

evolution can equally well be explained by a theory of creation, which, they contend, is a valid and scholarly theory deserving equal attention with evolution in the teaching of science. A second argument is that the theory of evolution favors or implies an atheistic viewpoint and thus discriminates unconstitutionally against Christian children.

Within this general framework, the

creationists are not a monolithic association, and certain doctrinal differences are evident beneath the surface. The Creation Research Society includes the hard core of scientist-creationists who advocate the falsity of evolution and the truth of Genesis. Two active members of the society form the staff of the Institute for Creation Research, a teaching and publishing organization attached to the Christian Heritage

College in San Diego. Another organization with evangelical, but not fundamentalist, leanings is the American Scientific Affiliation, a 1750-member body devoted to exploring the relationships between science and religion. Lammerts, founder of the Creation Research Society, was a member of the affiliation but quit, he told *Science*, "because it tolerated evolution." This is a major difference between the two

Congress: In Election Turnover, Changes at the Bottom

If the presidential election went to Republican Richard M. Nixon by a vote approaching tidal-wave proportions, the congressional elections produced some tricky cross-tides. The next Congress will be slightly less Democratic and, perhaps, marginally more democratic. The Republicans picked up a dozen seats in the House of Representatives to make the division 244 Democrats and 191 Republicans. In the Senate, Democrats actually added two seats, raising their majority to 14—57 Democrats to 43 Republicans. The Democrats consequently retain the majority on both sides of Capitol Hill and with it the committee chairmanships, the right to appoint a majority of congressional staff, and control of the legislative machinery. On the House side, an element of uncertainty has been added, not so much by the results of the general election, but by the retirement from Congress or defeat in the primaries of an unusually large number—57—of incumbents, both Republican and Democratic. Many of these are long-service members of both parties, and it is possible that the influx of younger members will have a significant impact on the way Congress does its work.

In the constellation of committees that deal with science and the environment, the most obvious change occurs with the replacement of the chairmen of both the House and Senate committees which handle authorizing legislation for the space program. Senator Clinton P. Anderson (D-N.M.), 77, chairman of the Aeronautical and Space Sciences Committee, is retiring after a long congressional career that began in 1941 when he entered the House. The chairman of the House Science and Astronautics Committee, George P. Miller (D-Calif.), 81, was defeated in the primary and leaves Congress after a period of unbroken service in the House that began in 1945.

Anderson, a member of the Senate's unofficial "inner club," has served as chairman of the Joint Committee on Atomic Energy and of the Interior Committee, as well as of the space committee. During the 1950's and early 1960's, Anderson was particularly influential in both civilian and military issues involving atomic energy and was a strong advocate of the development of nuclear power sources. He succeeded to the chairmanship of the Aeronautical and Space Sciences Committee in 1963 and was a consistent though not uncritical backer of the manned space flight program.

Miller took over the chairmanship of the House Science and Astronautics Committee at the end of

1961 and presided over the committee during the buildup for the moon landing. Miller was regarded as a strong advocate of full funding for the space program, but the committee frequently nudged NASA toward tighter management, as in the case of the unmanned space program. Under Miller, the committee manifested a serious interest in nonspace science, particularly through the subcommittee on science, research, and development, headed for much of the 1960's by former Connecticut Congressman Emilio Q. Daddario. The committee was instrumental in shaping the legislation which reorganized the National Science Foundation and moved it toward a greater emphasis on applied research. Miller, genial and well liked in the House, was hardly an autocrat of the committee room, for example, he encouraged initiative on the part of his subcommittee chairmen to a degree which was unusual when he began doing it.

Anderson's successor is expected to be Senator Stuart Symington (D-Mo.). Symington is also a member of the Armed Services and the Foreign Relations committees, as well as the Joint Committee on Atomic Energy. A one-time Secretary of the Air Force, he is knowledgeable in space and aeronautical matters and has the reputation of being an advocate of airpower and of military capability in space, although his opposition on the ABM issue is thought to represent a significant refinement of his views. He voted to restore funds to the SST.

Miller's successor would appear to be Representative Olin E. Teague (D-Texas). Teague is chairman of the Veterans Affairs Committee, but is expected to give up the post for the chairmanship of the space committee. The one condition under which Teague is thought likely to pass up the space committee post is if the disappearance of Majority Leader Hale Boggs (D-La.) on a plane flight in Alaska results in a serious contest for Democratic leadership posts. Teague is regarded as a possible candidate in such a contest. On the space committee Teague is chairman of the subcommittee on manned space flight. Next in line for chairmanship of the full committee is Representative Ken Hechler (D-W.Va.), now chairman of the subcommittee on aeronautics and space technology.

On the environmental front, a significant factor is the defeat in the primaries of Wayne N. Aspinall (D-Colo.), chairman of the House Committee on Interior and Insular Affairs. Aspinall, 76, has been chairman of the committee since 1959 and currently heads the

organizations. The affiliation has played no formal role in the California textbook affair except insofar as Grose, a leading creationist on the curriculum commission, is one of its members.

Grose, an engineer with an aerospace background, is vice president of the Tustin Institute of Technology, a Santa Barbara firm specializing in management education. He is not a member of the Creation Research

Society, and he considers the Institute of Creation Research staff to be not fully scientific in their selection of the evidence. Grose describes evolution theory and creation as "the case for chance" and "the case for design." His views seem to be shared in part by aerospace acquaintances of his such as Wernher von Braun and Apollo astronauts Jim Irwin and Edgar D. Mitchell. Grose accepts some measure of evolu-

tion, but his chief concern is with origins, a subject on which he wishes science to be "absolutely silent." In an interview, Grose said he was concerned that "schoolchildren, brought up to believe there is a God, are now told in the name of science that God has conclusively been shown to be out of the picture. I want that to be withdrawn and a neutral or pro-theistic account to be given." If a child raises

May Be More Important than Changes at the Top

Interior Committee's subcommittee on environment. During the last decade, Aspinall has been a frequent target of criticism from environmentalist groups. Primarily at issue has been Aspinall's views on the management of public lands. His critics claim that in legislating multiple use of public lands he has favored private interests in mining, oil production, grazing, and lumbering at the expense of environmental values. Aspinall's record is by no means unmixing. He can take major credit for legislation expanding and improving federal parks and preserving wilderness and wild rivers. By the standards of even a decade ago he would have been considered a strong conservationist. But it seems true that he is not attuned to current concepts of making the use of federal land part of a strategy for the total environment. Furthermore, Aspinall is known as a chairman who has dominated his committee and been a tough and astute manager of legislation, and this has led environmentalists to see him as personally responsible for some of their frustrations.

The Interior committee chairmanship is due to pass to Representative James A. Haley (D-Fla.). Now 73, Haley will begin his ninth term in Congress in January. He has been serving as chairman of the subcommittee on Indian affairs and has established no strong image, either positive or negative, on environmental matters. Haley represents the Sarasota area, where, it is worth noting, a fairly strong, bipartisan, politically savvy environmentalist movement exists. Observers expect Haley to be less the dominant chairman than Aspinall and to give more latitude to subcommittee chairmen and committee members.

The Democrat who unseated Aspinall in the primary, Alan Merson, a professor at the University of Denver Law School, was defeated in last week's election by Republican James P. Johnson.

Also not returning to the House are three other incumbent congressmen who, with Aspinall, environmentalists listed as being among a "dirty dozen" legislators who were regarded as having compiled unfavorable records on environmental issues. Representative Walter S. Baring (D-Nev.), a member of the Interior committee and chairman of its subcommittee on public lands, was defeated in the primary. Representatives Earle Cabell (D-Texas), a member of the Science and Astronautics Committee, and Sherman P. Lloyd (R-Utah) were defeated in the general election.

Cabell was slated to become one of six House members

of a congressional board which will oversee the newly approved congressional Office of Technology Assessment (OTA) (*Science*, 6 October). Two other prospective members of the board who also were thought to be in danger in last week's election won their races. They were Representative John W. Davis (D-Ga.), chairman of the House Science and Astronautics Committee's subcommittee on science, research, and development, and Mike McCormack (D-Wash.), who was formerly a chemist at the AEC installation in Richland (*Science*, 30 July 1971).

The OTA board lost another member-designate in the defeat last week of Senator Gordon Allott (R-Colo.). Allott is a member of the Senate Interior and Insular Affairs Committee and Appropriations Committee. Some observers feel that Allott's support of a proposal for public financing of the next Olympic winter games near Denver, which Colorado voters rejected, was at least a minor factor in his defeat by antiwar Democrat Floyd K. Haskell.

With the retirement of Representative Alton Lennon (D-N.C.), marine science loses an effective friend. Lennon has been chairman of the Merchant Marine and Fisheries Committee's subcommittee on oceanography and a member of its subcommittee on fisheries and wildlife conservation. He was a proponent of a "wet NASA" for marine sciences (*Science*, 16 July 1971) and has been interested in research and environmental protection programs for coastal zones.

The most notable change of all should be the replacement of the retiring William Colmer, 82, a vintage Mississippi conservative, by Ray Madden (D-Ind.), 80, a New Deal vintage liberal, as chairman of the House Rules Committee. The Rules Committee, however, is not the overall legislative arbiter it was even a few years ago. A fair guess is that changes at the bottom in the House will be more important than changes at the top. This is because the unusually large number of incoming members are relatively young. As a matter of fact, the ideological center of gravity in the House—as defined in conventional liberal-conservative terms—seems unlikely to shift much. And the effect of the influx is likely to be less on legislation, at least at the start, than on the way the institution operates. For the new members look like ready reinforcements for the already significant group of impatient younger members who are unwilling to ride the long, slow escalator of seniority to influence in Congress.—JOHN WALSH