

*The Field of Distinct Vision of Form in the Insane and in the Instinctive Criminal* [*Il campo della visione distinta delle forme negli alienati e nei delinquenti-nati*]. (*Arch. di Psichiat.*, vol. xxvi, fasc. i, ii, 1905.) Audenino.

A paper on this subject was published by Roncoroni in the *Archivio* in 1903, and the present contribution of Audenino is designed as a continuation and extension of the earlier researches.

Audenino's investigations were made on a series of 97 individuals, of whom 29 are described as normal, the remainder being made up of 18 instinctive criminals, 27 epileptics, and 23 patients suffering from various forms of insanity. The method used in the inquiry was the same as that employed by Roncoroni: An arrangement was fitted to a Landolt's perimeter, by which, in lieu of the ordinary test-object, one or two small squares were exposed to sight against a white background; in this way, by frequently altering the disposition of the squares, the limits were ascertained within which there was distinct peripheral vision of form.

The author gives the results of his research as follows:

(1) In normal subjects who are free from ocular disorders there is rarely any limitation of the field of distinct vision of form. In only 3 of the 29 individuals examined (13 *per cent.* roughly) was any such limitation found. In youths the field is often more extensive than in adults.

(2) In the instinctive criminal and in the moral lunatic the field is frequently narrowed, being so found in 8 out of 13 cases, without eye disease or error of refraction. The narrowing of the field for white does not always correspond with that of the field of distinct vision.

(3) Limitation of the field of distinct vision was noted in 77 *per cent.* of the adult epileptics, and in a smaller proportion (40 *per cent.*) of young epileptics. In some individuals it became more pronounced about the time of the fits.

(4) In the other diseased conditions—hysteria, alcoholism, paranoia—the field was sometimes found to be narrowed, but much less frequently than in the preceding groups.

The author argues that this limitation of the field of distinct vision, occurring, as it does, in individuals without ocular disease whose refraction is normal and whose visual acuity is often above the average, cannot be attributed to peripheral defect, but must depend on central causes. This view, he contends, is supported by the fact that the degree of limitation is most marked in the gravest forms of debility, namely, in epilepsy and in moral insanity. Its apparent variation in some epileptics in relation with the convulsive attacks would point in the same direction. He would, therefore, connect the condition with the moral anæsthesia and the various abnormalities of sensibility which, according to the school of Lombroso, characterise the epileptic and his congener, the instinctive criminal.

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*Observations on Colour Hearing* [*Beobachtungen über farbiges Hören*]. (*Arch. f. Psychiat. und Nervenkrank.*, B. 40, H. 2). Lomer, G.

Dr. George Lomer has made a renewed study of this curious condition, in which the hearing of a sound is combined with the sensation

of a coloured spot. He tells us that up to the year 1896 about 140 articles on the subject had appeared, principally by French and Italian authors. D'Abundo finds this affection to be hereditary, and some of its subjects neuropathic. In one case the vowels were associated with sensations of colour, and not the consonants. Words had the colour of the vowels which composed them. Some sounds were accompanied with colours, while tunes were not. In other cases all letters were accompanied with colours. The same sounds were not in different individuals associated with the same colours, but *a* was often associated with red, *u* with black, and *i* with white. In one instance the associations were given as follows: *a*, with black; *e*, with bright yellow; *i*, with sulphur yellow; *o*, with brown; *u*, with dark blue; *ai*, with a deep dark colour; *oi*, with purple; and *au* with blue. The name Luise was associated with dull blue, Margerethe with brown, Ida with yellow, George with deep brown, Max with dark blue, and so on.

Dr. Lomer observes that there are certain innate correspondences between the perception of colours and that of musical sounds. Albertoni has shown that in people who are colour-blind there are typical defects of the musical sense. Those blind to green take up in hearing, and repeat in singing, different notes from those blind to red.

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##### 5. Ætiology.

*Heredity and Predisposition in General Paralysis [Erblichkeit und Prädisposition resp. Degeneration bei der progressiven Paralyse der Irren]. (Archiv f. Psychiat., Bd. xli, Heft 1, 1906.) Näcke, P.*

Following up his previous studies of the inborn degenerative elements in general paralytics, Näcke here reviews the question at considerable length in reference to the most recent investigations, summarising a very large amount of literature in his usual careful and precise manner. He finds that there is still need for thorough investigation on a large scale and with due regard to detail; the personal equation differs so widely that the control study of normal individuals must always be carried out by the same investigator, and it is better for inquiries of this kind to be in the hands of two investigators working together.

After defining afresh what he means by "degeneration," Näcke reviews the latest observations, and concludes that though they are by no means harmonious, they lead to the conclusion that stigmata are more numerous in general paralytics than in normal persons, while in number and apparently also in gravity they approach those found in other psychoses (excepting idiocy and epilepsy). As regards morbid heredity, a review of the literature shows that the majority of authors now admit that it is very frequent in general paralysis, according to some almost as frequent as in other forms of insanity, though very seldom heavily charged. The existence of such heredity appears to favour syphilitic infection, partly because there is a tendency to fall into excesses, and partly because there is sexual precocity. As regards the psychic disposition of persons who become general paralytics, Näcke observes