New Atoms Doing the Same Dance, by Richard Feynman

I stand at the seashore, alone, and start to think.Â There are the rushing waves ... mountains of molecules, each stupidly minding its own business ... trillions apart ... yet forming white surf in unison.

Ages on ages ... before any eyes could see ... year after year ... thunderously pounding the shore as now. For whom, for what? ... on a dead planet, with no life to entertain. Â Never at rest ... tortured by energy ... wasted prodigiously by the sun ... poured into space. A mite makes the sea roar. Â Deep in the sea, all molecules repeat the patterns of one another till complex new ones are formed. They make others like themselves ... and a new dance starts.

Growing in size and complexity ... living things, masses of atoms, DNA, protein ... dancing a pattern ever more intricate. Â Out of the cradle onto the dry land ... here it is standing ... atoms with consciousness ... matter with curiosity. Stands at the sea ... wonders at wondering ... I ... a universe of atoms ... an atom in the universe.

The same thrill, the same awe and mystery, come again and again when we look at any problem deeply enough. With more knowledge comes deeper, more wonderful mystery, luring one on to penetrate deeper still. Never concerned that the answer may prove disappointing, but with pleasure and confidence we turn over each new stone to find unimagined strangeness leading on to more wonderful questions and mysteries -- certainly a grand adventure! [...]Â

This is what it means when one discovers how long it takes for the atoms of the brain to be replaced by other atoms, to note that the thing which I call my individuality is only a pattern or dance. The atoms come into my brain, dance a dance, then go out; always new atoms
but always doing the same dance, remembering what the dance was yesterday. [...]Â

What, then, is the meaning of it all? What can we say to dispel the mystery of experience? If we take everything into account, not only what the ancients knew, but all of what we know today that they didn't know, then I think that we must frankly admit that we do not know. But in admitting this, we have probably found the open channel.Â

--Richard Feynman, in Value of Science
[http://alexpetrov.com/memes/sci/value.html]