Science



Hit films like *The Secret* serve up a strange mix of New Age and quantum physics. Yet, a physicist asks, do they really understand what science and spirituality are all about?

BY PETER RUSSELL

YOU CREATE YOUR OWN REALITY. JUST

"think positive," and you'll get yourself a new car, a great job, the perfect partner and lots of money. That's a message heard more and more frequently, most prominently in popular documentaries like *The Secret*, following the success of *What the Bleep Do We Know!*?

To offer concrete evidence for their claims, the filmmakers point to discoveries in quantum physics. But does physics really provide the proof for these claims?

Quantum physics describes the socalled "observer effect," which refers to the impact the mere act of observing can have on the phenomenon being observed. Physicists speak about this as the "collapse of the wave function." The wave function describes the probabilities of a particle being observed in any of its possible states. When an observation is made, the wave function "collapses" and the particle is observed in one particular state. A popular interpretation of this is that the act of observation affects physical reality, "freezing" it into a certain state. Hence the claim that you create your own reality, and the importance of holding a positive vision of a desired outcome.

The original formulation, however, put forward by Nobel Prize-winner Werner Heisenberg, states that is your *knowledge* of the system that collapses. Nothing

in the real world actually changes; the only thing that changes is the uncertainty in your knowledge.

Nevertheless, there is a sense in which vou do create vour own reality: You create your own experience of reality. Take, for example, your ability to see. Light enters the eye, triggering nerve impulses that travel to the brain. There, these impulses are analyzed and put together into an image. You think you see the world, but what you're seeing is a reconstruction of the world. The same applies to all your senses: You hear your own listening, etcetera. In this way, you're creating your own perception of reality.

How you perceive reality depends in a large part on your attitude. A positive attitude is clearly a good starting point and may in part explain why things sometimes turn out the way you want.

I have discovered, for instance, that when I'm rested, centred and clear, things work out well. But I don't believe this is because I am "creating" the world around me. It happens because I have put myself into a good state of mind to pick up oppor-

tunities.

ANOTHER PHENOMENON

from quantum physics that is often misunderstood is the issue of "non-locality." Quantum theorists predict that observations in one place can affect observations a long distance away. Einstein had rejected this as "ghostly action at a distance" and concluded something was wrong with quantum

In the early 1980s, Alain Aspect,

a French physicist, carried out the first experiments to test the prediction. He showed that when two particles are created with correlated quantum states (for example, both having the same spin) and are then separated by a long distance, their quantum states remain correlated. When Aspect measured the spin of one particle, causing its wave function to collapse into one particular state, he found that the wave function of the second particle collapsed into the same state, although there was no way the two particles could now affect each other. Because the correlation is instant, some people see this as proof of faster-than-lightcommunication, or of an undiscovered field beyond time and space through which we are all connected and through which we communicate.

Most physicists, however, tend not to jump to that conclusion so easily, because they don't fully understand how this phenomenon happens. They use terms like "entanglement," meaning that the relationship between the particles is somehow preserved over long distances.

There is a non-local relationship, which cannot be understood in our current way of thinking. Yes, something unusual is happening, but I don't think we should grasp hold of these phenomena from sub-atomic unfair with respect to people who are ill or poor. The message of The Secret suggests they too are responsible for their own fate. Does this mean that the thousands in Bangladesh made homeless by floods are suffering because they did not have a positive vision?

THE STRANGEST THING ABOUT SUCH

films is that they are parading spirituality, yet are, in fact, supporting the very opposite. With their focus on acquiring material wealth, they reinforce the dangerous idea that whether or not you're happy and at peace in your life depends upon what you have, what you do and how other peo-

Yet almost all the great spiritual teachers through time have said that whether you are happy ultimately depends on how you feel about yourself on the inside, not whether you have a nicer car or a betterpaying job than someone else.

Telling people they can achieve happiness by acquiring more things just reinforces the mindset that's leading us to extract more and more out of the planet and that will ultimately drive our culture to extinction. The Secret would have had a more powerful spiritual message if it had helped people realize this.

A change in consciousness is a change



ARE WE REALLY CREATING **OUR OWN REALITY?**

physics to explain what may be happening at our own level of existence.

I'm not saying we shouldn't think positively, or that we're not interconnected. All I'm saying is it's incorrect to use current physics research to validate these claims and it's highly misleading to present them as the ultimate truth, or the "Great Secret," of the universe. Such grand assertions give people a false sense of hope.

And, on the contrary, the claim that we create our own realities may also be very in perception—a change in how we see things. The real secret—and it's only a secret because we keep forgetting it—is that we always have a choice in how we see, experience and interpret reality. That is what determines whether or not you'll be happy and find peace. Ode

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