BEHAVIOR

Shifting racial attitudes

White people's racial attitudes appear to have changed significantly between 1964 and 1974. The proportion of those who favor strict segregation has declined from approximately one-fourth to one-tenth. The proportion who feel the Government should protect the rights of black people to equal accommodations in public places rose from 56 to 75 percent. Those who felt that blacks should have the right to move into any neighborhood they could afford increased from 65 to 87 percent. These are among the findings of a series of national surveys conducted during the past 10 years by the Institute for Social Research of the University of Michigan in Ann Arbor.

While an increasing proportion of whites see "a real change in the position of blacks in the past few years," blacks seem to be less optimistic. Angus Campbell and Shirley Hatchett of ISR explain: "In general, the 10-year data show that during the mid-sixties, black people in this country had a strong feeling of change in conventional racial patterns, expressed both in their perception of increased contact with white people and in their sense of real change in their situation. But the sense of change for the better which seemed strong during the sixties appeared to have diminished during the seventies."

Reading with rhythm

The natural rhythms of speech are an essential part of language, but such rhythms do not usually appear on the printed page. This may be one reason that some children have trouble learning to read. "When children begin to read, they often only read sequences of individual words," explains Richard H. Meltzer of the University of Maryland in College Park. "As they progress, they start to associate the rhythm and flow of written words with naturally spoken words and phrases. But some students do not achieve this rhythm link." To help such students, Meltzer and James G. Martin have developed a method of teaching reading with the aid of rhythmic visual presentation of printed material.

A computer was used to time the natural rhythm of spoken sentences and to coordinate the written words, as they flashed on a television screen, with the spoken version. The system was used with second-graders enrolled in a summer remedial program. A control group saw the same material presented on a television screen as "still picture" displays. At the end of the term, the reading fluency of the rhythmic group was much improved and was considerably better than that of the control group. The researchers suggest that the system might be equally successful teaching deaf children to read or teaching adults a new language.

Publicizing death

"Too often, a child's first experience with death is a traumatic one. This is because of cultural taboos and the reluctance of parents to bring up the subject of death and dying. Then, the child is hard hit by the death of a grandparent, parent or brother or sister." Children can see death on television every night, but this is not the same as a death in the family. Therefore, it is time for a rational discussion of death, says Stephen Goldston of the National Institute of Mental Health's Center for Studies of Child and Family Mental Health. As a first step in a nationwide effort to improve communications within families about death, NIMH sponsored a conference that was attended by both mental health professionals and communications specialists. As a result of the conference, education materials will be developed and distributed to parents and children as well as to mental health workers.

SPACE SCIENCES

". . . Born under a riming planet . . ."

The increasing emphasis of current comparative planetology on detailed surface studies, suggests William Kaula of the University of California, has perhaps drawn attention away from the fundamental processes that shape the bulk of a planet. In an article in the September ICARUS (Vol. 26, No. 1) on "the seven ages of a planet," Kaula uses as his abstract a poem, which he wrote as a "tutorial device" to emphasize this back-to-basics view:

Our system is a stage,
And both the Sun and planets merely players.
They had their birth and'll have their fiery end.
A planet in its time plays many parts,
Its acts being seven ages. The first of these
Is condensation: dust grains drifting to
The nebula plane in chondrite clods. And then
The planetesimals: breaking sometimes, but
Most growing, though the Sun's hot breath blows gas
Away. And then formation: sweeping up
The bodies in its way, in fierce infalls
To bring then full convective vigor, too hot
For crust to form, though iron may sink and seas
Outgas, by radioactive energy driven.
And then comes plate tectonics: cooling leads
To lithosphere, with many marginal breaks.
Convective thrusts a crust create in belts
Complex. But heating slows; the sixth age shifts
Into the final volcanism: no
More lithospheric spreading, only vents
For magma, Nix Olympica or mare
To surface, ending fractionation. Last scene
That ends this history is quiescence: time
Sans melt, sans plates, sans almost everything.

The end of Apollo

It's over. "The Apollo Spacecraft Program Office," says the National Aeronautics and Space Administration, "has been abolished." And it goes deeper than that. In a fundamental realignment of its troops in preparation for the era of the reusable space shuttle, which will carry both human and scientific payloads, NASA has dropped the word "manned" from its Office of Manned Space Flight and transferred its Life Sciences Directorate from there to the Office of Space Science.

Moving in the opposite direction, the Launch Vehicle and Propulsion Program will be renamed the Expendable Launch Vehicle Program (meaning everything but the shuttle) and shifted to the new Office of Space Flight, which will also include shuttle operations. "In other words," says a NASA official, "OSF will get 'em up there, and OSS will tell 'em what to do when they get there."

A ride with the Russians

In response to an invitation from Soviet space officials (SN: 12/21/74, p. 389), NASA has selected four experiments to be included aboard a Soviet biological satellite, which may be launched as early as next month. In addition, rat tissues and *Drosophila* flies will be provided to U.S. scientists from seven Soviet-originated experiments on the same probe.

Samples for the U.S. experiments will be flown both in weightlessness and in a one-gravity centrifuge. They include studies of plant tumor growth using infected carrot slices, normal plant embryogenesis using cultured carrot cells, vestibular development using fish embryos at different growth stages, and heavy-particle radiation monitoring.

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