

The process of expression, like that of thought, is conditioned by the physical and psychical nature of man. It is not necessary here to describe the different steps of direct imitation by gesture and cry, of designation from analogy, and finally of imitative and arbitrary graphic representation, by which it is agreed that language was brought to its present high state of efficiency as an instrument for the spoken and written expression of thought.

Those principles of expression that are common to all languages, such as the principles of general grammar and those of rhetoric, have their basis in the nature of the intellectual processes. The principles of general grammar are necessarily the complement of the principles of logic; as the principles of rhetoric are necessarily the complement of the principles of dialectic. The special grammars of particular languages are more arbitrary in their origins, and occupy a position intermediate between general grammar and such purely conventional devices of expression as spelling, punctuation and variation of letter-forms.

The nature of the outline as a process-instrument antecedent to the full thought and its complete expression is not sufficiently understood, even by those who avail themselves of its aid in composition. The utility of the outline is due to the fact that by it we are able to express and contemplate major thought-relations without giving attention to minor ones.

The use of a certain number of visible symbols must be helpful in the process of connected thought; for by thus enlisting the service of the sense of sight, the mind is enabled the more easily to occupy itself with the judgments it has already formed, and accurately to determine their mutual relations. On the other hand, for the same reason, that is, because the mind through the sense of sight is fixed upon them, a great number of words organized into propositions, become a hindrance to that subtle activity of the mind by which, from a chaotic mass of unassimilated elements, organism of living thought is developed.

In order, then, to the most effective thinking about thought, as a process necessarily involved in that of composition, there is requisite a system of symbols which, enabling the mind through the eye to take firm hold of the growing thought, are yet not so numerous or complicated as to hinder their own frequent readjustment, as the subject takes form in the mind. These requirements the ordinary form of the outline, with its brackets and catch-words, effectively supplies.

The cry that composition as it is taught in the schools is a failure is heard on every side. Why are our teachers not more successful in this really fascinating subject? Is it not because they are ignorant of, or indifferent to, the scientific basis of composition, as it has been set forth in this article? Certainly a great reform is called for in the way of far less attention, relatively, given to the trick of juggling with words, and more to the nature and handling of thought. Frightful as the names "logic" and "dialectic" undoubtedly are to the common run of teachers, the subjects they represent not only are harmless in themselves, but lie at the very foundation of effective communication.

THE INTERNATIONAL CONGRESS OF ANTHROPOLOGY.

THE International Congress of Anthropology convened at Chicago, Monday, August 28th, and held daily morning and evening sessions during the entire week, closing Saturday, September 2d. All the meetings were well attended, and there was more than a full supply of excellent

papers on various branches of anthropologic science, which frequently elicited animated discussion.

The session on Monday was opened by the address of the President of the Congress, Dr. Daniel G. Brinton, whose subject was "The Nation as an Element in Anthropology." It was intended to show the physical, mental, and social changes which take place when man passes from a consanguine or tribal condition of government to that which is national. This transition exerts a profound influence on the physical man through new laws of marriage and relationship, and on religion, ethics, jurisprudence and art through the extension of the intellectual horizon. The goal of such changes, the speaker predicted, will not be reached in nationalism, but in internationalism, and in the supremacy of the individual, as the only proper aim of government. The remainder of the day was taken up with the exhibition of trepanned skulls from ancient Peru, by Senor M. A. Muniz, and explanations of the anthropological laboratories of the Department of Ethnology at the Columbian Exposition, by Drs. Franz Boas, Joseph Jastrow, H. H. Donaldson and G. M. West. The latter offered a paper of great merit on the anthropometry of North American school children, and Dr. Boas one on the physical anthropology of North America, the result of very extended measurements.

Tuesday was devoted to Archaeology, principally American. Mr. H. C. Mercer, however, exhibited an artificially flaked stone from the San Isidro gravels, near Madrid, Spain, exhumed by himself, and explained its probable palæolithic character. Professor G. H. Perkins read a resumé of archaeological investigations in the Champlain Valley, and Professor Otis T. Mason described in a most interesting manner the mechanical resources invented and developed by the aboriginal toilers of the American continent. The anthropological work at the University of Michigan was sketched by Mr. Harlan J. Smith; Senor Emilio Montes entered a plea for the great antiquity of the civilization of Peru; and Dr. Carl Lumholtz, just back from his explorations among the cave-dwellers in the Sierra Madre of Chihuahua, described their condition and exhibited specimens of their industries. The paper which attracted most attention, however, was that of Mrs. Zelia Nuttall on the Mexican calendar system, in which she presented a highly ingenious theory for the solution of this obscure and famous problem, supporting it with lengthy computations and the opinion of competent astronomers. The afternoon was spent in discussing the collection of games in the anthropological building by Dr. Stewart Culin, Captain J. G. Bourke and Mr. Frank Cushing.

The session on Wednesday was devoted to ethnology. It was opened by a paper by the President, Dr. Daniel G. Brinton, on the alleged evidences of ancient contact between America and other continents, in which he categorically denied that any language, art, religion, myth, institution, symbol, or physical peculiarity of the American aborigines could be traced to a foreign source. Miss Alice C. Fletcher and Prof. J. C. Fillmore presented a joint study of native songs and music of great interest. Mr. Walter Hough exhibited and described bark cloth from various primitive tribes; Mr. G. A. Dorsey related a peculiar observance among the Quichua Indians of Peru; Mrs. French-Sheldon spoke of some curious customs noticed by her among the natives of East Africa; and the Rev. S. D. Peet presented a memoir on secret societies among the wild tribes. The afternoon was spent in discussing the anthropological collections in the U. S. Government Building, Professor O. T. Mason referring to an industrial exhibit based on linguistic stocks; Mr. W. H. Holmes offering a critical study of the development of flaked-stone implements; Mr. Frank Cushing giving the

particulars of a curious Zuni dramatic ceremonial; and Dr. Cyrus Alder reviewing museum collections made to illustrate religious history and ceremonies.

Thursday morning was assigned to folk-lore, and papers were presented by Mr. W. W. Newell on ritual regarded as a dramatization of myth; by Dr. Franz Boas on the ritual of the Kwakiutl Indians; by Mr. J. Walter Fewkes on Tusayan ceremonial dramatization; and by Mr. George Kunz on the folk-lore of precious stones. The afternoon was devoted to the collections of American archaeology in the anthropological building under the care of Professor F. W. Putnam, Chief of the Department, who delivered the opening address on the subject. He was followed by Mr. Frank Cushing on the "cliff-dwellers"; by Mrs. Zelia Nuttall on Mexican archaeology; by Mr. G. A. Dorsey on South American archaeology; and by Mr. E. Volk on cache-finds from ancient village sites in New Jersey.

"Religions" was the subject taken up on Friday morning. Dr. Morris Jastrow, Jr., began with an explanation of the method and scope of their historical study; Mrs. Sarah Y. Stevenson gave an interesting sketch of an ancient Egyptian rite illustrating a phase of primitive thought; Mrs. Matilda C. Stevenson contributed a chapter in Zuni mythology obtained by personal study on the spot; and Mr. F. Parry read a theory relating to certain elements of religious symbolism. The afternoon was given to discussion of various points in North American ethnology by Professor O. T. Mason and to the ethnology of Paraguay by Dr. Emil Hassler.

The last day, Saturday, was set apart for "Linguistics," and for reading papers which had been crowded out on previous days. Dr. Daniel G. Brinton gave a brief review of the present status of our knowledge of American languages with especial reference to the parts of the continent in which it is deficient. These he especially found in Mexico and central South America. Dr. Boas stated his classification of the languages of the north Pacific coast; Dr. C. Abel illustrated his theory of the affinities of the Egyptian and European languages; Mr. Richardson read on the Cameroons of South Africa; Mr. Wildman on the ethnology of the Malay peninsula; and Dr. Jahn on the ethnological collection in the German village at the Fair. The session and the week closed with a social dinner in the Midway Plaisance given by the American to the foreign delegates, presided over by Professor F. W. Putnam and Dr. D. G. Brinton, which closed the scientific proceedings in the most agreeable manner.

All of the papers mentioned above were read before the congress and discussed as far as time permitted. Besides these, a number were read by title from writers who could not be present. Among them were Mr. Horatio Hale, A. L. Lewis, Dr. A. F. Chamberlain, Dr. F. S. Krauss, M. Raoul de la Grasserie, Dr. F. Jacobsen, Senor C. De la Torre, and others.

The number of foreign delegates embraced a fair proportion of those present, and in this respect the Congress merited its title as an "international" one. Among them may be mentioned Dr. Carl Peters, the Imperial German Commissioner for East Africa, Senor Manuel M. de Peralta, Minister from Costa Rica, Dr. Carl Abel, the well-known Egyptologist, Mr. C. Staniland Wake, of London, Dr. Ernst, of Venezuela, etc.

It was decided to print at an early date the transactions of the Congress by subscription. They will form a volume of 500 pages, price \$5.00, subscriptions for which may be sent to Dr. Franz Boas, Secretary, Department of Ethnology, Columbian Exposition, Chicago.

FREDERICK WARNE & Co. will issue immediately a "Dictionary of Quotations from Ancient and Modern English and French Sources."

LETTERS TO THE EDITOR.

* * * Correspondents are requested to be as brief as possible. The writer's name is in all cases required as a proof of good faith.

On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.

The editor will be glad to publish any queries consonant with the character of the journal.

INSECT SWARMS.

On the evening of June 26th, last, the fire department was called to two of the highest buildings in this city, the alarms being caused by an appearance as of smoke issuing from the pinnacles of the towers. In both cases the appearance was found to be caused by clouds of insects. On the following evening I witnessed the same interesting phenomenon about the court-house tower. I knew that I was looking at a swarm of insects, yet it was difficult to realize that it was not smoke, issuing from the summit, and driven by a brisk breeze. Near the tower the swarm was narrow and dense, gradually widening and thinning to a distance of about fifty feet, where it seemed to vanish by attenuation. The extent of the swarm varied but little during my observation, but the constant changes within it exactly simulated puffs of smoke driven away by the breeze. The deception was still more complete from the fact that the insects swarmed on the leeward side. On other dates up to July 18th I saw the same display, in each instance agreeing in every detail with the above description. The insects appeared to gather just before sunset and probably remained till attracted by the lights of the city.

On a store front near-by I captured some insects which I have good reason to believe were identical with the swarmers. These are Neuropters, about one-half of an inch in length, exclusive of the antennæ, genus and species unknown.

C. D. McLOUTH.

Muskegon, Mich., Sept. 2.

PROSOPOPHORA; A GENUS OF SCALE-INSECTS NEW TO THE NORTH AMERICAN FAUNA.

SOME time ago, I found at Las Cruces, N. Mex., a chenopodiaceous plant suffering severely from the attacks of scale insects (Coccidæ). On examination, it turned out that there were three species of these insects present, all new to the fauna of the United States. One is a form of *Mytilaspis albus*, Ckll., known hitherto only from Jamaica; the second is *Ceroplastes irregularis*, Ckll., the description of which, from Mexican specimens, is about to be published; and the third, to my surprise, proves to be a new species of Mr. Douglas's genus *Prosopophora*.

The genus *Prosopophora* was established in 1892 (Ent. Mo. Mag., August) for a species found on orchids in Demerara, which superficially resembled a *Lecanium*, but was distinguished by a number of peculiar characters. This year (Trans. N. Z. Inst.) Mr. Maskell has described two more species of the genus, found in Australia on *Acacia* and *Eucalyptus* respectively. Now we have a fourth from the United States,—so that within a little more than a year four species have been discovered of a remarkable genus, which had been altogether overlooked until 1892!

Mr. Maskell has kindly sent me both his Australian species, and I have the Demerara one from Mr. Newstead. Our insect is most like *P. acacie*, Mask., in appearance and color, but it is amply distinct in its structural characters. I propose to call it *P. rufescens*, and the following short description includes its more important characters: *Prosopophora rufescens*, n. sp. Scale waxy, about 4 to 4½ mm. long, shape and outline of *Lecanium hesperidum*, with a slight but distinct median keel, and a subdorsal row of raised points on each side. Posterior end with a small oval orifice, as in *P. acacie*. Surface obscurely granular