pathway in the control of estrogen- and progesterone-mediated sexual receptivity in the female rat. It should be noted, however, that studies of the male have indicated only that PCPA may heighten homosexual or male-male mounting behavior. We report here the effects of PCPA and PCPA plus pargyline on sexual interactions between male and female. The data indicate that these agents are not aphrodisiacs in the sense that they do not prolong or intensify male-female sexual interactions.

Seven male Sprague-Dawley rats (450 to 550 g), all sexually experienced and known to be vigorous copulators, were selected for study. These animals were given a series of four sexual satiation tests with receptive females during the dark phase of a 12-hour-light/12-hour-dark cycle. For each test a male was placed with a single female in a cylindrical glass observation jar. The test was terminated when (i) the male failed to mount the female within 30 minutes after they were placed together; (ii) the male failed to mount the female for 30 minutes following any ejaculation; or (iii) there was a 60-minute interval between successive ejaculations.

Typically, the sexually rested male rat will begin to copulate within 5 minutes of pairing and will achieve between 30 to 50 intromissions and 5 to 7 ejaculations on the average before reaching sexual satiation (*5*). Since the aftereffects of sexual satiation on subsequent mating performance remain for approximately 2 weeks (*6*), the present tests were spaced at 3-week intervals.

The first mating test of the series was a control test. The animals were not treated with the drugs but were simply allowed to mate until they were sexually satiated. During the 4 days before the second test, each male was given DL-*p*-chlorophenylalanine methyl ester hydrochloride (100 mg/kg per day, intramuscularly). The final injection of PCPA occurred 4 hours before the beginning of the mating test. The third test involved no drug treatment and served as a control to insure that 3 weeks were sufficient to dissipate the effects of sexual satiation. Before the fourth test the animals were given PCPA (100 mg/kg per day) for 4 days prior to testing. The final injection of PCPA occurred 12 hours before the mating test. Six hours after this injection (6 hours before testing) each animal was given pargyline (100 mg/kg). The final injection schedule was chosen to mimic the dose and treatment parameters found by Tagliamonte *et al.* (*2*) to be effective in inducing homosexual mounting in male rats.

There was no indication that PCPA or PCPA plus pargyline facilitated mating (Table 1). In fact, mean ejaculation frequencies were slightly reduced during tests with drug treatment, and in each of the two drug tests one male failed to ejaculate at all. Furthermore, drug treatments caused no enhancement in the frequency of mounting responses or in the frequency of intromissions prior to sexual satiation. The slight reduction in mating performance observed during drug treatment could have been due to nonspecific stress associated with that treatment.

The control tests indicated that these males performed within normal limits in terms of both intromission and ejaculation frequencies prior to sexual satiation (*5*, *6*) and that 3 weeks were sufficient to dissipate the effects of sexual satiation on mating behavior.

Our data suggest that the effects of PCPA and PCPA plus pargyline on mating may be limited to situations in which the male is presented with a normally inadequate sexual stimulus. Thus it is possible that the drug works not by enhancing sexual motivation, but rather by altering the male's ability to adequately distinguish appropriate sexual partners. The observation by Ferguson *et al.* (*3*) that cats treated with PCPA appear perceptually disoriented would be in line with this interpretation.

RICHARD E. WHALEN
WILLIAM G. LUTTGE
Department of Psychobiology,
University of California,
Irvine 92664

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18 June 1970; revised 17 July 1970

Single Atoms Visibility

Crewe and his co-workers (*1*) are to be congratulated for the outstanding achievement of making visible, with their scanning electron microscope, single uranium and thorium atoms. Highton and Beer (*2*) have reported an almost similar feat by seeing gold atoms used for staining nucleic acids by means of a Siemens Elmiskop.

For many years we have been seeing single atoms of a variety of metals (*3*) without any uncertainty, and also sections of small biomolecules (*4*), by the more direct imaging method of field-ion microscopy. In my atom-probe version of the instrument (*5*) I routinely pick up an individual atom that looks interesting and identify it unambiguously by sending it through a mass spectrometer.

ERWIN W. MÜLLER
Department of Physics,
Pennsylvania State University,
University Park 16802

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15 June 1970

The Venus Radius Controversy

The muddling through of workers from several organizations who finally arrived at a consensus in interpreting certain data from Mariner 5 and Venera 4 is an interesting story which is not always (*1*) rendered fully and with a sense of the interplay between the various—and merely mortal—workers. It is very human to pretend at the end that splendidly planned, successful experiments were free of errors, and that the new things we learned were, after all, pretty much what we thought all along. This account, in counterpoint, concedes that man is flesh as well as spirit, is prone to error as well as a discoverer of truth; it deals with the ebb and flood of recent opinion about Venus's lower atmosphere as seen from a moderately invariant (and biased) point of view—that of the "radar radius." In this account the work of