## Deathgates, Deductions, Dawkins

Richard Dawkins is a man known for his long fight against the supernatural, and so I find it fitting to quote him here: "I love romance."



I love the idea of there being afterlife we can communicate with, of our loved ones being there for us even in death. I love the idea of Cupid, an angel spreading love by shooting people with arrows. I love the idea of Santa Claus; an old man living in the North Pole, riding a flying sleigh and giving presents to children. I love all these ideas, yet I cannot believe in any of them.

Most of us believed in Santa Claus when we were young, so why did we stop? In my case at least, it was because I recognized the person behind the mask. I saw that it was in fact my neighbour, a chubby middle aged man with a fake mask and beard. As I knew for a fact that he didn't live in the North Pole but in the suburbs of Stockholm, he most certainly couldn't be the real thing. This however raised a disturbing question; if the Santa Claus I met was a fake, then where was the real one? He was supposed to come to all good children, and I had definitely been good. Could it be that Santa Claus wasn't... real?

In a most traumatic manner, I had falsified the theory of Santa Claus. The claims didn't hold! My approach back then was similar to that of the philosopher and scientist Karl Popper. He thought that theories which claims were proven wrong could be discarded. In fact, he thought that the worth of a theory lies within its falsifiability - how hard it is to disprove. The easier, the better, Popper thought.

Next up is Cupid. Cupid is a mysterious character. He isn't the source of all love, only the spontaneous kind. Not all spontaneous love of course, but some. Also, he's undetectable, regardless of the methods used. As we can't detect him, and his powers aren't consistently used, it seems his existence is nearly impossible to disprove. Despite this, not many people believe in the theory of Cupid. Perhaps because it seems a bit unreasonable?

We mentioned that Popper likes falsifiable theories. What we didn't talk about was his attitude towards the unfalsifiable kind. Well, he doesn't like them. In fact, he considers their value to be null, zero, void. If a theory is unfalsifiable, it is invalid. It doesn't describe things in a meaningful way. If it claims to be science, it is really only pseudo-science. This, the idea that valuable theories must be disprovable, is a scientific epistemology, an approach to knowledge. Popper aptly named it Falsificationism.

We are still missing something important. Falsificationism needs a context, and the context is Empiricism. Empiricism can be seen as an epistemological attitude. It simply states that the senses is our source of knowledge, and that we therefore should use our sensory experiences to determine what is true and false, preferably through experimentation. This attitude could be seen as the core of science.

The goal of science is after all to understand nature. It is truly that simple. In order to actually understand something, you must be able to predict its actions. Therefore, science tries to provide explanations which predicts the behaviour of nature. To actually reach these explanations one would preferably use scientific methods; techniques for investigation and appliance of new information. The methods differ, but they tend to agree on a few general principles:

- *Analysis* What is the question at hand?
- *Hypothesis* Create an hypothesis (educated guess) that could answer the question.
- *Synthesis* Experiment and gather data.
- *Validation* Was our hypothesis correct?

We now have the necessary tools to approach the main character of the article, the webpage **deathgate.net**, from a scientific perspective. As an educated reader, you are of course already aware of what the site is all about: It claims to let you communicate with the diseased. An astounding claim, worthy of inquiry. Could it be true?

Let us examine the site with our newly established scientific method! From the top: *Analysis*: The question is rather obvious. Can the site **deathgate.net** communicate with the dead? *Hypothesis*: Let us assume that it cannot. Our hypothesis is therefore that the dead cannot speak to the living through **deathgate.net**.

Synthesis: Now to validate. To prove our hypothesis, we have to... wait. How can we prove that there aren't some people somewhere who are affected by a power we can't detect? We could disprove isolated cases, like making people ask the dead person they are communicating with things that only they would know, such as where they hid their treasure. If the treasure isn't there, then this particular instance of communication obviously wasn't real, given that the diseased person in question isn't prone to both treasure hoarding and lying. Regardless, that would just be an isolated case! Unless we are able to disprove every single person who has ever been successful, it seems we are unable to go any further.

*Validation:* ???

Hmm. That didn't go very well at all. In fact, isn't this very similar to how the Cupid theory went down? An undetectable power which affects certain people sometimes. Like the cupid theory, it seems that the claims of people successfully talking to the dead using **deathgate.net** are unfalsifiable. From a scientific perspective, the question is therefore meaningless. There is no way to predict the supposed powers of the site. We only know that it most probably won't work, as the majority of people were unsuccessful in their attempts. So what should we do now?

There is a principle applied on many fields of knowledge, not only science, called Occam's Razor. It says that when faced with two different theories which both have the same explanatory power, to use the one that makes the fewest assumptions. The purpose is to shift the burden of proof in a fair manner. It is so widely used that it could indeed be considered a part of the curriculum of the scientific method.

In our case, this would give us the following two conflicting theories:

Theory 1: There is a body-persisting soul. There is an afterlife. The dead can communicate from it. The site **deathgate.net** utilizes otherworldly source code to channel this. This communication is undetectable through non-anecdotic means.

Theory 2: The people who thought they were communicating with the dead were mistaken.

Wow. There's quite some difference in the number of assumptions there.

So, despite the romantic thought of the great beyond and the continued presence of our dearly departed, we may have to conclude that in order to accept the claimed functions of the site **deathgate.net**, we may also need to accept a few more assumptions than we should be comfortable with.

I leave you with the underlying spirit of this text, a final memorable quote from Richard Dawkins, gallant defender of reason: "I love words."