

## An 'As If' explanation of Dyslexia, Dysgraphia etc\*

The brain stores its different 'representations' of things in different places. When you perceive an object, then the brain 'consults' a 'master index' that tells it, unconsciously, to go and look up the various ways it stores information about that object.

An image of an object will be stored in a different place to the smell, feel, written word and spoken representation of the same object. This may also apply to intangibles, such as emotions and feelings,

Imagine that each set of representations (image, sound, smell, feel, written or spoken word) is a separate filing drawer or computer drive, which only has that sort of representation in it.

When the brain is confronted by a particular object, say an apple, it has to search through its 'filing system' until it finds a match for an, image, smell, sound, or the written or spoken word 'apple'.

Most people will first match the 'apple idea' with an image of an apple, and then that 'apple' image will have links, through the 'master index', to the smell, written or spoken word.

Which type of representation we identify first is very individual. Some people will think first of it's image, some of it's smell, some of it's spoken word and some of it's written word. Usually this initial recognition makes links to all the other 'representations'.

In the 'dys' variations, there may not be a good 'master index', the links may not be stored in a way that are easily followed, or some of the representation 'drawers' or 'drives' may be jumbled or even absent. If an individual does not have an intact 'written representation' drawer, containing the image of the written word, they may not be able to write it, even if they have images of the individual alphabet letters, and can write the word 'apple', if the individual letters are spoken.

Thus, although an individual may know exactly what an 'apple' means *to them*, they may not have links to its spoken or written word, but they may have links to 'representations' that most of us don't have.

In some, the, links can be made by practice, and by using learning aids. Some individuals develop 'tricks', to be able to link up the various representations. In others, the whole 'filing drawer' has just not developed, and there may be no learning aid or trick that allows them to make a particular type of representation, by any of the usual methods.

However the plasticity of the brain that continues into adulthood, sometimes allows different and new areas to incorporate the missing representations, or transform their additional special representation into the more usual ones. This is a conscious learning process and may take much longer and be much harder, than the usual, innate system that most people have.

\*This is not meant to describe precise anatomical structures, but a 'Systems' approach to understand how people with the various 'Dys Variations', have sometimes un-remedial 'differences', which are not due to developmental delay, stubbornness or stupidity.

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