

Remembering By Forgetting

Psychology

If you sometimes forget the names of persons and places, you are invited by Prof. Knight Dunlap of Johns Hopkins University to join with him in testing a new psychological theory of habit formation that he explained.

If you wish to remember, try hard to forget. That is Dr. Dunlap's method, paradoxical and contrary to previous psychological theories as it may sound. So when next you rediscover the name of the person you can not remember, make up your mind that you do not wish to remember and put in a few seconds of good hard forgetting. You may be surprised, as Dr. Dunlap was, to find that the next time you see the person you have remembered his name.

Dr. Dunlap's theory of habit formation and its application to the breaking of undesirable habits was first enunciated nearly two years ago. It is almost the reverse of the theory William James formulated and which scientists have ever since held to be practically axiomatic: that doing something over and over again fixed the habit more firmly.

The method for habit breaking recommended by Dr. Dunlap is to deliberately do what you are trying to stop. Repetition under the proper conditions has been found to break the habit. Dr. Dunlap told the psychologists that his present re-

searches are "either the most foolish or the most significant line of activity in which I have engaged."

Thumb sucking in four and five-year-old children has been greatly reduced by having the child suck his thumb for a short period each day with mother or nurse explaining to him that that is the time to suck his thumb and that this performance will help him stop the habit at other times.

Stammering is another habit to which Dr. Dunlap has begun to apply his new method but in this habit as in many others cure or decisive improvement can not be expected in less than a year. Another investigator following Dr. Dunlap's methods achieved remarkable success in breaking a group of college students of fingernail biting. Errors in type-writing and musical renditions have also been attacked by the new method.

Dr. Dunlap made the discovery of the application of his habit theory to memory of names while he was riding past a small Maryland town which he habitually forgot. He tried to forget it and since then he has always remembered. Since this first success, Dr. Dunlap said, "I have been having a good time demolishing my specific amnesias as fast as they present themselves."

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Children Slow to Sleep

Physiology

Believe it or not, children take, on the average, twenty minutes to go to sleep. This is the finding of the mothers of one thousand children under eight years of age. The mothers have kept records in co-operation with Dr. Josephine C. Foster of the Institute of Child Welfare at the University of Minnesota.

Children less than six months old sleep about fifteen hours a day. Children seven years old sleep practically eleven hours. Averaging the records of children of all ages and records of all seasons of the year, the time required for dropping off to sleep was twenty minutes.

Late hours, popularly associated with city life, do not affect city youngsters, the records indicate. Country children went to bed later and rose earlier than the city children.

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Backhand Writing Inborn

Psychology

The child who persists in pushing his pen backhand style in spite of school fashions in penmanship is really seeking to attain a harmony of movement in accordance with his own physical traits. Even though he may not be recognized as a left-handed individual, his desire to slant his writing backward is an indication of some left-handed or left-eyed trait, according to Dr. June Downey, of the University of Wyoming.

Dr. Downey has studied forty-five supposedly right-handed individuals who slant their writing back. Some of these, she found, had been left-handed children who were taught to use the right hand. Some were ambidextral. Fully sixty per cent. of the group either had the left eye dominant, or else the two eyes were impartially depended upon.

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Hardest Compound

Chemistry

Tungsten carbide, the hardest compound known to science, and for years a mere curiosity, has now begun to find extensive commercial use. With it, hard alloys, such as manganese steel and armor plate, can be machined in lathes, planers and shapers, says Dr. Samuel L. Hoyt, of the General Electric Co., in a report to the Engineering Foundation, soon to be published as a Research Narrative.

One of the constituents of this remarkable substance is tungsten, the familiar metal of which the filaments of our electric lamps are made. Though years of research resulted in a process of making tungsten so that it could be drawn into fine wires, when combined with carbon, it makes a substance second in hardness only to the diamond. Tungsten carbide will scratch a sapphire, which is the second hardest natural mineral.

At first, despite its hardness, tungsten carbide was too porous to stand the strain imposed upon a cutting tool. But researches of Dr. Hoyt and his associates have shown how these difficulties can be overcome. In this form it is known commercially as "carboly".

"In testing high-speed steel tools," said Dr. Hoyt, "it is customary to use a 'test log', i. e., a long, round bar of nickel-steel, making a cut in it at about 50 feet per minute. Because of the lack of effect on the carboly cutter, however, it was necessary to increase the speed to 200 feet per minute. At this speed a high-speed steel cutter failed in 16 seconds, with its edge burned off. The tungsten carbide tool, under identical conditions, was run for an hour before the test was arbitrarily stopped, although the tool was still cutting and capable of continuing for a much long time.

"Consequently, the carbide tool in many operations effects substantial savings of time and costly labor. In others it gets much better results. With it numerous operations are feasible which are not possible with any other known tool material. Nevertheless, the alloys of tungsten carbide have limitations. They will break down, for example, in work involving very heavy pressures on the tools. Carboly is as yet on the market only to a limited extent although it has been in practical use for the past three years. A great advance in the art of cutting metals appears to be in immediate prospect."

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