



Ron Mueck, "Mask II"

Mind Out of Time

*I used to think that the brain was the
most wonderful organ in my body.
Then I realized who was telling me this.*
Emo Phillips

IN 1967, TWO AMERICAN THEORISTS derived an equation describing the quantum state of the entire Universe. Known as the Wheeler-DeWitt equation, it includes many key features of the cosmos, such as its size and momentum. But one familiar aspect is conspicuously absent: *Time*.

Remarkably, some theorists believe this implies that time is not intrinsic to reality, and in fact *may only exist in our minds*.

Unlike Isaac Newton, who believed in time as an absolute, inherent phenomenon, universally present and immutable, Einstein theorized that the flow of time is malleable, and numerous experiments and observations have since proven him uncannily correct.

(Einstein explained the idea with a typically humorous example: "Put your hand on a hot stove for a minute, and it seems like an hour. Sit with a pretty girl for an hour, and it seems like a minute. That's relativity.")

There is nothing in physics that requires time to be an unconditional attribute of reality, nor for it to necessarily flow in only one direction. What we call 'past, present, and future' may in fact be simply a matter of perspective, and not something universal or embedded in the outer world.

Today some physicists follow this reasoning to its logical conclusion and maintain that there is no temporal reality at all apart from an ever-present *Now*, and that time is nothing more than a stubbornly persistent illusion, the result of the way the brain processes information and makes sense out of its chaotic experience of the world.

Simply put, our perception of the world around us depends on the brain's ordering of what we interpret as events taking place over seconds, minutes and hours. In essence, the brain marks out events in its perceived 'reality' to create episodic memories, without which there would be no past to recall and no sense of time passing.

We have all experienced psychological time's relativity on an intimate, subjective level. We can create a year's worth of pleasant memories on a two week holiday, but wonder where the weekend went while returning to a boring job on Monday. Time seems to slow almost to a stop during a 'peak' athletic endeavor—or even more dramatically, in a car accident or near death experience.

Paradoxically, it would seem that the less attention we pay to the present moment, the more aware we are of time passing, but the faster time seems to be slipping by us.

Experiments suggest that this 'time expansion' effect is an artifact of thinking, a result of the number of discrete mentations we experience and catalog in our memory.

If true, this points to a very simple and practical way to expand our allotted quota of time on earth: The more engaged we are with whatever is happening in our lives—and in particular the more we seek out new experiences and avoid habit and routine—the more 'life' we will experience ourselves as having lived. (Immortality may not yet be at our fingertips, but extending our *perceived* lifespan may require little more than making sure we avoid getting bored with life.)

Similar experiments show that our sense of time varies in response to our emotional state. This suggests that our notion of time is bound up with our sense of self, pointing to another, even more intriguing possibility: *Perhaps our minds only exist in our minds.*

This may not be as implausible as it seems: Among many competing theories about the nature of consciousness is one cognitive scientists provocatively term 'Illusionism'—most often associated with the British philosopher Keith Frankish. As the name suggests, Illusionism posits that our familiar first-person sense of self—the ever-present 'I' or the mysterious 'ghost in the machine'—is in fact only an extraordinarily convincing parlor trick, an imposter created by the brain in order to process the billions of impulses of sensory data that we take in every second.

In Frankish's view, the *self* is simply the sum of all our experiences, captured and stored in the brain as memory. He suspects that "we do not actually have phenomenal consciousness...it's a kind of introspective illusion, which reflects the limited access we have to our own mental processes."

This is similar to the Buddhist idea that the mind is simply thought itself, an insight experienced by millions of people in the practice of meditation. In 'silent witnessing,' one may be startled to find that one is not actually the thinker of one's own thoughts—which come and go of their own accord, like clouds in the sky—but rather the background presence which exists prior to and independent of the mind's incessant activity.

Fundamental to contemporary quantum theory is the notion that no phenomenon exists until it is observed. If this is true, it implies that the physical Universe is merely an artifact of what we call consciousness.

In fact, Max Planck, who played a key role in developing quantum theory, regarded matter as secondary—and derived from consciousness—rather than the reverse.

All of which should be enough to blow anyone's mind. That is, of course, if there is really is any mind there to be blown. ■