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COVER: One of the largest astronomical objects ever discovered, the radio source DA240 is bigger than a cluster of galaxies. It is estimated to be about 7.5 million light-years across. On the same scale as this contour map of its radio brightness, our galaxy would be only about 1.5 millimeters in diameter. See p. 165. (Illustration: Willis, Strom and Wilson/Nature)

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To the Editor

Debate on bioethics

We are all very aware of the importance of the recent statement by Berg *et al.* (SN: 7/27/74, p. 52) regarding the hazards of research involving recombinant DNA molecules. The group, at the end of its letter to SCIENCE (7/26/74), called for an international meeting to review the situation. Similarly, Amitai Etzioni has suggested a public debate to form ethical criteria regarding decisions about who shall live and who shall die (SN: 8/17/74, p. 109).

It is clear that Etzioni wants participants from many fields present, including medicine, theoretical and applied research, religion, sociology, etc. Apparently the Berg group intends to discuss the situation internally (i.e., only biological and related researchers). Will Etzioni's meeting bog down in trivialities, because of too diverse a group of participants? Will Berg's meeting arrive at too conservative a position due to the similar backgrounds of the participants?

I can't predict, but I can hope positively in the spirit of René Dubos that the "God within" each participant at both conferences will manifest itself with knowledge, strength and human concern.

P. J. Thompson

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Etzioni's "Life, Dying, Death" (SN: 8/17/74, p. 109) is timely. Strange, strange are human ethics on life. Mother Nature must laugh derisively at our great concern over the fertilized ovum while we are totally serene over the loss of the multitudes of grand, wholesome, fine people who never were because fertilization didn't take place. Not to conceive at every possible opportunity is vastly more destructive of human potential than the aborting of diseased fetuses or the releasing from life of hopelessly ill beings; yet we think that we are moral and are without a thought for the unconceived.

Beauty and some of the more awesome complexities of nature are represented in the ripe ovum and mature sperm. The commingling of the two is only just one of the perhaps millions of specialized biological events leading to conception. Nature provides bountifully with glorious possi-

bilities; we ought not to be extreme in trying to salvage the ill or the ill begotten.

Charles Bell

Los Angeles, Calif.

Etzioni's challenge to ponder the ethics of death deserves widespread debate. There are ancillary values to be considered, too—equally important, I believe. How can a society find it so difficult to decide to "pull the plug" on a moribund patient when it continues to manufacture, without qualms, atomic warheads, germ and nerve armaments sufficient to kill the entire world's peoples many times over? Sell guns without control? Sell armaments and atomic capabilities to others?

Why have we avoided teaching our children—and ourselves—that death and living go hand in hand? Why are we so involved in efforts to prolong life for the unproductive years? In an overpopulated world where the means of sustaining life are inevitably going to become more difficult to achieve, why can't we consider the problem of death control with the same equanimity that we do birth control? Why can't we grant the individual, with society's sanction, the right to determine when life is insupportable, rather than leaving it to the decision of relatives or a society afraid of its own guilt reactions? When its inevitability is part of our human pattern, why don't we bend our efforts toward making death easier instead of more difficult? What price another day, or month, or year of pain, joyless existence? Why do we consider death an adversary instead of a benison?

Leone R. Hemenway
West Grove, Pa.

A matter of time

If journalism runs in the family, then John H. Douglas's great grandfather probably wrote a similar article ("The Apollo program: A dissent" SN: 8/10/74, p. 94), in his time, on the folly of Secretary Seward's purchase of a then, *seemingly* useless, chunk of real estate known as Alaska.

It didn't take 5 but 30 years to appreciate its worth and 106 years to realize how essential it was to the welfare of the nation, whose majority of inhabitants usually lack foresight.

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