

massive than 13 Jupiter masses discovered in Orion and Perseus will look like the giant planets of our solar system when they become as old as Jupiter is. The definition of the word "planet" has been modified several times in the last three millennia on the basis of an increasing scientific insight. Our knowledge of the solar system, other extrasolar systems, and the substellar population of the galaxy continues to expand, and thus we can expect such knowledge to be used to refine definitions of terms such as "planet" and to reveal the need for new terms.

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ADHD: Disorder or Discipline Problem?

TREATING CHILDREN FOR ATTENTION DEFICIT hyperactivity disorder (ADHD) with stimulant medications predisposes them to substance abuse, according to Peter Breggin in his letter to *Science* ("Questioning the treatment for ADHD," 26 Jan., p. 595). In support, he cites one article, but does not mention that

it was criticized for faulty methodology (1). And there are two studies that contradict Breggin's statement: one by Hechtman (2), who found no evidence that stimulant exposure predicted substance abuse, and another by Biederman et al. (3), in which we found that pharmacotherapy predicted an 84% reduction in risk for substance abuse. Breggin also cites two animal studies (4) as showing that stimulants permanently change the brain. However, these studies used dosing schedules that are not comparable with therapeutic practice. And the authors of these studies concluded that the brain changes observed were reversible, not permanent. Breggin's letter misses the point. It is the disorder, not its treatment, which is the public health problem.

Breggin also says that ADHD symptoms "can be caused by anything from normal childhood energy to boring classrooms or overstressed parents and teachers." Blaming parents and teachers is stigmatizing and counterproductive. It also ignores data

showing that genes play a major role in the etiology of ADHD (5). Indeed, its heritability, about 70%, is similar to that seen for other complex genetic conditions (5).

In another letter in the same issue, Fred Baughman argues that ADHD, rather than being a disorder, is simply the extreme of normal behavioral variation. There are many examples of extreme variation being medically urgent. Hypertension and hypercholesterolemia are two such examples. Medicine treats extremes of variation if they are associated with distress or disability. ADHD can lead to antisocial behavior, substance abuse, poor school functioning, traffic accidents, poor vocational functioning, and difficult marriages. It easily meets the distress and disability criteria defined in psychiatry's diagnostic manual.

Stimulant medication, used for decades to treat ADHD symptoms, is safe and efficacious when prescribed appropriately. The idea that parent and teacher training can duplicate this efficacy is wrong. That was

"Blaming parents and teachers [for ADHD] is stigmatizing and counterproductive."

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shown by a National Institutes of Health multisite trial (6). Denying children diagnosed with ADHD safe and effective treatments is also wrong. Physicians should use data, not dogma, when planning the treatment of children afflicted with ADHD.

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Politics of the Census

FORMER CENSUS BUREAU DIRECTOR KENNETH

Prewitt makes three assertions in his Editorial "U.S. Census 2000: an update" (12 Jan., p. 209) that are subject to debate. Whereas

the bureau's acting director must soon (in late February) provide a recommendation to the current administration regarding the release of census data adjusted with results of the Accuracy and Coverage Evaluation survey, making clear the exact terms thereof is timely and necessary.

First, in regard to the use of sample-adjusted data for "block level counts used for drawing congressional district boundaries," Prewitt says that it is allowed "under current legal interpretation." But this matter is by no means settled as a legal issue. In the Supreme Court's January 1999 decision (1), referring to the argument that 1976 census law intended to allow statistical estimation to alter district lines, the Court states, "Indeed, it tests the limits of reason to suggest that...Members of Congress...intended to enact what would arguably be the single most significant change in the method of conducting the decennial census since its inception."

Second, regarding the authority to release adjusted data, Prewitt says that "federal regulation specifies that...the final decision [will be] made by the director of the bureau" (rather than by the secretary of commerce). Prewitt is referring to a rule issued by former commerce secretary William Daley. Upon assuming the chairmanship of a presidential

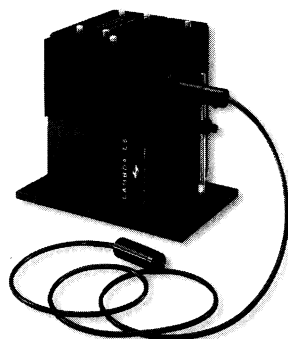
campaign, Daley delegated his authority over the census to the bureau director, but without the prospect of review for the decisions taken. The binding status of such a rule is likewise unsettled legally.

Finally, Prewitt warns against the intrusion of politics into census decisions. If, he says, the decision to use adjusted data "is then overturned politically...[p]olitics will have trumped science." High-minded as this may sound, an alternative formulation deserves consideration. At the Brookings Institution in March 2000, a speaker commended a recent book (2) by Peter Skerry about census-related controversies in the following terms: "I agree with Peter's book, and I quote

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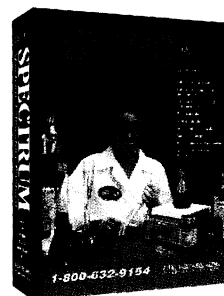


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