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GENERAL INFORMATION FOR STUDENTS.

The following information is given concerning the admission of foreign students into the faculties and schools of France:

Instruction is absolutely gratuitous in the universities and faculties of France. They are open without reserve to strangers as well as to native students, and the grades established are the same for each. It is required, however, that both foreign and native students should give evidence of certain preliminary study. In the case of the French student this consists in the presentation of a bachelor's diploma certifying that courses of secondary instruction of a given nature have been completed. Strangers who have obtained from institutions in their own country certificates of instruction are admitted after a ruling shall have been made by the Minister based upon the advice of the proper section of the Advisory Committee on Public Instruction, whose duty it is to ascertain the actual value of the certificate offered. This is rendered necessary by the fact that the certificates of study in France and in foreign countries are not always equivalent in value.*

The requirements in connection with obtaining degrees in the courses of higher instructions are the following: Matriculation, access to the library, privileges of practical work (only in the faculties of medicine and the schools of pharmacy), examination, certificate of proficiency, and diploma. The

* Graduates of foreign universities who desire to enter the courses of the faculties should address an application to the Minister of Public Instruction, accompanied by (1) the original diplomas, with a request that their equivalence in France be determined, and that they be approved; (2) a certificate of birth (original and translation).

fees for matriculation are 30 francs quarterly, or 120 francs per year. Library privileges cost 10 francs per year. The fees for examination and diploma vary from 40 to 100 francs per year, according to the faculties.

These provisions relate only to students who are candidates for degrees. Those who wish simply to receive the instruction given by a faculty, without asking a certificate or diploma, will be permitted the greatest freedom of action.

Foreigners who give evidence of sufficient previous instruction will be admitted into most of the special schools either as pupils or as free auditors.

In a subsequent article, information will be given in regard to the facilities offered by the principal universities and special schools.

G. BROWN GOODE,

Secretary of the American Branch of the Comité Franco-Américain.

THE ESSENCE OF NUMBER.

NUMBER is primarily a quality of an artificial individual. By artificial is meant 'of human make.' The characteristic of these artificial individuals is that each, though made an individual, is conceived as consisting of other individuals. In language the designations for artificial individuals so characterized usually contain other connotation. Examples are a flock, a herd, a bevy, a covey, a throw, a flight, a swarm, a school, a pack, a bunch, a cluster, a drove, a company, a brood, a group, etc. To any such artificial individual pertains an important quality, its 'Anzahl,' which may agree or differ among such artificial individuals, as may their color. But something like color is made and recognized by insects and animals, so that color is not so highly artificial as number, but will serve for an illustration. Just as the color of a bunch of grapes might be identified by use of a

card of standard colors, and so a particular descriptive color name attached to the bunch, in the same way by a well-known process of identification its 'Anzahl' may be determined and the proper descriptive name attached. This particular process of identification is called counting, and used originally the standard set of artificial individuals makable from the fingers.

The creation of artificial individuals having this numeric quality, 'Anzahl', the creation of number of necessity preceded counting, which is only a subsequent process for identification, for finding the 'Anzahl' where it is already known to be.

Number is so peculiarly human a creation that it might be used as an argument for the unity of mankind. Man has found it advantageous to perceive in nature distinct things, the primitive individuals. Each distinct thing is a whole by itself, a unit. The primitive individual thing is the only whole or distinct object in nature. But the human mind takes primitive individuals together and makes of them a single whole, an artificial individual and names it. These are artificial units, discrete magnitudes. The unity is wholly in the concept, not in nature. It is of human make.

From the contemplation of the primitive individual in relation to the artificial individual spring the related ideas 'one' and 'many.' A unit thought of in contrast to 'many' as not-many gives us the idea *one* or 'a one.' A 'many' composed of 'a one' and another 'one' is characterized as 'two'. A many composed of 'a one' and the special many 'a two' is characterized as 'three.' And so on, at first absolutely without counting, in fact before the invention of that patent process of identification now called counting. The 'Anzahl' of a group is wholly abstract, in that it represents all at once the primitive individuals or elements of the group or artificial individual, and nothing more. There never was and

never will be a concrete number or anything concrete about number.

The number in the sense of 'Anzahl' of a group is a selective photograph of the group, a numeric picture which takes or represents only one quality of the group, but takes that all at once. This picture process only applies primarily to those particular artificial wholes which may be called discrete aggregates. But these are of inestimable importance for human life.

This overwhelming importance of the number-picture after centuries led to a human invention as clearly a device of man for himself as is the telephone. This was a device for making a primitive individual thinkable as a recognizable and recoverable artificial individual of the kind having the numeric quality. This is the recondite device called measurement.

Measurement is an artifice for making a primitive individual conceivable as an artificial individual of the group kind, and so having an 'Anzahl,' a number picture.

It may be likened to dyeing cotton with aniline dyes. This will give the cotton a color which may then be identified by comparison with the set of standard colors.

The height of a horse, by use of the artificial unit, a 'hand,' is thinkable as a discrete aggregate and so has a number-picture identifiable by comparison with the standard set of pictures, that is by counting, as say 16. But to argue from this the implicit presence of the measurement idea in every number is the analogue of maintaining the implicit presence of the process-of-dyeing idea in every color.

GEORGE BRUCE HALSTED.

AUSTIN, TEXAS.

ROBERT EDWARD EARLL.

MR. ROBERT EDWARD EARLL, who died on March 18th, at 'Chevy Chase,' near Washington, was one of the oldest and most