Author unknown. This article appeared in two newspapers in slightly different versions: "Psychology and the Mind Art." *Philadelphia Press*, October 25, 1895; "Building Brains." *Philadelphia Inquirer*, October 25, 1895. The two versions have been combined to give a fuller account. Adjustments from the original text appear in brackets.

## PSYCHOLOGY AND THE MIND ART

The Educational Club made an auspicious beginning to its fall series of meetings last evening. The assembly room of the Normal School, Thirteenth and Spring Garden streets, was filled with an interested audience when Dr. Elmer Gates began his address on "Psychology and the Mind Art," which proved to be one of the most interesting topics ever discussed before the club.

Doctor Gates began by saying that about twenty years ago he observed that on some days his ideas came free and easy; that it was easy to contrive experiments and invent devices; that it was easy to understand and learn a difficult subject, and that he was full of exhilaration and good humor. He noticed that on other days, and often for quite a period of days, he was unable to achieve a single new idea, or to contrive the simplest inventions. Seeing that the advent of new ideas did not always follow the acquisition of new facts and that at other times new facts were soon the beginning of new ideas and insights, he began to study the causes which promote or hinder original thinking.

Pupils having nearly the same mental capacity may witness the same phenomenon of making the same experiment and one will often strike out valuable new ideas and the other will not, and it is not always the seemingly brightest pupil that attains to the new ideas. Sometimes the acquisition of new data is immediately followed by original ideation, and, at other times not for years, when suddenly the new insight dawns in the mind without having acquired new data upon that particular subject.

"Evidently," said Dr. Gates, "our minds are at work without our knowing it—growth is taking place—the mind, so to speak, assimilates its raw material and produces conclusions and insights. We do not make our own thinking Ideas come unbidden into our consciousness from the great domain of subconscious functioning. We cannot get new ideas unless we acquire knowledge of phenomena, but such a knowledge is not always followed by new ideas.

"[M]any people know a great deal about a subject and spend much time in thinking about it, trying to discover something new to add to the world's knowledge of that subject as well as to add to their own satisfaction and fame, but after years of trying, fail. We all know people who have great knowledge upon certain subjects, but who never discover anything new or advance that domain of knowledge.

"Others knowing less about that subject frequently discover much that is new, and are full of insights and ideas of the most interesting and valuable kind. Surely some laws are being violated in the one case and some conditions are being favorably complied with in the other case."

Doctor Gates then described how, by means of careful observations of his own bodily temperatures and their rhythmical variations of perspiration changes, of his respiratory rhythms, his food, exercises, salivary conditions, hunger thirsts, appetites, fatigues, pains, and other organic conditions he found many interesting facts concerning the operations of the mind. He found that certain organic conditions and habits interfered with brain operations and that certain others promoted them, and that certain environmental conditions hindered organic thinking and certain others augmented it. He collected his discoveries and reduced into a rational system the mental habits and processes of the thinker and investigator. He carefully studied the physiological periodicities and rhythms of the thinking functions and found that there are appropriate times for one kind of mental work when other kinds cannot be performed with equal efficiency. He also discovered that the human organism transforms and utilizes energy at different rates and with different degrees of efficiency when engaged in different kinds of mentation, and that thinkers and investigators usually waste most of their energy in wrong mental habits and by antagonizing cosmical conditions.

Dr. Gates then spoke of the art of originative mentation which his discoveries and investigations naturally led to—the art in which the subconscious functionings of the brain, composing as they do, ninety per cent. of our mental life, are systematically regulated. He also referred to conscious originative mentation in which each and all of the mental faculties and functions are trained to their most efficient normal functionings in scientific research, invention, discovery, study, speech, working and all kinds of practical activity.

The lecturer proceeded to develop more in detail the method of taxic brain building as well as the art of curing immoralities, [giving] examples of what he meant by perception, conception, imagination, ideation, thinking, and so on.

[He concluded] his lecture by stating that the art of original thinking is simply the art of scientifically accumulating the data to think with, the art of systematically applying all of the mental faculties to the process of thinking, the art of promoting the functioning of the entire organism so as to favor mental progress and the art of regulating the environmental conditions to the same end.