**Cognition and language**

Can our language determine how we think? Or is it thought that determines our language? Over the years, research has tried to solve these types of questions, in order to find out the influence that language has on our thinking in different cultures and vice versa. Overall, studies show evidence towards the influence of language on our cognitive system, but not in a strict way. Likewise, our thinking influences our language, even in the expression of emotions, but in the same way, it can be built without language.

Thanks to Piaget's studies, we know that during the first stages of life, babies develop their cognitive system before developing their language. They interact with their environment and learn the effect of their behaviours on their caregivers through their vocalizations and the expression of their emotions such as crying, in which they can express pain, fear or discomfort. Later, during language learning, babies discover that throughout words they can achieve more concrete purpose, thus favouring its development. Therefore, we develop an early understanding of the world through culture and parenting styles and then shape it with language learning.

Another important aspect to take into account is the individual differences of each subject, both in early development and in adulthood. Human beings live surrounded by continuous experiences that test their knowledge about their community and the way they operate in it. During this interaction, aspects such as temperament or learning style come into play, which influences not only the mental representation of the world around them and language development, but also the development of their skills (social, interpersonal, intrapersonal, resolution capacity, resilience, etc).

Furthermore, we cannot forget that both the way of life of a community and its language do not remain fixed, but evolve thanks to migrations. The coexistence between different cultures and the use of foreign languages ​​in that community produce certain enriching changes in both aspects, which they help to communities understand each other better and improves understanding of the world in which we live. Humans are capable of deforming our mother tongue in exchange for being able to interact socially with the people who form our immediate environment.

And the last point that we want to mention is the state of language and cognition when there is a pathology. When this occurs from birth, it can present learning difficulties, especially when they present alterations in listening comprehension. This can produce alterations in the understanding of the environment that, although not serious, can determine the complete development of the person. When the alteration is in adulthood, the cognitive system is already formed, but it makes it difficult to enrich some experiences given its limitations even though the rehabilitation it receives.

Given the above, it is clear that the language and cognition are separate entities but that they influence each other in what could be a circular process. In this process, it is reflected how the environment plays an important role in these aspects both in the early stages and in adulthood. These aspects, among others, must be taken into account in the investigation of the neural circuits of language. If no two brains are the same, neither are two language processing the same, which leads us to ask ourselves: Does each person have a different model of linguistic neural circuit or do they share general characteristics with some differences? Can experiences in stages early childhood, educational level, number of languages ​​spoken, brain pathologies and / or mother tongue influence in the development or reorganization of neural circuit of language?

At Auditory Cortex we continue working to answer these questions and other questions.