# IENCE NEWS®

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COVER: Sleeping cat subjects have helped researchers learn more about the physiology of sleep, notably that certain cells in the brainstem switch the REM (dream) stage of sleep on and off. Investigators are also learning lots of other things about sleep and sleep disorders. See p. 203. (Illustration: Annie Lunsford)

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#### Two cultures revisited

It seems to me that the split between the humanities and the sciences (SN: 2/19/77, p. 122) stems from personal laziness, ignorance and misplaced egotism on both sides.

The humanists see science in its absurd extreme as a bastion of objectivity. The scientist sees the humanities as a stronghold of subjectivity in its worst form. At this level, objectivity gives only trivial descriptions of phenomena, and subjectivity degrades into unsubstantiated statements.

An intelligent enterprise (whether scientific or humanistic) is a quality blend of these two seemingly opposite ideas. In the appropriate blend, subjectivity fosters imagination; objectivity nurtures a "critical eye, and foresight (intelligence, if you will) emerges. If one pays attention, this is never so obvious as in the "doing" of science. The philosophy and history of science seem to confirm the effectiveness of this blend.

It is a continuing source of pain to me to see Ph.D.-level students trying to objectify everything with no recourse to the lifegiving subjective aspects of science. To me, the objective aspects are the body of science. The subjective aspects are the breath and blood. Together they create the spirit of

So, where does this leave the discussion of "The Two Cultures?" Is science anemic due to this objective blood-letting? Are the humanities prone to excessive raving? We are a culture of feasibility studies that look backward more than forward, a culture that projects rather than imagines. Much of our art and science has become trivial and lacking in any historical perspective. The Two Cultures are alive, separate and lazy

Richard J. Krantz Physics Department Colorado State University Ft. Collins, Colo.

Two aspects of your "Two Cultures Revisited" article somewhat disappointed me. First, the SN survey of leading figures in the sciences and the humanities was generally limited to representatives from one camp or the other, neglecting several leaders of the attempt to synthesize the two. Second, those quoted offered no plausible hypotheses as to the fundamental basis and origin of the split.

I am convinced that the source of the science/humanities dichotomy lies in the field of philosophy. Once regarded as the

science of interdisciplinary integration, philosophy has largely retreated from fundamental issues and its synthesizing function, and has instead launched those prevailing dichotomies at the root of the "Two Cultures" split: e.g., analytic vs. synthetic truths, rationalism vs. empiricism, Platonism vs. nominalism, materialism vs. spiritualism, intrinsic vs. subjective value theories, etc. The field of psychology has been a most immediate heir to this schizophrenic methodological basis, one result being the traditional Freudian/behaviorist war, and the skirmish between "instincts" and "reinforcers." The abdication of philosophy has had far-reaching consequences: The sciences, dependent upon philosophically defined methodology, and the humanities, dependent upon philosophy's metaphysicalepistemological-ethical perspectives, have both been nurtured upon a series of dubious bifurcations.

To those interested in innovative ideas about synthesizing the sciences and the humanities, I would recommend, as a start, Arthur Koestler's The Act of Creation, Ayn Rand's For the New Intellectual and Introduction to Objectivist Epistemology, as well as Prof. Liam Hudson's Contrary Imaginations and Frames of Mind. All three authors approach the issue with a rare sense of fundamentality. Perhaps it is time to listen more closely to these "mavericks."

Robert James Bidinotto Somerville, Mass.

#### Nutritional education

I thought Gerald McHugh's attack on the food industry (Letters, Feb. 12) was simplistic. I am very appreciative of the efforts to discover negative effects of some foods or food additives (as in possibly increasing cancer risk or hyperkinesis). I realize how we are being constantly bombarded by advertising to influence our purchasing (as my 5-year-old begs for everything she sees on TV), and I agree that not everyone is equally educated about food values. Nevertheless, individual choice must also be blamed. As some believe smoking is unhealthy but continue to smoke, so I wittingly choose a certain amount of foods I would be better off without because I like their taste, ' 'preor convenience. And the servableness." food industry will respond to what is perceived as economically feasible, as seen by the proliferation of health foods, yogurt (almost unknown a few years ago), wholewheat breads, etc. I am sure the food industry will-rather than not survive-just adapt to changing demands of a nutritionally educated public.

Barbara J. King Fayette, Iowa

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