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COVER

Bumblebees regulate their thoracic temperature when foraging for nectar. At ambient temperatures below 24°C the thoracic temperature is maintained at 32° to 33°C; at ambient temperatures above 24°C the thoracic temperature rises. See page 185. [Photo courtesy of U.S. Department of Agriculture, Washington, D.C.]
Women in Academia

During the past several years higher education has experienced a series of crises. The newest, and in the long term perhaps the most significant, development is the issue of discrimination against women. Militant women's groups have been organized, and they have brought charges against various institutions. The federal government has provided a powerful tool for such groups in the form of a 1968 Executive Order that forbids discrimination by federal contractors on the grounds of sex. Using provisions of this order, individuals and women's groups have filed more than 350 formal charges against some of the greatest of our universities and state systems, and they are winning.

Male chauvinists would like to think that the current uproar is the work of a few militant troublemakers. They may hope that, if they are cautious and patient, the storm can be counted on to dissipate. The odds are, however, that we are witnessing a major movement that will persist until it has brought forth substantial changes, not only in the universities, but also in the professions.

In part the movement will persist because substantial injustices have been perpetrated. There has been massive discrimination against women in academia. In part the movement will persist because woman's role in the world is in the process of change. If society frowns on childbearing, how are women to occupy themselves constructively? What can they do to lead significant and interesting lives? Increasingly women are turning to employment of some kind.

Today women make up about 37 percent of the labor force. But women hold only a small portion of the desirable positions. For example, in the United States, only 2 percent of dentists and 7 percent of physicians are women. In contrast, in Denmark, 70 percent of dentists are women, while in Germany 20 percent of physicians are women. The limited presence (about 2 percent) of women as full professors in our major universities is particularly striking. This compares with an annual doctoral production of about 12 percent women.

In 1930, some 28 percent of doctorates were won by women, and at many institutions the proportion of women faculty members was higher than today. These were times of a comparatively low birthrate. Later, after World War II, having babies became the thing for young women to do. Correspondingly, women's participation in graduate training dropped.

At present, although a larger proportion of girls than boys complete high school, only about 50 percent of girls go to college as against 80 percent of boys. Between 75 and 90 percent of the well-qualified students who do not go on to higher education are women. This represents a large loss of talent for the nation and often leads to personal dissatisfaction that occur when intelligent people must work at unchallenging jobs.

With universities as dependent as they are on government contracts, and with the government determined to enforce legal constraints against discrimination, university administrations must make some major changes in their personnel and admissions policies. But there is more behind the current drive than law or militant women's groups. Transition from a time in which babies were the thing to an era of zero population growth must have profound consequences on the relations between men and women and on the structure of society. We have only begun to see some of the effects.—Philip H. Abelson

The statistics in this editorial are taken from a speech given by Alan Pifer, president, Carnegie Corporation of New York, to the Southern Association of Colleges and Schools, Miami, Florida, 29 November 1971.