

# A WATCHED POT NEVER BOILS

In the quantum world,  
there ain't no luck

BY FRED ALAN WOLF

**E**ver wonder how lucky or unlucky you are? Or do you think that whatever success or failure you've had had nothing to do with luck? Well, if the quantum world has anything to do with it, there is a way to beat Lady Luck at her own game. All you need to do is look at the world vigilantly and carefully.

Quantum physics is the theory of the behavior of matter and energy, particularly at the level of atoms and subatomic particles. It is nearly impossible to imagine the strange behavior of matter at this level. An electron in an atom, for example, performs a trick much like the crew on *Star Trek* when it “beams” from one energy level to another without going in between. But if we aren't watching it jump, we have no control as to when it will happen.

But suppose we do watch? Well, if current experiments in quantum physics are relevant to our everyday experiences, we will actually be able to alter the matter—and thereby the crapshoot of life. But there is a catch to all this: To do it, you need to begin to see things quantum mechanically.

Take the old proverb “A watched pot never boils.” Now imagine a tiny, quantum-sized “pot of water” being heated on a really tiny stove. We all know pots of water boil, given a few minutes or so. You would certainly think the watched quantum pot would also boil. It turns out, however, that if you vigilantly watch the pot, it will *never* boil. In fact, all vigilantly watched “quantum pots” never boil, even if they are heated forever. The only requirement for this to happen is that observers must have the intent to see the object in its initial state. This intent is determined by the frequency of their observations. The observers must look repeatedly in very short time intervals to find the object in the same state. Suppose physicists don't watch vigilantly, or suppose they do, but with the intent of seeing the quantum pot boil naturally. Then



what? If the physicists look intermittently, expecting it to boil eventually, the pot will follow its natural course and will boil. Infrequent observations have little effect on the result. Or if the physicists wish, they may vigilantly observe the object along its natural evolution and will observe the same result. In other words, a watched pot boils if you intend it to.

Finally, there is another bizarre aspect to all this. What if you want the watched pot to do something weird? If your intent to observe that occurrence is vigilant enough, the object actually will follow the strange path. Hence a watched pot boils on a cake of ice, if you intend it to.

Here I need to point out that “intent” and “intentions” are not the same thing. By “intent,” I am referring to a person's active observation. To make what you desire come true you need to pursue your vision vigorously, not passively dream about it and hope it will come true. If this “watched-pot” theory turns out to be correct at the human level, then our desires and accompanying actions are what actually govern our daily lives. Luck has nothing to do with it. ■

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