

The Weekly Newsmagazine of Science

Volume 154, No. 24, December 12, 1998

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Cover: For many people, a visit to the doctor triggers a temporary hike in blood pressure. Is it benign, or does it foreshadow heart problems and strokes? Results of recent research addressing this question support both possibilities. **Page 380** 

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# Letters

You can't beat drums for controversy

Although Elliot Mannette is apparently an "acknowledged master craftsman," it is equally apparent that the "legitimate scientists" do not acknowledge this credential ("Musical Metal," SN: 10/10/98, p. 236): "The more research we do, the more we realize that [Mannette's] intuition was fortuitous." Because master craftsmen, like Mannette, do not use scientific jargon, their empirical knowledge is always degraded as being "fortuitous." Mannette's process is not luck at all; it is knowledge and hard work. The "science" turns out to be merely a microscopic description of what a street musician has known for 40 years and craftsmen have known for eons.

Larry D. Guenther University of California, Davis Davis, Calif.

The scientists at UTEP have nothing but respect and admiration for Mannette. I don't think they attribute his skill to "luck" at all. They are simply looking at it from a different perspective. Mannette himself has said that he welcomes the knowledge contributed by the UTEP group. Murr may have meant "fortunate" or "inspired" when he said "fortuitous." C. Wu

I greatly enjoyed "Musical Metal." As one of the few people who both subscribe to Science News and play the pan, I must point out an error. The double tenor pans shown on the top of page 237 have been reversed. The pan containing C, E, and so on is placed at the player's left. The pan with B, F, etc. goes on the right.

> Bill Hansen Inverness, Ill.

The drums are reversed. Moreover, they are officially known as "double second" drums, whose note range is slightly lower than double tenors. These errors were carried forward from a scientific paper used in preparing the -C. Wu

**We have certain principles**Peter Weiss' article ("Wave or particle? Heisenberg, take a hike!" SN: 9/5/98, p. 149) was refreshing in its treatment of the difficulties of obtaining data about quantum-size particles. Normally, we see implicit acceptance, if not outright promulgation, of the idea that it is the act of performing the experiment that affects the experiment's outcome. It is, of course, not the act of performing an experiment that changes the outcome. It is, rather, the act of applying some force or impediment to the objects of the experiment that affects them.

I write this because of all the silly discussions I hear in hallways about the anthropic principle. Professional physicists should take every opportunity to debunk this.

Lowell Boggs Lewisville, Tex.

Peter Weiss' report on the implications for Heisenberg's uncertainty principle in the results of a team of physicists at the Univer-

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sity of Konstanz in Germany left unanswered an intriguing question.

If, as suggested, the microwave-induced spin flipping is merely innocuous information tagging, then the results amount to another way of skinning Schrödinger's cat. Is it possible that, as a previously undemonstrated corollary of the Pauli exclusion principle, the same sort of "self-recognition" which bars two electrons with a common set of quantum numbers—one of which is spin—from a single atom might also restrict the phenomenon of interference fringes (by which waves are distinguished from particles) to entities of like spin?

David Bortin Whittier, Calif.

### Sound judgments

Much like the fabled nature-versus-nurture debate, the question of whether clinically or statistically based judgment is superior is a false issue ("Clinical judgment gets lift from research," SN: 8/22/98, p. 117). The clinician rarely makes judgments about groups, for which actuarial methods are optimal.

Clinicians judge the individual casewhether or not parole candidate X is likely to recidivate, patient Y is likely to survive coronary bypass surgery, or parents Z are likely to abuse their children. The clinician rarely has a database available that allows for the parsing of data that will tell whether a twice-divorced, white, 45-year-old, east-Texas, male accountant will be a good marital risk.

Sound judgment is a matter of the artful

application of the best available empirical data to the particular case at hand. It is not clinical or actuarial but actuarially informed clinical judgment that is the only basis for diagnosis.

Allen K. Hess Montgomery, Ala.

"Clinical judgment gets lift from research" reports studies that are presented as a vindication of "psychiatrists and other mental health clinicians." The studies emphasize the findings that clinicians perform as well as statistical models, and for some tasks clinician judgment improved with time. But given the other data reported, that emphasis seems curiously placed. In one of the two categories analyzed, "statistical formulas and clinicians proved correct on about one out of every two judgments." In the other, the average success rate of clinicians improved with experience from 43 percent to 57 percent.

In other words, though statistical models may do no better, the overall success rate of clinician judgments is around 50 percent. Does a field that is content with (and apparently proud of) a predictive accuracy that could be achieved by flipping a coin deserve to be heard in our courts, schools, legislatures, penal systems, and social service agencies?

Kenneth Timoner Brooklyn, N.Y.

The researchers argue that experiments on clinical judgment often contain serious flaws and cannot be used to discredit practitioners' competence, not that the data vindicate practitioners. Most studies have focused on decisions that are straightforward and open to an actuarial prediction rather than those that prove critical in daily practice (such as discerning the underlying meaning in a client's behavior and formulating a treatment plan). Moreover, clinical judgment in real-world contexts can be quite good (SN: 1/7/95, p. 10).

### Cut flowers—ouch!

A little aspirin in the water of fresh-cut flowers is known to make them last longer. "Aspirin works on plants, too" (SN: 8/15/98, p. 107) maybe tells why.

Neil E. Fradkin Los Angeles, Calif.

#### Shots on a violent topic

In the second paragraph of "Incriminating Developments" (SN: 9/5/98, p. 153), you write of "a round of bullets that sprayed wildly." A round is a single cartridge composed of a cartridge case, primer, powder, and bullet. Perhaps you meant "he fired off a clip of cartridges" or "he emptied the magazine into the crowd."

Just remember, a round is one.

Roy Landstrom Cumberland, Ohio

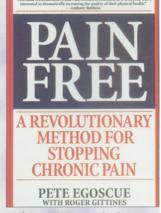
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# You Don't Have to Live in Pain

That is the message of this breakthrough system for eliminating chronic pain without drugs, surgery, or other invasive procedures. Back, knees, wrists, neck-name the joint or body part that is hurting enough to ruin your sleep, spoil your day, and undermine your strength-all are addressed in this book.

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When the body is deprived of motion, or when motion is restricted, our bodies become posturally dysfunctional. This leads to restricted activities and pain. The lifestyles of modern society perpetuate this lack of motion. We drive, we type, we sit, essentially never lifting our arms and legs outside of the area of a box. As structural or postural muscles



become dysfunctional, the whole skeletal system is affected. The skeleton is then subjected to stress and abnormal wear. The hip girdle changes its tilt, the back changes its curve, and the whole body begins to compensate for the misalignment, turning reaching or kneeling or bending into painful activities.

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