

of such world-wide renown as Lombroso, Flammarion, Marconi, Sir William Crookes, Sir Oliver Lodge, Professor Richet, Professor Hyslop, Professor James, and others, cannot be easily set aside by calling them fanatics or dupes," especially, we may add, when it is so clear that the majority of psychologists have not as yet the courage of their often anti-bread-and-butter convictions.

Doctor Cutten's discussion of the influence of suggestion on both the individual organism and on the crowd is thoroughly scientific. Suggestion alone, however, will not account for the miracles, he thinks, nor that plus certain probable inaccuracies in our present biblical accounts of the occurrences. For a Baptist clergyman, however, raised in the Nova Scotian fogs (the first atmosphere of so much stern conservatism and so many thoughtful men) such a viewpoint can but be deemed eminently satisfactory even from a physiologic location. Two chapters of the book are devoted to the relations of sexuality to religion, and while much has been left out, as is fit, the gist of the psychological relationship is ably presented except perhaps in the anthropologic field familiar to readers of Ploss and Bartels. That sexual processes in their mental phase are closely concerned with religious zeal oftentimes no one can doubt, surely; causal relationship has, however, never been proven, and perhaps the author too little accepts the scepticism of Professor Ladd and of Professor James as to this matter, and it may be that he is too much convinced, as many others have been, by the multitude of mere associations between sex and religion.

The book is ably written and its reading is pleasant, the author having a style clear and precise, and yet free of forbidding technical diction. It should have a large usefulness among all classes, since none lacks interest in religion in some one or other of its meanings. Dr. Cutten is to be congratulated on the production of one more bond between academic psychology and the great practical and universal freeholds of mankind. Psychology is rapidly coming to possess its own and religion orients itself apace in the natural faculties of the mind.

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REPORT OF A CASE OF PSYCHOCROMES- THESIA

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OF all the phenomena encountered in the study of abnormal psychology few are of more interest than that rather rare phenomenon — psychochromesthesia, or "colored thinking." Doubly interesting does it become when associated with the synesthesia of "colored hearing," or, as the French term it, "l'audition colorée." The studies of Galton, Locke, Albertoni, Peillaube, and Harris are familiar to most students of abnormal psychology, and occasionally the technical journals report a case. But the reported cases are not so numerous as to pass unnoticed. It is hoped the report of the following case will add something to the already growing interest in this peculiar condition.

M. C. O., the seer in this case, is an unusually intellectual and charming young matron of thirty years of age. The mother of two children, she has lost none of her love of youthful things, nor has the quality of her intellectual life deteriorated in the least. To be mildly critical, she is far above the average in vigor of intellect, and excepting her decidedly mystical turn of mind, a woman of no mental bias of any kind. Just what part heredity plays in this psychic peculiarity of hers it has been impossible to determine, but undoubtedly that factor must be taken into account. One of her sisters thinks in color, while another does not, and when a child it was her custom to occasionally pound her less fortunate sister because she could not see and enjoy the wonderfully brilliant display of color so constantly present before her own eyes. She does not

remember a time when she was not used to thinking in color, and as a child to shut her eyes and see ring after ring of gay colors whirling in mystic mazes through the air was one of her chief pleasures, and so realistic were they, and so vivid, that her mother on more than one occasion spanked her most soundly for what she thought wilful fabrications. These concentric rings were always composed of a central disc of yellow, a second and surrounding ring of red, another of green, this latter color being present in most of the chromatic thinking of this psychochromesthete.

In the association of colors with persons, M. C. O. does not associate color with all people, most people appearing to her as black, her psychochrome for space. Only certain persons produce the sensation of color, and then only following the visualizing of that person. Thus, when first entering the presence of M. C. O., she visualizes me, recognizes me, and at once becomes blind to all but a flash of clear and beautiful yellow. So accustomed is she to this phenomenon, that unless it is referred to she never alludes to it. In fact, few if any of her acquaintances are aware of this peculiarity of hers. Her husband, myself, religion, God, Buddha, priests, the word music and certain mystic symbols always appear to her as yellow. Those symbols showing an opening of any kind, as the circle, triangle, or swastika, are yellow, because, as she expresses it, "a flood of yellow light flows through them." To the contrary, those symbols presenting straight lines are always seen as white. As examples, the swastika, the circle \bigcirc , the triangle \triangle and the letter "S" are always visualized as yellow, while the cross $+$ and the letters "T" and "I" are invariably white. A serrated line like this $\wedge\wedge\wedge$, no matter when seen or in what connection, always brings with it the vivid vision of sea water in that peculiar shade of green always referred to as "angry green." Her little daughter is red, and her son blue and white.

For the months, hours, and numbers M. C. O. has no psychochrome, but for the days of the week, excepting Thursday and Saturday, she has. Monday is green, Tuesday red, Wednesday and Sunday purple, and Friday black. For the hours she has no psychochrome only as they fall within the broad limits of morning, afternoon, and evening.

The word "morning" is visualized as green, to think of it is to see green, while the afternoon is red, and the evening always amethyst, passing into the darker shades of purple as night approaches. To think of space is to be plunged at once into utter darkness. An interesting feature of this case is that, as a rule, letters, people, and objects generally that have no distinctive psychochrome are not visualized as being in themselves colored, but with a background of color. There are, however, certain exceptions to this rule, as, for instance, the letter "L," which is not only colored in itself a clear green, but brings with it the actual vision of a green budding tree. Happiness, as a word or as an emotion, produces the psychochrome of green; all desire is green, storm is green, as is also the letter "A." "E" is red, "B" and "C" are purple.

The synesthesia of "color hearing" is rather pronounced in the case of M. C. O. Certain musical selections are invariably associated with certain colors. Chopin is purple, Mozart green, Wagner red. For the "Intermezzo" from *Cavalleria Rusticana*, she has a passionate fondness and always visualizes a purple iris; while Schubert's "Serenade" brings instantly into view a rainbow in all its gorgeous hues, and, strangest of all, the sensation of having swallowed it. In music, the dominant is red, while the low tones are always purple. Any loud noise is red; if an unpleasant voice, the green of angry water. The only change that has taken place in the psychochromes in this case is that of anger, which in the childhood of M. C. O., was red, but now a "dull green."

Odors, too, have their appropriate psychochrome. Musk is always gold and brings with it the vision of dark faces, and the odor of carnations causes clouds of crimson to pass before the mind's eye.

In the life of our seer, color has ever played the most important rôle. To close her eyes is to at once usher in a giant kaleidoscope with its never ending play of color. In addition to this there are two set pieces that alternate and which, when her mind's eye is not busied with those visions for which there is some objective cause, at once assume the center of the psychic stage. The first of these pictures was

present at so early an age that she does not remember a time when she did not see it. There is a green hill surmounted by two broken marble columns, with the blue sea lapping its feet. The other, more complex and elaborate, presented itself at a much later date, and is of a Moorish doorway leading into a courtyard cool with the spray of splashing water and sweet with the scent of pomegranate flowers. A giant black in garments of snowy white stands guard over all. These pictures are present only when there is a call to fill a vacant frame, much as we see the painted drop in our theaters.

Beyond the very interesting phenomena of chromatic thinking and hearing, M. C. O. presents certain characteristics of the psychic, or medium. She has had several premonitory dreams,—always in their appropriate psychochromes,—and on several occasions has written automatically.

CONTRIBUTION TO THE PSYCHOLOGY OF GENERAL PARESIS

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IT is an opinion among general practitioners, shared even by a certain number of specialists, that the general paretics admitted to the asylums are completely demented, that all their ideas are absurd, that they are unable to judge the simplest things.

This is true in regard to the paretics who are in the last stage of the disease. In cases in which the disease is not of very long duration a psychological study of the patients shows that if their mental capacities are reduced, they are able, however, to answer correctly a great number of questions. A conversation of a few minutes is not sufficient to acquire this conviction; a paretic who answers very badly the first questions, is disoriented in time and place, who claims to be a millionaire, God, etc., may show after a careful examination a considerable intellectual store. To be able to judge the mental state of a paretic it is necessary to observe him during a few days, to waken him from his dulness, to gain his confidence.

The study of the psychology of the paretics has been somewhat neglected. All the abnormalities of their mental life are explained by the intellectual deterioration. This seems to be so obvious that relatively little has been done to prove it.

Desiring to elucidate the pathogenesis of the delusions in general paresis, I started with the study of their psychology. The examination of their capacity of judging the length, time, and value of objects gave me some interesting results, which I desire to report, without touching at present the problem of delusions.

The patients who have been used for these experiments have all been in the hospital for a considerable time. This excludes the preparalytic period and presumes that we have to deal with somewhat advanced cases.