#### CASE STUDY OF DYSLEXIA.

By THELMA STOHR.

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Reading in itself is a complex activity requiring a number of interlinked skills. Briefly, according to Buckhardt, Bond and Bond, and Cole, these consist of: 1. A vocabulary ability in which the individual must be able to acquire an increasing vocabulary by understanding the meanings of words and to unlock or work out long and incomprehensible appearing words. 11. Perception, or visual acuity in reading. The minimum requirement being a sharp and accurate discrimination of the differences between the shapes and configuration of the visual symbols of letters, words and phrases. 111. Comprehension, or conception of what is being read. This factor is a very necessary adjunct, for the mere mechanics of reading are of no use whatsoever if there is no understanding.

Not infrequently, the speech therapist comes across dyslexic, or reading disability cases. Quite often they show one or several characteristics upon examination. Briefly, these may be: 1. Psychological, such as hyperemotionality, poor attention, too high a level of attainment, rivalry with siblings, etc. 11. Educational factors which seem to be the main causes of the difficulty and are mainly due to failures to acquire the right techniques that might have been acquired had the right guidance been given at the time. 111. Neurological characteristics in which, according to Orton and Dearborn, there is a confusion or conflict in cerebral dominance, and is more likely to appear when people are neither definitely left nor right handed.

Finally there may also be physical factors such as poor auditory conditions, such as hard of hearing, and/or definite weakness of auditory discrimination. Defects of vision and/or lack of visual acuity may also be another characteristic.

An interesting case which was recently treated by the writer showed several of these characteristics, the details and treatment of which, are as follows:

Female. Age 13 Years.

Duration of therapy: 12 months.

# HISTORY OF DIFFICULTY:

This case was referred as being in need of treatment, because, although she managed to keep up to grade in all her work, she was a complete non-reader with a phenomenal auditory memory. She was able to repeat accurately word for word, lengthy material which had been read out to her, and by this means was able to do all her learning work, and to hide her disability for

such a long time. Even her essays, which were excellent, were dictated.

#### . CONDITION PRIOR TO THERAPY:

### 1. PSYCHOLOGICAL PICTURE:

This case was emotionally unstable. According to her mother she had had a "nervous breakdown" at the age of two years due to some obscure reason.

She was very restless, complaining that she couldn't sleep at night due to terrifying nightmares. Her great lack of concentration was very apparent during the interview and in the test situations.

## 11. EDUCATIONAL PICTURE:

Arithmetic and mathematical ability, spelling and composition were excellent. Writing was untidy and at times incomprehensible.

### EXAMINATION OF READING ABILITY FACTORS:

# A. Reading Attainments:

Word recognition was entirely nil. Case had not the slightest idea of the visual appearance of the words, but made wild guesses. She burst into tears during the attempt. Silent reading was non existent, and the oral reading consisted of making up the story. This was highly imaginative, but had nothing to do with the context.

# B. Comprehension:

Nil.

# C. Technique of Word Attack.

Nil.

#### D. Perceptual Orientation.

This was very interesting. There were 'no eyo movements, as the girl did not even attempt to look at the reading material. She fixated on one part of the paper, and stared through a haze of tears.

# E. Visual Perception.

There was not the slightest response to this test, even the names, capitals, and lower case letters were not known.

## F. Auditory Perception.

She could respond accurately to any auditory cue. Thus the cue of "b"

sounded out led to her response of "boy", "baby". Spelling was excellent and words spelled out to her were recognised as a gestalt. She could repeat a full page of material five minutes after it had been read to her. It was interesting to note that she was word perfect.

# 111. NEUROLOGICAL:

There had always been left handed tendencies with an inability to use the right hand correctly.

### 1V. FORMER METHOD OF TEACHING:

Apparently this had been mainly the "look and say" method to begin with, and the teachers' complete repetoire of teaching methods was attempted with hopeless results.

#### CONCLUSIONS:

This girl was definitely an audile typo, the auditory cue being the sole lead for the learning and memory processes. This explained the good spelling and recognition of spelt words and the excollent dictated essays. Although her sight was normal there was no visual discrimination or perceptual ability whatsoever, and it seemed possible that this was compensated for to some extent by her amazing auditory memory. Probably her lack of reading ability was closely related to her extreme emotionality, as she seemed to be outstanding in other school subjects. It is possible that some of the tests which she would not attempt, frightened her.

## PRINCIPLES AND TECHNIQUES OF THERAPY:

The child's amazing auditory memory would probably be a handicap to her in developing visual cues and this one factor would be very important to bear in mind. It seemed impractical to devise any therapy based on a visual approach, so a kineasthetic method was used.

## VISUAL RECOGNITION:

The visual symbols were always correctly written in a word but as she found it impossible to recognise that word afterwards, a variation of the Fernald-Keller method was tried. First certain signs were presented, and she was asked to trace over them with her finger several times until she had learned the "feel" of them. When this was achieved after a number of weeks, the signs were presented in duplicate, and she was asked to match them, drawing over them again if she was not sure.

Then this was done with the individual letters, carefully going through the whole alphabet, until the girl had learnt to match them accurately. Next this was done without tracing. This seemed at first impossible to achieve, but finally after many failures, she was able to call out the sounds and names of the letters presented. Slowly the various phonograms were worked through in this way, until eventually simple words were introduced.

In order to consolidate what she had learnt up to now, word matching games were used. Lists of many words were compiled, and she had to choose certain words in a list and find their counterparts either in the same list, or elsewhere. At first it took her an hour and a half to match twenty words correctly, always tracing when she was doubtful, but she improved to such an extent until she could match a hundred words in fifteen minutes.

#### FORMAL READING AND COMPREHENSION.

In this way, a fairly good sight vocabulary was obtained, and her emotional response to this situation became more stable. It was therefore possible to begin formal reading, with the use of the Gates-Huber reading work books. These consist of simple instructions in cutting out, colouring and exercises; she enjoyed them immensely, and worked through the several in a few weeks, thus bringing her reading to a higher grade. As she evinced a desire to read some fairy tales, and brought a book of these along with her, questions concerning these were given for home assignments which she completed.

## TECHNIQUE OF WORD ATTACK.

As there was difficulty in word attack, several techniques were taught with little success. These were word recognition, (from the look and say method), phonetic blending, which strangely enough proved futile, and tracing, which although fairly useful, was not always successful. Finally it was decided to let her spell the words out, first orally, and then, if there was any improvement, silently. This was in instantaneous success, especially when used in conjunction with other methods, and reading seemed to progress rapidly. It was surprising to see how quickly she could attack a word by spelling, and often the pauses in the oral reading were very slight.

When she came across new words which were not included in her vocabulary, she attempted to work them out by a process of tracing and sounding, and met with a very fair measure of success.

With the improvement in oral reading, speed in silent reading was now aimed at, with special reference to accuracy of comprehension. This was slow at first but soon she was able to read any story or book.

#### RESULTS OF THERAPY.

Although the progress was so very slow, it was definite, and good reading habits were established. At first the early attempts at reading showed reversals and poor eye movements, which however were remedied by the use of the slit card. Another difficulty was that she recognised individual words and wove a story around these, ignoring the context completely. This was deceptive to the listener who was not aware of the contents of the story, and she burst into tears when this tendency was pointed out to her. It ceased when

word perception improved.

## RE-EXAMINATION OF READING ABILITY FACTORS.

#### Reading Attainments:

Word, sentence and paragraph recognition was good. Oral reading was satisfactory, and to a lesser extent, silent reading. This probably indicates that the auditory cue was still highly influential.

#### Comprehension:

When the reading was of an oral type this was excellent, but mediocre during silent reading.

## Techniques of Word Attack:

Three techniques which were useful when used in combination with each other were used. Visual recognition in which the shape and configuration of the words were studied, was first attempted, if this failed the word was spelled, and finally, if there was still no success, tracing and blending followed. At this point it is interesting to observe that she used lip movements during the study of a word. This was not corrected as it appeared to assist in the working out of a word.

## Visual Perception:

This had definitely developed as seen by the process made here. It had often to be assisted by the kineasthetic method even after the case had learned to read fairly well. Words however could be satisfactorily broken into component elements.

This case was one of the most difficult problems that the writer had ever tackled. Progress was slow and many times disheartening, and it was only due to continual motivation that she persevered. There was no doubt that the auditory cue was so dominant that it interfered with the development of the other cues necessary for learning.

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