Right Hemisphere Participation in Language Learning: a Human Perspective

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"Sit back. Make yourself comfortable - Relax - Close your eyes - Listen to this piece of music by Evangelis - and let images come to your mind any images... When the music stops, open your eyes - Turn to your partner and compare what you saw with your mind's eye..."

Music appreciation combined with this process called visualisation typically illustrates some of the functions of the Right Hemisphere (RH).

In the same way, activities based on drawing or the use of colour or movement as starting points for oral expression bring into play RH functions. In short, the RH is nonverbal, synthetic, concrete, analogic, nontemporal, nonrational, spatial, intuitive. It perceives the overall patterns and structures (Betty Edwards). Although it is no good for speech production, it participates in comprehension by handling intonation contours, guessing the meaning of new items from known data and interpreting nonverbal and paralinguistic clues. Galloway (1983) claims that the two languages of a bilingual are more lateralized in the RH owing to a more frequent use of RH strategies to achieve successful communication.

In a traditional class set up where the emphasis is laid on grammar and competence as opposed to performance, the second language tends to be lateralized more in the LH. When language is learned through a communicative approach, however, or is acquired in natural surroundings, there is greater RH participation.

Let us remember that the Left Hemisphere (LH) is verbal, analytic, symbolic, abstract, temporal. It proceeds step by step. It is rational, digital, logical, linear. All these functions are eminently privileged in our educational system.

The really exciting thing about neuro-linguistic research however is that it seems to provide some degree of scientific grounding to back activities which we have been experimenting with, intuitively, for a good many years (See Magic Carpet and The Poet and the Scientists). Nonetheless, it would be simplistic and vain to consider hemispheric functions in isolation, for they are different but

complementary. The fascinating question, however, is to find out whether activities based on RH functions can be instrumental to triggering off language and to developing the speech capacities of our less verbal students. The evidence remains to be established. What can be said to that effect, though, is that artistic, creative, imaginative activities give those students who are less favoured verbally a fairer chance to gain respect and attention from their classmates. This came out clearly when a drawing activity was used as a starting point for discussion ("Draw a colour representation of your Left and Right Hemisphere, separately, then try to combine both on a second page"). Those students who were more artistic or more sensitive without necessarily having a gift for words to go with it, often produced far richer, more interesting pictures than the "good" students who normally held the floor. The former thus managed to regain some much needed self-confidence. This indirectly benefited communication within the class - and will, hopefully, contribute to improving speech performance as a result. Actually, what sounds like a longer circuitous process at first sight, might appear in the long run as a beneficial approach, for it opens up new pathways towards greater creativity. Under those circumstances, the motivation to talk is stronger for it comes from within, instead of being imposed from the outside.

The second point I'd like to bring up is the necessity to establish a warm non-threatening, non-competitive atmosphere in the classroom to lessen the negative effect of stress on learning and lower the affective filters (Krashen).

Hélène Trocmé taking up the theory of Mac Lean explains how the three levels of the brain participate in the learning process inclusively. The primitive or reptilian brain harbours a sense of territory. No wonder then that if the foreign language and culture are resented as a threat, this may provoke agressivity and a negative attitude. The second level, the lymbic or mammal brain is emotional. It remembers pleasant and unpleasant experiences and associates them with new perceptions. Neurologists point out that we function "bottom up", i.e. our acquisitions have to cross these two levels before reaching the neocortex which is rational and a specialist of "elegant thinking". **Everything we learn is therefore emotionally coloured.**

Consequently, learning can be hampered by a situation of fear or anxiety and teaching, to be effective, should take the affective into account.

The last point I would like to argue is based on an attractive theory which draws a parallel between the human brain and Gabor's hologram. The hologram is a tridimensional photographic plate. If it breaks, the whole picture is represented in each fragment when lit by the proper laser light. Pribram's comparison of the brain

to the hologram points to new implications for the process of memory. The more areas of the brain are impregnated, the more chances we have of successfully retrieving the information. Better results can be achieved, as Racle stressed, by diversifying the channels of input - visual, auditive and kinetic.

The findings of neurological research should encourage the language teacher to pay greater attention to differences in learning styles instead of stressing only the verbal analytical linear style. My claim is that other aptitudes and more particularly artistic and emotional factors should be taken into account in an attempt to promote the growth of the whole person - verbal skills being but one of the elements of the whole process. By stating this, I hypothesize that the language class is not just another class but a rather special place where interactions take place between the members of a group at a social and affective level through and beyond the power of words.

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