing interest in the sense of being stared at, five CSICOP/CSI Fellows investigated the phenomenon, namely Robert Baker, David Marks, Susan Blackmore, Richard Wiseman, and Christopher French, who at the time was the editor of the main British skeptical magazine, *The Skeptic*. All five were academic psychologists. What did they find?

Robert Baker. Robert Baker, a retired professor of psychology at the University of Kentucky, made no secret of his preconceptions about the sense of being stared at: "Skeptics ... believe that it is nothing more than a superstition and/or a response to subtle signals from the environment" (Baker 2000, p. 40). He regarded his enquiries not as experiments but as "demonstrations" of the non-existence of an ability to detect stares.

In his first demonstration, Baker selected people who were engrossed in different activities in the University of Kentucky library. He unobtrusively positioned himself behind them and stared at them. He then introduced himself and asked them to fill in a response sheet. Thirty-five out of 40 people gave the expected response: "During the last 5 minutes I was totally unaware that anyone was looking at me."

However, contrary to Baker's prediction, two people reported that they had been aware that they were "being observed and stared at" and three reported they felt something was "wrong." Baker dismissed these unexpected findings. He argued that the three people who said something was wrong were not really affected by his staring. Instead, he assumed that their restlessness was the *cause* of their feeling something was wrong. But this argument begs the question. Baker also "discarded" the results from the two people who said they knew they had been stared at. He regarded them as "suspect" because one claimed he had extrasensory ability and the other claimed she was constantly being spied on (Baker, 2000). But if the sense of being stared at really exists, people who claim to have extrasensory abilities might be more sensitive than average, and so might paranoid people (Sheldrake, 1994).

Baker then carried out a second demonstration in which he himself stared at people through a one-way mirror (Baker, 2000). The results were non-significant, just as he expected. But his experimental design was poor, with three times more control then staring trials, and the instructions he gave to the participants were ambiguous, confusing, and self-contradictory (Sheldrake, 2001b; Baker, 2001).

David Marks. David Marks, a leading British skeptic, encouraged a fellow psychologist, John Colwell, to carry out a staring experiment in his laboratory at Middlesex University. Staring took place through a one-way mirror and Colwell and his colleagues tested the same people repeatedly. Individuals were given trial-by-trial feedback and improved with practice (Colwell, Schröder, & Sladen, 2000). The overall results were positive and very significant statistically.

In an article in the *Skeptical Inquirer*, Marks and Colwell (2000) tried to explain this unexpected result as an artifact of the randomization procedures. In their experiment, Colwell et al. (2000) used a set of 24 instruction sheets that were at that time provided on my web site. In response to a previous recommendation by skeptics (Wiseman & Smith, 1994), the ran-

domization was counterbalanced on these particular sheets. Marks and Colwell speculated that rather than showing that people really can feel stares, their participants' positive scores arose from "the detection and response to structure" present in this set of randomized sequences. But they offered no evidence that their participants did in fact learn to detect hidden structures in the randomization. By looking at the trial-by-trial scores, they could have seen if there really was an excess of successful guesses as a result of any structure they chose to postulate. When I asked to analyze their data to test their hypothesis, they refused to supply the data, and as far as I know they never tested their hypothesis themselves.

After their unexpectedly positive result, Colwell et al. (2000) did a second experiment using "structureless" randomizations. This time the results were non-significant. They took this to confirm their implicit learning hypothesis. But in this second experiment there were two major differences; the experiment was confounded, although they did not mention this fact. There was both a different randomization method and also a different looker, a colleague of Colwell's. When I raised the possibility of an experimenter effect (Sheldrake, 2001b), they dismissed it as "a red herring" (Marks & Colwell, 2001). Experimenter effects are in fact known to occur in staring tests, as discussed below.

Marks and Colwell (2001) claimed that my own results and those of other investigators were artifacts arising from the implicit learning of hidden patterns in this particular set of counterbalanced randomizations, but this hypothesis was contradicted by the facts. First, this set of randomizations was only used in some of my tests, and in many thousands of other tests there were different randomization methods. For example, in more than 5,000 trials the randomizations were provided by tossing coins, with highly significant positive scores (Sheldrake, 1999c). Their prediction was also contradicted by results from over 18,000 participants in the NEMO experiment in Amsterdam, in which the computerized randomizations were "structureless." Second, the Marks and Colwell hypothesis predicted that the scores should be at chance levels in trials without feedback. But trials without feedback gave very significant positive results (Sheldrake, 2000b). Although I pointed out in the *Skeptical Inquirer* that Marks' arguments were refuted by the experimental data (Sheldrake, 2001b), two years later he reiterated his original arguments in *The Skeptic* (Marks, 2003), omitting any mention of the evidence that went against his implicit learning hypothesis.

Susan Blackmore. A student of Susan Blackmore's, Jonathan Jones, carried out a CCTV staring experiment in 1996. His thesis was entitled Automatic Detection of Remote Observation and Schizotypal Personality Correlates. His hypothesis was that people who scored highly on the Schizotypal Personality Questionnaire would be more sensitive to being stared at than those who scored low. According to the abstract of his thesis, which he and Blackmore kindly sent me, this is what he found: "As hypothesized, high scorers on the Schizotypal Personality Questionnaire were significantly aroused during stare trials compared to non-stare trials ($p = .028$, 2-tailed) whereas low scorers were not ($p = .313$, 2-tailed). This indicates the detection of Remote Observation by high Schizotypal Personality Questionnaire scorers." This finding was never published.

Christopher French. Neal Rattee, a student of Christopher French's, carried out a CCTV staring experiment in French's laboratory in 1996. He found that there was a difference between participants' responses in the looking and not-looking trials. Was this difference statistically significant at the conventional $p = .05$ level? No, according to a two-tailed t-test ($p = .096$). Yes, if a one-tailed test were used ($p = .048$). I asked Rattee and French if I could analyze their data using other statistical tests but unfortunately this was not possible because they had discarded the data.

Richard Wiseman. In initial experiments using the CCTV method in Richard Wiseman's laboratory there was a statistically significant positive effect (Wiseman & Smith, 1994). Wiseman and Smith then went back over their data to look for a possible flaw to account for this. They found that in their randomizations more looking trials preceded not-looking trials than vice versa. They argued that this could have given rise to an artifactual positive result if volunteers' galvanic skin resistance (GSR) declined throughout the session as they became more relaxed. They did not examine their data to see if this was in fact the case. They took it for granted that their hypothesis was correct.

I asked Wiseman if I could analyze the data to test their hypothesis. At first he told me that the results were inaccessible, but he finally managed to retrieve the data for 17 out of 30 volunteers, which he kindly sent to me. I found that in ten cases GSR declined throughout the test session, while in seven it increased. The available facts do not support the Wiseman-Smith hypothesis.

In Wiseman and Smith's initial experiments, students served as starers. In subsequent CCTV experiments, Wiseman changed the procedure so that the experimenters themselves did all the looking. The results were then at chance levels (Wiseman, Smith, Freedman, Wasserman, & Hurst, 1995).

Could there be an experimenter expectancy effect when experimenters themselves serve as lookers? Experimenter expectancy effects are widely recognized in experimental psychology; experimenters tend to get results that confirm their expectations (Rosenthal, 1976), which is why many psychological experiments and clinical trials are carried out masked or double-masked. This possibility of an experimenter effect was tested directly by Wiseman and Marilyn Schlitz, who jointly carried out a CCTV staring experiment in Wiseman's laboratory in which half the volunteers were tested with Schlitz as experimenter and looker, and half with Wiseman. As on previous occasions (Schlitz & LaBerge, 1994, 1997), Schlitz obtained significant positive results, while Wiseman's results were non-

significant (Wiseman & Schlitz, 1997). When this experiment was replicated in Schlitz's laboratory, it gave similar results, positive with Schlitz and non-significant with Wiseman (Wiseman & Schlitz, 1999). However, in a further replication, the results with both experimenters were non-significant (Schlitz, Wiseman, Watt & Radin, 2006).

Such experimenter effects are not symmetrical. In the first two experiments, the detection of Schlitz's stares by the participants implies the existence of an unexplained sensitivity to stares. The failure of volunteers to detect Wiseman's stares may imply only that Wiseman was an ineffective starer. He later said that he found staring "an enormously boring experience" and that in most of the trials he was "pretty passive about it" (Watt, Wiseman, & Schlitz, 2002). In the unsuccessful replication, which involved intensive blocks of testing, both experimenters reported experiencing a loss of motivation and interest as the experiment continued (Schlitz et al., 2006).

Interestingly, the research initiated by all five CSICOP/CSI fellows gave positive results to start with. Baker, Marks, and Wiseman then reacted to their positive findings in a similar way. First, they tried to dismiss the results as artifacts. Then in follow-up experiments, they themselves, or their colleagues, did all the staring, achieving the non-significant results they expected. By contrast, in the vast majority of tests by other investigators, the experimenters acted only as coordinators; the participants served as both starers and lookers. Under these conditions the results were overwhelmingly positive. In conclusion, the commonness of the sense of being stared at in everyday life, together with the positive results from numerous experiments, makes it very probable that this is a real ability, which may be widespread in the animal kingdom.

Animal Premonitions

There are many examples of animals seeming to have premonitions of earthquakes, sometimes several days in advance. In the 1970s the Chinese authorities started collecting reports about unusual animal behavior and with the help of this information successfully predicted several major earthquakes, saving thousands of lives (Sheldrake, 1999a). Some animals also seem to have premonitions of tsunamis (Sheldrake, 2005c). Animal-based warning systems for earthquakes and tsunamis may well be feasible. Some animals also seem to anticipate avalanches, as well as disasters like bombing raids, falling trees, and road accidents. Some dogs are able to warn their epileptic owners when they are about to have a seizure, and some give warnings of other impending medical problems like hypoglycemia and heart attacks (Sheldrake, 1999a), but no one knows how these advance warnings work, or to what degree they depend on presentiments or precognition, as opposed to subtle physical cues.

Human Premonitions, Precognitions, and Presentiments

In my database there are 842 cases of human premonitions, precognitions, or presentiments. Of these, 70 percent are about dangers, disasters, or deaths; 25 percent are about neutral events; and only 5 percent are of happy events, such as meeting a future spouse or winning a raffle. Dangers, deaths, and catastrophes predominate. This agrees with a survey of well-authenticated cases of precognition collected by the Society for Psychical Research in which 60 percent concerned deaths or accidents. Very few were of happy events, and most of the others were trivial or neutral, although some were very unusual (Saltmarsh, 1938).

Many precognitions occur in dreams, although usually only the most dramatic or bizarre are remembered. In the early 20th century, a British aeronautical engineer, J. W. Dunne (1927/1958), made an astonishing discovery, summarized in his remarkable book *An Experiment with Time*. He found that he often dreamed about events that were about to happen, but usually forgot these dreams. Only by keeping careful records of his dreams, writing them down as soon as he awoke, did the phenomenon become clear. He also found that he sometimes had experiences that seemed familiar—sometimes called *déjà vu*, French for "already seen"—and by looking back over his records found that they corresponded to recent dreams he had forgotten.

Presentiments

A presentiment is a *feeling* that something is about to happen, but without any conscious awareness of what it is. Some of the most innovative research in modern parapsychology has shown that presentiments can be detected physiologically, even though the participant is unconscious of them. Typically, people experienced an emotional arousal up to five seconds before they saw an emotionally arousing image on a computer screen, either pictures of extreme violence or pornographic images (Radin, 2007; chapter 17, this volume).

Although these laboratory experiments seem very artificial, short-term presentiments may play a part in real-life situations, especially if they are heeded at once, with no delay. Catherine Curtis had such an experience while driving (Sheldrake, 2003a):

> I was commuting to work with a girlfriend when I suddenly "felt" an accident in the making. This may have been due to subtle visual cues, but I cannot recall or imagine any. In any event, we were in fast but crowded freeway traffic when I reached across my friend to protect her and began to pump my brakes. A second later, the car just ahead of me in the lane to the right drifted into a concrete curb, and spun out of control into our lane. Only my advance braking and the driver's Herculean efforts to pull his car back into his own lane (albeit facing the wrong way) prevented us from a head-on collision. When my girlfriend recovered from the initial

> shock, she became quite perturbed by my apparent precognition and has never gotten over it [p. 234].

People who have such presentiments may well be more likely to survive than those who do not. Such short-term alerts may be common in many situations, including driving, flying an airplane, downhill skiing, and in many fast-moving sports. They may be very common, but unrecognized; they may be part of our biological heritage, favored by natural selection over innumerable generations.

Thinking of Someone and Then Meeting That Person

In the course of my research on unexplained human abilities, more than 150 people have told me about an experience that I had never before seen discussed. To their surprise, they thought about a friend or acquaintance for no particular reason and then shortly afterward met that person. No one thinks it strange if he meets someone he is expecting to meet, or someone he encounters frequently. It is with unexpected meetings that the phenomenon is so striking. For example, Andreas Thomopoulos, a film director from Athens, was visiting Paris with his wife: "Walking through the streets, we thought of a close student friend of mine in London. We wondered how he was nowadays since I hadn't seen him for over twenty years. Shortly after, on going around a corner, we bumped straight into him!" (Sheldrake, 2003a, p. 246).

Anticipations of meetings even seem to occur with vehicles, rather than specific people. David Campbell had a job during the school holidays working on a construction project in the north of England.

> We traveled to the site in the company's van, and for no good reason I memorized the registration number of the van.... A couple of years later I was out with the local cycling club one Sunday morning when for some inexplicable reason I started thinking about this builder's van and its number plate. About half a minute later the van passed me going in the opposite direction! [Sheldrake, 2003a, p. 247].

Some people also anticipate encounters with animals. Some hunters and wildlife photographers seem to anticipate meetings with animals they are trying to hunt or to photograph. Some anglers have had similar experiences. Paul Hicks, for example, was an avid angler: "There were instances I knew for a fact that within a minute or two I was going to catch a fish.... It wasn't just because the weather was good, or the time of day was right or whatever, it was just a knowledge that something was going to happen" (Sheldrake, 2003a, pp. 247–248).

There is a superficial similarity between anticipating meetings and anticipating telephone calls, but the two situations are very different. In the case of telephone calls, one person thinks about the other and forms an intention to call. This intention creates appropriate conditions for telepathy. By contrast, in the case of unexpected meetings, the person thought about is not usually intending to meet or thinking about the other person. The anticipation of meetings therefore seems more precognitive than telepathic. In addition, the anticipation of phone calls usually happens with people to whom a person is closely bonded, favoring the telepathic explanation. By contrast, the anticipation of meetings happens with mere acquaintances, or even with vehicles, or wild animals.

Waking Up Before the Alarms Go Off

Finally, I mention a very common but little-understood phenomenon, namely, waking up just before the alarm clock goes off. This is not usually thought of as an example of premonition or presentiment, but I suspect it might be. At present the question is open, and this is a field of research almost completely unexplored. In surveys in Britain and the U.S., I found that most people (96 percent) have had the experience of waking a few minutes before alarm clocks go off, even when they were set at a non-routine times (Sheldrake, 2003a). Perhaps an approximate internal "clock" plays a part when people know in advance when they need to wake.

It should be possible to distinguish empirically between the biological clock hypothesis and the presentiment hypothesis. What happens when people were woken in the night by alarms that they did not know about in advance, such as fire alarms, or unexpected loud noises? On the presentiment hypothesis, waking in advance should still occur, but on the biological-clock hypothesis, it should not. In my surveys I asked, "Have you ever found that you have woken up just before an unexpected alarm or event?" To my astonishment, a majority, 53 percent, answered yes; 16 percent said no, and 31 percent were not sure (Sheldrake, 2003a).

In this context, it is interesting that many nursing mothers say they often wake up just before their baby starts crying, even when the child is in a different room. In such cases, telepathy, precognition, and synchronized physiological rhythms could all play a part (Sheldrake, 2003a).

Conclusions

This review shows that there are many examples of psi in everyday life both among people and non-human animals. Telepathy, the sense of being stared at, premonitions, and presentiments are not rare or "paranormal"; they are common, natural, and normal. They are only "paranormal," meaning "beyond the normal," if we define normality in terms of materialist assumptions currently orthodox among many scientists. James Carpenter has called such abilities "first sight," and argues plausibly that psi phenomena happen unconsciously and continually, helping us make sense of everyday experiences (Carpenter, 2012) [see chapters 2, 8 and 16].

The dogmas of materialism have had a severely inhibitory

effect on psi research, which means that these animal and human abilities have been very little investigated so far. From a positive point of view, this provides researchers in the 21st century with remarkable opportunities. In most fields of science, the most exciting, pioneering investigations took place long ago and much research is now rather humdrum, filling in the details. But in psi research there is enormous scope for discovery in territories that are still almost explored.

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