sus of Nazareth did not assert any of the divine or messianic claims the Gospels attribute to him and that he died without believing he was Christ or the Son of God, not to mention the founder of a new religion."

Based on close scrutiny of ancient texts, Küng and his colleagues have even cast doubt on Jesus' resurrection. And if Jesus did not rise from the dead, Sheehan notes, the chief evidence for life after death is gone. That would deprive the Catholic Church of much of its authority as spiritual arbiter. (Ironically, Küng does not reject the possibility of an afterlife; he just denies that there is any concrete proof that it exists.)

Not surprisingly, the Vatican has taken a dim view of these ideas. In 1979, Pope John Paul II demoted Küng by stripping him of his professorship in Catholic theology. Yet, Sheehan believes that the new theologians, by undermining the Vatican's claim to infallibility in theological matters, are having an effect. The Catholic Church's growing involvement in secular issues, such as nuclear war and abortion, he lays to a retreat from the theological arena.

Sheehan believes that any effort by the Vatican to quash the theologians' revolt is doomed to fail. Yet, it also seems unlikely that a church that has survived for nearly two millenia will change quickly.

A Revival of Jewish Orthodoxy

"American Jews Rediscover Orthodoxy" by Natalie Gittelson, in *The New York Times Magazine* (Sept. 30, 1984), 229 West 43rd St., New York, N.Y. 10036.

Jews in the United States have long agonized over whether it is best to assimilate to American culture or to cling to the ways of their forefathers. Now, writes Gittelson, executive editor of *McCall's* magazine, more and more Jews seem to be deciding that it is possible to do both.

Of the nation's six million Jews, some 4.8 million belong to the mainstream and relatively assimilationist sects—the Reform, Conservative, and Reconstructionist movements. But Gittelson reports that membership in the more fundamentalist Orthodox movement, at about 1.2 million souls, is at a postwar high and growing steadily. "Often superaffluent, no longer insecure in the New World or uncertain about their American identity, these Jews have been freed by secular success to assert triumphantly their Jewish selfhood."

Scientists, film stars, and journalists are among the "new Orthodox." The movement itself is variegated—from the "far right" Hassidim, with their centuries-old costume (for men) of beards and long, black coats, to the more liberal Orthodoxy to which most of the newcomers adhere. Yet all of the Orthodox share a commitment to obey 613 biblical commandments and rabbinical laws. Among their practices: Praying three times daily, strictly observing the Saturday *Shabbos* (sabbath). Orthodox men wear *zizit* (fringed vests) beneath their shirts to remind them of God's presence and refrain from even touching their wives for nearly two weeks of every month.

The growth of ethnic consciousness and religious faith in America, along with sympathy for Israel's plight, have contributed to the Orthodox revival. And none too soon, say the new Orthodox. Harvard's Center for Population Studies estimates that at today's level of intermarriage, assimilation, and fertility there could be as few as 10,000 "identifiable" U.S. Jews remaining by the year 2076. The Orthodox, with their far higher birthrate, hope to prevent that.

But above all, Gittelson concludes, the return of some Jews to "old-time religion" is a personal quest for spiritual meaning. And the new Orthodox, in their strict practices and deep faith, "seem to feel constantly exhilarated that they are carrying out God's plan."

SCIENCE & TECHNOLOGY

Missing: Most Of the Universe

"The Invisible Universe" by John D. Barrow and Joseph Silk, in *New Scientist* (Aug. 30, 1984), Commonwealth House, 1-19 New Oxford St., London WC1 A1NG, England.

There is bad news for stargazers fond of contemplating the infinite: About 90 percent of the universe may be invisible. According to astronomers Barrow and Silk, of the Universities of Sussex and California, Berkeley, respectively, weak telescopes are not the problem. The "missing" part of the universe may be right in front of our noses. We just cannot see it.

The notion that there is more to the universe than meets the eye is a deduction from modern "cosmological" theory. During the 1920s, American astronomer Edwin Hubble laid the cornerstone for contemporary cosmology with his discovery that our own Milky Way is not the only galaxy in the universe. Later, the Big Bang theory postulated, among other things, that the universe is expanding and that the other galaxies have been moving away from ours since the Big Bang some 15 billion years ago.

During the last five years, physicists have added a theory of "inflation" that elaborates on what happened during the first instants of the Big Bang. This new understanding led scientists to conclude that the universe is expanding much more slowly than was originally thought.

Knowing the rate of the universe's expansion (assuming inflation theory is correct) allows physicists to calculate its theoretical density. According to these computations, there should be roughly 10 atoms per cubic meter of universe—far more atoms than scientists thus far have been able to find.

That means that there is probably some kind of "nonluminous" matter in the universe that has so far gone undetected—and that there is a lot of it. Attention, the authors say, has focused on a group of "exotic creatures": neutrinos, gravitons, photinos, axions, and gluons. For the present, these particles are only creatures of theory. Nobody has yet seen a single one of them.