Before closing this rather discursive paper I may properly allude to another form of speech deprivation, which Kussmaul calls verbal blindness, or the inability in persons who have previously been able to read printed or written words, to comprehend their meaning. This morbid condition may be, and probably most frequently is, associated with verbal deafness, and when it is so connected it is reasonable to believe that the underlying cerebral morbid condition is more extensive and formidable. Both verbal blindness and verbal deafness stand in close affinity with amnesic aphasia, but sometimes the latter may be supposed to be present when it is not. Dr. Seppilli discovered that one of his patients who was so deaf to words as to appear to hasty observers completely dumb, had neither forgotten the meaning of words nor how to articulate them. Her expressions were, of course, purely spontaneous, for she had no dialogistic capability. To nothing spoken to her could she make appropriate response; but the little she did speak was normally pronounced, e.g., "Please, Doctor, send me home; I do not want to stay here; I am quite well; my name is Assunta." Dr. S. was unable to test her reading or writing capacity, as she was "analphabetic." In this case there was neither motor nor amnesic aphasia. But this exemption was not to be interminable. In a few months she had an apoplectiform attack, from which she fell into a state of transient semi-coma, and lost the power of speech. She survived this attack about two months, and died finally from pyemia, consequent on a rebellious parotitis, and intractable bed sores over the sacrum and the trochanters. The post mortem showed the whole surface of the first temporal convolution on the left side, and the adjacent border of the second, diseased, besides several spots on the first and second frontal convolutions, and the orbital region of the third frontal, but not its middle part, or its foot. This exemption from diseased condition in Broca's lingual region, taken in connexion with the absence of previous motoraphasia, is deserving of consideration, whilst the diseased position of the temporal lobe, taken in association with the patient's verbal deafness, seems to indicate for verbal deafness a cerebral location distinct from that of motor-aphasia.

It is not only natural, but really necessary, that functional disorders which can exist separately

from, and independently of, each other, should have different and distinct cerebral local centres; but considering the intimate relationship that, in the normal state, exists between the faculties of hearing and seeing, on the one side, and vocal and written language on the other, it must also be necessary that structural media of inter-communication between the several centres should be provided. (Vide Archives, March, 1884, page 121, for Kussmaul's, and page 135, for Wernick's ideas of the arrangements.) It is easy enough, on paper, to diagraph anatomical arrangements to meet the exigencies of physiological hypotheses, yet such delineations are often conducive to the introduction and the retention of injurious errors. Kussmaul's diagram of four small circles, surmounted by his large ideogenetic centre container, with their graceful curvilineal connectors, is rather fascinating; but until anatomy shall have shown that it is a veritable representation of cerebral arrangements, and not a mere vision of his mind's eye, it might be as well that we do not let it any deeper than this poetic organ into our domain of mentality. In Wernick's brain map (p. 135) we see how easily and gracefully his little curve, connecting the regions x and y passes across the rubicon of the Sylvian fissure, but when we try the experiment on a real human brain, we must certainly discover that the path is not so short nor so easy to trace as the map shows it. The most, or the best we can say of these anticipative delineations of yet unexplored cerebral mail routes, is that they are better suited to please the imagination than to convey reliable or useful instruction or sound knowledge.

I am well aware, gentlemen, that to those of your number who have had the good fortune and the patience to read the elaborate article by Kussmaul on Aphasia, in Ziemssen's Encyclopædia of Medicine, this paper must appear a very lame production; but its object has not been to treat exhaustively of the numerous varieties of morbid speech defect. My chief desire and aim have been to invite from my auditors such interesting facts in this relation, as have fallen under their own observance, for I cannot doubt that some of you must have encountered cases of cerebral disorder in which aphasia, in some form or other, or in some degree, has commanded your thoughtful attention, and no little increment to our knowledge of a functional disorder, whose study has been of so recent inception, can fail to prove instructive.