

## NOTE ON THE INSTITUTIONAL AND FINANCIAL SUPPORT OF *ZYGN*

by *Ralph Wendell Burhoe*

Journals and institutions with a religious or educational mission must be supported with energy, just as must any parts of a living system. Like central nervous systems in animals, institutions which function to enculturate values and ideas (religions and schools) do not directly supply the necessary energy and materials for the life of the individual or the society. However, in order to provide their cybernetic goal-guiding informational functions for the system, they require a fraction of its energy and materials. While brains do no obvious work to feed the body, nevertheless, natural selection has arranged it so that such genetically shaped mechanisms as blood canals do supply brains as well as hands and mouths with the energy and other materials they need to operate. The necessity for this is clear in that the rest of the organism could not survive for long without the brain. Nor can a society long survive without the cultural institutions that provide the necessary attitudes and information that engender the complex cooperative functions necessary for its life.

In a human society the proper distribution of energy and other supplies to religions and schools to keep them functioning is not directly programmed by genetic information but indirectly through the culturally elaborated patterns of conscious awareness and through the concern of individuals in the rest of society to contribute to these social agencies. Of course, for the most part, societies have had an almost automatic readiness to support a shaman or priest or teacher because traditions have prerational ways of meriting support.

But innovating agencies such as *Zygon* that seek to meet new, unrecognized needs have little tradition to support them. Moreover, neither of the two traditions that *Zygon* seeks to unite, religion and science, is concerned to part with its own resources to support *Zygon*. Ordinarily, an established institution will provide support to agencies that seem to offer help for its own advancement. Religious bodies and scientific societies will support publication programs that seem desir-

able to advance their interests. But, because in our general culture there has grown up among intellectuals during the past few centuries the erroneous but widespread conviction that religion and science are necessarily separate or irrelevant, and perhaps even dangerous to one another, a proposal for support for an agency that claims to join or integrate religion and science seems preposterous. To many leaders of either the scientific or the religious institutions, it often seems that claims to the effect that the future health of society as a whole or their own future health depends on such a far-fetched, naive, and impossible nostrum as uniting religion and science is the last thing for them to support! In view of this, an enterprise like *Zygon* has been indeed fortunate in the past to have been nursed by major support from a rather unusual theological school, whose responsible officers saw some hope and value in an effort to integrate religion and the sciences: Meadville/Lombard Theological School, affiliated with the University of Chicago. It has been estimated that the school invested more than a half-million dollars in a program on theology and the sciences, which was the context necessary for the development of *Zygon*. Recently, financial conditions forced the school to cut back and to drop its support of *Zygon*.

The other agency that, jointly with Meadville, undertook to publish and support *Zygon* is the Institute on Religion in an Age of Science (IRAS), a small, voluntary association of persons who had earlier generated the idea and plan for such a journal. A "Twenty-Year View" of IRAS was published in the March 1973 issue of *Zygon*, reporting on this rare phenomenon of twentieth-century cultural history. (A free reprint of this may be had on request from the editor.) However, IRAS itself is poorer than a church mouse, and its treasurer's report of September 30, 1974, provided a long footnote indicating that IRAS's *Zygon* fund was not equal to the task of bearing the full costs of the editorial and publishing office. This editorial note may be said to be a footnote to that footnote to that treasurer's report and may be said to be an appeal to readers and friends of *Zygon* to help find new sources of support for the continuation of the journal.

I quote portions of the treasurer's footnote 6 as follows:

6. The *Zygon Fund* of IRAS was established to provide the IRAS share of costs as co-publisher of the journal. The other co-publisher has been the Center for Advanced Study of Theology and the Sciences at Meadville/Lombard Theological School from 1965 to 1972, when it withdrew for lack of funds, and was succeeded from July 1972 by the independent and still unfunded Center for Advanced Study in Religion and Science (CASIRAS), a not-for-profit, tax-exempt institution incorporated in the State of New York, whose leaders overlap with IRAS leaders. During the ten years from 30 September 1964 to 30 September 1974, IRAS members and friends

have contributed a total of \$43,275.25 to the Zygon Fund, including \$3,506 raised in advance to launch the journal. . . .

The [funds supplied to] the Zygon publishing and editorial office during the past two years [involved] the \$9,500 dowry from *Meadville* to CASIRAS: some \$28,000 from *Meadville* in providing the Editor's salary and office facilities and help; and some \$8,500 from the IRAS grant from the *Sloan Foundation* and some \$1,500 from the [IRAS] *Zygon Fund*—a total of \$47,500 or nearly \$24,000 a year. Because 95% of this was supplied by these other sources, the Zygon Fund of IRAS was hardly touched.

If the publishers of *Zygon* were to continue to provide for editorial and publication costs at this rate of \$24,000 a year, the \$10,206.94 balance in the [IRAS] *Zygon Fund* would not last long, especially if we note that, without [the late Mr. Fowler McCormick's] generous contributions, the *Zygon Fund* income in the past four years has averaged only \$1,343 a year, [and that] the Sloan Grant is all used up, *Meadville's* indirect subsidies have finished, and CASIRAS is impecunious. A question to be settled therefore in the next few months is what arrangements can be made to provide for this publication.

It should be noted that not only does *Zygon* need support for the future of its editorial office but also—because of the increase in the number of important papers being received that we cannot yet afford to publish and because the increased institutional and social needs of our times urgently warrant an expansion in the number of pages published per year—we need larger support for expansion.

While continuation of a part-time, overburdened, unpaid publication and editorial office is assured for a limited time—through temporary gifts of services—the longer-range security of *Zygon* will require at least the equivalent of the \$24,000 a year for its editorial office, plus whatever will be needed for expansion of *Zygon* and to cover inflation. I would estimate that additional funds of the order of \$30,000—\$40,000 a year from some source will be required for *Zygon* to flourish in the future as it has in the past.

While there is a reasonable possibility that this kind of support might within a few years be covered by additional subscriptions, that may not be soon enough. In the case of many academic journals the subscriptions market could not possibly cover the costs of editing; sometimes it even does not cover manufacturing costs. It has often been a part of the policy in financing of research and development programs to provide for institutional, foundational, or other funds to cover a large portion of the costs of publishing the results.

But we have pointed out that support for *Zygon* by traditional institutions is not very likely so long as *Zygon* insists on being neither fish nor fowl, neither religion nor science, but both—something alien to and usually rejected in each of these subcultures. *Zygon* is in the position of an experiment along different lines from those already proven and accepted in the minds of most people who channel institutional funds. Novel charitable ventures also require "risk capital."

## ZYGMON

The most immediate need for funds is to provide minimal support for some years of the *Zygon* editorial and publishing office. The costs of the manufacture and distribution of the present size of *Zygon* are now essentially covered by receipts from subscriptions. Our editorial office costs could come from inclusion within the program of some institutions, as it did from Meadville, provided there would be equal freedom and support for the goals of *Zygon*. Also, they could come from new sources of contributions to the "Zygon Fund" of either IRAS or CASIRAS, the joint publishers of *Zygon*. Such contributions may be sent as tax-deductible gifts to either. The Office of the Treasurer of both institutions is located at 1524 East 59th Street, Chicago, Illinois 60637. More information on these publishers and their program for *Zygon* is provided below in an appendix to this note.

The financing of experimental and pioneering enterprises can sometimes be accomplished by \$5 and \$10 or \$50 and \$100 contributions from a large number of people; in any case, the tangible expression of faith in the enterprise by such contributions influences the faith of some of the larger and institutional donors.

Readers of *Zygon* may also be uniquely helpful in bringing *Zygon* to the attention of friends and acquaintances by providing a one-year gift subscription to such acquaintances. If in such ways we could increase our subscribers from the present level of about two thousand to some six thousand, this alone could provide the basic support needed to insure financing both the editorial office and production of the journal at its present level and somewhat more.

But there is a further important need involved in the publication of *Zygon* to which concerned readers of *Zygon* may contribute even when they cannot provide the funds directly themselves. This need is the essential development of special areas of sound information which is basic background for both the production and selection of papers to be published. The publishers of *Zygon* have been engaged in this, but the program urgently needs expansion. Information on this is given in the appendix to this note.

## APPENDIX ON THE PUBLISHERS: IRAS AND CASIRAS

In the past half-century, manuscripts that provide sound and positive relations between theology and the sciences have not been a natural outflow from scientists, theologians, or scholars in any of the estab-

lished disciplines. In fact, in Western culture the really sophisticated on either side of the gulf often view the hope for a union of theology and the hard sciences as only a fantasy of the naive. For a large portion of sophisticated scientists, theology has been held to be a primitive mythical belief that pertained to earlier stages of civilization. For the sophisticated theologians, science has been admitted as sovereign in its own realm; but for them the scientific realm could not join revelation in providing knowledge of matters spiritual and moral. Had not philosophers made it clear that values did not and could not issue out of facts? Moreover, theologians tended to be more worried about the revelations of scholarship within the realm of religion alone, which had been showing increasingly the human sources, the "mythical" character, and the seemingly dubious authority of the religious message. Some of them had turned away from earlier convictions and had openly declared that credibility in God was dead. Many turned to other means of warding off evil, such as releasing personality tensions according to a new gospel of psychotherapy or improving the social order by moving into the ancient arts of politics, often garnished with symbols of a sacred heritage. Outside of the United States and a few smaller enclaves, the societies of Western civilization had already largely abandoned traditional religion. In some countries they had already been seriously engaged in fabricating man-made faiths in political philosophies as replacements.

Hence, when *Zygon* began publishing there was no flow to the editor of papers on scientific information confirming the worth of elements of religious and theological tradition such as there would be papers to the editor of a journal in today's established traditions, where the criteria for good science or scholarship and a tradition for advancing knowledge is shared in a sizable population of specialists, all of whom are working to advance that field of knowledge. Papers for *Zygon* at first were cultivated from a relatively small population of scientists and scholars who have been working together in a few pioneer groups of often overlapping membership of a few dozen to a few hundred scientists and scholars. Sometimes the editor or one of these associates has spotted a new person who has independently been developing some ideas that fulfill the rather special and complex requirements by which we have defined a program for uniting religion with the sciences, a program that may be discerned in the editorials and papers published in *Zygon*. But we have to confess that in spite of all our care many of *Zygon's* papers fail to penetrate the veil that the past two centuries of cultural history has drawn between facts and values and between the sciences and theology. The very meanings of

## ZYGON

words in common language, as historical events have colored them with different connotations, tend to prevent effective communication of the new hypothesis that lies behind *Zygon's* program: The information accumulated in the sciences in recent decades constitutes a new revelation of the nature of man and the reality system upon which he depends; this new revelation not only shows why and how traditional religions have been selected for the essential contributions of their beliefs and practices for enculturating men with what they need for their psychosocial viability but also shows how religious belief systems may indeed be said to reflect valid insights into the requirements of an ultimate and universal reality system, which is the source of and law for life, and into man's proper duty and hope.

*Zygon's* editor must take responsibility for the above hypothesis, which is not fully shared by many even among those who have been working with him. Nevertheless, this hypothesis has been greatly enriched and developed by a company of people with whom he has worked on these matters, beginning with members of the Committee on Science and Human Values of the American Academy of Arts and Sciences since before 1950. In 1954 many of these joined with some clergymen and theologians to constitute the Institute on Religion in an Age of Science (IRAS), attracting, over the years since, a still wider group of scientist and religious scholars, who in large measure have focused upon the criticism and development of this hypothesis, particularly in summer conferences in the Isles of Shoals off Portsmouth, New Hampshire. Out of this cluster of a few hundred people have come many of *Zygon's* papers. In the late 1950s IRAS people wooed a number of theological schools, and in 1964 we were welcomed by the Meadville/Lombard Theological School in Chicago to establish the Center for Advanced Studies in Theology and the Sciences (CASTS), which provided the time and support of the editor and, jointly with IRAS, in 1966 inaugurated the publication of *Zygon*. Many of the same people who had developed IRAS became members of the advisory board of CASTS and of *Zygon*. In the first issue of *Zygon* the following among them were listed as the Editorial Advisory Board:

Ian G. Barbour	Hudson Hoagland	Filmer S. C. Northrop
Sanborn C. Brown	Chauncey D. Leake	John R. Platt
Theodosius Dobzhansky	Henry Margenau	Van Rensselaer Potter
Alfred E. Emerson	Kirtley F. Mather	Harlow Shapley
Lawrence K. Frank	O. Hobart Mowrer	Melford Spiro
Ralph W. Gerard	Hermann Joseph Muller	George Wald
Ward H. Goodenough	Henry Alexander Murray	Anthony F. C. Wallace

These are primarily scientists, representing all major areas, and are men of high distinction in their own fields, entirely apart from what

they have done for *Zygon*. In the past twenty-five years, several hundred men of similar character have been involved in one or more of the groups related to *Zygon*, with increasing numbers from the theological community. In 1966 theologians were not listed on the advisory board of *Zygon* partly because a theological school was one of the publishers and partly because there were so few who were sympathetic with the idea. But it should be noted that, beginning about 1949, theologian Henry Nelson Wieman and the American Academy's executive officer (*Zygon's* present editor) sought to bring a *Zygon*-type journal into being but failed to find the necessary funds and personnel. Also, the late Edwin Prince Booth, professor of historical theology at Boston University, was one who in 1953 joined with others to lay the foundations for IRAS and was its first president and for many years one of its leaders. Increasingly, clergymen and theologians have become enthusiastically involved, and a dozen or more serve on *Zygon's* present editorial advisory board (see p. 124).

The many dozens of meetings and conferences generated by IRAS and CASTS have been the springs from which have been drawn the insights published in *Zygon*. A number of informed commentators have noted that there has probably been no other group of persons during the past quarter-century which has so clearly and effectively focused upon illuminating, reforming, and revitalizing religious beliefs and practices in the light of the sciences. Somewhat related groups have included the followers of Alfred North Whitehead in theology. There have been the societies influenced by Teilhard de Chardin which again have been in general more involved in celebrating and interpreting the important suggestions of a notable pioneer in this field than in themselves being explorers in the wider penetrations of the many revelations of the sciences important for understanding and developing religion. There have been many groups which have sought to bring the new psychosocial therapies into religious ministry; but most of them have not been very successful in relating the new doctrines stemming from Freud and Pavlov, for instance, to the traditional wisdom of religious beliefs and practices. These, of course, are only some among others. But I would tend to agree that probably no group has excelled those who have been publishing *Zygon* in persisting for more than a quarter of a century in pioneering to show how information from a broad spectrum of the sciences—ranging from thermodynamics and biochemistry to genetics, neurophysiology, ethology, ecology, anthropology, and the various psychosocial scientific studies of man and his religion—may cohere in a picture more or less isomorphic or analogous to the best in religious or theological traditions and may be available for their revitalization, reformation, and convergence.

## ZYGON

When funds for CASTS were cut off in 1972, a new and independent Center for Advanced Study in Religion and Science (CASIRAS) was incorporated in New York to succeed CASTS as joint publisher of *Zygon*. It was thought that funds from secular society could be attracted more easily to an independent institution of scholars than to a theological school. There are twelve members of a board of directors and an advisory board of some hundred scientists and scholars, with membership overlapping those in IRAS and the advisory board of *Zygon*.

The board of directors of CASIRAS consists of the following twelve:

Sanborn C. Brown	Theodosius Dobzhansky	Ervin Laszlo
Ralph W. Burhoe	Donald S. Harrington	George A. Riggan
Everett R. Clinchy	Philip Hefner	Ormsbee Robinson
Kenneth Cauthen	Lawrence Kohlberg	Malcolm R. Sutherland

The "Proposal" for CASIRAS, the substance of which was published in *Zygon* (September 1972), called for a center funded in the beginning by some hundreds of thousands of dollars a year to enable the full- and part-time employment of a sufficiently able and diversified group of scientists and theologians to constitute a critical mass of persons to develop much more rapidly the proposed synthesis of theology with the sciences. Such ways for applying the sciences to meet human needs more rapidly have already been shown to be successful in such cases as the application of the sciences to developing atomic energy or travel to the moon. The further development and expansion of *Zygon* were written into the "Proposal." But out of nearly one hundred foundations approached, some large and some small, none has yet offered to fund this proposal. Unfunded, CASIRAS can neither engender the rapid development of the basic theory nor fund the editorial office and expansion of *Zygon*. So, as an interim situation, CASIRAS, like IRAS, remains a small volunteer society with occasional meetings on a spare-time basis.

Some may wonder whether it is better to make contributions to the *Zygon* Fund of IRAS or CASIRAS. The overlapping membership and directorship would make them fairly equivalent. But there is a real difference in institutional character and function that can be made clear. IRAS is an open-membership, voluntary organization which holds conferences and which may be joined by persons concerned with meetings and conferences for general purposes of integrating religion and science. Although subject to the changes of accent and focus of a more or less open society, it has had a highly



commending twenty-one-year record of hewing rather consistently in its conferences and symposia to the goals represented in *Zygon*. CASIRAS is a closed, self-perpetuating group, established more specifically to cooperate as an agent affiliated with educational institutions and theological schools for conducting advanced studies and teaching at various levels from postdoctoral, to predoctoral, to professional-degree programs involved in developing religious understanding and practice in the light of the sciences, more or less akin to the development of medical understanding and education in the light of the sciences. While such programs have been partially tested with a skimpy staff by CASTS at Meadville, the as yet unfunded nature of CASIRAS has meant that it has served at most as an adviser or stimulator of some scattered, small programs in which some of its members or friends have engaged within their own varied educational institutions. As yet, the Center, as a critical mass of scholars intensively cultivating religion and theology in the light of the sciences, is only a proposal. Nevertheless, even in this state CASIRAS, as well as IRAS, is a tax-deductible religious and educational society or institution which can receive and disburse funds to maintain and develop the publication and editing of *Zygon*.

However, it is important for the future of *Zygon* to note what we have previously outlined: Its character thus far has been generated by an unusual and not yet widespread or well-established hypothesis about religion and its potential relation to the modern sciences. Therefore, in order to accomplish the *Zygon* program it is not sufficient merely to provide for the routine costs of editing and publishing. Especially for major near-term advances to break through the barriers to revitalize practical religious meaning and morals, it urgently requires the existence of a community of authors as well as a community of publishers and editors who are immersed in the development of that hypothesis. Hence, the more effective advancement of *Zygon* toward the goal of the close integration of religion and science needs the intellectual productivity of a Center for Advanced Study in Religion and Science, just as the production of adequate information to develop atomic energy or reach the moon required much more than the existing journals and sciences and technologies of the periods from 1930 to 1970. Without the creation and intensive funding of a small community of men who had the right hypotheses concerning these possibilities, the more routine publication of standard journals of physics and engineering would still be far from publishing adequate information for enabling the technologies that could usefully employ atomic energy or provide interplanetary transport. The application of the sciences to

interpreting and advancing religion is equally complex and more important; and the traditional universities, science departments, theological schools, and journals are not likely to achieve the kind of reformation, revitalization, and reconciliation of world religions in time to inspire a world civilization capable of surviving with modern science and technology before the presently degenerative and disruptive forces within and among human societies bring about the decline and fall of morals, morale, and meaning that spell a new Dark Ages.

So the funding and operation of the intensive development of the hypothesis by a critical mass of a carefully selected community of scientists and scholars from all the pertinent disciplines become essential if *Zygon* is in fact to accomplish its mission. Your editor regrets that during the past decade, for lack of larger support for such a program, the papers published in *Zygon*, while often crucial for the development of our goal, have not yet achieved the more advanced consensus and usefulness of a dynamic scientific theology that has been his vision or hope. It could be that some among the present readers of *Zygon* can become important links in bringing about the funding and development of CASIRAS or other centers that can vastly accelerate our progress toward these goals and thus provide the milieu of ideas that is essential for the development of *Zygon*.

However, this does not mean that under proper future editorship *Zygon* could not continue its present slow pace of selecting the kinds of papers that provide a slow building of the foundations toward a scientifically informed religion and theology. And there probably is naturally occurring a slow noninstitutionalized acceleration of the generation of papers that may be said to be laying foundations for a scientific theology.

But some *Zygon* readers may be concerned to help generate the larger goals of *Zygon*, which require the more rapid and institutionalized development of theology and religious revitalization in the light of the sciences. Some may even wish to, and some already have, become involved themselves in IRAS and CASIRAS or related institutions.

The funding of such institutions, while difficult, is possible. Before many years the combination of social needs and the more substantial offerings of intellectual breakthroughs, such as may be published in *Zygon*, will make this field an attractive target for those who would usefully give money for the improvement of human welfare.

But already there are undoubtedly many individuals and some institutions who are ready to invest in sizable gifts to such a program.

*Ralph Wendell Burhoe*

But we may not know of them nor they of us and our needs. Probably some *Zygon* readers know of such individuals and institutions. The introducing of the journal and its publishers to such resources could begin the funding of a major expansion of *Zygon*, or even the funding of the center for advanced study to provide the urgently needed research and development of its hypothesis.