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Setting Criteria for Ideal Reincarnation Research

Attempts have been made to show reincarnation is a candidate for a scientific theory of consciousness on the basis of empirical evidence, such as the testimony of children who seem to have paranormal knowledge of a previous life and the concomitant behaviour, emotional states, and physical traits consistent with the alleged previous life (Stevenson, 1966; 1997a,b; Mills, 2004; Haraldsson, 2000a,b). There is a tradition of paranormal research within Western universities, of which Stevenson, Mills and Haraldsson are part. Deborah Blum's (2006) recent book discusses the distinguished (and often neglected) band of men in the nineteenth and early twentieth centuries who also attempted to use a scientific method to study the supernatural. We find that William James conducted séances in Boston, that Henry Sidgwick, the Cambridge professor of philosophy, co-founded the Society for Psychical Research in 1882, and that the co-founder of evolution, Alfred Russell Wallace, used scientific methods to study the paranormal. Despite its eminent line of predecessors, parapsychology is very much a black sheep among academics, as the philosopher David Ray Griffin (2000, p. 195) has noted.

One reason that parapsychological studies on reincarnation in particular may often be considered outside the pale of solid academic research is that reincarnation entails an ontology that deeply contradicts contemporary scientific (Angel, 1994, p. 295), philosophical (Edwards, 1996, p. 255), and Christian theological (Swinburne, 1986, p. 302) views of mind consciousness. If it were shown that a human mind or consciousness could reincarnate into another body after death, this would have a revolutionary impact on how we understand

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mind–body relationships, the nature of human memory, and the ontology of consciousness, as would the studies done on near-death experiences (Parnia & Fenwick, 2002). Moreover, reincarnation would rule out reductive materialism, and give some credibility to non-physical views of consciousness in Eastern religions such as Hinduism, Buddhism and Jainism.

Yet, is it possible to conclude anything substantive about reincarnation on the basis of empirical research? Many would dismiss the question as impossible to answer or irrelevant because neurology has shown the mind's dependence on the brain (Churchland, 1999, p. 25). Recognizing how deeply a belief in reincarnation contradicts the ontology that contemporary scientists adhere to, the authors of the present paper have designed a very rigorous and large-scale reincarnation experiment that would involve many teams of researchers and a series of protocols.

In order to evaluate whether reincarnation can be argued for on the basis of empirical evidence, one must have some sense of what such empirical research might look like and how it might best be conducted. There are two types of reincarnation cases: *spontaneous* and *hypnotic*. In the latter, hypnotists gather information about a supposed previous life or supposed unlearned languages when a subject (usually an adult) is placed under hypnotic regression. The spontaneous cases occur apparently from no particular cause when a (usually young) child claims to remember a previous life. We shall only discuss the spontaneous cases in that we believe they are more amenable to scientific investigation for reasons that will become clear below.

There are a number of weaknesses with the current methodology used by parapsychologists to study reincarnation claims, even though these studies have provided a wealth of interesting information and provided a much needed rationale for further study. Considering that many reincarnation cases occur in countries in which belief in reincarnation is part of the cultural matrix, the possibility of interpreting otherwise normal information in light of reincarnation is very strong. In most cases, the child was not interviewed so as to exclude the possibility of familial and/or interviewer suggestion, nor in such a way that allows other researchers to observe the interview itself. Generally, the child was present at the time his statements were validated at the designated household, thus introducing the possibility that suggestion occurred (Bernet, 2002; Edwards, 1996, p. 138; Rhine, 1966).

Jim Tucker (2000) has demonstrated the manner in which the University of Virginia Division of Personality Studies has used the

'strength-of-case scale' (SOCS) to document about 800 cases. The SOCS evaluates a reincarnation case based on four criteria:

- (1) whether it involves birthmarks/defects that correspond to the supposed previous life;
- (2) the strength of the statements about the previous life;
- (3) the relevant behaviours as they relate to the previous life; and
- (4) an evaluation of the possibility of a connection between the child reporting a previous life and the supposed previous life (also Mills, 2004).

The SOCS is an important contribution to creating an ideal protocol for studying reincarnation, but no attempt has ever been made to compare the child's score in describing the designated household with a control household.

We are attempting to correct these weaknesses by providing a protocol that has yet to be employed. An ideal protocol would have the sort of evidence and employ the methods of research able to give substantive weight to a reincarnation hypothesis, even for those who have physicalism as a metaphysical bias and are therefore highly sceptical of reincarnation case studies.

In order to have an ideal protocol for reincarnation research, the standards, acceptable practices, and methods should be carefully outlined and reviewed by professionals in fields as varied as psychology, psychiatry, parapsychology, forensic science, and anthropology. The group must hold varying degrees of sympathy and skepticism for the belief in reincarnation so as to add as much objectivity and balance to the discussion as possible. What follows is a step toward establishing these standards and methods.

Phase 1

When a child spontaneously tells of a previous life he or she believes to have had, that data should be collected from the child in an individual interview by trained professional(s), *A*. The interview must be videotaped so that other people working on this project can determine the overall quality of the interview, both in its content and the manner in which it was conducted. This would allow other members of the project, as well as other scientists and scholars in the future, to make up their own minds as to whether the information could have arisen from normal means during the interview process, for instance, that the interviewer made suggestions or that the child was merely speaking

from rote memorization. Thus, close-ups of the child and interviewer, as well as a long shots of both, must be provided. As of yet, this practice has not been adopted by those studying reincarnation.

Interviewer *A* must elicit from the child specific statements about the previous life, such as 'My mother, whose name was Mary, has red hair'; 'There is a round window in the bathroom overlooking the garden'; 'My house is surrounded by a stone wall', etc. As much as possible, the interview should be nondirective. That is, *A* should proceed from very general questions ('Tell me everything you can remember about the past life.') to more specific questions ('Tell me the names of everybody who lived in the house.') to even more specific questions ('How old was your younger brother?') so as to mine as many details as possible. If the child has not said anything about serious injuries or operations, *A* could ask a general question ('Did you have any operations or injuries?') and then more specific questions ('Were you ever stabbed?'). Since the interview will be recorded, other researchers can determine whether the interviewer made suggestions as to the sorts of answers needed to prove reincarnation.

The statements by the child must in principle be empirically verifiable, and they must be specific enough and numerous enough to eliminate the possibility of chance and/or common knowledge that any child might have. We suggest that *A* collect enough information from the child to make twenty discrete, independent descriptors of the former life. For example, 'My younger brother was 5' and 'He was in kindergarten' only amounts to one descriptor, because almost all 5-year-olds are in kindergarten. However, 'My younger brother was 5' and 'He broke his left arm and had a cast' constitute two descriptors.

Phase 2

A group of trained professionals, *B*, looks at the data collected from the child. Group *B*'s role is to make a critical evaluation of the interview as well as all possible information that can be gathered about the life-history of the child. Group *B* will collect information about the child by interviewing the child's parents and other relatives, reviewing school information, and reviewing medical and mental health records of the child. Their analysis will be handed over to the project director for further evaluation.

Group *B* must be trained in psychiatric interviewing so they can discover any discrepancies in the interview of the child. There are two aspects to *B*'s project: (a) to show that the child could not have

received the information through some normal means, or (b) to point out when or where the child did receive the information through normal means, e.g., from radio, television, the Internet, parents, an informant, suggestion by an investigator, etc. Regarding (a), it is entirely possible that *B* could provide mere approximations or probabilities, for instance, that it is 'highly unlikely the child could have obtained the information through normal means' or that 'there are many ways the child could have obtained the information through normal means such as the neighbour with whom he spoke daily'. Regarding (b), *B* may only be able to suggest possible situations that the child could have received the information normally based on what is gathered from the child's life-history, rather than a specific instance such as, 'On July 12, the child was in the house when people from his supposed former town came to his house.'

Since group *B* must have full access to the child's history, this would entail cooperation from the parents and other persons associated with the up-bringing of the child. Much of what *B* investigates regarding the child's life-history must come from the parents' testimony since the child would not be a reliable source given she or he already espouses paranormal means of information transmission. As such, *B* must demonstrate either the reliability or unreliability of the testimony involved in the case; this may require psychological evaluation of key informants, including the child.

Many of Stevenson's cases occurred before people had access to modern communication technology and long distance transportation, but that is certainly changing quickly. With the tremendous amount of information children have easy access to today, group *B* may find it exceedingly difficult, perhaps even impossible, to rule out normal means of information transmission. Thus, it would be important that the child be very young (that is, 3 to 6 years old) so as to reduce the possibility of normal means of information acquisition, and ideally the child should have led a life that was tightly controlled by the parents.

An analysis of the interview, the possibility of normal and/or paranormal knowledge reception, the life-history of the child, and the reliability of testimonials should be drawn up to be presented to the project directors. Also, *B* will create the list of the 20 descriptors elicited by the interview of the child, and will prepare definitions of what will constitute 'a hit' when the next group of investigators, *C*, visit the supposed previous home or village and collect data to validate the claim of reincarnation.

Phase 3

A third group of investigators, *C*, is sent by the project directors to the location of child's supposed previous life to collect data. *C* must not have been given *any* access to child or his/her recorded statements, as this might influence their investigation of the location. *C* should be told to gather 'general information' from the family at the designated household and the location in question. By general information, we mean they should be asked to describe the physical features of the mother if the child had spoken about the mother, to describe the bathroom in detail if the child had spoken about the bathroom, to describe the size, shape, colour and general condition of the house if the child had spoken about a house, etc. It will be group *B*'s job to formulate the types of information *C* is to gather in such a way that *C* is not led to a particular conclusion. *C* should also describe surrounding areas so that it can be seen if the information provided by the child is unique or common. For instance, if the child says, 'I had a blue house on a hill with a water-well in the backyard,' then *C* should provide enough detail of the surrounding area to determine how common such descriptions are. Since much of the information gathered will depend on the testimony of neighbours, the reliability of this testimony must be determined, as in *Phase 2*.

Aside from gathering information of the surrounding areas of the alleged past life, *C* should visit another household nearby that has been predetermined by group *B*, which serves at the control household. For instance, the control household could be at the same house number on an adjoining street or a comparable household in a nearby community. *C* must not know which is the designated house and which is the control house. In other words, the criterion for success is not that the child scored 12 hits out of 20 descriptors, but that the number of hits for the designated household and village is significantly higher than the number of hits for the control household and village. Such numbers could be compared statistically to show how likely it is that the result did not occur by chance.

Wherever possible interviews should be video recorded, and household objects, landscape and relevant artifacts should be photographed. As with group *B*, all of *C*'s instructions, collections, and evaluations must be saved so that future researchers can evaluate their strengths and weaknesses.

Phase 4

In this final phase the project directors, *D*, collect and assess the findings from groups *A*, *B*, and *C*. Group *D* must provide for publication a written review of work done in each phase to determine their overall quality, and their strength or weakness for paranormal activity. It is their job to ensure that all documentation and records are secured and organized so that other researchers can view them in the future.

D must determine whether the interview was conducted properly by group *A*; *D* must determine whether group *B* adequately addressed all possible natural sources of information; and *D* must determine whether group *C* had collected the relevant information from the alleged past life and the control site. Assuming that *D* finds the above satisfactory, the largest question *D* must answer is: Do the 20 (at least) descriptors provided by the child rule out chance as an explanation? Perhaps the child could construct a convincing reincarnation story with no paranormal knowledge based solely on facts gained from everyday experience.

The results of the experiment proposed thus far in this paper can be analysed statistically to see if there is a significant difference between the accuracy of the child's descriptors for the designated household and that for the control household. It is not possible to analyse a single case statistically, since almost any result in a particular case might come about by chance. For example, if a person were to flip a group of five coins, every so often all five coins will come up heads. In fact, this will occur on the average once in 64 trials:

$$\frac{1}{2}^5 = \frac{1}{64}$$

In the proposed study, the experimenters will need to study a number of cases of alleged reincarnation and analyse them as a group. The null hypothesis is that there is no significant difference between the designated households and the control households. If the null hypothesis is disproven, we are left with the alternative hypothesis that there is a significant difference and that the reincarnation of the child is an explanation for this difference. In other words, one must rule out the possibility of chance statistically.

Suppose the experimenters study several cases of alleged reincarnation. In each case, after the child designates twenty descriptors of the household of his or her former life, the experimenters will look for these descriptors in the designated household and the control household. For each case, this will produce two scores: the number of

correct descriptors or hits for the designated household (X_D) and the number of hits for the control household (X_C). These are called 'paired samples'. The difference between these two scores is:

$$X_D - X_C =$$

If the child made 16 hits on the designated household and only 10 hits on the control household, then $= +6$. If the child made 12 hits on the designated household and 14 on the control household, then $= -2$.

In this design, the significance is determined by several factors: (1) The size of the average of (ave) for all the cases included in the study. If the ave is a large positive number, it is more likely there will be a significant difference between the designated households and the control households. (2) The number of cases (n). The larger the n , the more likely it will be to find a significant difference between the designated and the control households. (3) The standard deviation (s) of all the s . If this standard deviation is small, it is more likely there will be a significant difference between the designated households and the control households. If this standard deviation is large, it is more likely the scores for X_D and for X_C will overlap and there will be no significant difference between the designated households and the control households.

The formula for the standard deviation (s) of the differences (d) is:

$$\sqrt{\frac{ave^2}{n - 1}}$$

The test statistic for the null hypothesis is:

$$\frac{ave}{\sqrt{n}} \frac{\sqrt{n}}{ave}$$

To give a simple example of how this would work in practice, suppose the experimenters study 9 cases of alleged reincarnation. Assume that on the average, the children achieve 4 more hits on the designated households than on the control households. And assume the s are fairly tightly grouped, so the standard deviation of the s is 2. These assumptions are optimistic in the sense that they favour the rejection of the null hypothesis, but we do not wish to suggest that the actual results would necessarily be this way. Applying the test statistic to these data, the result would be:

$$\frac{\sqrt{9} \cdot 4}{2} = 6$$

We use the one-tailed t -test because we are only interested in showing that the children's scores for the designated households are significantly higher than those for the control households, not the reverse. Consulting a t table at 8 ($n-1$) degrees of freedom, we find the probability (p) of this result occurring by chance is less than 0.001. If these were our actual results, we would reject the null hypothesis and adopt the alternative hypothesis that these children had knowledge of the designated households through reincarnation or some similar means. On the other hand, if the average of the t 's turns out to be a small number or a negative number and/or the standard deviation of the t 's turns out to be relatively large, the result would not allow us to reject the null hypothesis.

A strong case for reincarnation would, on this model, require that at each and every phase the research was conducted without flaw. In other words, if the children were interviewed according to the above standards by group A , and if the children provided the necessary information; if group B was unable, despite their best efforts, to show how the children's information was obtained normally; if the information gathered by C showed that the children's statements regarding the designated households were significantly more accurate than when applied to the control households; if D could find no flaw in the overall quality of the research, then we would have a strong case for reincarnation. Lastly, the t , or the difference between the results obtained from the designated house as opposed to the control house, must be a large, positive number.

Such a result has yet to emerge, for none of Stevenson's, Haraldsson's, or Mill's cases involve this large collaborative effort. We believe, however, that the work done by Stevenson and others provides a rationale for conducting further research in reincarnation. Furthermore, the vast implications of reincarnation for our understanding of mind, memory and consciousness suggest that such experiments could be beneficial to human knowledge. Although ideal reincarnation research has not yet occurred, it is in principle possible to achieve this goal.

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References

- Angel, Leonard (1994), *Enlightenment East & West* (New York: State University of New York Press).
- Blum, Deborah (2006), *Ghost Busters: William James and the Search for Scientific Proof of Life After Death* (New York: Penguin Press).
- Bernet, William (2002), Book Review of *Previous Lives: A Question of Reincarnation*, Revised Edition by Ian Stevenson, *Journal of the American Academy of Child & Adolescent Psychiatry*, **41** (8), August, pp.1022–23.
- Churchland, Patricia (1999), ‘Toward a Natural Science of the Mind’, *Consciousness at the Crossroad: Conversations with the Dalai Lama on Brain Science & Buddhism*, ed. Alan Wallace and Robert Livingston (New York: Snow Lion Publication).
- Edwards, Paul (1996), *Reincarnation: A Critical Examination* (Amherst, NY: Prometheus Books).
- Griffin, David Ray (2000), *Religion and Scientific Naturalism: Overcoming the Conflicts* (New York: SUNY Press).
- Haraldsson, Erlendur (2000a), ‘Birthmarks and claims of previous life memories I. The case of Purnima Ekanayake’, *Journal of the Society for Psychical Research*, **64** (858), pp. 16–25.
- Haraldsson, Erlendur (2000b), ‘Birthmarks and claims of previous life memories II. The case of Chatura Karunaratne’, *Journal of the Society for Psychical Research*, **64** (859), pp. 82–92.
- Mills, Antonia (2004), ‘Inferences from the case of Ajendra Singh Chauhan: The effect of parental questioning, of meeting the “previous life” family, an aborted attempt to quantify probabilities, and the impact on his life as a young adult’, *Journal of Scientific Exploration*, **18** (4), pp 609–41.
- Parinia, S. and Fenwick P. (2002), ‘Near death experiences in cardiac arrest: visions of a dying brain or visions of a new science of consciousness’, *Resuscitation*, **52**, pp 5–11.
- Rhine, Louisa E (1966), Book Review of *20 Cases Suggestive of Reincarnation* by Ian Stevenson.,In *The Journal of Parapsychology*, **30** (4), December, pp 263–72.
- Stevenson, Ian (1966/1974), *20 Cases Suggestive of Reincarnation, 2nd Edition, Revised and Enlarged* (Charlottesville, VA: University Press of Virginia).
- Stevenson, Ian (1997a), *Reincarnation and Biology: A Contribution to the Etiology of Birthmarks and Birth Defects, Volume 1* (Connecticut: Praeger).
- Stevenson, Ian (1997b), *Reincarnation and Biology: A Contribution to the Etiology of Birthmarks and Birth Defects, Volume 2* (Connecticut: Praeger).
- Tucker, Jim (2000), ‘A scale to measure the strength and weakness of children’s claims of previous lives: Methodology and initial findings’, *Journal of Scientific Exploration*, **14** (4), pp 571–81.
- Swinburne, Richard (1986), *The Evolution of the Soul* (Oxford: Clarendon Press).

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