



# KEYNOTES



***Interview with NATALIA OJEDA (25/02/2011)***

***- Interviewer Igor Fernandez, CTA in training -***

**I.F. What is your professional background?**

**N.O.** I am PhD. in Psychology from the University of Deusto, I am a professor in this university and a specialist in clinical psychology for the American Psychological Association and the Spanish Education and Science Department. I am also a psychotherapist, with the accreditation of the European Association Federation Psychotherapy and EuroPsych and I completed my specialization in Neuropsychology at the Johns Hopkins Medical Institutions. I am the president of the Vasco Navarra Association of Neuropsychology, and consultant for the International Neuropsychological Society, and currently, my academic, research and clinical work is on this field. In 2007 I was the chair of the Neuropsychology World Conference, also held in Bilbao.



**I.F.: What are you currently working on?**

**N.O.** In terms of research, I run a Researchers' Team with the accreditation of the Vasque Government as a Type A, which is part of the CSIC Mental Health Research Network, in which several professionals and centers are participating. In the last 10 years, within the researching field, I have been working on the role of the cognition related to the brain development and organization in healthy people, and also in people who suffer from severe mental health diseases (especially new beginners in the first psychotic episode and also with chronic disease), and how the cognitive deterioration influences on the clinical diagnosis and the functional prognosis; in short, on the quality of life for the following years. We have also developed the Rehacop program to take part in and to be able to change those disturbance patterns.

**I.F. How was for you to get the request to participate in the TA World Conference?**

**N.O.:** At first I got surprised, since my work field, despite having a clinical background, it is not linked to Transactional Analysis, but afterwards, it seemed a challenge to me. In our team, we have tried to keep contact and to share our job with several professionals, because we think it's a way to go forward in the knowledge of human being complexity. So, my participation in the Conference is also an opportunity to meet of all us and to be able to build bridges.

**I.F. You have told me that you have a clinical background. Do you think that those bridges between clinical and neurosciences do also exist?**

**N.O.** Absolutely. I have fundamental clinical training and I like to put the real face to what we are investigating. People are a whole; we are not a brain in one side and the mind on the other side. Even evaluating the severe mental disorder, to isolate the cognition from other elements like emotion or behavior is a very important bias, because the understanding of the person I have in front of me is going to demand that, sooner or later, I get close and try to understand the rest of his context, his story...The APA 40<sup>th</sup> Division describes the clinical neuropsychology as the study of the brain-behavior relations and this includes cognitive behavior, emotional behavior and the expression of the personal uniqueness.



**I.F. Taking into account the conference title, what is “to grow” for the brain or in neurological terms?**

**N.O.** It involves many things. The most important one that we need to understand is that the brain is constantly changing, positively and negatively. The human being is the animal who is born with the least developed brain, what allows that in the first stages of life the environment influences much more on its physiology and, therefore, on the components that will be essential in the future for the change and the development. This makes possible for the Nervous System to participate in the environmental variables.

There are milestones about the brain development and its deterioration later, but the changes are continuously bi-directional: the changes in the brain will be shown in some behaviors, and at the same time, the vital experience and the interaction with the environment and people, are going to be fixed in neurological changes.

**I.F. Then, the nervous system is in relation**

**N.O.** Constantly. It feeds on oxygen and glucose, but we know that depending on how the interaction with the environment had been, it will have repercussions on either the size of the structure or the way the neural networks are taking shape in the brain, what is unique in every person. This influence happens throughout our life span.

**I.F. Is the change a challenge for the brain?**

**N.O.** Of course. The natural state of the brain is the change; in fact the brain that lives best is the one that adapts best to the changes. When we find a fixation in certain brain areas, a stabilization is normally an indication of a disturbance or a pathology, but there is also a change even in the pathology. We have linked the search for stability to the safety, as we are animals of habits. Even so, the challenge of growth is to arrive to the milestones I was talking about before, in which the change is imposed, and to overcome them with a biological success and a success in the tendency that these changes will mark to the future life of the person.



**I.F. We are talking about adapting to internal and external circumstances, but the concept of potential growth and search for growth are important in TA. How is it understood from the neurosciences?**

**N.O.** This can be translated, for instance into the concept of cognitive reserve. We know that someone who has been interested in the search for growth has a cognitive reserve with a biological reflex that guarantees a bigger potential and it is going to be protective in case of any eventuality. What tells us that when someone has taken an active role and is committed to his personal growth the biology responds to it as well.

In terms of prevention, we are to take care of mental life aspects, and among other things we need a good source of stimulation, what will depend on the interest that each of us have. Also the oxygen that we breathe, the diet, the sleep and the level of stress will have an influence.

**I.F. In order to have evidences of the personal growth what could we pay attention to in the brain?**

**N.O.** I don't think there is a clear answer for that. Growing is a continuous and complex process, it is not limited to a certain moment and to measure those processes is more difficult. Neither have the functional neuroimaging techniques allowed a prolonged observation and even if we observed a brain for a ten-year period, the changes could hardly be ascribed to a specific cause. Yes, there are experimental suggestions, because habits change the brain and the experimental path is closely related to our nervous system development.

**I.F. And in this potential development, what is the role of relationships?**

**N.O.** The last decade researches have been intense in this regard; for instance, about the mirror neurons and about the mind theories, how in the relationship with the other, this reflex is biologically gathered and sealed. The relational level is essential to the growth, we need one another to grow. The quality of the affection has a repercussion on the fetus and its brain even before birth, fixing and establishing a preset, fostering or limiting the growth at a specific moment.

It is so essential that when the stimulation disappears it could cause death, there is no survival without that.



**I.F. To go to an end, what can your work and the neuropsychology contribute to the personal growth?**

**N.O.** In general, the knowledge of the brain and the awareness about the importance of taking care of our physical and mental life; this would be a vital lesson in order to keep a life as healthy as possible for as long as possible. If we comprehend this connection, beyond the technical understanding, we all probably would do what is necessary to take care of this organ.

**I.F. TA has applications in other fields that are not eminently clinical like Education and Organization. What kind of applications would the neuropsychology have in these fields?**

**N.O.** In Education has a great impact: on syntonic stimulation of child development, academic stimulation, child disorders like ADHD or learning disorders.

In Organization there are two major trends: in Advertising, with the inclusion of Emotional Intelligence; and in Neuromarketing, with the understanding of the way decisions are made or risk behaviour in investments.

Although, nowadays, the neuropsychology and neuroscience have a major impact on clinical fields.

**I.F. For my part, that's all, Natalia. Do you want to add anything?**

**N.O.** I am grateful for the invitation to participate in the Conference, because it is not always easy to have the opportunity to build bridges among disciplines. Although I believe that growing always implies certain risk, it's worthy of taking it on and see how what we know from both fields could be integrated. After all, it is also an active position and with responsibility for the growing.