

Dr. Seppilli has exhibited, in copious tabular forms, the details of twenty cases gathered by him from the medical histories of twenty persons who came under the observance of various physicians, nineteen of which have been continental and one English. It might almost go without saying that the majority of these have been German—no less than thirteen of the whole number. This fact may serve as a sufficient assurance of the minuteness, if not also of the accuracy of the records. In the separate vertical columns Dr. S. has given the ages and sex of the patients, the aphasic symptoms, the degree of intelligence, the state of sensibility and motility, and last, the autopsic findings. In seven of the patients the state of intellect was more or less weakened; in the remaining thirteen it was not affected. The hearing was perfect in 18; in the remaining two its condition is not stated. Dr. Seppilli has given the pathological state of the brain in 15 of the 20 cases, in which *post-mortems* were obtained, and he has added to these two cases of his own, of which he has given very ample details, thus making 17 well-observed cases. The autopsic results are thus summarized by Dr. Seppilli:

In all the 17 cases the first temporal convolution on the left side was found diseased.

In one of the 17 the second temporal convolution was diseased, and in two others in company with that of the right side. The third temporal convolution was diseased in only one of the two above named, and then on both sides. The island of Reil was diseased on the left side in 5; third left frontal in 4; the second left frontal in 2; the first left frontal in 2; the ascending left frontal in 3; the inferior parietal lobule on the left in 5, and on the right in 1; the angular gyri in two on the left and one on the right; the occipital convolutions in two on the left, and on both sides in one of these. *The right temporal lobe was not found isolately diseased in a single case.*

It is to be noted that the third left frontal, or Broca's convolution, was found diseased in only four cases, and the island of Reil, which later writers have associated with the foot of the third frontal, as the governing centre of speech articulation, was diseased in five cases on the left.

This preponderance of diseased condition on the left side of the brain seems, in this form of aphasia, to show an interesting parallelism with

the diseased condition found on the same side in motor aphasia, but at the same time a very notable difference as to convolutional localization. It is seen that while motor aphasia has its morbid seat in the third frontal convolution and the island of Reil, the aphasia called verbal deafness has its seat preferentially, in the first or uppermost temporal convolution on the left, and the diseased condition of the second temporal does not occur isolately, but always by extension from the first, and then only limitedly, in contiguity with the first. The part diseased is invariably the convolutional cortex, with occasional dipping into the white medullary matter beneath it. The meninges are found tenaciously adherent to the cortex, from which they do not separate without dragging off some of its softened and disintegrated constituents.

When Broca condensed his cerebro-lingual creed into the quaint expression, "brain left-handedness," many cynical critics were tempted to regard *his* brain as entitled to the first rank in the class of strabysmal thinkers, but many who then scoffed have since learned to admire the aptitude of his laconic expression. The discoveries of Sir Charles Bell taught us that the voluntary muscles of the right side are under the government of the left side of the brain, and *vice versa* those of the left side under the government of the right side of the brain. Bell did not venture to assign the motorial sovereignty to any special parts of the brain, but modern physiological experimenters have amply filled up the lacuna. Hundreds of zealous cerebral explorers, whose findings are often opportunely confirmed by able clinicians, have placed the doctrine of cerebral localizations on a basis from which the cavils of fault-finders and flaw-hunters have failed to upset it. If our right hands are pre-eminently, though not indeed exclusively, under the control of the left side of the brain, why should not that other, too often unruly member, the tongue, and its motor-coadjuvants, be placed under the same dignified authority? But it will be objected that the tongue and its associate speech muscles, are not one sided movers, yet they sometimes are one sided non-movers. It does not however follow because the left side of the brain, or in this relation, to speak more pertinently, Broca's convolution, with, probably, the island of Reil, is the chief seat of speech legislation, and, it may be, of idea-motor inception, that the right