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Memory as evidence of personal identity. A study on reincarnation beliefs

Derek Parfit in his book “Reasons and Persons” writes:

There might [...] have been evidence supporting the belief in reincarnation. One such piece of evidence might be this. A Japanese woman might claim to remember living a life as a Celtic hunter and warrior in the Bronze Age. On the basis of her apparent memories she might make many predictions which could be checked by archaeologists. Thus she might claim to remember having a bronze bracelet shaped like two fighting dragons. And she might claim that she remembers burying this bracelet beside some particular megalith, just before the battle in which she was killed. Archaeologists might now find just such a bracelet buried in this spot, and their instruments might show that the earth had not here been disturbed for at least 2,000 years. This Japanese woman might make many other such predictions, all of which are verified. (1984: 227)

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In this chapter, I will not discuss whether such a case—should we really encounter it—would constitute evidence supporting the belief in reincarnation. In contrast to Parfit, my aim here is purely descriptive. I want to understand how people think about the role of memory claims in establishing facts about personal identity.

In empirical literature, there is work on various questions dealing with folk reasoning about memory and personal identity. Is continuity of memory taken to be necessary for the continuity of personal identity (Blok, Newman and Rips 2005; Nichols and Bruno 2010)? How important are facts about possession of memories in reidentification of a person in reincarnation (White 2015; 2016a) or fission (Woike, Collard and Hood 2020)? What is the role of memory in convincing people that they have lived past lives (White, Kelly and Nichols 2016)? Existing work, however, does not look into the role of memory *claims* in establishing facts about personal identity.

Let us thus distinguish between three descriptive questions that can be asked about Parfit's imaginary case and others like it (e.g., Ayer 1956: 220), assuming, for the sake of argument, that such alternative explanations as a deliberate hoax are taken to be definitively ruled out. First, would these cases be taken to provide evidence supporting the belief in reincarnation? Second, if yes, would they provide evidence of personal identity retained through cycles of reincarnation? Third, what exactly in these cases would be taken to constitute such evidence?

Let us briefly discuss these three questions. The answer to the first one plausibly depends on what alternative explanations are considered. In discussing Parfit's case, Steven Hales claims that "there are indefinitely many [...] hypotheses" that are superior explanations than reincarnation in a sense that they are consistent with our best current theories about the mind and physics in general, as well as being in principle empirically testable (2001 :342). He provides the following alternative hypothesis as an example:

[T]here are intelligent, technologically advanced extra-terrestrials who regard humans with great amusement, and secretly monitor and occasionally interfere with our lives. One thing they enjoy is performing super-advanced psychosurgery on select humans that provides these humans with quasi-memories of having lived past lives, verifiably true beliefs about where ancient bracelets are hidden, and previously non-existent linguistic or musical talents. (ibid.)

Alternatively, one may be willing to consider alternative supernatural explanations (Ducasse 1961: 300-304), like mediumistic communication (the Japanese woman communicates with (the spirit of) the Celtic warrior), possession (the spirit of Celtic warrior possesses the Japanese woman) or extrasensory perception (the Japanese woman has access to either the mind of the Celtic warrior or current facts about locations of buried artefacts). Thus, we can expect that the answer to the first question would depend both on what prior plausibility was assigned to the reincarnation hypothesis and also on what alternative hypotheses are salient in the context (and how much initial plausibility is assigned to them).

Moving to the second question, the answer would depend on the precise understanding of reincarnation or rebirth. While the most familiar conception of reincarnation in Western culture seems to assume personal identity through cycles of reincarnation, this is arguably not the case in the Buddhist understanding of rebirth (Perrett 1987; Siderits 2015). Memories of past lives do not presuppose continuous personal identity, at least on the level of

the religious and philosophical doctrine, if not always on the level of folk conceptualizations.²

Finally, and most centrally for this chapter, let's look into the nature of evidence involved in such cases as Parfit's. The only available systematic analysis of ethnographic evidence suggests that in cultures that have procedures of identification of reincarnates, these procedures tend to primarily focus on "physical marks that correspond to those on the deceased when they were alive [...]; behavioral similarities that indicate similar personal traits [...]; and the recognition of places or people the deceased knew" (White 2016b: 3-4). Furthermore, in a series of studies with participants from cultures that do not practice identification of reincarnates (Americans and Indian Jains), White gave the participants a story about a village in which the true reincarnation needs to be chosen from a number of candidates, each of whom has one feature in common with the deceased. She found that possession of memories and bodily marks were preferred cues in identifying reincarnated people (2015; 2016a).

Now, memory comes in different kinds and flavors. Which aspect of it is taken to provide evidence of reincarnation? For ethnographic accounts, White claims that the recognition of places or people the deceased knew "assumes the continuity of episodic autobiographical memory" (2016b: 4). The same was true about empirical studies (White 2015; 2016a), where presence of an episodic autobiographic memory ("He remembered seeing a shoe for the first time.") was taken to constitute better evidence of reincarnation than

² Thus, when Claire White and her colleagues interpret eyewitness accounts of the selection procedures of the 14th Dalai Lama (which included the boy correctly choosing the items that belonged to the late 13th Dalai Lama and also handling those objects in a distinctive fashion) in terms of essentialism about personal identity (White, Sousa and Berniunas 2014), they seem to underestimate the vast doctrinal resources available to the Tibetan bureaucrats.

the presence of a semantic (“He remembered the names of shoe parts.”) or a procedural (“He remembered how to mend shoes.”) memory. Autobiographic memory of past events, however, can also be semantic. Thus we can ask whether the reason why verifiable memory claims are considered to provide evidence for the belief in reincarnation is (otherwise unexplainable) possession of information about past events—a feature shared by both episodic and semantic memories—or rather some feature of memory claims that signals the presence of specifically episodic memories.

I present two studies in which I look into these three questions.

Study 1. Celtic warrior

In the first study, I test whether (a) judgments of quality of evidence supporting the belief in reincarnation provided by Parfit’s Celtic warrior case depend on study participants’ initial beliefs about the possibility of reincarnation and also whether (b) evidence can be weakened by making alternative explanations salient.

Participants. 300 study participants were recruited on Prolific: 63% female, 37% male, 1 person identified as non-binary, $M_{\text{age}} = 37.0$, age $SD = 13.4$, age range 18-75. In both studies reported in this chapter, participants were nationals of the USA or the UK who indicated English as their first language.

Materials. Study participants were asked to read a short story based on Parfit’s scenario:

A Japanese woman claims to remember living a life as a Celtic hunter and warrior in the Bronze Age. On the basis of her apparent memories, she makes many predictions which can be checked by archaeologists. For example, she

claims to remember having a bronze bracelet, shaped like two fighting dragons. And she claims that she remembers burying this bracelet beside some particular megalith, just before the battle in which she was killed.

Archaeologists now find just such a bracelet buried in this spot, and their instruments show that the earth has not here been disturbed for at least 2,000 years. This Japanese woman makes many other such predictions, all of which are verified.

Suppose you learn that there indeed is a woman who (a) claims to remember living a life as a Celtic hunter and warrior in the Bronze Age and (b) many of the things she claims to have experienced are verified by archeologists. What would be your best explanation of what could be happening here?

Study participants were asked to write a one or two sentence-long explanation and then proceeded to the next two tasks, provided in a counterbalanced order over the two subsequent pages.

One of these tasks asked to suppose that it is shown that the woman is sincere in her claims, that she sincerely believes remembering the Bronze Age events, and then respond to the following two questions (in randomized order) on a scale from 1 (Completely unlikely) to 7 (Very likely):

[Identity]³ After learning of such a case, would you think that this woman in fact is the same person as the Celtic warrior?

³ Labels in brackets (in both studies) were not shown to the participants.

[Memory] After learning of such a case, would you think that this woman in fact personally remembers (and not only thinks that she remembers) the Bronze Age events?

In the other task, participants were provided with a list of attempts to explain what could be happening in this situation (in randomized order) and asked to indicate how plausible each attempted explanation is, on a scale from 1 (Totally implausible) to 7 (Very plausible):

[Reincarnation] The Celtic warrior reincarnated as the Japanese woman.

[Possession] The spirit of the Celtic warrior possessed the Japanese woman.

[Telepathy] The Japanese woman had telepathic access to the mind of the Celtic woman.

[Clairvoyance] The Japanese woman used clairvoyance to learn where various Bronze Age artefacts are.

[Insertion] Technologically advanced extra-terrestrials planted memories of or true beliefs about past events they witnessed into the Japanese woman (for amusement or as an experiment).

[Immortality] The Japanese woman was the same immortal being as the Celtic warrior.

Half of the participants responded to identity and memory questions before considering alternative explanations, the other half in the opposite order.

On the next page, participants were asked to suppose again that there indeed is such a woman and then asked whether they would consider this to provide evidence in favour of a belief in reincarnation (on a scale from 1 ("No evidence") to 7 ("Very strong evidence")).

Finally, on the next page, they were asked which of the following descriptions best captures what they think happens after we die (first three options provided in a randomized manner, "unsure" always last):

[Annihilation] The person ceases permanently after the body dies.

[Immortal soul] The person continues to exist as a soul after the body dies.

[Reincarnation] After the body dies, the person continues to exist in a new body.

[Unsure] I don't know what happens to the person after the body dies.

Results.

Free text explanations. 70 percent of participants provided one explanation, 24 percent - two explanations each, and a further 2 percent - three each. The remaining 4 percent did not provide any explanations either by saying that they have none or simply claiming that the story is false.

Explanation in terms of reincarnation was mentioned most frequently, by 51 percent of participants. The second most common explanation was in terms of educated guess – 26 percent of participants speculated that the reason why archaeologists were able to verify the claims is that the claims were based on familiarity with Celtic culture and history, e.g., general knowledge about types of Celtic jewelry or funerary rituals. 12 percent referred to precise knowledge. Most of these were in terms of testimony through family line (21 participant), followed by access to an authentic written source, e.g., the Celtic warrior's diary

(14). 10 indicated that the relevant knowledge was acquired via archaeological means, e.g., in a non-invasive way, like sonar or x-ray, which is compatible with ground not being disturbed. There were also 6 participants who referred to knowing or having information without specifying any details. 13 percent entertained a possibility of sheer coincidence, some referring to the fact, that if there are many people making claims, some are likely to be true, other referring to the claims being vague enough. Finally, 13 percent referred to various other supernatural explanations, such as ESP (8 participants), communication with spirits (5), messages in dreams (4), time travelling (3), genetic memory (3), collective consciousness (2), possession (2), being a multidimensional being (2) and a number of other explanations each mentioned by only one participant.

Order effects. Ascriptions of identity were higher before ($M = 3.54$, $SD = 1.97$) than after evaluating alternative explanations ($M = 3.00$, $SD = 1.92$), $t(298) = 2.40$, $p = .017$, $d = .28$. The same was true for memory, $M_{before} = 4.08$, $SD = 1.85$, $M_{after} = 3.64$, $SD = 1.92$, $t(298) = 2.04$, $p = .043$, $d = .24$. Ascriptions of identity and ascriptions of memory were strongly correlated, $r = .782$, $p < .001$.

Explanations. A mixed-effects model was fit with participants as a random factor, explanations and order of presentation as fixed factors, and plausibility as an outcome. There were differences in evaluations of plausibility between different explanations, $F(1, 1490) = 34.7$, $p < .001$. Order of presentation did not affect evaluations ($p = .545$) nor was there an interaction between the two factors ($p = .399$).

Post hoc pairwise comparisons suggest that reincarnation was taken to be a more plausible explanation than all the other five explanations (all $p_{holm} < .001$), while extra-terrestrial memory insertion was taken to be the least plausible of all (all $p_{holm} < .001$). See Figure 1.

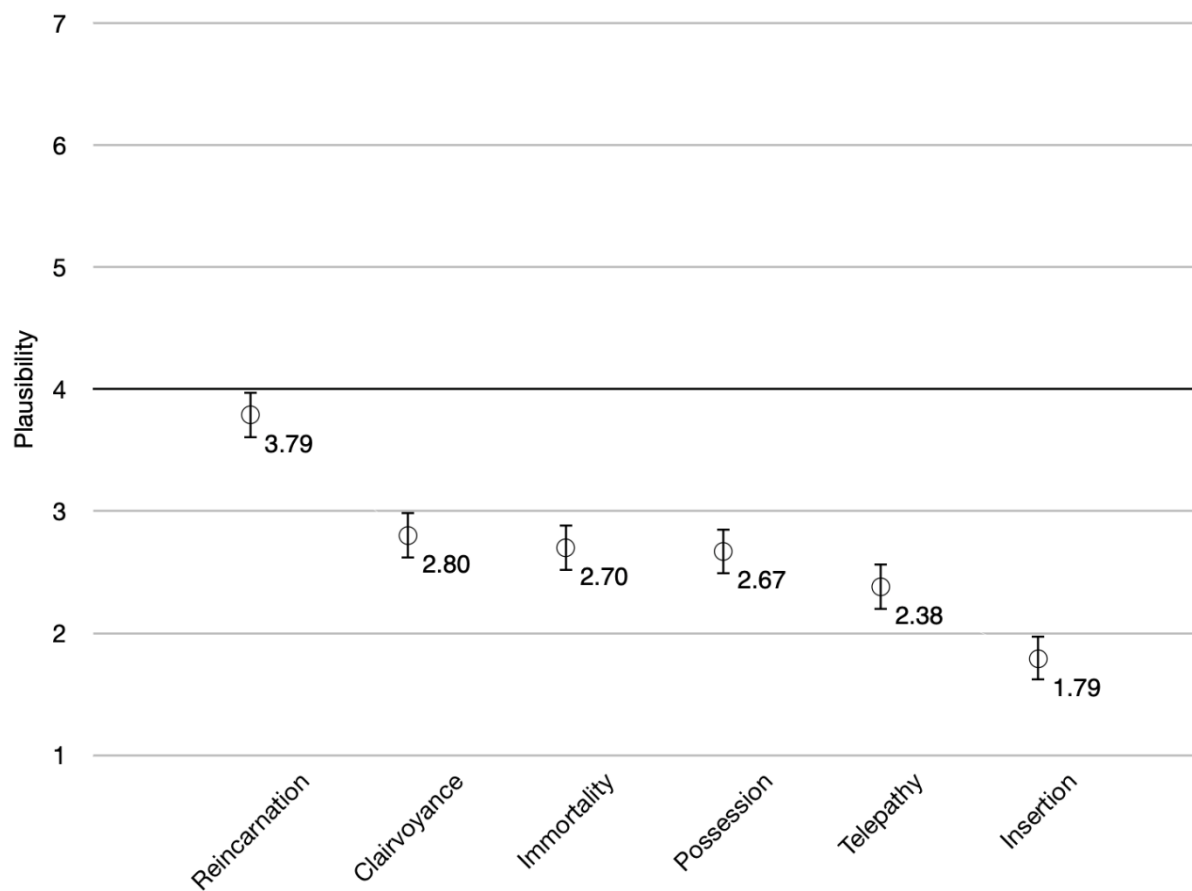


Figure 1. Estimated marginal means for plausibility of each of the six explanations. Error bars indicate 95% CI.

Principal component analysis using varimax rotation on the six explanations returned a two-factor solution that cumulatively explains 68 percent of variance. Factor 1 includes three explanations that presuppose the presence of the Celtic warrior in the Japanese woman: reincarnation (factor loading .874), immortality (.850), and possession (.717), explaining 38% of variance. Factor 2 includes three explanations that presuppose mental access to the relevant facts: insertion (.769), clairvoyance (.736), and telepathy (.681), explaining 30% of variance. When measures of memory and identity are also added, they strongly load in Factor 1: identity - .914, memory - .853.

Quality of evidence. Evidence for reincarnation was on average judged to be inconclusive, no different from the middle of the scale, $M = 3.99$, $SD = 1.95$, $t(299) = .09$, $p = .929$.

Afterlife beliefs. 9 percent of participants indicated that they believe that after the body dies, the person continues to exist in a new body (Reincarnation). 31 percent said that the person continues to exist as a soul after the body dies (Immortal soul). 29 percent said that the person ceases permanently after the body dies (Annihilation) while the remaining 31 percent were unsure.

Effect of afterlife beliefs. A series of one-way ANOVAs showed that afterlife beliefs were associated with responses to questions about how plausible an explanation in terms of reincarnation is, $F(3, 296) = 27.9$, $p < .001$, how good the evidence in favor of belief in reincarnation was taken to be, $F(3, 296) = 22.5$, $p < .001$, as well as with ascriptions of identity, $F(3, 296) = 15.0$, $p < .001$, and remembering, $F(3, 296) = 15.3$, $p < .001$. Estimated marginal means and pairwise comparisons are presented in Table 1 and Figure 2. The same pattern can be observed in all four cases. Scores are the highest in those who believe in reincarnation, closely followed by those who believe in the immortal disembodied soul, while scores are low in those who believe in annihilation.

The same pattern of responses is also observed in looking at how frequently participants mention reincarnation as an explanation in free text responses. Reincarnation was mentioned by 85 percent of those who believe in reincarnation, 64 percent of those who believe in an immortal soul, and only 33 percent of those who believe in annihilation. Among those who were unsure, 45 percent mentioned reincarnation. Binomial logistic regression suggests that probability of mentioning reincarnation depended on the type of afterlife beliefs, $\chi^2(3) = 32.6$, $p < .001$.

Measure	Group	EMM	95% CI	Immortality		Annihilation		Unsure	
				<i>t</i> (296)	<i>p</i> _{holm}	<i>t</i> (296)	<i>p</i> _{holm}	<i>t</i> (296)	<i>p</i> _{holm}
(a)	Reincarnation	5.81	[5.10, 6.52]	2.97	.007**	7.62	<.001***	5.70	<.001***
Plausible explanation	Immortality	4.60	[4.22, 4.97]	-		6.99	<.001***	4.12	<.001***
	Annihilation	2.68	[2.30, 3.07]			-		2.96	.007**
	Unsure	3.49	[3.12, 3.86]					-	
(b)	Reincarnation	5.38	[4.70, 6.07]	1.48	.141 n.s.	6.18	<.001***	4.07	<.001***
Evidence	Immortality	4.80	[4.44, 5.17]	-		7.05	<.001***	3.92	<.001***
	Annihilation	2.94	[2.55, 3.31]			-		3.22	.003**
	Unsure	3.79	[3.43, 4.15]					-	
(c)	Reincarnation	4.77	[4.06, 5.48]	2.20	.053 n.s.	5.62	<.001***	4.16	<.001***
Identity	Immortality	3.87	[3.49, 4.25]	-		5.12	<.001***	2.95	.010*
	Annihilation	2.47	[2.08, 2.85]			-		2.23	.053 n.s.
	Unsure	3.07	[2.70, 3.45]					-	
(d)	Reincarnation	5.12	[4.43, 5.80]	1.59	.112 n.s.	5.35	<.001***	3.50	.002**
Memory	Immortality	4.49	[4.13, 4.85]	-		5.64	<.001***	2.87	.013*
	Annihilation	3.00	[2.63, 3.37]			-		2.83	.013*
	Unsure	3.74	[3.39, 4.10]					-	

Table 1. Estimated marginal means and pairwise comparisons for measures of (a) plausibility of explanation in terms of reincarnation, (b) judgment of quality of evidence supporting the belief in reincarnation, ascriptions of (c) identity and (d) remembering, grouped by afterlife beliefs.

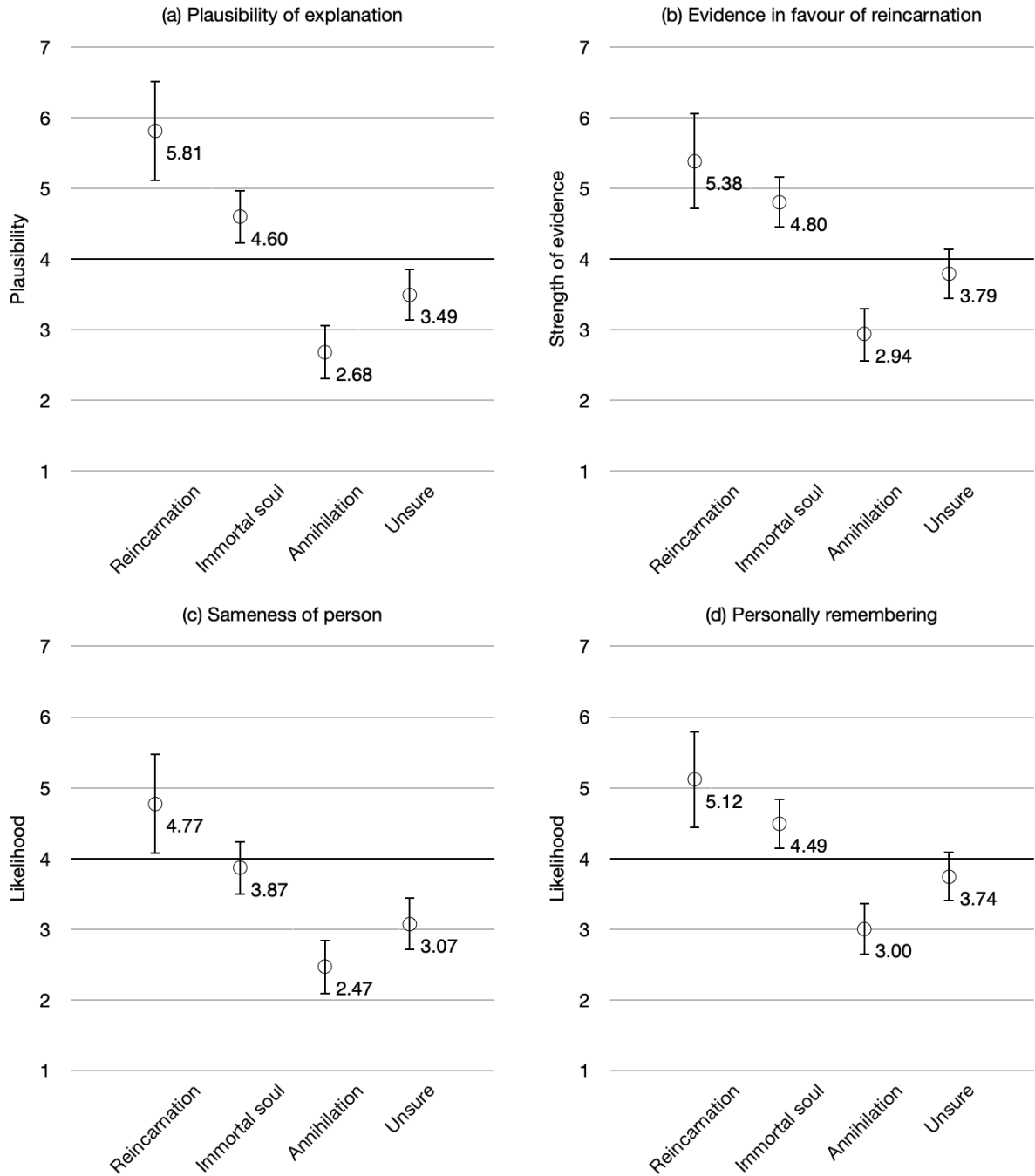


Figure 2. Estimated marginal means for measures of (a) plausibility of an explanation in terms of reincarnation, (b) judgment of quality of evidence supporting the belief in reincarnation, ascriptions of (c) identity and (d) remembering, grouped by afterlife beliefs. Error bars indicate 95% CI.

Discussion. While on average Parfit's Celtic warrior case was not judged to constitute strong evidence in support of belief in reincarnation, judgments of quality of evidence depended on study participants' initial beliefs about the afterlife. For instance, those who believe in reincarnation (and those who believe in an immortal soul) thought that such a case would constitute strong evidence supporting the belief in reincarnation, while this was denied by those who believe that the person ceases permanently after death. A similar pattern was observed on a number of other measurements: how plausible an explanation in terms of reincarnation was taken to be, how likely participants thought it is that they would ascribe personal identity and remembering in such a case, as well as how often participants suggested an explanation in terms of reincarnation in a free text response. Furthermore, evidence can be weakened by making alternative explanations salient. Study participants who had a chance to consider alternative explanations before ascribing identity and remembering, ascribed lower scores.

Study 2. The strategy

In Study 2, I build upon a study design used by White (2015; 2016a). There are some differences, however. First, the task does not require the study participant to suppose that reincarnation can in fact occur. Second, participants are asked to create the most convincing strategy in favor of a particular candidate rather than simply to choose from a predefined set of candidates. Third, the strategies can rely only on what is observable (thus, for instance, memory *claims* rather than presence of memories themselves). Furthermore, I check how different aspects of memory claims (level of detail, availability of information, type of remembering) contribute to how convincing the memory claim is taken to be.

Participants. 100 study participants were recruited on Prolific. 51% female, 44% male, remaining 5% chose 'non-binary / other', $M_{\text{age}} = 32.0$, age $SD = 11.6$, age range 18-76.

Materials. Study participants were given the following task:

Imagine that it is the middle of the 19th century and you are a secret operative sent to a far-away country on a secret mission. Your mission is to make sure that a tribe that lives in one of the valleys does not interfere with the business people from your home country building railroads and mines in the territory adjacent to the tribe's territory. You were given this mission because thirty years ago you spent several years with this tribe, learned its language and traditions. You knew the chief of the tribe well; you know a lot about his life, appearance, character. You also know that the chief died from an arrow shot into his heart.

You realize that if your mission fails and you do not manage to convince the tribe to cooperate, your country will use its army against the tribe and the whole tribe is likely to perish.

After thorough analysis, you come to the conclusion that the only way to secure the support of the tribe is to convince them that your close associate (who was born in this tribe, but kidnapped and raised by a neighboring tribe) is the reincarnated tribal chief. In this tribe, everyone believes that people reincarnate after they die and also that the tribe should be governed by the reincarnate of the previous chief. If the tribe can be convinced that your associate is the true reincarnation of the deceased chief, your associate will become the new chief and you will secure the tribe's cooperation.

Now you need to come up with the best way for your associate to convince the tribe that he is the true reincarnation of the deceased chief.

Participants then were asked to answer the following two question (one or two sentences each):

What advice would you give to your associate on how to convince the tribe that he's the true reincarnation of the deceased chief?

Why, in your opinion, will the tribe find your suggested strategy convincing?

On the next page, they were provided with a list of possible strategies (presented in randomized order) and asked to indicate whether they think it would be found by the tribe to be convincing (on a scale from 1 (Completely unconvincing) to 7 (Completely convincing)):

[Tattoo] Your associate tattoos a birthmark on the chest exactly where the chief was shot with an arrow.

[Memory] Your associate claims to remember various events from chief's life and is able to describe those events.

[Limp] Your associate walks in a limping manner, exactly like the chief did.

[Jewelry] Your associate is able to recognize jewelry that was owned by the chief.

[Name] Your associate claims that his name is the same as the chief's.

[Claim] Your associate claims that he is the reborn chief.

[Style] Your associate has hair and clothes in the same style as the chief.

[Character] Your associate exhibits character traits that are exactly similar to the chief's.

Finally, on the last page participants received the following task:

Let's look further into the strategy "Your associate claims to remember various events from the chief's life."

Which features of memory would be found to be the most convincing?

Consider the following three pairs of features.

[Availability] Event known only to very few / Event known to many

[Level of detail] Event is described with a lot of detail / Event is described very abstractly

[Memory type] Associate claims "I personally remember this event" / Associate claims "I just know that this happened to me"

After reading these instructions, participants were asked to indicate for each of the eight possible combinations⁴ (presented in random order) whether they think it would be

⁴ For example:

Event known only to very few.

Event is described with a lot of detail.

Associate claims "I personally remember this event".

found by the tribe to be convincing. Responses were collected on a scale from 1 (Completely unconvincing) to 7 (Completely convincing).

Results.

Free text responses. Looking at bare word frequencies in responses, “knowledge” and “to know” in various forms (77 instances) is mentioned three times more frequently than “memory” and “to remember” (in various forms, 25 instances). These results hint that it is unlikely possession of information rather than presentation of this information in a form of a memory claim that is taken to be key element in assessing evidence.

To look into the suggested strategies in more detail, the following coding-scheme was applied (some participants mentioned more than one strategy):

1. Strategies based on possession of information;
2. Strategies based on possession of traits;
3. Strategies based on possession of bodily signs.

65 percent of participants mentioned possession of information, 33 percent – possession of traits, 7 percent – possession of bodily signs. There were also several additional isolated strategies, like staging a miracle, but they were not mentioned by more than one or two participants each.

In the first category, it was often not possible to discern what form should communication of information take. Where it was presented explicitly enough, 29 participants talked about demonstrating knowledge about the chief and the tribe while only 11 participants mentioned that the associate should claim to have memories of events from the chief’s life. The fact that memories were relatively rarely mentioned may suggest that it was the unlikely possession of information that was thought to play the crucial role.

For traits, no comparable classification difficulties emerged. 24 participants mentioned that the strategy should involve mimicking behavioral patterns, such as mannerisms and a further 15 mentioned mimicking character and personality traits.

Only 7 participants mentioned bodily signs, in all cases associated with the manner in which the chief died, such as presenting a scar or a birthmark on the spot where the arrow hit the chief or pains in the heart.

Comparison of strategies. Mixed-effects linear regression with random intercepts by participant and strategy as a fixed factor showed that there were differences in how convincing various strategies were taken to be, $F(7, 693) = 54.9, p < .001$. Estimated marginal means for each strategy are plotted in Figure 3. Post hoc pairwise comparisons suggest that there were no differences in how convincing the top three strategies (Memory, Character, Tattoo) were taken to be, all $p_{\text{holm}} = 1.00$. Second-tier strategies (Jewelry, Limp, no difference, $p_{\text{holm}} = .176$) were seen to be less convincing than those in the first-tier (all $p_{\text{holm}} < .030$) but more convincing (all $p_{\text{holm}} < .010$) than those in the third group (Style, Claim, no difference, $p_{\text{holm}} = 1.00$). The least convincing strategy (all $p_{\text{holm}} < .001$) was Name.

A mixed-effects model was fit with participants as a random factor, three fixed within-subject factors: level of detail (detailed vs abstract), availability (known to few vs known to many), and memory type (personally remembers vs knows) and convincingness as an outcome. All three factors were statistically significant predictors of how convincing the memory is going to be taken to be (Level of detail, $F(1, 693) = 79.6, \beta = .97, 95\% \text{ CI } [.76, 1.18], t(697) = 8.93, p < .001$; Availability, $F(1, 693) = 52.7, \beta = .79, 95\% \text{ CI } [.58, 1.00], t(697) = 7.27, p < .001$; Memory type, $F(1, 693) = 14.1, \beta = .41, 95\% \text{ CI } [.20, .62], t(697) = 3.76, p < .001$. There were no two- or three-way interactions between the factors (all $ps > .250$). See Figure 4.

Memory type, however, was the weakest predictor of the three, weaker than Level of detail ($z = 3.66, p < .001$) and Availability ($z = 2.48, p = .013$). No difference was observed between Availability and Level of detail ($z = 1.18, p = .24$).

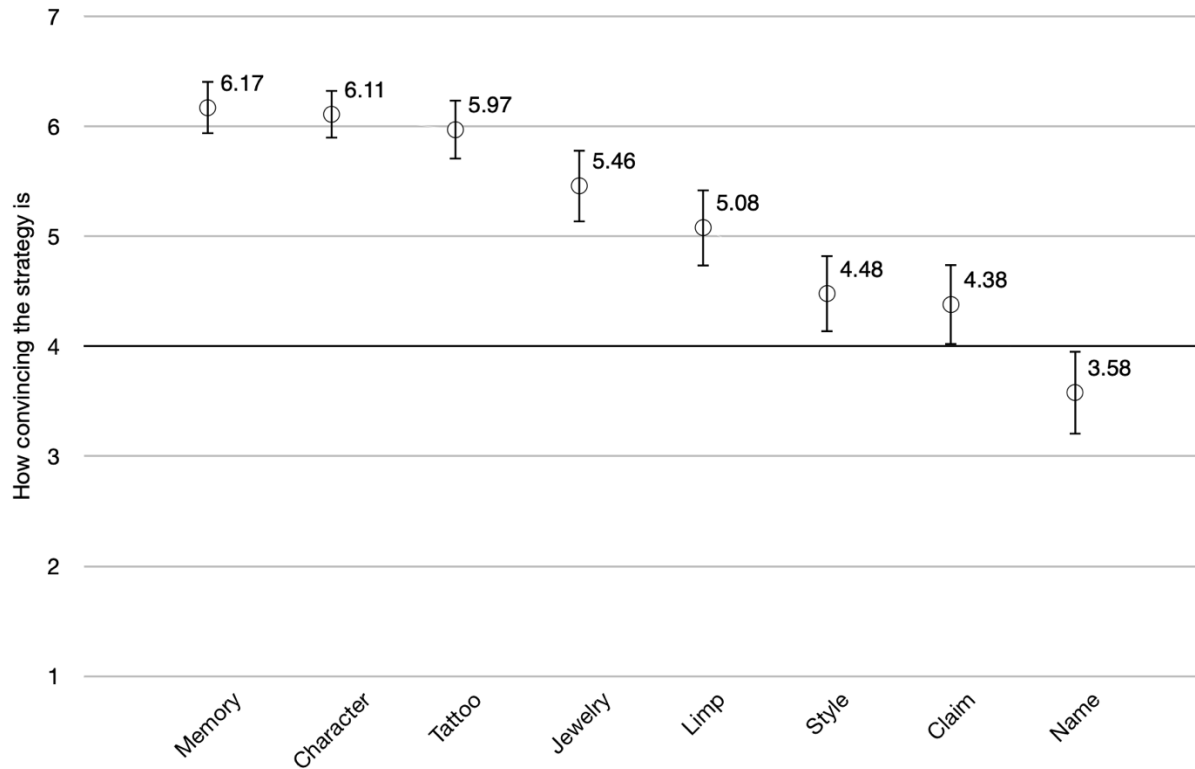


Figure 3. Estimated marginal means for how convincing different strategies were thought to be. Error bars indicate 95% CI.

Discussion. While the study confirms that accurate memory claims are taken to constitute evidence of reincarnation—strategy based on memory was perceived to be highly convincing, on a par with strategies based on mimicking the character of the deceased chief and also bodily marks—both free text responses and direct comparisons between the level of detail, availability of information about the event, and memory type, suggest that it is otherwise hard-to-explain knowledge of facts that plays the key evidential role. While memory claims in which the agent is explicitly claiming to personally remember an event from the chief’s life were taken to be more convincing than those claims in which the agent

claims to simply know that the event happened to him, this effect was considerably smaller than the effect of level of detail (detailed vs abstract) or availability (known to few vs known to many) of information contained in the memory claim.

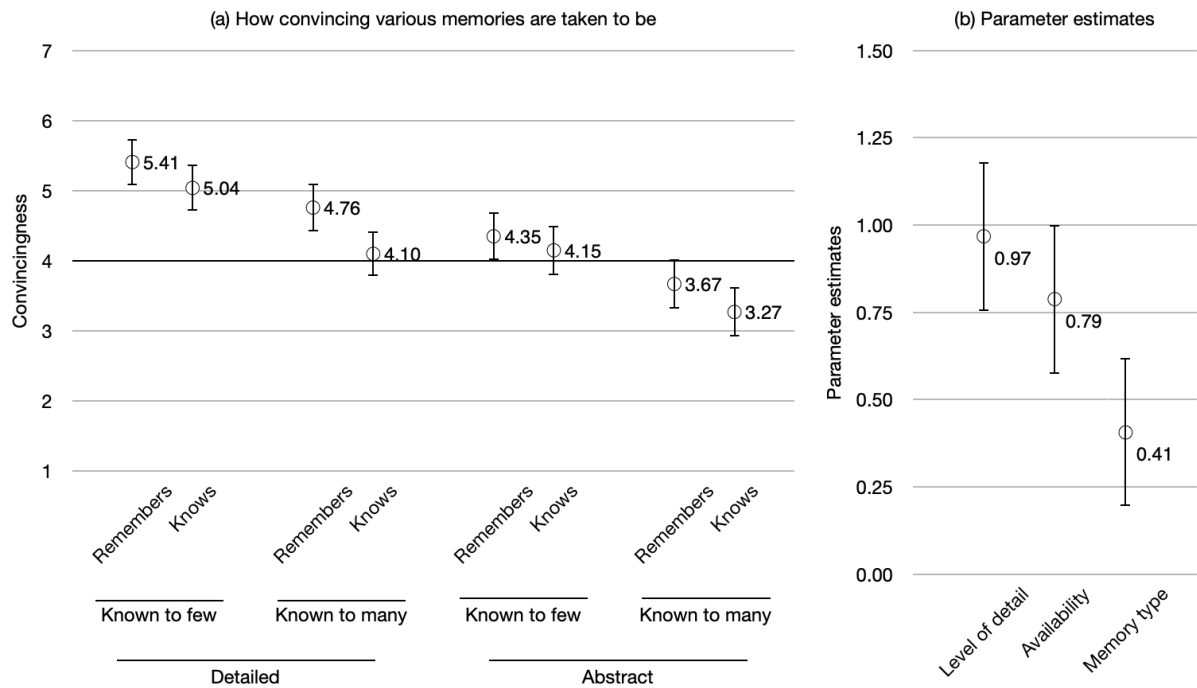


Figure 4. Estimated marginal means for how convincing various memories differing in level of detail, availability, and type of memory are taken to be (a) and parameter estimates of the three factors (b). Error bars indicate 95% CI.

General discussion.

The two studies presented in this chapter bear on the three descriptive questions discussed in the introduction. First, to what extent cases like Parfit's Celtic warrior case are judged to provide evidence supporting the belief in reincarnation depends on prior willingness to believe in reincarnation and what other potential explanations are salient (Study 1). On average, the case was not judged to constitute strong evidence in support of belief in

reincarnation. There were, however, striking differences between groups holding different afterlife beliefs on a number of measurements: how plausible reincarnation was taken to be as an explanation of the case, how good was evidence for a belief in reincarnation taken to be, how likely participants thought it is that they would ascribe personal identity and remembering should they encounter such a case, as well as how often participants suggested an explanation in terms of reincarnation in a free text response. In all cases, those who believe in reincarnation scored high and those who believe that the person ceases permanently after death scored low. Furthermore, considering alternative explanations, some of which did not presuppose personal identity (telepathy, clairvoyance, artificial memory insertion by the technologically advanced extra-terrestrials), led participants to lower ascriptions of personal identity and remembering.

Second, written responses in Study 1 did not contain any clear hints that study participants interpret reincarnation in a way that does not assume personal identity. Furthermore, a measure of perceived identity was strongly correlated with measures of plausibility of explanation in terms of reincarnation, $r = .760$, and judgments of quality of evidence in support of the belief in reincarnation, $r = .759$, both $ps < .001$, suggesting that the concept of reincarnation employed by the participants implied preservation of personal identity. Furthermore, in factor analysis, explanation in terms of reincarnation loaded with other explanations that assume the presence of the Celtic warrior in the Japanese woman: immortality and possession.

In relation to the third question, the two studies collectively suggest that third-personal evidence of reincarnation is mostly constituted by otherwise hard-to-explain possession of knowledge rather than that knowledge being presented in a format of a memory claim that stresses that the event is personally remembered. This is most clearly demonstrated by direct comparisons between the level of detail, availability of information about the event,

and memory type as well as by relatively rare references to remembering in free text responses in Study 2. Free text responses in Study 1 also point to the fact that what was often taken to call for an explanation was the unlikely knowledge of facts: 26 percent of participants proposed explanations in terms of an educated guess, 12 percent speculated about other ways to obtain this kind of knowledge (testimony via family, access to authentic written sources, non-invasive archaeology), 13 percent entertained the possibility of sheer coincidence (made more palatable by pointing to the possibility that perhaps many people were making such claims and thereby someone was likely to guess just by luck, or portraying the claims made to be relatively vague).

In summary, the extent to which verifiable memory claims are taken to constitute evidence of personal identity in reincarnation depends on background beliefs. Furthermore, it seems that when potential past lives memories are considered, the element of verifiable memory claims that calls for an explanation—and that is sometimes explained in terms of reincarnation—is the possession of otherwise-hard-to-obtain knowledge about past events rather than whether the memory claim is presented as based on personally remembering the event.^{5 6}

⁵ At least in third-personal scenarios based on observable evidence in a form of memory claims. The role of memory may be different in first-personal scenarios (White, Kelly and Nichols 2016) or when presence of memories is stipulated in a vignette rather than inferred from memory claims (White 2015; 2016a; Woike, Collard and Hood 2020).

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References:

- Ayer, A. J. (1956), *The Problem of Knowledge*, London: Macmillan.
- Blok, S., G. Newman, and L. J. Rips (2005), 'Individuals and their concepts', in W.-K. Ahn, R. L. Goldstone, B. C. Love, A. B. Markman and P. Wolff (eds), *Categorization Inside and Outside the Lab*, 127–49, Washington, DC: American Psychological Association.
- Ducasse, C. J. (1961), *A Critical Examination of the Belief in a Life after Death*, Springfield, Ill, Charles C Thomas.
- Hales, S. D. (2001), 'Evidence and the afterlife', *Philosophia*, 28 (1): 335-46.
- Nichols, S., and M. Bruno (2010), 'Intuitions about personal identity: An empirical study', *Philosophical Psychology*, 23 (3): 293–312.
- Parfit, D. (1984), *Reasons and Persons*, Oxford University Press: Oxford.
- Perrett, R. W. (1987), 'Rebirth', *Religious Studies*, 23 (1): 41-57.
- Siderits, M. (2015), *Personal Identity and Buddhist Philosophy: Empty Persons*. 2nd edn, Aldershot: Ashgate.
- White, C. (2015), 'Establishing personal identity in reincarnation: Minds and bodies reconsidered', *Journal of Cognition and Culture*, 15 (3-4): 402-29.
- White, C. (2016a), 'Cross-cultural similarities in reasoning about personal continuity in reincarnation: Evidence from South India', *Religion, Brain & Behavior*, 6 (2): 130-53.
- White, C. (2016b), 'The cognitive foundations of reincarnation', *Method & Theory in the Study of Religion*, 28 (3): 264-86.
- White, C., P. Sousa and R. Berniunas (2014), 'Psychological essentialism in selecting the 14th Dalai Lama: An alternative account', *Journal of Cognition and Culture*, 14 (1-2): 157-8.

White C., R. Kelly and S. Nichols (2016), 'Remembering past lives: Intuitions about memory and personal identity in reincarnation', in: H. De Cruz and R. Nichols (eds), *Advances in Religion, Cognitive Science, and Experimental Philosophy*, 169–95, London, Bloomsbury Academic.

Woike, J. K., P. Collard and B. Hood (2020), 'Putting your money where your self is: Connecting dimensions of closeness and theories of personal identity', *PloS One*, 15 (2), e0228271.