# How much is that doggy in the window? A brief evaluation of the Jaytee experiments

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### Background

In the early 1990s, Mathew Smith, Julie Milton, and I investigated 'Jaytee', a dog who could allegedly psychically predict when his owner was returning home (Wiseman and Smith, 1996; Wiseman, Smith & Milton, 1998). We believed that the results of our study did not support the dog's alleged ability. At roughly the same time, Rupert Sheldrake (RS) conducted additional work with Jaytee, and argued that his findings suggested that Jaytee was able to signal when his owner started to return home from a distant location (see, e.g., Sheldrake, 1999b; Sheldrake and Smart, 2000). RS also criticised the study conducted by Mathew Smith, Julie Milton and myself (Sheldrake, 1999a, 1999b). We subsequently replied to the points raised in this critique (Wiseman, Smith & Milton, 2000), and RS replied to our reply (Sheldrake, 2000).

I am frequently asked about RS's experiments with Jaytee. This short note briefly outlines some of my thoughts. RS carried out two main experiments with Jaytee. Each experiment employed the same general procedure, involved both Jaytee and his owner (PS), and took place at PS's parents house. Each experiment was composed of several trials. During each trial:

- An unmanned static camera was set up to continuously film a porch area that Jaytee visited to allegedly signal PS's return.
- PS then left the house, and the camera recorded Jaytee's behaviour whenever he visited the porch.
- The resulting videotapes were later analysed by measuring the amount of time that Jaytee was present in the porch during three periods:

The first ten minutes after PS set off to return to the house (the 'return period').

The ten minutes prior to the return period (the 'pre-return period').

The time when PS was out prior to the 'pre-return period' (the 'main period').

When averaged across the trials, the data from both experiments showed that Jaytee was at the porch a relatively small percentage of time during the 'main period', longer during the 'pre-return period', and longest during the 'return period'.

One experiment consisted of 30 trials involving 'ordinary' homecomings (in which PS's return time was not randomly determined), and the other consisted of 12 trials involving 'random' homecomings (in which her return time was randomly determined).

When evaluating any empirical research, it is important to be able to assess the degree to which the results might be skewed by data selection, post hoc analyses, and other possible problems. The data from the Jaytee experiments has been described in both

a popular book (Sheldrake, 1999b) and academic journal (Sheldrake and Smart, 2000). Both sources present graphs showing the amount of time that Jaytee visited the window throughout the 12 'random' homecoming trials. In both the book and the paper, 6 of the 12 trials are classified as 'early' returns (in which PS returned relatively early in the trial) and 6 as 'late' returns (in which she returned relatively late). There are some important discrepancies between the book and paper. For example, in the paper, the trial which took place on the 11/2/97 is classified as an 'early' trial, whilst in the book it is classified as 'late'. In the paper, the trial on the 1/7/97 is classified as 'late', whereas in the book it is classified as 'early'. In addition, some of the data patterns appear different in the two sources. In the paper, the data from the trial on the 19/3/97 shows Jaytee spending very little time at the porch in the early part of the trial, whereas in the book he spends a considerable amount of time there. Likewise, in the paper, the trial on the 21/9/97 shows a spike in Jaytee's activity that appears to be missing from the corresponding graph in the book.

However, assuming that the data is sound, there are two main normal explanations that could potentially account for Jaytee appearing to psychically know when his owner is returning home. I have labelled these the 'sensory leakage' hypothesis, and the 'anxiety' hypothesis. The following two sections each discuss whether such explanations might account for the results of the two experiments.

## 'Ordinary' homecomings

The 'sensory leakage' hypothesis. If Jaytee knew roughly when PS was due to return, his alleged psychic behaviour could simply reflect genuine anticipation. During the 30 trials, PS's return time was not randomly determined, and so Jaytee might have gleaned a rough return time from several sources, including, for example, PS's normal routine, interactions with Jaytee prior to leaving the house, the behaviour of PS's parents, the way PS was dressed, etc.. RS has acknowledged that this is a potential problem, but argues that it was excluded the in the 'random' homecomings studies discussed below.

The 'anxiety' hypothesis. If Jaytee became more and more anxious over time, he might visit the porch more frequently, thus producing the observed pattern. RS assessed this notion by examining the trials during which PS returned at different times. His argument can be illustrated as follows. Imagine taking all of the trials in which PS set off to return home after half an hour ('early' trials), and comparing them with the trials in which she set off to return home after an hour ('late' trials). According to the 'anxiety' hypothesis, Jaytee would be expected to spend roughly the same amount of time at the porch 25 minutes into both the 'early' and 'late' trials. However, if Jaytee possessed psychic ability, he would be expected to spend a larger amount of time at the porch 25 minutes into the 'early' than 'late' trials. Using this approach, RS compared three sets of trials (those that were 80-100 minutes long, those lasting between 110-170 minutes, and those 180 minutes or longer), and argued that the resulting patterning did not support the 'anxiety' hypothesis. However, it is important to realise that although this hypothesis might not account for the data in this study, there

is no reason to believe that Jaytee would never engage in such behaviour. As noted above, in these trials, Jaytee may have been aware of when PS was likely to return home because these were ordinary (that is, non-random) homecomings. Jaytee therefore may not have become more anxious over time and thus felt the need to visit the porch more frequently as the trial progressed. As noted below, other circumstances may, however, be more likely to elicit this type of behaviour.

In short, this first series of trials does not provide compelling evidence of Jaytee's psychic ability as PS (and possibly her parents) were aware of when she was likely to return home, and this may have been inadvertently communicated to Jaytee.

## 'Random' homecomings

**The 'sensory leakage' hypothesis.** This series of 12 trials used the same general procedure as the 'ordinary' homecoming study, but PS's return time was randomly determined, and signalled via a remotely activated beeper.

The beeps designating that PS should return "....were within a pre-arranged period, between 45 and 90 minutes long. This period commenced 80 minutes to 170 minutes after PS had gone out" (Sheldrake & Smart, 2000). Sheldrake (1999b) describes how PS was aware of the window of time forming this 'pre-arranged' period, noting:

During the period in which Pam [PS] could be bleeped it was important for her to be free to come home straight away. Thus, for example, we could not do one of the experiments while she was at the dentist, or in the middle of an important meeting. Most of them took place when she was visiting friends or members of her family, at the library or in a café or pub. Of course, both Pam and I both had to know in advance what window of time the bleep would occur. (p. 274, square brackets mine).

This point is repeated later in the book, with Sheldrake noting 'In all of these experiments, Pam knew that she would be bleeped to come home within a particular time period' (p. 250).

When each of the 12 trials are plotted, Jaytee is generally inactive until the start of the 'pre-arranged' periods, with the majority of his visits to the porch occurring during these periods. Given that the timings of the 'pre-arranged' periods were known to PS, this information may have been inadvertently communicated to Jaytee via the type of cues outlined in the previous section, and may explain why he was more active during the 'pre-arranged' periods. This would not, however, provide a normal explanation for the significant differences in Jaytee's behaviour during the 'return period' and 'pre-return period'.

**The 'anxiety' hypothesis.** Unfortunately, as this series consists of only 12 trials, ruling out the 'anxiety' hypothesis is problematic for several reasons. For example, any formal comparison of trials in which PS returned home at different times (e.g., 'early' vs 'late') would involve comparing groups containing small numbers of trials. Also, as the

trials were much shorter in this study (between 45 and 90 minutes) than those in the 'ordinary' homecoming study (between 85 and 220 minutes), the 'late' homecomings will be closer in time to the 'early' homecomings, making the detection of any effect, or absence of effect, more difficult. Third, if PS did inadvertently communicate the timings of the 'pre-arranged' periods to Jaytee, one would expect relatively more activity during the start of 'early' versus 'late' periods as the likelihood of PS returning then would be higher.

In short, unlike the 'ordinary' homecoming study, the results of these trials cannot be due to Jaytee knowing approximately when PS would return home. However, they could be due to Jaytee visiting the porch more frequently over time, perhaps precisely because he was increasingly anxious and uncertain about when PS would return. Unfortunately, the data do not allow us to properly test this notion.

#### Conclusion

I do not find the two studies compelling evidence of psychic ability as each allow for a normal explanation.

- There are several discrepancies between the way in which the data has been presented in two different sources.
- The results of the 'ordinary' homecoming trials could simply be due to PS (or her parents) inadvertently communicating her likely return time to Jaytee.
- The results of the 'random' homecoming trials could be due to Jaytee visiting the window more frequently over time. Indeed, such switching behaviour makes sense given the very different circumstances of the study. Imagine wanting to be in hall to greet your partner on their arrival home. If you knew the time that they would arrive you would simply go to the hall at the correct time. If, however, you were uncertain when they would arrive, you might become more anxious as times goes by and therefore visit the hall more frequently. Of course, it could be argued that Jaytee would not have the ability to detect and utilise inadvertent cues from PS and her parents, or be able to adapt his behaviour to suit the experimental context. However, one would then have to argue that such abilities are less plausible than him possessing psychic powers. The only way of resolving the issue would be to carry out an experiment that eliminates both the notion of an owner inadvertently communicating their return time to their pet, and the pet signalling their return more frequently over time. Unfortunately, the existing studies with Jaytee do not fulfil these criteria.

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