

What are you thinking about?

"A happy person never phantasies, only an unsatisfied one," said Freud. But many people do daydream and do have fantasies. And researchers, such as Kinsey, have reported that some people (especially men) have sexual fantasies during sex. This is not too surprising, but women who have erotic fantasies during sex have sometimes been considered neurotic. Such fantasies have often been interpreted as signs of "women's essentially masochistic nature, sexual inhibitions, attempted escape from the responsibility for sexual excitement or need for submission to suppress dominance strivings," say E. Barbara Hariton and Jerome L. Singer in the June *JOURNAL OF CONSULTING AND CLINICAL PSYCHOLOGY*. But their studies of the sexual fantasies of 141 normal married women suggest that erotic fantasies during sex are common and may even be helpful.

Tests and interviews indicated that 65 percent of the women had erotic fantasies at least some of the time during sexual intercourse with their husbands, and at least 37 percent had fantasies very often. This, say the researchers, represents "a considerable amount of erotic fantasy." The most common fantasies selected from a questionnaire were: "Thoughts of an imaginary romantic lover enter my mind," "I imagine that I am being overpowered or forced to surrender" and "I enjoy pretending that I am doing something wicked or forbidden."

The researchers suggest that instead of being neurotic, "women who had a high frequency of erotic fantasy might be more creative, exploratory and might also have an active and positive attitude toward sex." Fantasy, they continue, may be an adaptive normal adjustment mechanism for replacing boredom, enhancing a routine experience, or helping people through sexual situations that are less than satisfying. The interview data support this hypothesis because women who reported that their husbands were ineffective lovers said they made use of fantasy to increase their enjoyment of sex. "It is unreasonable," conclude the researchers, "to hold to theories that link these fantasies only to neurosis."

Drugs and the Vietnam vet

When the heroin scare was at its height several years ago, some drug experts predicted that addicted soldiers, returning from Vietnam, would turn on a whole generation of young Americans to heroin. A study conducted for the White House Special Action Office for Drug Abuse Prevention has now found that continued heroin use is not a serious problem for the returning vets—but drinking, divorce and unemployment are.

Lee Robins of Washington University School of Medicine in St. Louis studied 1,000 1971 returnees and found that during the eight to ten months after return 53 percent of them had been drinking heavily and 45 percent had used marijuana. The use of other drugs had reverted to pre-service levels. Only 14 percent of those who had been seriously addicted to narcotics in Vietnam became re-addicted.

Although the heroin problem may not be as serious as predicted, there are other adjustment problems for the vets. Ten percent had divorced since returning. Of those who married after discharge, 20 percent had divorced. At the time of the interview, 15 percent of the men were out of work and were not in school. Since return, 20 percent of the Vietnam vets had been arrested and drunkenness was the most common offense.

The shuttle's environment-watcher

The space shuttle has been assigned its own environmentalist. By the early 1980's shuttle flights could be coming less than two weeks apart, each flight accompanied by noise, rocket exhaust gases and the dropping of large structural components into the ocean. To anticipate and evaluate such concerns, James King Jr., former manager of the physics section at Jet Propulsion Laboratory in Pasadena, has been appointed director of the shuttle's Environmental Effects Office.

King, who was also the first black scientist to supervise a section at JPL and who served four years as a consultant to the Los Angeles Air Pollution Control District, will be involved with such problems as sonic booms, the effects of ground-facility construction and pollution from the exhaust.

In the environmental impact statement submitted by NASA for the shuttle program, the major constituents of the rocket exhaust—water vapor, carbon dioxide, hydrogen chloride and aluminum oxide—were studied and estimated to produce negligible effects on the ionosphere and troposphere. Since the statement was filed, however, NASA has become a bit cautious. "Our continuing studies," says agency Administrator James Fletcher, "have shown that the hydrogen chloride in the booster exhaust may give rise to free chlorine in the stratosphere, which laboratory experiments indicate might catalyze the destruction of some stratospheric ozone." There are no data proving that this really happens, Fletcher says, but studies will continue.

Leftovers for Jupiter

An unmanned mission to orbit Jupiter could be carried out using the backup hardware from the Pioneer 10 and 11 flights, according to an international scientific team seeking avenues for U.S.-European space cooperation.

Such a mission would probably emphasize magnetic-field, charged-particle and similar near-environment measurements, because the Pioneer spacecraft is kept stable by spinning, making it less suitable for remote sensing of the planet and its atmosphere. It is also lightweight, however, so it might be possible to send along an ejectable probe that would descend into the Jovian atmosphere to make direct measurements.

The flight should not be launched until 1980 or later, the team recommended, because until then Jupiter will be far enough out of the plane of the ecliptic that a much more powerful launch vehicle would be required to reach it.

The team, including researchers from the United States, Italy, Germany and England, suggested that the flight could be timed so that the gravitational attraction of Jupiter's moons would help to swing the spacecraft into orbit around the planet, as well as to change its path during the mission.

Rocket for a riddle

U.S. and British scientists will launch a sounding rocket from Australia next June to study the supernova remnant Puppis A, in hopes of answering a riddle posed by results from the Copernicus orbiting astronomical satellite. The satellite showed a strong peak in the X-ray emissions from Puppis A located near the center of the object, possibly due to a rotating neutron star—one of the suggested identities for pulsars. The resolution of the equipment aboard the sounding rocket should be able to reveal whether there is, in fact, a neutron star there, says Ian Tuohy of the Mullard Space Science Laboratory in the United Kingdom.