thoughts and actions—a capability he terms representational empathy.

According to the map of functional areas that accompanys the article, Deacon's theory is that a quantitative reorganization of the cerebral cortex took place in the human brain, but not in the brain of other primates. This reorganization is said to have involved a 102% increase of the prefrontal area, a 17% increase of the secondary auditory area, a 9% decrease of the primary auditory area, a 65% decrease of the primary motor area, and a 40% decrease of the primary visual area. In other words, the sizes of the primary areas of sensory and motor analyses have been relatively decreasing, while those of the secondary and tertiary areas have been increasing in primate evolution. The underlying pressure for these evolutionary changes is linked by Deacon to unusual cognitive demands related to symbolic communication.

One should keep in mind that investigators at the Moscow Brain Institute worked for more than 60 years measuring the cytoarchitectonic areas and subareas of primate brains and published these data in a series of papers. They showed that the relative sizes of the primary sensory and motor areas were decreasing, while so-called "specific human," that is, secondary and, especially, tertiary, cortical sensory areas were dramatically increasing in the comparative primate series (*1*). In particular, G. I. Polyakov and I. N. Filimonoff attributed these changes to the development of specific human features such as speech and symbolic thinking (*2*).

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Breast Cancer Incidence

Eliot Marshall, in his article "Search for a killer: Focus shifts from fat to hormones" (Breast Cancer Research, 29 Jan., p. 618), quotes a National Cancer Institute (NCI) biostatistician as concluding that "about

three-quarters of the [4% annual] rise [in breast cancer incidence] in the 1980s was due to the expanding use of mammography machines." The issue has, however, been studied directly, and the data tell a different story.

The acceleration in the rate of increase of breast cancer incidence evident in the 1980s was analyzed in two studies (*1*, *2*), in which the medical records or tumor registry abstracts of population samples were reviewed. Liff *et al.* (*1*) found an increase in breast cancer incidence of 29% among whites and 41% among blacks between 1979 and 1986 in their analysis of SEER (surveillance, epidemiology, and end results) data from Atlanta. After reviewing the registry records of 200 patients, Liff *et al.* concluded that "mammographic detection of asymptomatic lesions accounted for only 20–40 percent of rising incidence among whites and only 13–25 percent among blacks."

Glass and Hoover (*2*), in analyzing the population-based tumor registry of Kaiser Permanente, found that "the overall age-adjusted rate of *invasive* [emphasis added] breast cancer rose 45% . . . in the period between 1960–1964 and 1980–1985" with "the greatest rise . . . in women 60 years of age or older (74%)." After reviewing the medical records of 1745 patients with invasive breast cancer, they concluded that "even under some extreme assumptions, these cases [detected by mammography] could only have accounted for less than one-third of the increase seen from the mid-1970s to the mid-1980s."

To my knowledge, there are no *data* that contradict these findings. The 4% annual rise in the incidence of invasive or symptomatic breast cancer cannot be explained away by the increasing prevalence of screening mammography. The true cause(s) of this rise must be found.

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Cold Fusion Difficulty

Ivan Amato's article (Research News, 14 May, p. 895) about Martin Fleischmann and Stanley Pons' paper on calorimetric results in cold fusion (*1*) refers to me as saying that I "found the paper too difficult to assess with