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the past! This simple procedure is, alas, unacceptable to the "analyticist," to whom the past is, for unexplainable reasons, tabu.

In spite of these disagreements in method we are in full agreement with Dorn's conclusions that "man's ability to control his environment" can avert a population catastrophy "provided he rapidly develops cultural substitutes for those harsh but effective governors of his high reproductive potential," because his suggestion is precisely our thesis. We observed that the growth phenomenon of the human population in the past is typical of an open-loop system that is composed of cooperative elements following a superadditive composition rule. An intrinsic instability of such systems, which manifests itself in a pathologically rapid growth, can be avoided by converting the open-loop system into a closed-loop system. Hence, we suggested a "population servo," which, first of all, has to provide a feedback that informs the system of its present state. Dorn's paper serves our purpose admirably.

> HEINZ VON FOERSTER PATRICIA M. MORA LAWRENCE W. AMIOT

Department of Electrical Engineering, University of Illinois, Urbana

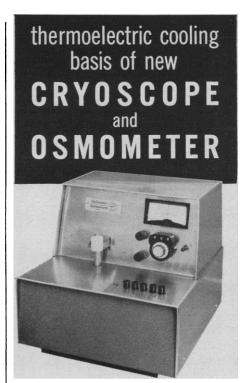
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Girdles and Griddles

With much delight I read the following comment by Bancroft W. Sitterly, in his review of Man's Conquest of the Stars, by Pierre Rousseau [Science 135, 35 (5 Jan. 1962)]: "The translation seems to convey well the spirit of the French original. One grotesque slip in this English edition is the statement, repeated on a number of pages, that the galactic system has the form of a girdlecake! But I found no other."

A light sponge-cake batter, perhaps, baked in a fine corset with steel staysthe comparison does seem laughable (although it is not entirely disagreeable to imagine the grace of a wasp-waisted



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belle, or even the fine abundance of a generous matriarch, repeated on a cosmic scale: das Ewig-Weibliche . . .).

In justice to Michael Bullock, who appears to be the translator in question, I should like to point out that according to the *New English Dictionary*, girdle is a respectable variant form of griddle "by metathesis of r." It is defined as a "circular plate of iron which is suspended over the fire and upon which cakes are baked or toasted." The first example of this usage is dated about 1400. There is an entry for girdle in this sense as a combining form, "as girdle-cake...."

According to Nancy Mitford, a recognized authority on U diction, "girdle-cake" might be mentioned casually in a conversation in London. Fanny Wincham (whose husband, pastoral theologian at Oxford, has been named ambassador to Paris) and Uncle Matthew are having tea:

"Delicious girdlecake."

"Comes from the Shelter—they've got a Scotch cook there now" [Don't Tell Alfred (Harper, New York, 1961)].

An American edition of *Man's Conquest of the Stars* might well explain that the galactic system has the form of a griddle cake, a hot cake, a pancake; but it seems that the English edition is within its rights.

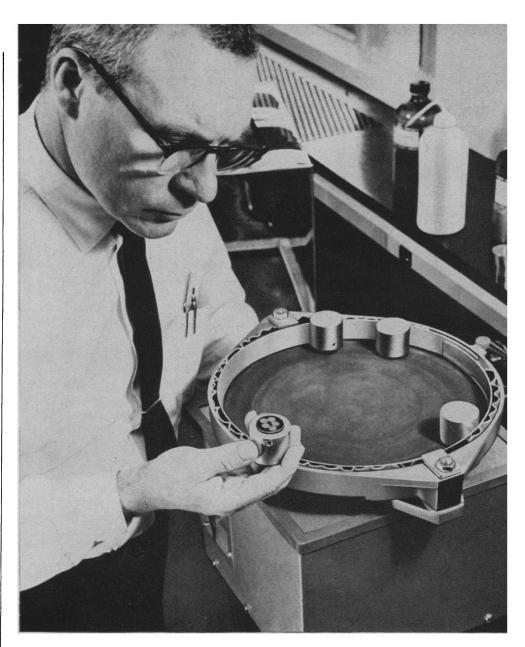
MARY ANN HARRELL 4607 Connecticut Avenue, NW, Washington, D.C.

Electroplax and Nerve Activity

In his article "Chemical factors controlling nerve activity" (1), D. Nachmansohn refers to a protein which I have isolated from the electric organ of the electric eel as the "physiological acetylcholine receptor." Although initial results suggested such a role for the protein (2), recent studies on its properties led to a change in my interpretation of the nature of the material. This new interpretation was presented at the 1st International Pharmacology Meeting, held in Stockholm in August 1961; since the paper has not yet appeared in print (3), I am writing to restate my views.

The following points must be considered in assessing the possible function of the protein.

1) Binding of acetylcholine (ACh) and some depolarizing agents to the protein is very weak as compared to their high activity in physiological processes.



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