had had considerable experience in recording and evaluating brain potentials identified the records. The particular records identified were relatively new to each of us. The one to identify the record was given the matching sample and was instructed to find its mate on the wall. When he had made his decision he was not told whether he was right or wrong. Several days later, each of us repeated the task of matching. This whole process was repeated for the second half of the 44 records so that each one of us identified each record twice.

A total of 352 identifications were made (8×44). By chance, 4.5 per cent. of the records could have been correctly identified. Ninety-four per cent. of the records were correctly identified (20 errors). Seven records were missed by some one of us; one by three of us; and five by two of us. Thirty-one of the 44 records were not missed by any of us.

Some records were identified very easily and quickly. This was so because they had very distinctive characteristics. As may be judged, one or two of the records which were missed by two or three of us were very difficult to identify. This was so because two or three of the records were strikingly similar.

Every one of us became more accurate as we progressed from the first to the fourth trial. Two of us got 91 per cent. right the first time, and 100 per cent. right the fourth time. The other two got 82 per cent. right the first time and 100 per cent. right the fourth time. We are inclined to believe that this indicates learning what characteristic details are distinguishing.

Each of us listed the criteria by which we matched the records. Frequency, amplitude and form of the waves, each played its part. Under form, such characteristics as beta waves, the shape of the alpha waves and the relationship between the negative and positive deflections were noted. Also, we appeared to size up the records as a whole, evaluating such factors as trains, stability of the base line and fluctuations in frequency and amplitude of the waves. Certain other possible cues need to be mentioned. Because of differences in developing the sensitized recording paper from time to time, records differ from each other in regard to color, under- or over-development and accidental exposure to light. Some differences between records were also caused by differences in width of the time line, speed in passage of the paper and wrinkling. One is never certain that he has been able to eliminate such accessory cues, but trials made to see to what extent identification could be carried out by these alone showed them to be as confusing as helpful.

Our conclusion is that human brain potentials have individuality and that an individual can be distinguished from other individuals by his brain potentials. We don't know yet how consistent an individual's brain potentials are from day to day. This is the next question to settle.

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THE USE OF THE TERMS COENOCYTE AND SYNCYTIUM IN BIOLOGY

The terms coenocyte and syncytium are frequently confused in biological literature. They are always used to describe multinucleate masses of protoplasm, but some writers use the words synonymously, while others have assumed a difference without making a clear distinction between the two terms. Neither do the definitions as given in Webster's New International Dictionary, second edition, 1935, help to clarify this confusion.

Since, in biology, there are two types of multinucleate masses of protoplasm with respect to ontogeny and since there are in use two terms for such structures, it seems highly desirable that the terms be differentiated and used consistently in the interest of proper comprehension and exact expression. The two ontogenetic types of such structures are: (1) an enlarged protoplast, the nuclear divisions of which have not been followed by cytoplasmic cleavage, and (2) a protoplasmic mass formed by the fusion of several protoplasts without the fusion of the individual nuclei. Examples of the former are: the filaments of Vaucheria and Rhizopus, segments of Cladophora filaments and Hydrodictyon nets, embryo sacs of seed plants, latex cells and striated muscle fibers. Examples of the second category are young xylem tracheae, latex vessels and young plasmodia of Myxomycetes.

The term coenocyte should be used in connection with the first type of structure described above, and syncytium with the second. This distinction was clearly brought out in S. H. Vines's "Textbook of Botany," 1895, pp. 90–91. In response to a letter of inquiry sent recently to the editors of Webster's New International Dictionary, the same interpretation was held: ". . . the multinucleate structures that are called *coenocytes* arise . . . by enlargement, along with nuclear divisions, of single protoplasts, while the multinucleate structures that are called *syncytia* arise by the uniting of separate protoplasts."

About the only distinction one can find in modern biological literature is that zoologists as a rule use only the term syncytium, while botanists tend to use coenocyte nearly to the exclusion of the other term!

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THE BLACK WIDOW SPIDER IN VIRGINIA

In his note entitled "New Localities for the Black Widow Spider" in Science for November 13, 1936, Lowrie makes the statement that this spider has not been officially recorded from Virginia. This must come as a surprise to the naturalists of the state, since the black widow must be fairly prevalent all over the state, so much so that nobody has considered it significant enough to record its occurrence. Around Farmville it is rather common. A few minutes hunt under old logs, fence rails, etc., is almost certain to unearth a specimen, and scarcely a year passes that specimens are not brought into our laboratory.

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SPECIAL CORRESPONDENCE

NEW ENGLAND INTERCOLLEGIATE FIELD TRIP

THE 32nd annual meeting of the New England Intercollegiate Geologists was held on October 10, 11 and 12, at Littleton, New Hampshire. Dr. Marland Billings, of Harvard University, was in charge of the various trips, and was assisted by Dr. Arthur B. Cleaves, Dr. Charles R. Williams and Jarvis B. Hadley. The field excursions were planned to illustrate the geology of the Franconia, Littleton, Moosilauke, Mount Cube and Woodsville quadrangles. The geology of these quadrangles has recently been studied by those who led the trips.

On Saturday, October 10, more than 100 geologists were in the parties led by Billings and his associates, to study the stratigraphy and structure of the Ordovician (?), Silurian and Devonian rocks under conditions of epi-zonal (low-grade) metamorphism. The Highlandcroft granodiorite was studied in its type locality where it is separated by an unconformity from the overlying middle Silurian fossiliferous Fitch formation. The slates of the lower part of the Littleton formation (lower Devonian) and overlying volcanics were also seen. Continuing upward in the stratigraphy, the slates and sandstones of the upper part of the Littleton formation were viewed where an Oriskany fauna had been obtained. Finally, the Ammonoosuc volcanics, of upper Ordovician age, consisting of soda-rhyolite, volcanic conglomerate and soda-rhyolite tuffs, were seen. Localities at which the Ammonoosuc thrust fault is observable were also visited.

Three trips were conducted on Sunday, October 11, by Drs. Billings, Williams and others. Dr. Billings conducted a study of the Paleozoic rocks in areas where they showed mesozonal and katazonal metamorphism. Excellent fossils were found in the mesozonal Fitch along the Ammonoosuc near Gale River. Along Gale River the mesozonal Littleton is well exposed. Near Northey Hill the geologists studied the exposures of the Ammonoosuc volcanics, the Clough conglomerate, the Fitch formation and the Littleton formation on the limbs of the Garnet Hill syncline. In this same area the Littleton formation yields many excellent staurolite crystals. The Bethlehem granodiorite gneiss, with well-developed north-south vertical foliation and a pronounced vertical linear feature, was seen east of Swiftwater. The final stop of the trip was at Lost River, where both the Littleton formation and the Kinsman quartz monzonite are in the katazone.

Dr. Williams conducted a trip to the summit of Mount Hale and pointed out the compelling evidence for mapping the Mt. Garfield porphyritic quartz syenite as a ring-dike. This ring-dike is an arcuate body, 13 miles long and varying from one quarter to one mile in width. It forms approximately 100° of arc. The leader suggested that field evidence indicated that the syenite was intruded along some fracture or fracture system and fulfilled the requirements of a ring-dike. On the trail the party also studied the Devonian Talford schist, a gray quartz mica schist, with occasional garnet and sillimate, injected by sills and dikes of granitic material of the New Hampshire magma series.

A special glacial trip was led by J. W. and R. P. Goldthwaite, G. W. White and R. J. Lougee in the Whitefield and Mount Washington quadrangles to see the classic Bethlehem moraine (?). The Twin mountain ice contact deposits, the Zealand Esker, a delta near Meadows and a series of spillways, near Jefferson, and their associated deposits were examined. The trip concluded with a view of the low divide (spillway?) between the Connecticut and the Androscoggin drainage at Bowman and a view of the ravines and cirques on the north slope of Mt. Washington. R. P. Goldthwaite summarized some of his findings of his recent studies on the date of cirque cutting.

On Monday, October 12, a trip, led by Dr. Williams, was conducted to see the Franconia "breccia" and the Conway granite at the basin, and the deep post-glacial weathering of the Conway granite. This group also visited the Flume and Lost River, and at the former locality, Dr. Williams demonstrated that the Flume has been eroded along a series of trap dikes.

On the same day Jarvis Hadley led a trip within the Moosilauke and Mt. Cube quadrangles. Owl's Head dome, one of the great igneous domes of western New Hampshire, was viewed. One of the most striking features of this trip was the readily discernible evidence of the three-fold repetition of the Clough