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PYTHAGORAS, PLATO AND EVERYTHING

If a "theory of everything" ["100 Years of Quantum Mysteries," by Max Tegmark and John Archibald Wheeler] were to be totally mathematical, with "no concepts at all," perhaps the best interpretation of this would be Pythagorean. That is, to date we have assumed that the mathematics describes some reality that is going on; this has led to all sorts of mental gymnastics about what electrons and the like are "really" doing between observations—gymnastics that have gotten us into all kinds of trouble, not to mention many-worlds, consistent histories, "rampant linguistic confusion" and even Zen. All this results from assigning a descriptive role to mathematics. Perhaps, following Pythagoras, we should assign a prescriptive role to the math: assume the equations are real and that matter is formless and comports itself in accordance with them. That is, the equations do not describe what matter does; rather, they tell it what to do.

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Tegmark replies: With such a viewpoint, which might also be termed Platonic, the mathematical structure encapsulated by the equations wouldn't merely describe the physical world. Instead this mathematical structure would be one and the same thing as the physical world, and the challenge of physics would be to predict how this structure is perceived by self-aware substructures such as ourselves.

IN FORESTS, THE OLDER THE BETTER

Several points made in "Debit or Credit?" by Sarah Simpson [News and Analysis] lose sight of the fact that forests can contribute legitimately to lasting reductions in atmospheric carbon dioxide. We can continue to manage forests in the usual fashion globally (where deforestation is the second-largest source of CO₂) and nationally (where the forest sink has been declining for the past decade), or we can take the positive steps envisioned in the Kyoto Protocol, which calls for the maintenance and enhancement of existing forests. Significant and long-lasting gains can be made by reducing carbon emissions from deforestation and by enhancing carbon stocks through maintaining older forests. In the next 50 years these gains will be far larger than those from newly planted forests.

SANDRA BROWN

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LAURIE A. WAYBURN

President, Pacific Forest Trust

Santa Rosa, Calif.

ERRATUM Re "How We Can Do It: Leaking Away," by Diane Martindale: Volt VIEWtech ended its involvement with New York City's Residential Water Survey Program in 1995. The program is currently overseen by Honeywell DMC Services.

Letters to the Editors
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