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COVER: Protons accelerated in a string of linac sections like this one being viewed by Don Swenson and Ed Bush of Los Alamos Scientific Laboratory may someday make pions in the basements of medical centers for the irradiation of cancer patients. See p. 410. (Photo: LASL)

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LETTERS

Much ado about nothing

"An interaction by any other name" (SN: 11/11/78, p. 327) suggests "leptodynamics," in my opinion, as a logical generalization of "electrodynamics," recognizing that electrons, muons, and neutrinos are all leptons, and are all involved in the weak interaction.

Electrodynamics is named after electrons; despite the obvious role of photons in it, it is not called "photodynamics," even though that could be an appropriate name for it.

That is why I think "leptodynamics" could be even more appropriate than "ivbodyynamics" for the physics of the unified weak and electromagnetic interactions.

Of course, this may be much ado about nothing, and hence, without further ado, I will close this letter.

*Kenneth J. Epstein
Chicago, Ill.*

The recent note about naming the description of the combined electromagnetic and weak interaction was intriguing—the sort of reporting we get nowhere else. However, "Neurasthenia" seems to be an unnecessarily fancy name to suggest as the name for the final synthesis. At that point we would have only a single force, hence no need for a distinguishing name. It would be so simple and appealing to just call it "The Force," unless, of course, George Lucas objects. . . .

*R. Keith Dick
Sunnyvale, Calif.*

Shaky sensory ground

The article "Blind Drawings" (SN: 11/11/78, p. 332) was fascinating, but it seems to me the author has missed the most interesting point of all. The findings reflect most heavily not on the world of blindness, but on the world of those who see.

If people who have never seen express their perceptions in terms of foreshortening, occlusion, and other "visual" metaphors, doesn't this suggest that these metaphors are part of a predetermined interpretation our brains impose on sensory signals, rather than conclusions inherent in the optical evidence? And if this is so, then what we sense as perspective, occlusion, motion, etc., may not be characteristics of space at all, but may be just part of an arbitrary framework our mind imposes on reality, quite independent of what our eyes tell us.

So to be amazed that blind people can tell what things "really" look like is not the point. We should instead be wondering how shaky is the ground that our own senses tell us we stand on.

*Carolyn Gilman
St. Paul, Minn.*

SN inspiration

For years SCIENCE NEWS has informed and entertained me. Let me now express my appreciation for its inspiration as well: The November issue of OMNI includes my fantasy "Controlled Experiment," which was suggested by your report several years ago concerning a scandal in psychic research.

*Rick Conley
Ashland, Ky.*

Exciting contradictions

SCIENCE NEWS reported that R. Cade has found abnormally high blood levels of leucine-endorphins in schizophrenic patients undergoing hemodialysis and a concomitant alleviation of symptoms due apparently to the removal of endorphins (SN: 7/8/78, p. 29). Soon thereafter you indicated that Stanford's Laboratory of Behavior Neurophysiology found that a morphine antagonist, Naloxone, diminished the symptoms of schizophrenia (SN: 7/15/78, p. 38). Now your readers find that a series of injections of endorphins produce dramatic improvement of symptoms (SN: 11/11/78, p. 326). There appears to be a conflict, most likely related to theorizing with a paucity of data and coarse experimental tools (SCIENCE: Vol. 202, No. 4366, p. 399). However, conflict or not, endorphins certainly seem to be precipitating a revolution in neurophysiology, pharmacology, psychiatry and therapy that makes science news exciting.

*Michael R. Hudson
Tok, Alaska*

Far out substructures

I was fascinated by the conclusion of the article, "Magnetic moments for hyperons and quarks" (SN: 11/18/78, p. 340), which says that the experiments "strengthen the feeling that quarks are pointlike elemental particles."

This is a remarkable statement. Is there any example in science that something exists totally without a substructure? Except as a mathematical concept, where could we hold to a notion that there is any such animal as a "pointlike elemental particle"?

The Greeks seem to have invented the idea that there are building blocks in the microcosm formed of hard and immutable "atoms." The idea suggested in the article that people really believe in "point particle" quarks can only be classed as one of the farthest out conceptions since classical Greece.

*Kenneth Snelson
New York, N.Y.*

("Structureless" does not necessarily mean nothing inside. It means no subdivisions, no articulations. Photons and neutrinos are certainly so regarded. The mathematics that describes them tends to give the impression that they are points, but the suffix "-like" testifies to physicists' insistence that they must be finite bodies, however small. But lately there has been a proposal of nonmaterial quasiparticles, the instantons [SN: 4/15/78, p. 228]. —D.E.T.)

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