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COVER— Astronomers have always tried to put telescopes as high as they can, like those of the Lick Observatory shown here on Mt. Hamilton near San Jose, Calif. With telescopes about to go into orbit, will hilltop ones like these be outclassed? Will everybody take up residence at Space Telescope Ground Control? Will ground-based astronomy survive the operation? See p. 138. (Photo: Lick Observatory).

Editorial and Business Offices
1719 N Street, N.W.
Washington, D.C. 20036

Subscription Department
231 West Center Street
Marion, Ohio 43302

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LETTERS

Drugs and dreams

Thank you for the excellent articles on botanical divinities and R. Gordon Wasson (SN: 8/2/80, p. 75).

As a pharmacist, pharmacognocist and amateur mycologist I have read with great interest the articles and books by Wasson, Schultes and others. I am glad to see that SN is following their latest contributions.

As SN strives to have the proper mix of features and technical articles I think your readers would appreciate the identification of Fly Agaric as being *Amanita muscaria.*

I was also very much impressed with the cover of the August 2, 1980 issue. I would like to frame this issue for my office.

Keep up the excellent work, I look forward to each issue!

Marshall Tate
Corvallis, Ore.

I enjoyed the cover story about entheogens, but I question the assumption that drug experiences led to religious beliefs. Even setting aside the idea that there might be something to religion, we must not ignore that separate reality we all know: dreams.

We do not understand dreams any better than our ancestors, yet we feel we can afford to ignore them. Ignore them and then complain and joke that dreams don't make any sense or seem of any use. However, those who have tried paying attention to dreams find that they change, becoming richer, more vivid and filled with remarkable events and beings.

We know from anthropology and folklore that primitive people pay attention to their dreams and I suspect that dreaming had an impact on religion before drugs and that drugs only enhanced and never contradicted the religions of the dreamers.

Steven B. Nelson
Northfield, N.H.

Heredity's hot debate

Revolutions in science aren't made by convincing those who are committed to old paradigms. Thomas Gregg's letter on your article "Heredity: Genes or Experience" (SN: 6/14/80, p. 374) is typical of the geneticists' reaction to evidence of the inheritance of acquired traits: Previously unknown genes, they say, are caused to be "expressed" by an appropriate environment (and somehow continue to be expressed generations after that environment has stopped acting). We should ask them whether there is *any imaginable* case of vertical transmission which couldn't be explained by that "20th century dogma." What kind of a scientific theory is it that can never be falsified, even in imagination? Isn't such an absolute theory more metaphysical and philosophically objectionable than pure Lamarckism?

Incidentally, "blood born" or "simply physiological" influences as agents of inheritance would not contradict classical Lamarckism. Lamarck wasn't concerned with "genes." Lamarck was a gradualist who, unfortunately, lived in an era of Christian catastrophism, and whose reputation was dirtied by crooked opponents.

Raymond Peat
Eugene, Ore.

The author raised the question "what prenatal factor might transmit increased ulcer susceptibility?" I believe that it is not necessary, as yet, to resort to Lysenko's theories to explain the results of Skolnick, et al.

There is reportedly some evidence that, in humans, high anxiety in the mother during pregnancy can have long-term negative consequences for the child. One could reasonably speculate, and perhaps measure, that prematurely separated rat pups might grow to be anxious adults. Further, some chemistry underlying anxiety states might cause subtle damage to the fetus, resulting in the observed higher incidence of restraint-induced ulcers.

Only female pups were studied in the experiment. An interesting experiment might be to use male pups prematurely separated and mated to "normal" females. This would control for non-heredity causes such as harmful changes in the chemical environment of the womb.

One could, of course, argue that environmental inducement of hereditary changes can only occur as the result of maternal experience. This would imply that the mechanism underlying heredity is different in the male than the female, which seems to me a bit far-fetched!

None of the above is meant to say that "vertical transmission" of the traits studied in the experiment cited is impossible; rather that the mechanism involved may be non-hereditary. In essence, the argument is that a prenatal environment was transmitted, not genetic code.

Charles W. Mustain
Berea, Ohio

Harmful burros

In discussing the feral burro problem of the western United States (SN: 7/12/80, p. 25) you left the reader with the impression that these animals are harmful only to "native plants, small mammals and soil." It should also be pointed out the burros are negatively impacting deer, pronghorn and desert bighorn sheep. The problem is especially critical with respect to the sheep because the desert bighorn is at low population levels over most of its range.

Lowell W. Adams, Ph.D.
Ellicott City, Md.

Address communications to Editor, Science News, 1719 N Street, N.W. Washington, D.C. 20036
Please limit letters to 250 words.