## What is Trauma?

Etymology of the English word trauma is from ancient Greek word τοαῦμα, which means wound (hurt; injury). Whereas it is, in a way, easy to imagine how our body could be wounded or injured, here we should imagine how certain events could wound the mind and emotions. What does it mean? Moreover, we know that traumatically event may have both physical and emotional aspects, as for example a car incident and a sudden loss of someone we love. X Both events may lead to a strong traumatically reactions and symptoms as depression and fear, numbness, irritability, anger, sleep and eating disturbances, law energy, memory lapse, distraction, compulsion, substance abuse, isolation, avoidance, social withdraw, flashbacks, nightmares, and more. Symptoms and signs of trauma may be physically, emotional, cognitive, and behavioral. X Alternatively, a symptoms of re-experiencing the trauma, as flashbacks, nightmares, intrusive thoughts, sudden emotional or physical flooding. This is because the trauma is affecting one's body, mind, emotions and social life. X

Dictionaries defines trauma as deeply distressing or disturbing experience 1 or severe emotional shock and pain caused by an extremely upsetting experience2. Wikipedia gives the following definition to psychological trauma: a type of damage to the mind that occurs as a result of a severely distressing event. Trauma is often the result of an **overwhelming amount of stress that exceeds one's ability to cope, or integrate the emotions involved with that experience.** 

It is essential here, that traumatic event as well as the responds to them are different and strongly individual. Same event may be experienced in a strong stressful way or as something not that dramatic from different people (e.g. divorce), as they are events that are always traumatize - war, physical and emotional violence, etc. However, different people react in a different way and there are some of us, who may recover faster and easier compared to other, survived the same traumatic event, despite of its nature. How does it possible? X

In her paper, "Thinking about trauma", Caroline Garden, a Consultant Clinical Psychologist at the Tavistock Clinic and a member of The British Psychoanalytical Society, is linking trauma with the capacity of the individual "to take care of what he feels to be his own well – being". X The concept behind this statement is very psychoanalytical and lays on the ideas of Freud (1920), who gives metaphoric examples of brain, enveloped with a protective skin (as the body is), described as an "outcome of the development in the brain of a highly selective sensitivity to external stimuli". X

Short and simple explanation on this theory is that in order to function well the mind needs such selectivity function, through which the access of certain stimuli with various nature are prevent and the mind is kept safe from overwhelming. This developmental process begins in the early childhood, where the selectivity function of the baby is implement by the mother/primer caregiver. The mother is keeping the child from overstimulation by knowing what her child is able to manage at certain time. Adults are managing this by themselves through the level of their personal autonomy. Nevertheless, some adults may behave in a risky way and put themselves in to trouble very often in their lives. As they are constantly looking for problems.

So, the capacity to respond on traumatic event very much depends on the individual autonomy and mental functioning. X However, as Caroline Garden says, "some events will overwhelm that capacity, will knock out ordinary functioning and throw the individual into extreme disarray". What the

<sup>&</sup>lt;sup>1</sup> Oxford dictionary

<sup>&</sup>lt;sup>2</sup> Cambridge dictionary

individual actually perceives is that the word, as he knows it, is gone. Traumatic event is sudden. It breaks the trust that the word is a safe and predicted place.

It is fundamental here that in order to function well and to be confident and mental stable, ones need to relay on the predictability of the word. X The Sun rises in the east and set in the west; My daughter is waiting me at home; I will always find something to eat; People are predominantly good; It is safe to flight with airplanes, etc. Of course, there always could be doubts and fears that something wrong or bad will happened, and the degree of which this fears affected us is a sign of our mental state. Some people are most vulnerable. Some people engaged strong defensive mechanisms X to prevent themselves of being overwhelmed or worried (e.g. when someone denied a bad news and eventually accepted it when is already prepared to manage with the strong emotion).

We need to know the world and to be able to make sense of the events. People always engaged themselves in giving explanations about what have happened. We feel safe and relax when we know the reason. Why this happened? Why to me? Opposite, it is painful, disturbing, madding, when we do not know the answers. It is crucial that things have sense, a positive sense. Trauma does not make a positive sense. It is always the question "why me"? A quotation from Garden's paper is very convenient here: X

...a traumatic event is one which, for a particular individual, breaks through or overrides the discriminatory, filtering process, and overrides any temporary denial ... of the damage. The mind is flooded with a kind and degree of stimulation that is far more than it can make sense of or manage. ... There is a massive disruption in functioning .... It is a breakdown of an established way of going about one's life, of established beliefs about the predictability of the world, of established mental structures, of an established defensive organization.

While trying to make sense and to extract meaning from traumatic events, some people could find themselves trapped in repetitive situations: they may be fixed on talking on the event, or going at the place it has happened, or even literary trying to repeat it, either from the position of the victim or the perpetrator.

Trauma affect the inner world of the survivor. The damage is perceived inside the individual, although the experience is coming from the outside. It may also face inner fears: as the feeling "I knew this will happen". It may felt as all fears come true in the reality, if, for example the survivor were threaten. And this very much affects the ego, the mental functioning.

In his famous publication "Inhibition, Symptoms and anxiety" (1926) Sigmund Freud wrote that X once traumatized, the ego can no longer afford to believe, in signal anxiety (fear) in any situation resembling the life-threatening trauma (...). After being traumatized, one's capacity for belief in warnings is empty, and the situation of threaten is perceive as equal to the reality. No warning, this is it!

The hire our inner anxiety is, the weaker our capacity to manage and overcome trauma is. X The capacity to sustain or to recover from trauma is correlating to one's confidence. This means that our early lives and the level of our cognitive and mental development predetermines our capacity to respond to sudden distressing experience. This is why children, raised in institutional care, as there are many in Bulgaria and in Romania, are becoming more easy and often victims of violence, human trafficking including. Their autonomy is week. Due to sever deprivation during the early life, the lack of constant caregiver and the weakness of the primer care they may received, their developmental process may not pass well and their social and emotional wellbeing is more probably to be seriously affected. X

Contemporary research in neuroscience reveals that a child's brain develops in a relation to other people. This finding was crucial and proofs basic ideas of relational theories. It was in the 19<sup>th</sup> century when Donald Winnicott, a famous British pediatrician and psychoanalyst, postulate that the developmental process for the child's mind is correlating with the environment, which in early childhood is the mother/primer caregiver. X

In her recent book, "Keeping Your Child in Mind", (2011), Claudia Gold, a pediatrician, interested in children's mental health, gives an wonderful and easy to understand, overview of most recent neuroscientific researches, related to brain development of the infants.

A part of the brain called medial prefrontal cortex (MPC) is primarily responsible for emotional regulation. When a person have a well developed MPC, he experiences a sense of emotional balance. He can feel things strongly, without being thrown in to a chaos.

Further on Claudia Gold describes how important role plays the amygdala and the insula (both parts of the MPC) for emotional control, and stressed the fact that MPC development starts from the second month of life to one's twenties. Her primer concept, supported with notable amount of researches and her own clinical practice is that interacting with the child emotionally the mother literally promotes the growth of her baby's brain, helping to wire it with a secure sense of self. Furthermore she postulates that the first step to help a child, a teenager or a parent (client) is understanding. Like the mother who looks after her crying baby and telling him with no words: "I understand your emotion".

We will come back to this idea later on.

Nowadays for the psychotherapist it becomes more and more importantly to be informed about the neuroscientific findings in order to be able to understand and usefully treat their patients. Of course, this is not that easy, not only because neurology is complicated. Helpfully they are initiatives of multidisciplinary teams who seems to have been working hardly to find a way to link psychotherapy with the neuroscience and come up with publications equally addressing both type of professionals. X A wonderful example is the book "The Psychotherapist Essential Guide to the Brain", which was published in September 2017, and which I am going to refer now, attempting to present the brain and its functions. X

According to well – known model of the human brain, the brain is developed in three main parts: The reptilian complex (the primitive part), The Limbic system and The neo – cortex.

The reptilian complex is fully developed in birth, and is responsible for our basic bodily functioning as hart rate, breathing, body temperature and orientation in space.

It is important to recognize that the function of the primitive brain will take precedence over other brain activity. For example, if you try to hold your breath, you will find that as carbon dioxide builds up in your bloodstream, this primitive part of your brain is going to want to take over and make you breathe again.

While the New cortex is our "smart brain", responsible for all high — order conscious activity, such as language, imagination, abstract thinking, the limbic system is our emotional brain. It is a collection of brain structures located in the middle of the brain. X

(...) We could think of it as a center for emotional responsiveness, motivation, memory, formation and integration, olfaction, and the mechanism design to keep us safe. Kay areas of interest to psychotherapy are the hippocampus, the amygdala and the hypothalamus. X

The amygdala is like an early-warning system, with the motto "safety first" – put that safety plan into effect before consulting the executive brain (the new cortex). Picture yourself jumping out of the way of a snake –like object before closer examination reveals it to be just a garden hose in the grass. This is very important first response, because if it were left to the prefrontal cortex to initiate, for example, a leap out of the way of a bus you had inadvertently stopped in front of, than it might be too late: the evaluation system is too slow. The amygdala makes very fast, albeit not always accurate, evaluations and has a fast track from the thalamus through the hypothalamus that can initiate a stress response to forestall impending doom. The hippocampus plays an equally important role by encoding events in time and space them from short-term to long-term memory.

Of particular interested to therapists is the case where the limbic system gets the cues wrong: where there is no danger in actuality, but the body is thrown into stress response anyway. From chronic low-grade stress to full-blow panic attacks, a maladaptive limbic system could be the key to what is troubling your client. X

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The amygdala forms part of the limbic system. It is most commonly recognized as the emotional processing center that receives incoming sensory information and processes it for an emotional response. The response may be a defense to a perceived threat (...). The amygdala learns how to respond to various stimuli based on the its reference to implicit memory and makes decisions on how to initiate an emotional reaction to such stimuli. The emotional memory learned and utilized by the amygdala is episodic-autobiographical memory that can be notably implicit or unconscious, in contrast with explicit or declarative memory processed by the hippocampus.

The left and right amygdala have separate memory systems, but they work together to evaluate incoming information and process an emotional response, encoding, storing and retrieving memories that are associated with certain cues in the environment. The right amygdala is more strongly associated with negative emotions such as fear and sadness, whereas the left amygdala has been associated with both positive and negative emotional responses. X

The amygdala has an attentional role, focusing our attention on the most important stimuli in the environment. It helps us define a stimulus and primes our immediate response, for example in recognizing a dangerous stimulus and initiating a stress response. (....) when the amygdala perceives a threat, it initiates a response to keep us safe from that threat, although this may not be the most adaptive response.

Hypersensitivity and over activity of the amygdala are at the core of anxiety – based disorders such as generalized anxiety disorder, phobias, PTSD, and other limbic-driven states that inhibit positive, rational responses to stressors. Down-regulating amygdala reactivity (...) is of primary importance when treating clients suffering from fear-driven conditions. Cognitive therapeutic techniques are of little value to someone who cannot function cognitively, so a bottom-up approach should be employed. Creating of environment of safety and calm becomes the first step in helping the client regulate their amygdala reactivity. X

So, after we are at least one step further in our knowledge and, hopefully, understanding, of trauma and had a look on a most recent theories and findings, together with some really old ones, have made a link between psychoanalytically informed science together with neuroscience, the question how to use this knowledge arise. How to make a use form the theory into our everyday practice? X

As Caroline Garden wrote in the last part of her paper "Thinking about trauma", "we need theory behind us for at least two reasons. First, we know that when survivors come for treatment it is because the sympathy and support of family or friends or neighbors or colleagues has not, on his own, be enough to help repair the damage. (...) Second, when we listen to someone in deep distress because terrible things have happened to them, it can also be very distressing for the listener". X

Effective listening and empathy is required primary from all helping professions. However, in order to be in help we need to listen without being overwhelm by ourselves. Nevertheless, it is not an easy task to listen someone's terrible, or even horror personal story. Empathy "involves, in part, *imaginative identification with the speaker and with his or her experience"*. There is also neurophysiology behind it. The insula, which Claudia Gold identified as equal important part of the medial prefrontal cortex as the amygdala and the hypothalamus, is mediating the physical experience of empathy.

When experiencing empathy for another person, one often has a number of physical sensation, such as a tightening in the chest and tingling in the skin, she wrotes.

When person is either doing something or watching another person to doing something the mirror neurons (a special set of neurons) are codding not only the action, but also the goal or intention of the action and plays an important role in interpretation of the meaning of another person's behavior. Together with the insula, mirror neurons seems to play a critical role in attunement and the sense of being understood by another person.

Effective listening appeared to be a very complex process, isn't it? In addition, listening of traumatize persons is also challenging. As I mention earlier when talking about the brain development into the infants in relations with her mother and made a parallel with the process between therapist and a client, feeling of being understood is of primer importance for the client. And this understanding goes beyond the simple meaning of the word. It requires that the person is seen and accept as the way he is — with his entire personal story, all the suffering and all the damages. Traumatize people failed in their attempts to make sense of what have happened to them and to keep a positive sense of self. From their perspective, the *thing that have happened to them, and is still happening inside them,* as Caroline Garden says, *is unbearable*. They failed to manage that feeling, to make a sense from it, and this have changed their entire sense of self, the confidence about who they are, the positive believe in the world, their willing to life. And they are looking for someone to help them, by holding, containing this mental process instead of them. As the mother who is holding her child's unbearable emotions, provoked by things as hunger, pain, etc., in her own mind, calming the child with words of understanding and confirmation, "I know you are hungry/afraid/in pain...", until the moment when child's mind and brain are ready and the little one is capable to take care for himself.

The survivor is looking for help to regain his or her equilibrium. If we want to understand this process in a way that is helpful, we must not to be overwhelmed ourselves. We have to sustain a complicate balance: to be open enough to the survivor's experience to take in a real way his or her state, but steady enough not to be knocked off balance of it.

It may takes years of treatment, where the therapist may be feared or even hated by the survivor, until the survivor begin to trust him or her in a realistic way. The therapist's role here is to follow the client instead of lead him.

Most importantly, it is not good to focus on the traumatic events. The process of treatment will move on trough the relationship between the therapist and client, trough the *transference*.

What is offered by the therapist is that particular way of understanding, in a setting that offers a new experience of containment. Attention to the transference will, bit by bit, help re-establish the capacity to think about the traumatic events and their significance without the patient is being overwhelmed by flashbacks. Unfortunately, not all individuals can be helped. Some, particularly those who were severe ill-treated in a brutal and sustained way in childhood, cannot tolerate the demands of the one-to-one treatment setting. This patient are often those most in need of treatment. Here, group therapy, or the loose but stable containment offered by district psychiatry or forensic service can be very helpful, Caroline Garden writes.