

We Are Such Stuff As Dreams Are Made On

Why do we dream? Where do dreams come from? What is the “purpose” of dreams? These questions have been asked for thousands of years but, only now, through modern science, are we beginning to find answers.

In ancient days, dreams were thought to be messages and spirits from the Underworld. But one had to be careful because, as Homer and Virgil instructed, sleep had two gates, one of rough animal horn, one of polished ivory. “True” spirits came through the horn-gate, false spirits through the ivory.

The poets didn't say how to tell them apart, nor whether the dream world is the real thing and life but a dream. The Chinese poet Chuang-Tzu, on waking, wondered, “I do not know whether I was then a man dreaming I was a butterfly or whether I am now a butterfly dreaming I am a man.” Hamlet also had to contend with the uncertain boundary between life and the spirit world after death. In his famous soliloquy on suicide (“To be, or not to be”) he wonders what nightmare terrors might await him: “For in that sleep of death what dreams may come ... must give us pause.”

Dreams also were thought to provide prophecy. Recall Pharaoh's dream of the seven fat cattle devoured by the seven starved cattle. Joseph interpreted the dream as prophesying seven years of good crops, followed by seven years of failure. He advised Pharaoh to build storehouses to hold grain harvested in the years of plenty.

Freud also made much of interpreting dreams, but for psychoanalytic purposes; dreams were, in his phrase, the “royal road

to the unconscious” mind, its images representing an individual's repressed wishes. Freud's rival in psychoanalysis, Carl Jung, returned to mythology, believing dreams represented a collective human library of archetypes that we are all born with and that inform our behavior — the desire to know God is a principal archetype.

Jung usefully described the dream as theater, the dreamer at once the actors, the stage manager, the director, sometimes also the critic. The archetypal “plays” our dreams put on for us are ones we're all familiar with: flying (sometimes dangerously), the secret room we've just discovered in our home, or going out in public undressed. One common anxiety dream is taking a test for which one is unprepared, or going up on stage to play a part whose lines have not been learned, the so-called “Actor's Nightmare” (there is an actual comedy by that name).

Fast forward to the 21st century. Neuroscientists can now say what parts of the brain are needed to make dreams. It's now known that dreams come both in the light rapid-eye-movement (REM) stage of sleep as well as in the deeper non-REM stages. Even animals have REM stages of sleep: when dogs snuffle in their sleep they may be visualizing chasing that squirrel.

If animals can dream, some researchers are then led to think that dreams have a purpose: processing memories to know what to do to ensure survival the next day. If true, it might be said that a robot programmed to process its computer chip “memories” of movement so as to maneuver better is also “dreaming.” Yet other scientists take a more reductive view: dreaming is just a way to erase “brain noise,” like a software program cleaning a computer disk.

Or it could be, as recent research indicates, that dreams have no specific biologic function whatever, being just an accidental result of evolution that gave us both sleep and thinking. Dreams, such research suggests, are simply a continuation of our waking selves, depicting our thoughts, preoccupations, and emotions — especially those we have suppressed during the day — albeit in artful and imaginative forms. Nonetheless, we can still make practical use of dreams, as Ralph Waldo Emerson wrote, “A skilful man reads his dreams for his self-knowledge.”

As a scientifically trained person, I'm pleased that we are learning more about how our brains function. As a poet, I'm charmed that “real life” and dreams may be a continuous whole after all, and we needn't let go the ancient magic and mystery of dreams, windows upon something beyond us. As Shakespeare wrote in *The Tempest*, “We are such stuff as dreams are made on, and our little life is rounded with a sleep.”

Norbert Hirschhorn, a poet and retired physician, was adopted by marriage into a Minnesota family but now lives in London. He taught at the University of Minnesota and headed the Division of Family Health in the Minnesota Department of Health. He notes that in his previous column “Spend a little time contemplating Time,” which appeared here Nov. 13, he left out one word in the title of an Elizabeth Bishop poem he cited. The correct title of the poem is “At the Fishhouses.”