

of and some opposed to the CCRI, were prompted by this charge to go on record as saying so (1). The letter includes the following statements.

The CCRI is a general ban on a wide range of sex classifications: "The state shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting."

But clause (c) says that "Nothing in this section shall be interpreted as prohibiting bona fide qualifications based on sex which are reasonably necessary to the normal operation of public employment, public education, or public contracting." . . .

The [bona fide qualifications] proviso doesn't set up some weak "reasonableness test." It allows only those sex classifications that pass both the existing California constitutional tests and fit within the very narrow area of bona fide qualifications. And it avoids the problems that a total ban on sex classifications might cause: The law shouldn't, for instance, require that the state let male guards do strip searches of female jail inmates. Likewise, the law shouldn't require high school girls' basketball teams to allow boys to participate.

The signers end on the following note.

We welcome honest, thoughtful debate on affirmative action. But we oppose erroneous

statements such as those made about clause (c).

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Notes

1. The complete letter and the names of the signers can be found at World Wide Web site <http://www.publicaffairsweb.com/ccri/open.htm>



Alzheimer's Original Patient

Claire O'Brien, reporting on the discovery of Alois Alzheimer's patient file by Konrad Maurer and his colleagues (News & Comment, 5 July, p. 28) correctly says that clinical neurologists are eager to examine the file and possibly make a new diagnosis. In 1989, K. L. Bick and I reported (1) that this case was likely one of those described by Gaetano Perusini in 1910 (2). Both the temporal evidence and the clinical description support this conclusion. The histopathology of Perusini's case shows neurofibrillary tangles and senile plaques, but also some features that are not characteristic of Alzheimer's disease, namely, demyelination of central white matter and metachromatic

deposits in the spinal cord after it was stained by toluidine blue (2). Staining techniques for metachromasia were the topic of a long paper by Alzheimer that appeared a few pages after Perusini's paper in the same publication (3). From those documents, we concluded that Alzheimer's patient could have had a late form of metachromatic leukodystrophy, where plaques and tangles are also present—not an Alzheimer's case then, but certainly an "Alzheimer's pathology."

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2. G. Perusini, *Histol. Histopath. Arb.* **3**, 297 (1910).
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Of Sex and Gender

In a recent online search, I entered the words "biology" and "gender," expecting to find papers investigating the ways girls might be socialized out of science careers. I did find some sociological papers, but also listed were a great many studies that had nothing to do with humans and their cultural problems. I found papers describing the behavior, morphology, and molecular biology of plants, insects, flatworms, crustaceans, rodents, and even sphincter muscle and coprolites; all of these papers attributed differences seen between individuals of the species to "gender."

Use of the word "gender" as a synonym for "sex" in scientific literature is an increasing trend (1), which may perhaps derive from the impression that "gender" is more polite (or politically correct, as much as I hate the phrase) than the word "sex," with its vulgar connotations. But in scientific language, terminological ambiguity is undesirable. We gain nothing by substituting "gender" for "sex"—no additional nuance of meaning. If anything, the substitution clouds understanding and runs contrary to the scientific principle of parsimony.

The online abstract of a paper in *Scientific American* states (2)

In humans and other mammals, chromosomes determine gender. In other species, sex is controlled by temperature or even the social environment.

Social scientists might react with horror at this statement if they interpret "gender" as representing societal roles, not biological

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sex. In the title, "Protein interactions with a gender-specific gene of *Schistosoma mansoni*" (3), does the word "gender" refer to different human immunological responses or to whether the worm itself is male or female? The title "Gender-specific and gonadectomy-specific effects upon swim analgesia" (4) will startle a reader who expects "gender" to describe human cultural roles.

I would like to advocate a few simple rules for lessening this confusion. First, the word "gender" should not be used to refer to suborganismal effects or organization. DNA banding, neonatal tissue, and in vitro drug-membrane transport are all unlikely to be affected by social roles. Second, the word "gender" should not be used to refer to nonhuman organisms without any apparent social structure (5). Discussion of plant or coprolite gender is meaningless if gender is a social construct. By using "gender" as a synonym for "sex," we confuse the language and perpetuate the myth that biology is destiny.

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Meteorite Recovery

In the ScienceScope item of 30 August about Antarctic meteorite recovery (p. 1161), the international aspects of such recovery and analysis are not discussed. The Japanese were the first to systematically search for meteorites in the Antarctic. I have lobbied the current Russian and former Soviet governments to use their extensive Antarctic infrastructure to recover meteorites. Instead of operating alone, the United States should encourage a joint effort from the Antarctic international community to integrate their resources and collaborate to advance a common goal efficiently and effectively.

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Cosmic Cat?

Is the picture accompanying the 16 August Random Samples item "Cosmo-thriller" (p. 877; also shown in the introduction of this issue's Letters section, p. 325)—like the feminist's vision of God as Goddess—an ailurophile's view of Creation? The orange comet in the picture looks like a cat I used to know. Could a hacker fan of Garfield have planted the picture in the National Science Foundation's supercomputer image files?

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Letters to the Editor

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