

Technology in sight

Space colonies accepted

by Robert Thomason
Staff Writer

"Would I like to live in a space colony?" the girl said looking up from a french fry, repeating the question. "Yeah, I guess so," she said, returning to her food.

Like many other students asked about the possibility of pioneering space, she had not given the question much thought. Until recently, only science fiction writers had said much about it. But now, a new school of thought has developed, looking toward the colonization of space as the answer to earth's problems.

Scientists, both in the academic community and at the National Aeronautics and Space Administration, think technology has advanced to the point that colonies could be put in space. Yet, NASA is approaching this possibility very cautiously.

"The way that technology is advancing, I think it is feasible to deal with problems, like overpopulation," said Doug Johnston, a business major from Burlington.

Johnston felt his talents would be needed after space colonies evolved from early, pioneering stages. But he would not want to stay for more than a year.

"I get tired of things fast," he said.

Victoria Lewis, a graduate student in history from Arizona, repeated his feelings. "I would have to say yes right now because I would be attracted to the kind of people who would be interested in such an experiment. They would probably be intellectuals; not afraid of a challenge.

However, Lewis qualified her remarks: "I see the whole question as being visionary and impractical."

A Princeton physics professor, Dr. Gerard O'Neill, thinks that space colonies are not only achievable as a short term goal, but a potential economic asset. O'Neill has suggested that if a project for colonization of space were to be started in 1982, nine years and \$150 billion later, a mining station on the moon, a colony for 10,000 persons and a satellite which beams energy to earth could be built.

The Apollo space missions showed that lunar soil is rich in aluminum (12 percent) and iron (15 percent). O'Neill thinks that the U.S. government should put miners on the moon to extract this mineral-rich lunar soil.

The miners would "strip mine" the surface of the moon for soil. This type of mining would have negligible effects on the moon, O'Neill contends, because there is no water or atmosphere to cause erosion, as there is on earth.

The mining station would chemically separate the soil into its useful elements. Then, taking advantage of the moon's low gravity, the miners would launch the elements to a point in space where it would be used to build a space station.

O'Neill believes that a colony could be built from these elements. The first colony he envisions would house 10,000 persons.

The colony would be cylindrical, spinning about its axis to create an artificial gravity from the centrifugal force. Closed at both ends, the colony could hold a simulated earth atmosphere.

The estimated 6,000 persons needed to build this first colony would be housed in the external tanks of space shuttles. After completion of the colony, which O'Neill refers to as "Island I", 4,000 persons would join them and begin construction of a power satellite.

To O'Neill, the power satellite is the most immediately worthwhile goal of the entire project. It would collect the ever-present sunlight, convert it to microwaves and beam it down to earth. This, he says would enable the world to continue its current rate of energy consumption without depleting any natural resources.

"I think that it would be good to live in a space colony," said Monty Coggins, a zoology major from Kannapolis, N.C. "I'd do it for the sense of adventure."

Coggins said there would be no end to the experiments one could perform on animals in outer space.

Astronomers have written that space stations, either on the moon or in orbit, would be superlative sites of observatories. The earth's atmosphere fogs and blurs the view of even the best and biggest telescopes, even on clear nights. Pollution multiplies the problem.

Some industrial processes could be carried out better in space. The lack of gravity would ease the moving of large masses. The relative vacuum would facilitate the purification of chemicals.

The idea of a space colony is



Staff photo by Allen Jernigan

Oliver Goulston was a nine-year-old entrepreneur. All he wanted to do was earn enough money to buy a bicycle.

Making a five cents profit on every 15 cents glass of iced tea, Oliver, the son of Andre S. Goulston of 319 W. University Dr., set up a stand in front of Wilson Library. He earned almost \$20 in three afternoons and had planned to continue just a couple of more days, but a trustee regulation regarding merchandising on campus interfered.

Thomas Shetley, manager of the Student Stores, spotted young Oliver Monday afternoon and alerted the University Police to the violation of the regulation.

Oliver's stand has been moved to in front of his home, where there is not as much business, but where he won't have to worry about University rules.

—Pat Daugherty

Four tell stories of lifestyles, relationships

By Eric Miller
Tar Heel Contributor

This article is about four gays who tell what it is like to be gay.

Karen Peterson, a graduate student in classics and former president of the Carolina Gay Association, says, "Gay people are people and what determines what kind of people they are and so on is not their gayness. It is other factors. Professions, socio-economic levels, races and religions say more about lives than just being gay does."

Howard Fradkin, a graduate student in psychology at UNC, says, "I became aware that I had strong feelings of attraction for other men when I was in high school. I started having experiences when I was 12 or 13, but I really wasn't aware what all that meant. I didn't label myself as gay till I came here three years ago."

Dan Leonard, supervisor of Second Year Medical Laboratories at Memorial Hospital, says, "When I was about 13 I realized I was different from my male peer group. I realized that they were sexually attracted to women and I was not."

Donna Mears, a junior at UNC and treasurer of the CGA, says, "I labeled myself as gay in the ninth grade when I had my first crush on a girl."

Karen says, "When I was in high school I recognized that I was attracted to both sexes. When I got to college and met some gay people, I really started thinking about myself and realized I was at least bisexual."

Sex researchers from Alfred Kinsey on have found that approximately 10 percent of the general population is predominantly homosexual. Howard says, "I believe

that being gay means having strong feelings for persons of the same sex. You can't ever get rid of these feelings. If they develop, then they develop. You can say, 'I'm not going to act on them. I'm going to try to deny these feelings.' But you can't get rid of them."

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The term "coming out" is used by gay people to describe their own discovery of their sexuality and their subsequent revelation of that sexuality to others. The revelation to parents is one of the most difficult milestones in coming out. Donna says, "I know one girl who told her family one summer, and she was immediately kicked out of the house."

"I told my family during my freshman year, and I think their response was positive," Karen says. "They haven't changed in their attitudes toward me at all." Howard and Dan were accepted by their families in much the same way. Donna plans to tell her family this summer when she moves in with another woman. Donna's father is an Episcopalian minister. "Shock at first is the usual

response of parents. When they finally realize they do love their children that's when they accept their homosexuality," Donna says.

Gays say it is painful to find that someone they care about cannot understand or accept their gayness because of misconceptions about gay people. "A lot of people in the dorm found out I was gay since my name was in *The Tar Heel*. There've been a few girls who made snide

remarks and have treated me pretty badly," Donna says.

Karen says most friends are quick and willing to accept gayness while a few must be given time to adjust to the idea.

In a relationship, gays feel the same agony and ecstasy that other people feel. Dan says, "My ex-lover and I broke up last year after being together for three years. He ran off with this graduate student in English. Finally after all these months I'm getting over it. I was very upset. It actually hurt physically. I felt like someone had a knife in me. It was so painful. I cried. I would say, 'Well, I've given you three good years of my life.' Then we'd laugh and then we'd cry. We had an open 'marriage' in the sense that we both had

space shuttle program by allowing organizations to rent shuttle space for experiments. NASA charges \$3,000 minimum to bring the scientific mind closer to space.

social and sexual relationships with other men. I knew he was seeing this other guy. Part of our agreement was that if one partner felt that the other partner was seeing too much of someone else then you were supposed to speak up and say something. So I said, 'Ken I think you're seeing too much of this David person and I wish you wouldn't see him so much.' I think that forced him to leave me and to go live with David."

Lesbian relationships can last a lifetime, Donna says. "There must be no pressure on either partner's part to be more dominant. They're both equal in everything they do: making love, washing the car or putting out the cat. I think both of them should work and should have a career of their own. They should both have their own interest. They have to be in love. I know two old women who've been together 55 years. They're both 80 years old."

Donna says there are advantages to being a lesbian. "Women know their own body and when they make love to another woman it's very easy to know what the other woman wants. I feel that women are more sensitive and care more about their partners than men. I guess that's prejudice on my part. When two women make love I see it taking longer. There's more touching, more feeling."

"Being gay has made me very strong individually. I've had to stand on my own more times that I care to remember," Donna says.

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