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to tetrahydrofolic acid is a step in the renewal of the supply of 5,10-methylene tetrahydrofolic acid. This reduction is presumably not carried out readily by L. citrovorum, as shown by its defective response to folic acid and dihydrofolic acid as contrasted with its ready response to tetrahydrofolic acid (6). The addition of preformed thymidine would lessen the requirement for 5,10-methylene tetrahydrofolic acid. Although this evidence is inferential, it could account for the well-established sparing action of thymidine on the "citrovorum factor" requirement of L. citrovorum (4, 7).

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Messages from Other Worlds

The article by S. von Hoerner [Science 134, 1839 (1961)] gave us very interesting estimates of the probabilities of radio communication with other civilizations in space.

A small thought of my own is that notice of the existence, location, and communication system of such a civilization might reach us by means other than direct radio transmission. If an earlier civilization was as egocentric as our own, it would probably want to leave a record of its existence and communicate its knowledge to successor civilizations. It would need, for this purpose, objects that would be maintenance-free, would attract attention. and would carry much information in a small space for millions of years.

If such a speculation has any merit, one might want to take a new look at meteorites, comets, and other space travelers for possible messages. Might the organic compounds in meteorites contain coded information? Also, could one intercept comets to obtain material for analysis?

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