

ANTHROPOLOGIC MISCELLANEA

Anthropology and Education. — As a student and teacher of education, the writer has often been impressed by the extreme difficulty of making accessible to elementary students the data of anthropology necessary to the scientific study of education. Educational philosophy postulates a theory of cultural development in the race which is epitomized in the life-history of the individual, and on this establishes a system of practice, drawing largely on primitive culture for material for instruction and basing the course of study in the elementary school on the theory of cultural evolution.

Now, it would appear that the students of pedagogy stand ready to determine the limitations of the data of anthropology in the service of education and to make the wisest possible application thereof in educational practice. The National Society for the Scientific Study of Education was organized a few years ago. The writer, who was among the first to seek the benefits of membership in this organization, inferred the movement to be a declaration that students of education proposed to apply the methods of science to the investigation of pedagogical problems, to institute a closer study of the data of the sciences on which a science of education must be founded, in their relation to pedagogy, and to encourage scientific accuracy in the use of material furnished by the sciences in educational theory and practice. The papers brought forth by this movement have been an important contribution to the literature of pedagogy. Every student of education acknowledges their value. It may be questioned whether or not the assumption of the writer relative to the purpose of the Society was correct, for an examination of the titles presented before the Society up to date does not disclose any line of investigation undertaken which would not properly come within the domain of some previously existing department of the National Educational Association. This must not be interpreted as a criticism of the National Society for the Scientific Study of Education. It has moved along its line of least resistance. It cannot enter the province of a contributory science for original research, nor create a literature therein. It can only utilize the accepted data of such sciences in the scientific investigation of educational problems.

Now, it seems to me that scientific pedagogy must derive a more im-

portant mass of its data from the science of man than from any other, particularly from that side which we call culture history. To culture history we must go for the verification of a great body of educational theory; but an examination of a number of much-used text-books on pedagogy, produced in recent years, will hardly convince anthropologists that the data of anthropology are being correctly stated or correctly applied in pedagogy. And to primitive culture we must go for a vast amount of the material for instruction used in elementary education. Teachers are drawing continually on culture history for this material, but an examination of the matter selected, as embodied in many elementary books used in the public schools, will convince anthropologists that it is not their best nor most authentic material which is finding its way into the public schools.

The difficulty seems to lie in the existing state of anthropological science. It would be difficult to find ten anthropologists who would agree on what anthropology is on close definition. There is pressing need for a text-book on anthropology. This branch of science does not possess in its literature any great, up-to-date text-book. Some one must do for anthropology what Dana did for geology, James for psychology, Giddings for sociology.

Again, there is need for some great treasury of culture history. The student of education who is in need of facts and criticisms in Greek sculpture or ceramics, finds in Furtwängler or Overbeck great authoritative treatises. It would be a great service to education if the treasures of primitive American arts and industries, archeology, mythology, and folklore were made equally accessible, and by the same profound, critical study made available for the use of students from other fields.

In short, anthropology should enrich the course of study of every public school in the land, and the greatest line of progress now open to the science is in this direction. To this end the science needs closer definition by the masters, and its literature must be brought to a state that will place it in closer relations with education, through the schools of pedagogy, normal schools, and teachers' institutes. A joint meeting of the two national societies during the session of the American Association for the Advancement of Science might contribute to the progress of both.

EDGAR L. HEWETT.

Archeological Institute of America.— At a meeting of the Council of the Archæological Institute of America, held May 14, in New York City, the following action of interest to American archeologists was taken :

(1) A committee was created on the preservation of the remains of Indian antiquity. This committee is expected to have at least one member from each society of the Institute. The President and the Secretary of the Institute will be the chairman and the secretary of this committee. (2) The Committee on American Archeology was requested to consider and report on an enlargement of its membership, in view of the probable extension of its work, and to recommend some enterprise in its field to the council at its next meeting. (3) The chairman of the Committee on American Archeology (Mr C. P. Bowditch) was made a member *ex officio* of the executive committee. (4) The affiliated societies in the West were urged to take an active part in devising and obtaining the adoption of measures for the preservation of ancient monuments. (5) The sum of \$300 was placed at the disposal of the chairman of the Committee on American Archeology for his use in procuring information with regard to the remains of Indian antiquity.

The following officers of the Institute were elected: President, Professor Seymour; Vice Presidents, Mr C. P. Bowditch, President D. C. Gilman, Mr Edward Robinson, Professor F. B. Tarbell, and President B. I. Wheeler. Professor Mitchell Carroll was elected a member of the Executive Committee, to serve for three years.

Dr Uhle's Researches in Peru. — Reports have been received from Dr Max Uhle, who sailed last November for Peru to carry on archeological explorations for the Department of Anthropology of the University of California through the generosity of Mrs Phoebe A. Hearst, and has since then excavated at the famous site of Ancon, near Lima. On his previous two years' trip for the University, Dr Uhle's chief explorations were on the coast of northern and southern Peru, in the vicinity of Trujillo and of Ica. His present excavations at Ancon were mainly at three points within the "necropolis," and on a level slope to the south, behind the modern town of Ancon. The explorations were in continuation of his previous lines of archeological investigation in Peru, as summarized in a recent paper in the *American Anthropologist* (N. S., IV, 753-759). At a point near the northern end of the enclosure forming the necropolis, not far from the lime-kilns shown on the map of Reiss and Stübel, objects of a late date down to the beginning of the Inca period, the pottery being of the Chancay type, were found. Burials excavated in the eastern part of the enclosure were generally older, of what may be called the middle periods of Peruvian culture. Excavations in the southern part of the necropolis, in the vicinity of the present Indian fishing village and the hill with large mill-stones, brought to light finds of various

age, some of the burials, as shown by their continuation under and beyond deposits of a later age of considerable depth, and by the character of the objects in the graves, being of a very early period.

The soil of the evenly sloping hillsides south of and outside the necropolis, though giving no superficial indication of being other than a natural formation, was found for a considerable area to be a refuse deposit three or four yards deep. Two trenches of some length were dug in this deposit. No mummies were found, but in the lower depths there were a few skeletons. The quantity of artifacts was small; they revealed, however, a new type of culture, evident especially in the pottery. Not a single object showing the characteristics of the ware of this peculiar culture was found at any other spot at Ancon, nor, in fact, so far as known, anywhere in Peru; and to complement this circumstance, not a specimen with the characteristics of any of the various cultures represented in the necropolis occurred in these southern hillside deposits. The age of these deposits, unless their culture should hereafter be found in association with remains of a known period, can therefore be determined only by the apparent absolute age of the finds and by the internal evidence of the objects. The style of the remains, which Dr Uhle describes as showing a certain freedom and development toward artistic greatness, approaches in some respects that of the pottery characterizing the early or "golden" period of Ica established by him on his last Peruvian trip and of which his collections for the University of California contain abundant illustration. This Ica period Dr Uhle is inclined to regard as contemporaneous with the period of Tiahuanaco or antecedent to it. The newly found Ancon ware differs, however, from the early Ica ware in being ornamented by incision instead of by painting, and on the whole represents a very distinct culture which is almost certainly of considerable antiquity.

Dr Taguchi's Brain-weight.—In response to a further inquiry concerning the brain of the Japanese anatomist, Kazuyoski Taguchi, the following communication was received from K. Yamagawa, president of the Imperial University of Tokio:

"In reply to your favor of May 9th, 1904, I am sorry to say that the figure for the weight of brain in the last information, sent to you through Miss Gardener about the postmortem examination of the late Professor Taguchi, was found to be wrong. It seems to me that the weight of his brain was put down as 1,920 instead of 1,520, which is the right figure, by mistake when it was copied from the original record. I apologize," etc.

The corrected figure places Taguchi's brain in the thirtieth place among

those of men notable in the professions, arts, and sciences, instead of in the second place, as first reported. See *American Anthropologist*, N. S., vol. V, 1903, pp. 595-596; vol. VI, 1904, p. 366.

EDWARD ANTHONY SPITZKA.

Dr Walter Hough, of the United States National Museum, has recently returned from an exploring trip in New Mexico and Arizona, bringing with him a collection of ancient pueblo, cliff, and cave material gathered principally on upper San Francisco river. Dr Hough started from Socorro, New Mexico, and crossed the country to Holbrook, Arizona, a distance of about 280 miles, visiting ruins at Magdalena, Datil, the upper Tulerosa river, Old Fort Tulerosa reserve, and near Luna, in New Mexico, and on Blue river in Arizona. One of the objects of this two months' reconnoissance was to locate and trace the lines of north and south migration into the basin of the Little Colorado and to learn more of the forebears of the people who inhabited the now-ruined pueblos explored by Dr J. Walter Fewkes and the Museum-Gates Expedition within the Colorado drainage. Much was learned during the trip regarding the distribution of several cultures. Extensive excavations were made in a group of ruins seven miles from Luna, New Mexico, on the Spur Ranch of Montague Stevens, Esq. These ruins proved to be exceedingly interesting for the reason that they occupy the margin of a fertile, enclosed valley which was once the bottom of a lake, and because they represent a rude and perhaps indigenous culture fostered in this favorable enclave. There is evidence also that an earlier culture, characterized by large, semi-subterranean, circular houses, was supplanted by that of a people who built rectangular stone pueblos. Two of the deeper excavations yielded fragmentary human bones and unchipped flint flakes in apparently undisturbed gravel, and a more extended research in this locality may furnish results of value in the study of early man in America. Numerous plans of the ruins were drawn and a fair collection obtained. A group of cliff-houses on Rita Blanca yielded, on exploration, many specimens illustrating the domestic life of their former inhabitants. A large ceremonial cave was also investigated and many ancient offerings of extreme importance were collected therefrom.

Study of Megalithic Monuments. — The greater part of the discoveries made during many years among the megalithic monuments of Morbihan, France, have proved that, although already explored, these monuments still contain archeological treasures. The excavations in the tumulus of Saint-Michel show that it contains many monuments besides

the principal crypt. It is therefore probable that other crypts are contained in the numerous tumuli of the Carnac region, thus rendering their complete scientific exploration of high importance. A committee on excavations has been formed at Carnac for this purpose, under the distinguished direction of M. d'Ault du Mesnil, president of the Commission of Megalithic Monuments of France and of Algeria, to which all are invited to send an annual contribution. Signatures and subscriptions are received at the Musée James Miln, Carnac (Morbihan), or by M. d'Ault du Mesnil, 228, Rue du Faubourg Saint-Honoré, Paris.

Congenital Digital Malformation in Negroes. — Dr D. S. Lamb, for Dr H. M. Smith, recently read before the Anthropological Society of Washington a brief paper on congenital digital malformation in a family of Virginia negroes. The malformation extended through three generations and the affected persons showed no other anatomical peculiarities.

The father had but two phalanges on each finger of each hand; the thumbs were normal, the nature of the nails is said to have been the same as in the next case. There was no indication that a similar malformation occurred in his parents or other relatives.

Second Generation: This man had five children, the eldest of whom was the only one to show malformation, which was just like that of her father, the thumbs being normal. There was a small nail on each index finger, but none on the others. This woman had nine children, six girls and three boys, of whom the six elder ones were malformed, but the three younger children were not.

Third Generation: In this generation six persons were affected. First, a girl; both hands; one phalanx absent from each finger; terminal phalanx of ring fingers rudimentary; ends of fingers clubbed; thumbs normal; small nails on index and middle fingers. Second, a girl; both hands; one phalanx absent from each finger; terminal phalanx of ring, middle, and little fingers rudimentary; thumbs normal; small nail on each index finger. Third, a girl; both hands; one phalanx absent from each finger; right hand rudimentary; terminal phalanx of index and little finger; thumbs normal; small nails on index and middle fingers of each hand; on ring finger of left the nail was shaped like a carpet-tack; right index, and middle and left index, middle, and ring fingers abnormally broad. Fourth and fifth, boys, and sixth, a girl, had hands like the third case except for slight differences in the nails.

Fourth Generation: Thus far the children of the fourth generation do not show malformation of fingers.

Dr Smith personally verified the information herein given in three of the cases and received a written statement in regard to the remaining five.

In discussing the paper Dr Lamb mentioned, as bearing on the hereditary transmission of malformations, that he knew of a woman who had what dentists call "underhung jaw," that is, the lower front teeth projected in front of the upper front teeth, instead of the reverse, which is normal. This woman's parents, as well as all of her brothers and sisters, had the same malformation.

Peabody Museum Researches. — The report of the operations of the Peabody Museum of American Archæology and Ethnology at Cambridge for the year 1902-03, submitted by its curator, Prof. F. W. Putnam, has recently been published. The report shows the usual increase in the collections of archeological and ethnological materials and in the facilities for displaying them, as well as in the usefulness of the Museum along the lines for which it was founded. Work in the field has been conducted by Mr Theobert Maler and Mr A. M. Tozzer in Central America and Mexico, Mr E. H. Thompson in Yucatan, Messrs M. R. Harrington and A. S. Parker in New York state, and Mr D. I. Bushnell Jr. in Missouri. The results of Mr Maler's latest explorations in Usumacinta valley were published, it will be recalled, in part III of volume II of the *Memoirs* of the Museum in 1903. Mr Thompson's archeological studies at Xul, Tzulá, and Chacmultun will be embodied in a report to be published by the Museum during the present year, accompanied with illustrations in color of several mural paintings. Mr Tozzer's researches have been in connection with the Maya-Quiche language as spoken by the Lacandonnes of Chiapas and the upper Usumacinta valley, whose dialect varies but slightly from that of the Mayas, while in their life and customs Mr Tozzer finds in the latter a striking instance of the effect of Spanish contact. Under the auspices of the Museum a grave, attributed to the Erie tribe, was explored by Messrs Harrington and Parker on the Cattaraugus reservation, New York, and several skeletons, a fine lot of pottery vessels, also characteristic pipes, stone and bone implements, ornaments, and many other objects were recovered. Some of the results of Mr Bushnell's excavations in Missouri were presented in a paper published in the last number of the *Anthropologist*. Professor Putnam acknowledges many gifts to the Museum during the year, and pays generous tribute to the work of the late Frank Russell and Howard B. Wilson, notices of whom appeared in these pages at the time of their unfortunate deaths.

Hopi Pottery Fired with Coal. — That the pottery of the Hopi Indians of Arizona, in prehistoric and probably early historic times, was fired by means of coal, has already been pointed out by Doctor Fewkes, who says: "There is evidence that the ancient people of Tusayan used coal for fuel, seams of which underlie their pueblos, but in course of time this substance has fallen into disuse, so that it is unknown as a fuel today. . . . This change probably took place at the introduction of sheep, whose dried droppings are now used in firing pottery." (Smithsonian Report for 1895, p. 580; see also p. 574.) The evidence to which Doctor Fewkes refers is doubtless the occurrence of cinder heaps on the rocky ledges about the East Mesa, especially below Walpi pueblo, which could scarcely have originated in any other way. To this may be added the testimony of the pottery itself, for the ancient ware is far better in quality than that made during more recent times, although we may assume that the same materials have always been available, and the same methods, save that of the firing, practiced. In further support of the evidence that coal was used as fuel by the Hopi, I wish to direct attention to a statement by Fray Agustin de Vetancurt, in his *Cronica de la Provincia del Santo Evangelio de México*, 1697 (reprinted, Mexico, 1871, p. 321). Speaking of the mission of San Bernardino de Ahuatobi (Awatobi) among the Hopi, Fray Agustin says: "Hay piedra pomez en cantidad, y piedras que sirven de carbon; aunque el humo es nocivo por fuerte." ("There is pumice stone in quantity, and stones which serve for coal, but the smoke is noxious in its strength.") Bituminous coal is still found in quantity in the Hopi country, and steps have been taken in recent years to develop the deposits. It is reasonable to suppose that the Indians would soon have discovered its adaptability in pottery firing, especially as they had nothing, so far as known, before the coming of the Spaniards and the introduction of flocks and herds, that could have served their purpose so well.

It may be added that the use of coal by the Pueblos was apparently confined to pottery firing, and was not used for heating or for cooking. There was good reason for this. In pre-Spanish times the pueblo dwellings were not provided with chimneys, the hatchway in the roof serving the double purpose of entrance and smoke-hole, hence the use of coal, with its noxious fumes, would have been impracticable in such ill-ventilated houses, but could readily have been employed out-doors, where pottery is always fired. So far as I am aware, no coal ashes have ever been found in the fire-pits of pueblo dwellings.

It is interesting also to note that no Coal clan exists among any of

the Pueblo tribes, but Firewood clans are to be found among the Hopi, San Juan, Santa Clara, and San Ildefonso Indians, and the Hano people once had a Firewood clan also.

F. W. HODGE.

Professor Frederick Starr, of the University of Chicago, has wisely taken advantage of the facilities offered by the Louisiana Purchase Exposition at St Louis, with its splendid ethnological collections and gatherings of primitive peoples, by forming a Louisiana Purchase Exposition class in ethnology. The work of the class began on September 1. Students in the University of Chicago, desirous of receiving credit for the course, presented their matriculation cards at the time of registering. Students from other institutions or outsiders, taking the course and passing the examination, will be given a certificate to that effect. For the full course the fee was \$12.00; for full work for one week, \$5.00; for the exercises of one day, \$1.00; for single exercises, 35 or 50 cents. Following is a calendar of the lectures, visits, and demonstrations:

CALENDAR OF 9:00 AND 10:00 O'CLOCK LECTURES AND 11:00 O'CLOCK VISITS AND DEMONSTRATIONS.

Sept.	9:00 a. m.	10:00 a. m.	11:00 a. m.
1	The Tribes of the N. W. Coast.	Social Organization : Totem Poles.	Kwakiutl and Clahoquaht.
2	Southern Athapascans.	The Study of Games.	Navaho and Apache.
3	The Pueblos of Today.	Religion of the Pueblos.	Pueblos; also Pimas and Maricopas.
5	The Cliff Dwellers.	Archeological Theories.	The Cliff Dwellers. (Pike.)
6	The Sioux and Relatives.	Sign Language and Gesturing.	The Indian Congress. (Pike.)
7	The Cocopas and Desert Tribes.	Bodily Modifications.	The Cocopa Settlement.
8	South American Indians.	The Origin of the American Indian.	The Patagonians.
9	The Eskimo.	Adaptation to Environment.	Eskimo Village. (Pike.)
10	Pygmy Problems.	Cannibalism.	Batwa and other Africans.
12	Ainu of Japan.	Physical Characters of Race.	Ainu Group.
13	The Negritos.	Fire-making.	The Negrito Village.
14	The Igorots.	Head-hunting and Kindred Customs.	The Igorot Village.
15	The Visayans and Tagals.	The Peoples of the Philippines.	The Visayan Village.
16	The Moros.	Music and Musical Instruments.	The Moro Villages.
17	The Japanese.	Art Industries.	Japanese Commission Grounds; Varied Industries Exhibit.
19	The Chinese.	The Evolution of Writing.	Varied Industries Exhibit.
20	The Aztecs of Ancient Mexico.	Native American Sculpture and Architecture.	U. S. National Museum Exhibit.
21	The Indians of Southern Mexico.	The Exposition's Department of Anthropology.	The Anthropological Building.

The Department of Anthropology of the University of California, instituted in 1901 in order to organize and coördinate the numerous archeological and ethnological researches supported in behalf of the University by Mrs Phoebe A. Hearst, is under the direction of an executive committee consisting of Prof. F. W. Putnam, chairman ; Prof. J. C. Merriam, secretary ; President Wheeler, and Mrs Hearst. The Department is devoted primarily to research and the formation of a museum. The courses of instruction which follow are offered chiefly as training for anthropologists ; in addition, public lectures on anthropological subjects are given from time to time.

General Introduction to Anthropology: The Indians of California, Dr Kroeber. Athapascans of the Pacific Coast, Mr P. E. Goddard. Geological History of Man, Assistant Professor Merriam. North American Ethnology, Dr Kroeber. Experimental Phonetics, Mr Goddard. North American Languages, Dr Kroeber. North American Archeology, Dr Kroeber. The History of Art in Greece, Dr Emerson. Seminary Exercises in Classical Archeology, Dr Emerson. Advanced Work in Ethnology, Dr Kroeber. Advanced Work in Primitive Languages, Dr Kroeber.

Full information will be furnished prospective anthropologists and others on application to the Secretary of the Department at Berkeley, California.

MR VOLNEY W. FOSTER, of Chicago, who died suddenly in that city on August 15th, was a delegate from the United States to the International Conference of American Republics held at the City of Mexico in 1901-02. As hitherto announced in these pages, the Conference recommended the appointment of an International Archeological Commission, of which Mr Foster became a member on the part of the United States through appointment by the President, and later a representative on behalf of the government of Peru.

AT THE CAMBRIDGE MEETING of the British Association for the Advancement of Science, which adjourned August 24, the following grants were made for anthropological research: Age of stone circles, £40; Anthropometric investigations, £10; Excavations on Roman sites in Great Britain, £10; Excavations in Crete, £75 and unexpended balance; Anthropometry of native Egyptian troops, £10; Glastonbury lake village, balance in hand; Anthropological teaching, balance in hand.

DR FRIEDRICH RATZEL, professor of geography in the University of Leipzig, who died August 9th, will be remembered by students of Ameri-

can ethnology chiefly by his authorship of *Völkerkunde*, first published in 1885-88, revised and reprinted in 1894-95, and translated into English by A. J. Butler and published under the title *The History of Mankind* in 1896-98.

THE EIGHTEENTH SESSION of the Congress of the Archeological and Historical Federation of Belgium was held at Mons, July 30-August 6.

DR GEORG THILENIUS, professor of anthropology at Breslau, has been appointed director of the Hamburg Museum of Ethnology.

THE UNIVERSITY OF FREIBERG has conferred an honorary doctorate on the anthropologist, Otto Ammon of Karlsruhe.