

COMMUNICATION WITH
EXTRATERRESTRIAL INTELLIGENCE
(CETI)

Edited by Carl Sagan

THE MIT PRESS
Cambridge, Massachusetts, and London, England

1973

APPENDIX F

SEARCHING FOR GODot

JOSHUA LEDERBERG

Department of Genetics, School of Medicine
Stanford University, Stanford, California

I assume (1) the angels are still within the Galaxy, and (2) their average "progress" can best be estimated as equal to ours \pm millennia.

Then a reasonable proportion will have reached the stage of interstellar (wisely "unmanned") travel—but not of being able to discriminate Earth from the multitude. (The UFO seers are incredibly geocentric in their conceits.)

Ergo: if there is a transmitter, it will be at the unique point in the Galaxy—as far as I can imagine, the *barycenter* is just that. This will be even more self-evident to that subset of angels who live a few hundred or thousand light years from the center. By the way, would they have more interstellar dust to use for rocket "fuel"?

Further I would favor looking for signals in the frequency domain, as compared with the advantages of time-averaging. The operational program is to look for unexpected line-structure, superimposed on the doppler-broadened lines of, say, the 21-cm

H microwave emission. Which we have good reason to do anyhow.

But if one takes such programs seriously, we must also contemplate the political imperatives of establishing terrestrial *radio silence* vis à vis emissions that might be detected elsewhere.