

PSYCHOLOGY

Imagination Affects Smell

► WHEN A lady sniffs at two samples of perfume, she will most likely prefer one to the other. If the two samples are of the self-same scent, she will often imagine a difference, and she will like better the one she smelled first.

The part played by a lady's imagination in what she smells was discovered in a study made at Hunter College in New York by Drs. Joan Eisensohn, V. R. Fisi-chelli and Livingston Welch.

Samples of two popular brands of perfume and toilet water and also plain odorless distilled water were used in the sniffing test. Three hundred students at Hunter College took part. The samples were presented for sniffing in an instrument called an olfactometer, dropped onto strips of the special blotting paper used in the perfume industry, and dropped onto strips of ordinary blotting paper cut by the scientists.

Two samples were presented in each case, one after the other. Although the girl doing the smelling did not know it, in every case both samples were exactly the same.

The percentage reporting imagined differences was greatest, 38%, for one brand of perfume. It was smallest for distilled water. However, 17% of the girls thought they noticed a difference between the two samples of water.

More girls reported a difference between the two whiffs of the same perfume when they were presented in the olfactometer than when they were on the blotting paper. The investigators believe this may be because of a greater concentration of alcohol in the olfactometer, they explain in reporting their results in the *Journal of Genetic Psychology* (March).

Imagined differences where none really exist may also be found with other senses besides smell, the investigators predict. As differences between pairs of samples decrease toward zero, it becomes more and more difficult to distinguish between them. When there is no difference, people can be expected to observe differences that do not really exist.

Science News Letter, March 27, 1954

GENERAL SCIENCE

Long Delays for Visas

► VISAS FOR foreign scientists who are invited to visit the United States to attend a scientific meeting or do research temporarily in a laboratory are even harder and slower to obtain now than two years ago.

This is charged by Prof. Victor F. Weisskopf, Massachusetts Institute of Technology physicist, speaking as chairman of a committee of the Federation of American Scientists.

"The time interval between application for and receipt or rejection of a visa has now ballooned to six to nine months or more," Prof. Weisskopf reports in the *Bulletin of Atomic Scientists* (March). "The questioning of applicants is becoming obnoxious again and is loaded with many unimportant details of past connections."

In the fall of 1952 after considerable public protest, the State Department made real efforts within the framework of the McCarran laws to mitigate their harmful effects, he reports. Time delays in the granting of visas were reduced to two months or less.

Political damage to the United States by the present conditions is illustrated by the resolution adopted by the International Congress of Genetics last summer. This international meeting recommended that the next congress not be held "in any country to which it may be expected that scientists would be refused permission to enter on grounds of race, nationality, religion, place of birth, or political associations past or present."

Dr. Weisskopf explains that "there was a

time when such a resolution would have been obviously directed at the Soviet Union." Actually the resolution was passed in order to avoid a meeting in the United States.

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METEOROLOGY

Gulf Winds Determine Dust Bowl Future

► THE FUTURE of farms on the Great Plains, reeling from two years drought and the start of another Dust Bowl, depends on warm, wet winds from the Gulf of Mexico in April, May and June.

If the farmers get relief this year, Ivan R. Tannehill, senior meteorologist at the U. S. Weather Bureau, said, it will probably come in these months.

Already dust storms have started in Texas, Oklahoma, Kansas, Colorado and New Mexico. These states never do get much precipitation in the winter, Mr. Tannehill said, but this winter has been even drier than usual.

The wet years that bring prosperity to the Plains depend on warm, moist winds from the Gulf of Mexico that move over the area, meet cold air and precipitate rain. In the good years, Mr. Tannehill noted, parts of Oklahoma in May are often the wettest spots in the nation.

An alternation of rain and drought has been a feature of the Great Plains since the Civil War. The droughts seem to come

about every 20 years. A lack of ground water reserves in the area means that when the rains do not come there is not enough water to make up the deficiency.

Moisture from the Pacific Ocean is deposited on the Rocky Mountains. Very little moisture from the East Coast manages to cross the Mississippi. This leaves the farms dependent on the moist winds from the Gulf of Mexico and when these fail, the farmers suffer.

Mr. Tannehill did point out one favorable aspect to the drought. This winter's small precipitation of snow in the Missouri and Mississippi River basins means there is very little danger of floods due to snow thawing.

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