OFF THE BEAT

Grant titles from history

With all the current fuss over grants given by government agencies for "silly" research, it might be interesting to consider how well some of the great discoveries of history would have fared if they had been subjected to Congressional scrutiny. We thus present some likely titles for grant proposals by historical figures (whose names appear at the end, together with their discoveries) and the probable comments of a practical-minded legislative aide, recommending why his Congressman should vote against them.

(1) "Perturbation of space and time at extreme velocities, with implications for mass-energy relationships." (Pure science fiction. A patent office clerk proposes to prove by pure mathematics that clocks would run slower and measuring sticks would get shorter if they could be accelerated to nearly the speed of light. Topic is irrelevant to everyday life, such effects cannot be experimentally tested in the conceivable future, and the whole business violates three centuries of amply demonstrated physical principles.)

(2) "Possible interrelationships of various species of Galapagos finches." (Young drifter wants to take a five-year junket around the world, toward no particular end. His academic qualifications are limited to having flunked medicine at Edinburgh and divinity studies at Cambridge. He enjoys the sporting life and now says he wants to collect rare birds and such.)

(3) "*Er redete mit dem Vieh, den Vögeln und den Fischen*"—(roughly translated): "Conversing with dumb animals." (Austrian physician and goose fancier wishes to further his studies in communicating with lower animals—he sometimes becomes their "parent" and, for example, jumps into the water with his adopted geese to help them learn to forage.)

(4) "Transmission of pod color in crossed strains of garden peas." (Young Augustinian monk, having flunked out of the university and failed to qualify as a teacher in his Order, now raises peas in the monastery garden. Intends to note pod color and plant height over several generations—cannot produce any publishable results for at least eight years.)

(5) "Molecular stimulation by electromagnetic waves in a resonator with positive feedback—for application to high-resolution microwave spectroscopy studies of quantized molecular vibration modes." (Reputable physicist with experience in radar; but the product sounds awfully esoteric, with little foreseeable practical application.)

(6) "A compendium of new mechanical devices, explanation of hydrodynamics, an improved method of bronze casting, proof of the impossibility of perpetual motion, and discourses on related and unrelated topics." (Easily ignored. This nut turns out to be an illegitimate itinerant artist with little formal schooling, who claims to intuitively understand the principles of science and technology better than those now propounding them in scholarly publications. A virtual illiterate in mathematics, he is reduced to drawing pictures to express his ideas.)

Fortunately, in most cases, the researchers in question were able to survive somehow until their work was better recognized. They were: (1) Albert Einstein, as he might have proposed his relativity theory; (2) Charles Darwin, who took his five-year journey as an unpaid naturalist and returned with the idea of evolution; (3) Konrad Lorenz, the founder of modern ethology (the study of animal behavior); (4) Gregor Mendel, whose pea experiments led to the understanding of heredity; (5) Charles Townes, as he might have described his work leading to invention of the laser; and (6) Leonardo da Vinci, who anticipated by several centuries many scientific and technological principles, but whose writings in these areas were either lost or ignored for the reasons indicated.

—*John H. Douglas*