Council, for the year beginning July 1, are as follows: *Chairman,* Walter H. Bucher; *Vice-chairman,* Richard Hartshorne, *Executive Committee,* Walter H. Bucher, Richard Hartshorne, Norman L. Bowen, Wilmot H. Bradley, Charles B. Hitchcock, A. I. Levorsen; *Representatives of Societies,* Wilmot H. Bradley and Stephen R. Capps—Geological Society of America; George Tunell—Mineralogical Society of America; Charles E. Resser—Paleontological Society; Richard Hartshorne and C. Warren Thornthwaite—Association of American Geographers; Charles B. Hitchcock—American Geographical Society; W. S. Burbank—Society of Economic Geologists; Robert B. Sosman—American Ceramic Society; A. I. Levorsen—American Association of Petroleum Geologists; *Members at Large,* Norman L. Bowen, Walter H. Bucher and Charles C. Colby.

THE sixty-fourth meeting of the American Astronomical Society will he held at Wellesley College from September 11 to 14.

The Australian Journal of Science announces that the Adelaide meeting of the Australian and New Zealand Association for the Advancement of Science will open on August 19. Social functions will be restricted, but sectional excursions will afford members opportunity for meeting together informally. It is hoped that longer excursions to places of scientific and industrial interest may be arranged in cooperation with the South Australian Tourist Bureau and the companies and departments concerned. The incoming president will be Dr. Patrick Marshall, testing officer in the Public Works Department, New Zealand. He succeeds the late Sir Ernest Scott.

Nature states that an Austrian Academy in Great Britain has been founded, the honorary president of which is Sir George Franckenstein, formerly Austrian Minister in Great Britain. The academy is arranging lectures, which will be delivered, as a rule, in English, and will be open to the public, on Austrian culture, and it is hoped to organize exhibitions and other activities in collaboration with the Austrian Circle for Arts and Sciences. The inaugural meeting of the academy was held at the Royal Institution on May 2; among the speakers were Professor Gilbert Murray, Professor E. Schrödinger (for the Austrian Academy) and Sir William Bragg. A "Society of Friends of the Austrian Academy" has been established to collaborate with the academy and to further its scientific and cultural activities. Members of the society will be admitted free of charge to all regular lectures, and will have special privileges for other functions arranged by the academy. According to the official statement the object of the academy is to "furnish a means for the many exiled scholars and artists at present in England to spread the knowledge of Austrian culture and achievement and to continue their work in art and music."

THE endowment for the Arno B. Luckhardt Fellowship Fund, started in 1932, has now, through contributions from former students, colleagues and other friends of Dr. Luckhardt and the aid of the University of Chicago, reached the sum of $25,000. This will yield an annual income of about $1,000. This fellowship is administered by the department of physiology. Dr. Alexander Rush, great-great-grandson of Dr. Benjamin Rush, has been appointed fellow for next year.

IN the issue of SCIENCE for May 10, page 443, in the article entitled "Expeditions of the Smithsonian Institution" the statement is made that Rose Atoll belongs to the Phoenix Group and that Tau Island is an atoll. Rose Atoll belongs to the Samoan Group and Tau Island is not an atoll but a high volcanic island. The errors indicated do not occur in the original publication but were inadvertently included by the correspondent who prepared the press release.

DISCUSSION

WHAT IS A "PRE-AMERINDIAN"?

DESPITE its obvious usefulness the term "Amerind," suggested in 1899 by Major Powell as a substitute for the inappropriate terms used to designate the race of man inhabiting the New World before its occupancy by Europeans, has strangely enough found scant favor. Its meaning, however, is clear, referring as it does to the various physical types incorporated into and ancestral to the American Indian. Recently, Dr. Kirk Bryan has several times employed the term "Pre-Amerindian" in referring to the Folsom and other lithic horizons, some of which have been found in association with extinct animals.[1] Since no human remains have yet been found in America which represent any ancient type radically different from portions of the variable modern Indian population there seems as yet no biological justification for such usage. Dr. Bryan, however, seems to base his case mainly on cultural evidence, since he believes the Folsom and other cultural complexes are genetically different from those of the "late Neolithic American Indian" (1940, p. 1). If this were actually the case there would indeed be an excellent chance that "Folsom man," when he is finally found in association with such artifacts, might prove to be a widely divergent and unique physical type. However, Dr. Bryan's conception of the Ameri-

[1] SCIENCE, 87: 2259, 343–346, April 15, 1938. *Bull. Texas Archeol. and Paleont. Soc.,* 11: 9–42, September, 1939; and Kirk Bryan and Lewis F. Ray, *Smithsonian Miscellaneous Collections,* 99: 2, 1940.

can Indian seems only to include New World horticultural and ceramic cultures of more advanced type and to ignore both the contemporary marginal gatherers and hunters and the intermediate lithic horizons as well.

Actually, every major artifact type recovered at the Lindenmeier-Folsom site finds a close analogue, and possibly homologue, in hammer, grinder, chopper, scraper, drill, knife and projectile point types from the lowest level (I) at the nearby Signal Butte site.[2] This is not merely a resemblance in individual specimens but in whole classes of artifacts and techniques. Bone work, simple geometric art and use of mineral paints, as well as the basic hunting economy, are the same. Many of these generic similarities, included in the ancient Lake Mohave culture as well, have also been pointed out by Amsden.[3] In addition, Kidder, Howard and myself have indicated the manner in which the later Signal Butte and other intermediate horizons inadequately, but definitely, link the earliest clearly defined lithic and the later ceramic horizons in North America.[4] Since Dr. Roberts has never referred to the Signal Butte deposits, nor made any comparisons between Lindenmeier and Signal Butte I culture complexes,[5] Dr. Bryan is perhaps unaware of the basic cultural similarities and sequences involved. Because Signal Butte I lacks positive evidence of extinct bison as well as completely fluted points, and includes other artifact types as well, it would seem to be a somewhat later descendant of the culture represented at the Lindenmeier site. This, in connection with the upper stratified horizons, is extremely important, since it gives us a clear indication of sequence, and culture sequence must always be the backbone of archeology. This brings up a matter of method and archeological vogue which appears to have more than passing significance.

Of recent years numerous archeologists have temporarily shifted their attention from prehistoric horizons of unknown age and affiliations to early historic and documented sites. These have been excavated in order to proceed from the known into the hitherto unknown. Such excavations objectively link history with prehistory and anchor archeology to meaningful social science. Meanwhile, other archeologists, and especially geologists and paleontologists, have been interested in the problem of early man in America. They have concentrated on such early horizons and have often evinced little interest in anything not demonstrably "ancient." As a result, archeological problems in the New World are being attacked from both ends, thus creating a largely artificial hiatus between the two fields of concentration or interest. Presumably, the two attacks will eventually meet, but the present situation is scientifically unfortunate in that it leads those not too familiar with the complex and extensive cultural evidence to postulate absolute non-conformity between various lithic and ceramic horizons in America.

Actually there is no positive evidence of such a state of affairs in the New World. Only by stressing negative evidence can such a view-point be suggested. The only human skeletal remains actually found in association with cultural evidence and extinct animals, the horse and the ground sloth, are described by Dr. H. L. Shapiro as a "not especially primitive type" conforming to Indian characteristics and resembling in some traits the Lagoa Santa skulls.[6] Further, these extremely important but little publicized discoveries of Bird in Patagonia and Tierra del Fuego reveal a sequence of lithic and bone industries extending from this early faunal association up to the historic hunting and fishing cultures of the Ona and Yahgan. The succession of lithic types is, in general characteristics, surprisingly similar to that in the longer but less complete cultural sequence from Folsom to the historic in the central Great Plains. Considering the distances involved these correspondences are especially striking. Obviously in the older deposits one would expect somewhat more primitive, or at least earlier, physical types, as is actually the case in the south Patagonian, Punin, Lagoa Santa and Pericue crania. In regard to the much publicized "Minnesota Man" even this evidence is highly debatable, whereas the cultural materials found in association most strongly suggest a relatively late Mississippi culture burial. A trend in predominance from early dolichocephaly to later brachycephaly is well known in the New World, but this does not indicate any clear hiatus between an ancestral "Amerind" and an alien "Pre-Amerindian." Similarly, early and late cultural connections have also been demonstrated in those few areas where adequate work stressing sequence equally with antiquity has been accomplished.

A tremendous amount of such research remains to be done in filling in these bare outlines and establishing others. The field is crying for even closer cooperation between geologist and archeologist. Already far-reaching results have been attained. Such cooperation has converted knowledge of late Pleistocene or early Recent occupation in the New World from pure hypothesis to objective fact. It seems foolish to obscure the emerg-

[2] W. D. Strong, *Smithsonian Miscellaneous Collections*, 93: 10, 224–239, 1935, pls. 23 and 25.

[3] C. A. Amsden and others, *Southwest Museum Papers*, No. 11, pp. 92–95, Los Angeles, 1937.

[4] A. V. Kidder, "Speculations on New World Prehistory, Essays in Anthropology," presented to A. L. Kroeber, Berkeley, 1936, p. 144; E. B. Howard, *The Museum Journal*, 24: 2–3, 150, 1935; W. D. Strong, *op. cit.*, pp. 278–282.

[5] F. H. H. Roberts, Jr., Smithsonian Report for 1938, pp. 531–546, 1939, and earlier papers.

[6] Junius Bird, *The Geographic Review*, 28: 2, 250–275, April, 1938.

ing picture by emphasizing antiquity and ignoring all evidence of sequence. In final analysis, relative dating of the earlier finds will always depend upon agreement among geologists, cultural and racial significance upon the findings of anthropologists. In this last regard it appears to the writer, and he believes the majority of physical and cultural anthropologists will agree, that whereas the use of the term "Amerind" is a matter of personal choice, the use of the term "Pre-Amerindian" is still unjustified on the basis of the known physical and cultural evidence. Since such usage and the selective attitude producing it seem to carry very important theoretical and methodological correlates the matter is one of far deeper significance than mere terminology.

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ANNUAL HONORARY JUNIOR MEMBERSHIP AWARDS

THE Academy Conference of the American Association for the Advancement of Science has been deeply interested in the work of the several junior academies of science. The conference has in various ways encouraged the work of the junior groups. In 1938, the council of the American Association for the Advancement of Science voted to recognize outstanding work of younger scientists by providing two honorary annual junior memberships in the American Association for the Advancement of Science to each affiliated senior academy which sponsors a junior academy of science. The procedure in selecting the recipients for these awards was left entirely with the senior and junior academies. The only restriction imposed was that the awards were to be given to one boy and one girl in each state upon the recommendation of the senior academy. Since in some cases the senior academy as a whole is not directly connected with high-school work, the selection of the candidates for the honorary awards has been supervised by the senior sponsors of the junior academy.

In an attempt to give significance to the honorary junior membership award the advisory committee of the Pennsylvania Junior Academy of Science has evolved a procedure which might be of interest to other junior academies. At the annual state meeting of the junior academy the various clubs with their sponsors and officers listen carefully to the papers presented. On the basis of an open election by membership clubs the boy and girl candidates are nominated. Each club represented at the meeting is permitted but one vote. Following this election the advisers judge the election as to the worthiness of the candidates who have been recommended. The senior academy officials are then notified, and they make the recommendation to the American Association for the Advancement of Science.

To further the importance of the award in Pennsylvania, the chairman of the advisory committee, when he could do so, has made the presentation of the certificate of membership in person at a school assembly. Usually this is preceded or followed by a short address to the student body on some general phase of science. In this way the attention of the entire school is called to the work of the American Association for the Advancement of Science in connection with secondary schools. This method of presentation has been followed with gratifying results.

The high caliber of the students selected for the award in Pennsylvania is attested by the fact that both of the honorary members this year have received scholarships for college work. The boy recipient received his as a direct result of his fine presentation of a cosmic ray counter at the annual meeting of the junior academy.

Unfortunately, the expenses for traveling to the schools to make the presentation has come from the pockets of those presenting the awards and from an officer of the association who has been most enthusiastic about the work of the junior academies.

OTIS W. CALDWELL
KARL F. OERLEIN

PEACE RESOLUTION OF THE AMERICAN ASSOCIATION OF SCIENTIFIC WORKERS

MANY scientists in this country have hoped that mature consideration of the social relations of science, prior to the arrival of acute emergencies, such as those which broke the spirit of German science, would enable scientists to direct their collective influence, when crises do develop, on the side of those human and intellectual values upon which all scientific accomplishment is predicated. Such considerations have led to the formation, and rapid growth, of the American Association of Scientific Workers.

A peace resolution circulated by this organization has met an amazingly enthusiastic reception by leading scientists and other scientific workers throughout the country. It has also elicited some criticism, along the lines of Dr. Sturtevant's communication to SCIENCE (May 24), on the assumption that it states a position of uncompromising pacifism.

I write this letter, as a vice-president of the A.A.S.W. and as one who was active in preparing the resolution, to help allay this incipient misunderstanding. (See also letters by Drs. Carlson and Mulliken, SCIENCE, May 31.) As a matter of simple fact, the Chicago group of nearly a dozen scientists which, in committee, over three months ago, approved the statement in its present form, rejected another wording which implied an unqualified isolationist position. A majority of this particular committee was, even then,