

ent groups in a society. Those groups in society that have a high rate of growth will grow proportionately relative to those who have lower rate of growth. Growth of groups may come either from surplus of births over deaths, or from immigration and conversion. The latter is usually an unimportant source of growth. Emphasis on high birth rates is seen as a recipe for eventual political dominance. One sees this problem in such places as far apart as Guyana, Trinidad, Quebec, The Netherlands, South Africa, Fiji, and Ceylon, where in racially or culturally heterogeneous societies the fear of many groups of being "outbred" may condemn the whole society to competitive population expansion, with mutually disastrous results. Anti-natalist policies, especially for other people, must also come under moral scrutiny and Mr. Behan points out, "The way to keep barbarians away from the gates apparently is to slip them the 'pill,'" (p. 114). Still, in view of the fact that on any considerations the optimum birth rate must be below, and indeed far below the physiological limit, the burden of moral truth lies always on the pro-natalists.

These essays deserve to be widely read, especially among the anti-natalists, because they do bring out some points which need to be kept in mind in this whole argument. It is a pity indeed that they are described as "non-Malthusian" because I am sure Malthus would have enjoyed them and would have approved of a lot of it. He was, after all, a Christian minister and no inconsiderable moral theologian, and it is a little unfair to saddle him with the excesses of some of his followers. However, I am afraid, also, if these are read by the pro-natalists, it will reinforce them in many of their errors. It is almost impossible to avoid doing good to our enemies and harm to our friends. One hopes in this case the good will outweigh the harm.

## Issues in Science and Religion

DAVID TOLMAN

*Issues In Science and Religion*, by Ian G. Barbour. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1966. 470pp. Also a Harper Torchbook.

*Being expert neither in the field of science nor of religion, we are relieved of the responsibility of discussing a theme [science and religion] whose treatment has suffered from everything but neglect.* —HUGH NIBLEY

Ian G. Barbour's book is a rarity in the area of science and religion, for the theme does not suffer at all, but benefits greatly from Barbour's organization and presentation of problems. Barbour teaches modern physics, appears to be well-versed in modern theology, and has a broad knowledge of history and philosophy. In addition, he is well-acquainted with the development of science and with the history of religion. Mercifully, his book spares us the long and tangled history of their interaction, a welcome change from books of this sort. Instead, Dr. Barbour assembles what amounts to a history of philosophy or an intellectual history of

metaphysics, and he presents a set of categories and ideas that resolve the problems of science and religion through the process philosophy of Alfred North Whitehead.

*Issues* is divided into three major sections: Historical, Logical and Substantive. The first section of the book illuminates the interface of science and religion. Unlike those who claim there is no conflict between the two systems, Barbour focuses his attention on the areas where religious assertions become philosophical (and thus become sometimes scientific) and where scientific assertions become metaphysical (thus acting back through philosophy to religion).

Barbour includes an instructive chapter called, "From the Sciences to the Humanities," in which he attempts to show that the balance between objectivity and personal involvement is necessary in all disciplines and that the social sciences have the same epistemological problems as the sciences. This is a modification of C. P. Snow's provocative "Two Cultures" essay. Barbour breaks down the stereotypes of science/objectivity, humanities/subjectivity and shows that the separation Snow describes is only social and linguistic. Of course, such a broad, pervasive cultural problem has no easy solutions, but Barbour's comments provide an interesting complement to Snow's and set the stage for his detailed comparison of the methods of science and religion which follows. If we were to assume that science and religion were completely antithetical pursuits rather than evolving intellectual enterprises, the great similarities would be robbed of their impact. Barbour observes that there is no uninterpreted revelation. This leads the reader to recall a previous discussion where H. R. Hanson demonstrated that there is no uninterpreted, or "bare," scientific fact. Thus Barbour establishes a difficult epistemological point about theory-laden observation in a rather painless but unmistakable comparison.

The analysis of the methods of religion focuses on liberal Protestant theology but raises most of the key issues about religion in its various functions of theology, community, personal experience, language, and as history in ways that invite serious reflection and further analysis. After balancing the contrasts and parallels of science and religion, Barbour turns to an analysis of the language of both in order to reveal the solution to the interpretive problem of scientific and religious thinking.

This book is a tremendous accomplishment. It treats a tough problem with respect and covers all the major areas with admirable scope and depth and with copious footnotes. It is certainly the place to begin a study of the problems of science and religion, and in addition serves well as a bibliographic and reference tool for advanced students. This is an ideal book for the relatively unsophisticated Mormon audience. The subject of science and religion in the Church has been treated either as a false problem which Mormonism, embracing all truth, need not confront, or as a subject which can be satisfied by the testimonial assurances of some prominent Churchman-scientist. We, as a Church, have avoided, for the last half-century at least, serious attempts to reconcile our theological views with other intellectual currents in the world even while more of our community now seems in need of it and qualified to evaluate it. Particularly in the area of science and religion, where Mormonism makes so many provocative assertions, the silence is surprising. Hopefully, attention to Barbour's fine book will stimulate some analysis of the unique ideas of Mormonism.

Using Barbour's categories and terminology, a few key questions could be asked: Can our realistic interpretation of the world be extended to a full scientific realism? What is the relation of this world to the previous one and to the future one? Are God's physics the same as ours but more refined? What kind of truth have we found? Further, how does the scriptural promise that we keep the knowledge we gain here relate to science? If our enterprise of science (i.e., developing better explanations of increasingly diverse and obscure observations) is similar to God's science, could we not, therefore, jump immediately to new scientific levels by God's gift of a few laws of physics? Or does our science, like our moral progress, require step-by-step addition of knowledge?

These questions are difficult enough, but perhaps the best approach to them is in Barbour's technique of language analysis. It sometimes seems that our abhorrence of dogma or theology in the Thomist sense nourishes our predilection for linguistic imprecision. By using key words loosely, we allow flexibility of interpretation but we also invite sloppy thinking. What is the information content of words like "light," "truth," and "intelligence" in Mormon theology? "Spirit" in common usage differentiates something from "matter"; how are we to read Joseph Smith's "spirit is merely a more refined form of matter"?

When we think of the general problem of science and religion, there is really no one solution. There can be no set of reconciliations broad enough to cover both subjects, but there can be good resolutions within smaller parts which will give satisfaction. There is a particular need in the Church for scientists to analyze and synthesize their own experiences and then to suggest ways to integrate these two means of interpreting the events of the world and the scriptures. Fear is the only dividend of avoiding the issues.

Both science and religion are attempts to interpret our experience. Not all people have experiences in a scientific structure, nor do all have religious experience sufficiently clear to provide contrast and conflict. Nevertheless, Mormons, more than most, should be interested in acquiring knowledge of the sort that will allow them to understand, in the broadest sense, the world—physical and spiritual—around them. Ian Barbour's book is a good beginning toward such an undertaking.

## J. Golden Kimball: Apostle and Folk Hero

RICHARD M. DORSON

*The Golden Legacy: A Folk History of J. Golden Kimball.* By Thomas E. Cheney. Santa Barbara and Salt Lake City: Peregrine-Smith, Inc., 1973. (Originally published by Brigham Young University Press, 1973.) 155 pp. \$6.95.

Even before his death in 1938 at the age of eighty-five, J. Golden Kimball had become the most talked about of all Mormon churchmen. He was himself cognizant of his reputation, and when a nephew told him, "Well, Uncle Golden, I heard another J. Golden yarn today," he scoffed, "I'll bet the damn thing isn't genuine. Seems like all the stories told these days are either about me or Mae West." To