In modern society, the quantities one is most likely to use are time, temperature, mass, and length. Those quantities and their associated SI base units are defined as part of the present SI, as shown in table 1. However, in the new SI, table 2, the base quantities become frequency, heat capacity, action, and velocity. That choice, although it may be logical to the purist, seems to remove the SI from everyday use. Newell comments on the possible difficulties of teaching the new SI and uses the watt balance as an example. I believe many electronic balances work by offsetting the gravitational force of the unknown mass with the force generated by an electromagnet, so the basic concept of the watt balance is not particularly foreign. However, explaining why action is a base quantity may prove more challenging. Who uses an action meter?

Because of practical considerations, the SI can never be logically perfect. For example, it is not clear why the candela should be a base quantity, nor that Avogadro's number should be a fundamental constant on the same footing as the speed of light. Keeping the same base quantities will not impede the improvements that may be expected from the emphasis on invariants of nature. However, it will provide continuity with the past and leave the basic logic of the SI accessible to a wider public.

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Coleman project seeks readers' contributions

Sidney Coleman was a physicists' physicist. With science historian David Kaiser, we are working to gather and publish a collection of his correspondence. One of us (Diana, Sidney's wife) is already in possession of many fascinating letters that document his life from his youth in Chicago through his education at Caltech and his long career in Harvard University's physics department. Letters written by Sidney to colleagues and family, and those he received and chose to keep, exhibit his renowned warmth and humor and paint a portrait of a man engaged across the breadth of physics.

Over the years, Sidney said several times that he went into theoretical physics "because it makes my head feel funny." He was probably thinking of the weirdness of quantum mechanics, the spooky fascination of black holes, the possibility of wormholes providing access to multiple universes. He convinced Diana that the universe is full of stuff that would make any thinking person's head "feel funny." One of the delights of reading Sidney's papers and letters is that they embody his spirit of adventure and sense of wonder.

The collection of letters in our possession, we are certain, does not reflect the entirety of Sidney's correspondence. Many letters, notes, and postcards, written by hand or typed, must have escaped his records. We invite readers of PHYSICS TODAY to share copies or scans of any correspondence they have, from or to Sidney. Materials can be sent to Aaron Sidney Wright, Department of the History of Science, Harvard University Science Center 371, 1 Oxford Street, Cambridge, MA 02138, or by email to aaronwright@fas.harvard.edu.

Aaron Sidney Wright
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The truth in pictures

Let's start a campaign to require that any computer-generated picture of a real or possibly real event have an indication of its nature clearly displayed on the picture. In the case of the September 2014 PHYSICS TODAY front cover, which depicted a simulation of the inbound Chelyabinsk asteroid, the image's origins are described in the caption on page 5, so the reader's misperception is temporary and perhaps stimulating and appropriate for its audience.

My complaint has more to do with anonymous undeclared simulations on television programs such as *NOVA*. Computer-generated pictures and real space-telescope pictures are now so good that even scientifically literate observers cannot always tell them apart. The taxpayers who are funding the real thing and the youth in whom we want to cultivate interest in science are being deceived. Impressive though simulations may be, the misperception that computer-generated images are the real thing is a poor lesson for students.

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