

- 1942 (with MUELLER, I. M.). Role of Seedlings in Recovery of Midwestern Ranges from Drought. *Ecology* 23: 275-294.
- 1943 (with ALBERTSON, F. W.). Resurvey of Grasses, Forbs, and Underground Plant Parts at the End of the Great Drought. *Ecological Mono.* 13: 63-117.
- 1943. Replacement of True Prairie by Mixed Prairie in Eastern Nebraska and Kansas. *Ecology* 24: 421-434.
- 1944 (with ALBERTSON, F. W.). Effects of Drought, Dust, and Intensity of Grazing on Cover and Yield of Short-Grass Pastures. *Ecological Mono.* 14. (In press.)
- 1944. Recovery of Midwestern Prairies from Drought. *Proc. Amer. Philos. Soc.* (In press.)

EDGAR T. WHERRY, University of Pennsylvania

Grant No. 403 (1940), \$500. Preparation of a monograph on the genus *Phlox*.

In continuation of this project, three articles on *Phlox* have been published during the year. One new species was described from Utah and one new subspecies from Florida.

WHERRY, EDGAR T., 1943. Report of Progress. *Amer. Philos. Soc. Yr. Bk.* for 1942: 162.

- 1943. Variation in *Phlox floridana*. *Bartonia* 22: 1-2, 1 pl.
- 1943. *Phlox amoena*. *Bull. Amer. Rock Gard. Soc.* 1: 59-62, 1 pl.
- 1943. *Microsteris*, *Phlox*, and an Intermediate. *Brittonia* 5: 60-63, 1 pl.

#### ANTHROPOLOGY

WALTER W. TAYLOR, JR., Harvard Medical School, AND  
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School of Medicine

Grant No. 648 (1942), \$200. Blood groups of the pre-historic Indians of Coahuila by serological tests of their mummified remains.

Observations were made on the blood group reactions of sixteen specimens of the American Indian mummies from Coahuila, Mexico. Four of these specimens consisted of bone only and were not tested. The results obtained to date with the remaining twelve are summarized in the accompanying Table I. The technic used has been described by one of us in previous publications.<sup>1,2</sup> Briefly it con-

<sup>1</sup> Boyd, W. C., and Boyd, L. G. Blood grouping tests on 300 mummies. *Jour. of Immunol.* 32: 4 (1937).

<sup>2</sup> Schiff, F., and Boyd, W. C. Blood grouping technic. Interscience Publishers, Inc., N. Y. (1942).

sisted of testing whether the samples when finely ground and mixed with anti-A and anti-B iso-agglutinins possessed the power of combining with and removing one or both of these agglutinins. The way in which these results enabled a decision to be made about the blood group is indicated in Table II.

TABLE I  
PRELIMINARY REPORT ON BLOOD GROUPING TESTS OF  
COAHUILA MUMMIFIED MATERIAL

| Group O                                                                                                                     | Group A           | Group B               | In process            |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------|-----------------------|
| C 59b-B1<br>C 68 -B3<br>C 24 -B13<br>C 79 -B1<br>C 24 -B-H<br>C 74 -B1<br>Cojote Cave "Mummy"<br>USNMacc 9462<br>Cat. 45581 | Coyoto Cave 22776 | C 68 -B18<br>C 54b-B1 | C 68 -B19<br>C 58c-B1 |

TABLE II

| Agglutinin removed | Blood group of tissue |
|--------------------|-----------------------|
| Neither.....       | O                     |
| Anti-A.....        | A                     |
| Anti-B.....        | B                     |
| Both.....          | AB                    |

We introduced the check of using both human and immune sera for each test, as the finding that a tissue having the power of removing the anti-A agglutinin from human type B serum had also the power of removing anti-A from an immune rabbit serum greatly strengthened confidence in the specificity of the reaction.

*Reagents.* Human sera of types A and B were prepared in the usual way. Not all sera were found to have high enough titers. The B serum was diluted to make it of equal strength with the A. The A and B sera were not usually mixed for the test, on account of the possibility of some neutralization of the agglutinins by A and B substances normally occurring in the sera themselves. Type O serum was not used because of the commonly unequal strength of its agglutinins, and the possibility that the removal of one ag-

glutinin from an O serum may in some cases involve some removal of the other.

Immune sera, anti-A and anti-B, were prepared by injecting rabbits as previously described,<sup>2</sup> absorbed with B or A erythrocytes respectively, titrated, and diluted to the desired strength.

*Procedure.* Our final procedure in examining a specimen of mummified tissue was as follows: The material was ground in a mortar, and about 0.08 gram of it treated in a small test tube with human sera of groups A and B, and a mixture of anti-A and anti-B sera in volumes of 0.4 ml.; the sera having a titer of between 1:8 and 1:32. After the usual mixing and 48 hours standing, the supernatants were removed and titrated, using 0.1 ml. pipettes to make the progressively doubled dilutions. Final decision as to the group of the mummy was based on the amount of agglutinin removed, as judged from the titer before and after absorption. The serum was checked from time to time for changes in strength. It was found that most mummies either reduced the titer one tube, or did not affect it at all, but some specimens reduced it by several tubes. If the titer of a serum was reduced three tubes or more, under these conditions, it was considered presumptive evidence of the presence of the appropriate agglutininogen in the mummified tissue. If the human and immune sera behaved alike in this respect, as they usually did, the mummy was classified as A or B, as the case might be.

The results reported in Table I are to be regarded as tentative only as some retests still remain to be made since the experiments were interrupted by war work on the part of one of us, but the work is practically completed. If results shown here are confirmed, the results will be of considerable significance. Suggesting that the Coahuila culture represented an ethnic group not identical with all the modern inhabitants of the American Southwest<sup>1</sup> and judging by their blood groups possibly allied to the Big Bend Basket-maker culture or possibly to certain early South American Groups.<sup>2</sup>

<sup>1</sup> Boyd, W. C. Blood groups of American Indians. *Amer. Jour. Phys. Anthropol.* 25: 2 (1939).

<sup>2</sup> Boyd, W. C. Blood groups of the South American Indians in handbook of South American Indians. (In press.)

## PSYCHOLOGY

FLOYD H. ALLPORT, Maxwell Graduate School of Citizenship and Public Affairs, Syracuse University

Grant No. 666 (1942), \$200. Studies of the influence of war-news headlines upon civilian morale: a contribution to war-effort research and the social psychology of news-presentation.

The studies here reported were carried out in collaboration with Milton Lepkin, Eleanor Cahen, Pearl Waxman, Raymond Rhine, and other members of the Morale Seminar at Syracuse University.<sup>1</sup>

### I. THE EFFECT OF SITUATIONAL ASPECTS OF THE NEWS, AS PRESENTED IN HEADLINES, UPON THE READER'S MORALE

Three main questions were investigated in this part of the research: (1) Which are more effective for motivating citizens to participate in the war effort—headlines telling of "bad news," or headlines presenting "good news"? (2) If headlines are subdivided into categories on the basis of the side or country doing the action (United States, Allies, or the enemy) and on the basis of the nature of the action itself (winning, losing, or holding), what combinations of actor and action raise the motivation of the reader to the highest level, and what combinations are low in this respect? (3) Does actual newspaper practice show a regard for morale value in the types of headlines published?

One hundred and twenty-six main war-news headlines, of representative character, were employed. They covered the latter half of 1942, and most of them were taken from twelve daily newspapers of large circulation, representing different parts of the country. These headlines were printed on cards closely resembling the upper half of the front page of a newspaper. The banner-head of a Syracuse daily newspaper was employed on each, and below the headline was printed "filler" news-material which remained constant for all cards and was ignored by the subjects in giving their reactions to the headline.

The headline cards were displayed, one at a time, on an easel in the front of the room, and the subjects reacted to each by checking

<sup>1</sup> This report is drawn largely from dissertations submitted by Milton Lepkin and Eleanor Cahen for the degree of Master of Arts at Syracuse University in 1943 and 1944. Mr. Lepkin's dissertation is now on file in the library of Syracuse University.