About Sensations, Emotions and Feelings: A Contribution to the Theoretical Basis of Transactional Analysis

© 2018 Jane Maria Pancinha Costa

This paper has been translated and is published here with permission from REBAT – Brazilian Journal of Transactional Analysis 21:1, 2011 64-82

Summary
This article is intended to present new thinking and expansion of the knowledge of emotions and feelings within transactional analysis, through a dialogue between Eric Berne, Antonio Damasio and Humberto Maturana. From Berne comes the guiding framework of transactional analysis and the core concept of ego states. From Damasio comes the distinction between feeling, emotion and mood as well as an understanding of the organisation of the brain. From Maturana comes an understanding of the importance of emotions, particularly the emotion of love, in the process of human evolution. From this dialogue can be seen the foundation for the five primary emotions referred to within transactional analysis: anger, fear, sadness, joy and love. Finally, there is a proposal to update the concept of ego states in line with that dialogue.

Key Words
transactional analysis, emotion, feeling, ego states

Introduction
Working with transactional analysis for understanding how humans evolve towards autonomy, together with the orienting philosophy, method and therapeutic attitudes proposed by Eric Berne (Tudor, 2002) has been a compelling path for me in facilitating development during the course of my professional practice as a doctor, psychotherapist, researcher and educator over the past 30 years.

In this article I aim to rethink and expand knowledge about emotions and feelings based on a dialogue between Eric Berne, Antonio Damasio and Humberto Maturana.

To that end, I consider the differentiation between emotion and feeling developed by Damasio (2004) in his research in the field of neuroscience, and relate it to concepts of ego states and natural and learned emotions within transactional analysis. The transactional element of transactional analysis relating to philosophy is reviewed primarily through the relationship with the biology of knowledge, as presented by Maturana & Varela (2005). Finally, there is a reflection on how Eric Berne’s philosophy impacts on the scope of the work of transactional analysts as they interact with clients, and how that motivates, permeates and emerges from the interactions related to the expansion of consciousness and identification of action relating to the emotional world.

Philosophical Principles of Transactional Analysis
The fundamental ethical principles proposed by Eric Berne (1977, 1985), which permeate the theory and the therapeutic method, are an understanding that it is possible to cure psychiatry patients through the recognition that such a problem has a solution, and that we are all born with the ability to develop our potential to be autonomous. In other words, we can become aware of what is going on inside when we meet the external environment, we can be spontaneous in our actions and decisions, and we can have close, transparent and loving relationships.

Transactional analysts have been busy in the last 30 years, reflecting on the philosophy and the method of transactional analysis (Steiner, 1974, 1975; Schlegel, 1998; Barnes, 2007; Allen, 2009). I also highlight the work of Keith Tudor (2002) for the systematising of philosophical principles, methodology and therapeutic approach of transactional analysis as follows:

- **Basic philosophy:** people are OK; everyone has the ability to think; people decide their own destiny and these decisions can be changed.
- **Therapeutic principles:** primum non nocere – above all do no harm (the principle of the philosophy and ethics of non-harmfulness): vis
Emotions and Feelings

With regard to the theory of emotions, terminology within transactional analysis literature uses the term ‘feeling’ rather than ‘emotion’ (Nabrady, 2005). Differentiating between genuine feelings and substitute feelings. Sometimes there is reference to feelings and emotions as synonyms, and references to five basic feelings, sometimes referred to as natural, primary or authentic, of fear, anger, sadness, joy and affection with its variants from sympathy to passion (Roman, 1983; Solis, 1988).

In our lives, when we find ourselves in strongly emotional situations, we are in general invaded by the production of many substances and physical sensations and we run the risk of plunging into them without the awareness that we can experience them as our allies (Steiner, 1998), whether they are pleasant or not. Many times they seem strange, as if they are not us, or as if we have been suffering from a good or bad surprise that comes and goes independently.

Emotions and feelings pervade human history, and are central in human comedies and Greek tragedies, and in the work of philosophers such as Aristotle and the first written compilation – the Bible. (Editor’s Note – the first parts of the Bible are dated to c.1400 BCE whereas writing in Mesopotamia is dated back to c.2600 BCE).

In the scientific world, the first major contribution to the study of emotions was Charles Darwin (2000) in 1872, through his book on the expressions of emotions in man and animals, in which he developed a series of analyses of the expressions in humans and animals, from the observer’s perspective, inaugurating the study of the biological aspects of behaviour.

In the field of psychology, in the second half of the 19th century William James caused controversy by inverting what was believed at the time about thinking and sensing. He stated that emotions would be produced from bodily states rather than being the result of a mental state. For him, the modification in the body would occur before consciousness of the emotion itself; this has been corroborated by current studies (Damasio, 2002).

Since that time, theories have emphasised the biological aspect, the social and evolutionary aspects and the cognitive aspects of emotion.

The Tree of Damasio

Antonio Damasio (2004) stands out today through studies in the field of neuroscience, relating to the precedence of emotion over feeling. In biological evolution, emotions came first and then feelings. Damasio tells us of a complex chain that starts with emotions and ends in feelings. The conclusions of his research are that emotions are public (revealed on the face, or in specific behaviours) and feelings are private (invisible to others, as are also other mental images).

According to Damasio, every living organism, from amoeba to human being, is born with enough resources to solve the basic problems of life, which are: finding sources of nutrition, incorporating and transforming this nutrition, maintaining a chemical equilibrium compatible with life, replacing components as they age and die, keeping the body’s structure and defending it from physical injury. This happens automatically, without prior reasoning and this constitutes homeostasis.

Over the course of biological evolution, this equipment has become sophisticated but at the base of it are simple responses such as approach or withdrawal of the body in respect of an object. In the more complex levels, there are competitive responses or cooperation.

Damasio proposes that we imagine the homeostasis machine as a large and tall tree, in which the branches provide the automatic regulation of life phenomena. Lower branches are the processes of metabolism that keeps the chemical equilibrium inside, organising the heart rate, blood pressure, storage and distribution of proteins, lipids and carbohydrates which supply the organism with energy that is required to maintain and renew the structure. Within these branches are also the basic reflexes such as the profound alarm studied by Hans Selye (1956), which he called general adaptation syndrome, and the tropisms that lead organisms to choose light and avoid extreme heat and cold. There is also the immune system that defends the body from threats from inside or outside itself.
The branches are behaviours associated with senses of pleasure and pain, including approach and withdrawal reactions, such as the withdrawal that happens when the body, or part of it, reacts to a burn. A series of actions occur and are aimed at restoring the balance of the body. This set of actions and related chemical signals result in the experience of pain. When the body works well and the transformation of energy is easy, there is a relaxing and opening of the body, and expressions of confidence and well-being are accompanied by the release of endorphins, which result for example in the experience of pleasure. Damasio explains these functions as automatic and present even in very low complexity organisms such as paramecia.

A little higher up the tree are drives and motivations such as hunger, thirst, curiosity, exploration, playful and sexual behaviours. Damasio referred to these behavioural states as appetites of an organism affected by drive and desire, with the organism being conscious of the appetite and the satisfaction or frustration of it.

Near the top of the tree, Damasio positions the emotions themselves, consisting of the jewels of the automatic regulation of life. The emotions themselves influence the appetites and vice versa. Fear, sadness and disgust act to suppress hunger and sexual activity. Joy promotes hunger and sexual activity. The satisfaction of impulses can lead to joy and blocked satisfaction can result in anger, despair and sorrow. To Damasio, all of these reactions are automatic, and the direct or indirect purpose of them is to regulate life and promote survival. According to him, this arrangement operates even at the level of the emotions themselves, with differences in the complexity of the assessment and response, which are larger than the simple reactions upon which these emotions have developed through biological evolution. It is the relentless effort of self-preservation present in any living being, the struggle against threats, and the need to maintain the consistency of structures and functions in order to keep being the same individual. Maturana & Varela refer to this as autopoiesis.

Hence, for the various levels suggested by Damasio, emotions are built based on the same principle. At this level of the tree, Damasio relates the origin of authentic or natural emotions, or primary emotions as referred to by transactional analysts. In this respect we can consider the primary emotions as biocycnernetic mechanisms of regulation of instincts whose purpose is survival and well-being (Solís, 1988). The lack of consideration within transactional analysis of the evolutionary aspects suggested by Damasio in the understanding of primary emotions is discussed below in terms of the relationship of the biology of knowing developed by Maturana & Varela (2005).

According to Damasio’s research, the genome ensures that these devices are active at the time of birth or shortly after, without relying on learning, although learning plays an important role in determining the occasions when these devices are employed. Fundamental to this reflection is the classification that Damasio makes to the emotions themselves: basic emotions, primary emotions and social emotions.

**Basic emotions** – the diagnosis of emotions depends on subtle manifestations such as the frequency, precision and range of motion of individuals, the body and facial expressions, and of the cadence of speech and music. A distinction is made according to Damasio of moods, as emotions kept for long periods, such as hours or days. A mood can also be a repeated activation of the same emotion. For Damasio, emotions are the result of simultaneous triggering of unpredictable regulatory processes which include metabolic adjustments and reactions that occur continuously in response to external situations. These depend on our well-being or malaise.

**Primary emotions** include fear, anger, disgust, surprise, sadness and happiness. In other words, those which come to mind when we think of ‘emotion’. These are immediately identified in human beings of different cultures as well as in non-humans. Damasio proposes that most of what we know about the neurobiology of emotions is based on primary emotions.

**Social emotions** include sympathy, compassion, embarrassment, shame, guilt, pride, jealousy, envy, gratitude, admiration, amazement, indignation, and contempt. Regulatory reactions and components of primary emotions are an integral part of social emotions. Ingredients of pain and pleasure are also evident in the depth of emotions. Social emotions are not unique to humans; they are present in chimpanzees, dolphins, wolves, dogs and cats, to name just a few. The cerebral arrangements that allow such sophisticated behaviours, in the absence of language or cultural instruments, are according to Damasio a gift of the genome of certain species, and part of the innate devices of automatic regulation of life. Their addition to the unique social emotions is another class of reactions whose origin is not conscious and is formed by learning during individual development: what we learned to like or hate. Innate reactions and learned reactions seem to be intimately interrelated in the bottomless pit of our unconscious.

The level of social emotions referred to by Damasio, especially with regard to learned emotions, can correspond to the theory of rackets within transactional analysis literature (Berne, 1988; English, 2010; Erskine, 2010; White, 1996). The understanding that Fanita English brings to this correspondence is particularly
useful: “Rackets are stereotypical repetitions of allowed feelings that were recognised in the past and are expressed whenever a real feeling is about to emerge.” (English, 2010, p.90). (Translated from original).

Damasio’s (2004) hypotheses about emotions can be summarised as:

1. “An emotion itself is a collection of chemical and neural responses that form a distinct pattern.

2. The reactions are produced when the normal brain initiates an Emotionally Competent Stimulus (ECS) to an object or event whose real or remembered presence triggers excitation. The reactions are automatic.

3. The brain is prepared by evolution to respond to certain ECS with specific action repertoires. However the list of ECS is not limited to those that have been prescribed by evolution. It includes many others acquired by individual experience.

4. The immediate result of these reactions is a temporary change of the condition of the body and the state of the brain structures that map the body and the mind.

5. The final result of these reactions is the placement of the body, directly or indirectly, in circumstances that lead to survival and welfare.” (p.61).

Most of what surrounds us has the capacity to trigger emotions, whether strong or weak, good or bad, consciously or unconsciously, in the form of a Competent Emotional Stimulus. Some of these exist for evolutionary reasons while others may have been created from individual experiences through the processes of socialisation.

In Damasio’s tree, the profusion of branches form lattices at various levels which maintain a connection with the main trunk and the roots. At the tip of the various branches at the top of the tree are located the feelings.

Currently several brain regions are identified as involved with emotion, such as the amygdala and the ventromedial prefrontal cortices. These regions come into action as a result of natural or artificial stimuli in the form of electrical current supplied to cellular tissue.

The study of the amygdala in animals has generated data on emotions thanks to the work of Joseph Ledoux (2001). The study of the human amygdala through functional imaging suggests that it is an important interface between visual and auditory ECS and the triggering of emotions like anger and fear. People with lesions of the amygdala fail to trigger fear or anger and consequently do not have the feelings to which they correspond. On the other hand, a normal amygdala kicks in even when we have no consciousness of having seen a menacing image.

In any emotion, multiple types of chemical and neural responses change the state of the viscera and the condition of the muscles with a certain profile over a period of time. Emotion is a disturbance of the body that spreads and amplifies. According to the research, this extension and amplification happens because the presence of an ECS is frequently accompanied by a recording of related stimuli which become in themselves another ECS. Over time, these lead to additional triggering of other emotions such that these induce emotions that collide with the original emotion. This seems to be the mechanism for the formation of racket feelings. In relation to the initial stimulus, the continuation and intensity of the emotional state are at the mercy of the cognitive process. The flow of mental content triggers emotional responses, which occur in the area of the body or its brain maps, and that ultimately leads to feelings.

Of interest is the account of a 65 year old patient who had electrical stimulation directed to a specific part of the brainstem, the midbrain, for Parkinson’s treatment. He suddenly suspended the conversation he was having, leaned to the right, and his facial expression turned into a mask of sorrow. A few seconds later he started crying and his behaviour revealed deep regret. A little while later he started talking, confessing to great sadness, exhaustion and hopelessness. Suspecting that it was caused by the electrical stimulation, the doctor suspended the treatment. About 90 seconds after the stimulation was interrupted, the patient’s behaviour returned to normal. The physical manifestations stopped, the sorrow was gone, and the reports of sadness ended. The patient asked in jest what was happening, because he felt bad but did not know why. A similar experience with electrical stimulation of the motor area of the left frontal lobe provoked laughter, which was described by the researchers as contagious. The laughter was a sense of fun and joy, with no explanation for such feelings. The patient attributed the cause of the laughter to any object that could be seen. When considering the two cases together, it is possible to see the various layers of the neural structure responsible for emotions.

Certain thoughts evoke certain emotions and certain emotions evoke certain thoughts. The cognitive and emotional planes are constantly connected by these interactions. Even when the emotional expressions have no psychological motivation and are ‘generated’, they are able to cause feelings and the kinds of thoughts that were learned in conjunction with these emotions, as shown in the research of Paul Ekman (1973).

For Damasio, feelings open the door for a new opportunity; the voluntary control of what until then has been automatic. This is the space in which the relational enables transformation.
“Evolution seems to have built the framework of emotion and feelings as benefits. Built first as mechanisms to produce reactions to objects and circumstances – the structure of emotion. Built afterwards as mechanisms for the production of cerebral maps that represent these reactions and the results – the structure of feeling. In the beginning was the emotion, of course, and at the beginning of the emotion was the action.” (Damasio, 2004, p.88).

To Damasio, feelings emerge from various homeostatic reaction functions, not only those we call emotions in the strict sense of the word. A feeling is a sense of a certain state of the body, accompanied by the perception of thoughts with certain themes, and the perception of a certain way of thinking. The senses of emotions are functionally distinct because the essence of these consist of thoughts about the body being surprised in the way it responds to certain objects and situations. When you remove this essence, the notion of feelings disappear. So, it is no longer possible to say “I feel happy” or “I think happy”.

The product that we call mental feeling is the result of close cooperation of the various maps of the body state which are contained in several brain regions, from the brainstem to the cerebrum cortex. Feelings are interactive perceptions within the body. They are not necessarily in the real state of the body but are maps being built moment by moment within regions of the brain.

If we consider, as James Allen (1999, 2009) suggests, that an ego state is a private network of activated neurons, where a profile of activation of certain neural networks includes specific modes of information processing being enabled and utilising specific neurons, it becomes clear that each activation has specific rules and particular problems that are being addressed, including a specific profile of sensations, emotions and feelings for each network.

Allen proposes that the construction of ego states depends on the environment and the ego states are co-constructed interpersonally. According to him, the interpersonal experience alters brain structure and connections between neurons, modelling in this way the mental processes. The plastic richness of the nervous system is due to the continuous transformation, which remains congruent with the transformations of the environment as a result of each interaction that affects us.

**Maturana and Emotions**

Humberto Maturana has worked since 1970 with the development of what he called ‘biology of cognition’ (renamed as biology of knowing by Varela in an Afterword added in 1992 to Maturana & Varela, 2005)), as well as the implications of the theory of autopoiesis in different areas of biological phenomenology, particularly in social anthropology, human origins and biological evolution. Central to the development of his thinking has been the assertion that living beings exist in two areas: autopoiesis as the operation of internal structural dynamics, and relational dynamics in terms of how we exist as living beings with the recognition that we exist alongside different classes of living beings. Later conceptual development relates to a ‘biology of love’ concerning the expression of a biological interpersonal congruence as we accept the existence of others, without whom there would be no relational space or classes of relational behaviours.

Maturana & Varela proposed that living beings are characterised by literally producing themselves continuously. Different living beings are distinguished by having distinct structures but with the same organisation. Living beings are autonomous units. A system is autonomous if it is capable of specifying its own legality, that which is proper to it. The organization of living beings is such that their only product is themselves. There is, then, no separation between producer and product. The being and the doing of an autopoietic unit are inseparable, and this is their particular mode of organization.

It is possible to relate what the authors refer to as an organisation to what Damasio calls the maintenance of the structure of the organism, albeit by assuming less interactive evolutionary movement than is understood in the autopoietic organisation. The molecular components of a cellular autopoietic unit are dynamically related in a continuous network of interactions. The concrete chemical transformations of this network constitute the cellular metabolism. This metabolism produces components that integrate the network of transformations that produce them. Some form a boundary, a boundary for this network of transformations. In morphological terms, this border is like a membrane. This membrane not only limits the extent of the network of transformations that produce its components, but also participates in it. They are two aspects of a unitary phenomenon.

Ontogeny, according to the authors, is the history of structural changes of a unit, without losing its organisation. Maturana and Varela argue that as long as a unit does not enter into a destructive interaction with its environment, we observers will see that between the structure of the environment and that of unity there is a compatibility or commensurability. While this exists, structural components and unity act as sources of mutual disruption and mutually trigger changes of state. They refer to this continued process as structural coupling.

An interesting aspect of evolution is how the inner coherence of a group of living things offsets a particular disturbance. For these authors, conservation of identity and the capacity for reproduction are
all that is needed. With or without the nervous system, the living being always works in its structural present. The past is a reference of interactions that have already occurred, and the future a reference of interactions yet to occur. However, they are not part of the functioning of the structural determinism of the organism at every moment. Endowed or not with a nervous system, all organisms, including ourselves, function as they function and are where they are at every instant as a result of their structural coupling.

They report as illustration of their understanding the case of the two Indian girls who were found with wolves that had apparently brought them up isolated from human contact in 1922. They were eight and five years old and were healthy when they were rescued. As much as their genetic makeup, anatomy, and physiology were human (autopoietic organisation), they did not fit into the human context. One of them did not survive, and the other, who survived for ten years, never spoke, and although she had learned to stand on both feet in urgent situations, she ran on all fours. So, there being no structural coupling, the organisation collapsed. [Editor’s Note: since Marturana & Varela referred to this example, it is has come to be recognised as a hoax]

According to the authors, the nervous system functions as a closed network of changes in activity relations between its components (operational closure). We can relate this operational closure as well as the history of interactions that constitute disruptions to Eric Berne’s description of human destiny when he says: “The destiny of every human being is decided by what goes on inside his skull when he is confronted with what goes on outside his skull. Each person designs his own life. Freedom gives him the power to carry out his own designs, and power gives him the freedom to interfere with the designs of others.” (Berne, 1988, p.41; English text from Berne, 1972, p.31).

For there to be a history of recurrent interactions, there is an emotion that constitutes the behaviours that result in such recurrent interactions. If this emotion does not occur, there is no history of recurring interactions, but only casual encounters and separations. There are two pre-verbal emotions that make this possible. They are rejection and love. Rejection constitutes the space of conduct that denies the other as a legitimate other in coexistence. Love constitutes a space of conduct that accepts the other as a legitimate other in the coexistence. Rejection and love, however, are not opposites because the absence of one does not lead to the other, and both have as their opposite indifference. Rejection and love, however, are opposites in their consequences in the scope of coexistence: rejection denies and love constitutes it. Rejection is a space of recurring interactions that culminates with separation. Love constitutes a space of recurring interactions that widens and can stabilize itself as such. Without the acceptance of the other in the coexistence, there is no structural coupling, there is no social phenomenon.

This is why love is the fundamental emotion in the history of the human lineage to which we belong. Here, as in transactional analysis, love assumes its space as the basic emotion, the biocybernetic mechanism of regulation of our instincts for the purposes of survival, well-being and evolution. For the authors, we are as we are in congruence with our environment and our environment is as it is in congruence with us, and when this congruence is lost, we are no longer.

“Love is the central emotion in human evolutionary history from the beginning and all of it occurs as a history in which the preservation of a way of life in which love, acceptance of the other as a legitimate other in coexistence is a necessary condition for the physical, behavioral, psychic, social and spiritual development of the child, as well as for the preservation of the physical, behavioral, psychic, social and spiritual health of the adult. In a strict sense, we human beings originate in love and are dependent on it. In human life most of the suffering comes from the denial of love: human beings are children of love.” (Maturana, 2005, p.25).

These emotions seem to be related to the mechanisms of approach and withdrawal mentioned by Damasio in the middle branches of the tree.

It is also possible to relate to the form of healing interaction that stimulates awareness, spontaneity and intimacy - autonomy in transactional analysis.

So for Maturana, love belongs to us as a biological characteristic that constitutes the human. Most human infirmities arise from the denial of love. We get sick if they do not want us, if they reject us, deny us or criticise us in a way that seems unfair to us. We can even get cancer, because physiological dynamics have to do with emotional dynamics. (Maturana, 2005). Our immune system is already contained in our first cell.

Robert Ader (2007), an experimental psychologist who has dedicated himself to the psychosomatic nature of diseases, states that disease is not due to a single physiological or psychological factor, but it is psychosomatic and arises from a variety of circumstances. He concluded that the immune system was not an inviolable, self-regulating and autonomous unit within the body, but a system that welcomed messages from the mind. In 1981, he published the book titled *Psychoneuroimmunology* which contains research that reveals the ability of the central nervous system to affect the body's immune system and health.
Pert (1997), was an early contributor to the presentation of works on neuropeptides, which are tiny chains of amino acids that are decisive for our emotional experiences. These were first identified in the brain and, as this author's work demonstrates, are also 'brain particles' that float throughout the body, carrying the message of the central nervous system. This system is constantly conveying thoughts that condition the functioning of the brain, which in turn sends messages through the neuropeptides to various systems, including the immune system.

Paul Pearsall (1999), a psychologist specializing in psychoneuroimmunology, also studied the relationship between the brain, the immune system and experiences of the outside world, as described in his book entitled Memory of the Cells. Working with transplant patients and their families, he has shown in his research a type of cellular memory and the important role that the heart plays in the recovery of this memory. He states that our ability to love and willingness to give love is at least as important as, if not more than, how much we are loved.

**Eric Berne and Ego States**

Eric Berne (1988) defined ego states as coherent systems of thought and feeling manifested by corresponding patterns of behaviour. For him (Berne, 1977) structural analysis, as the first step in a therapeutic process, is to clarify and strengthen the boundaries between states of the neopsyche (Adult), exteropsyche (Parent) and archeopsyche (Child) with the consequent reintegration of these influences into the patient's mind under command of a decontaminated Adult ego state which then becomes the executive of a healthy way of life and an ally in the subsequent therapeutic process. The understanding of the intrapsychic dynamics in Berne can be exemplified in the following paragraph:

"Each ego state is a type of entity that is differentiated in some way from the rest of the psychic contents, including from other ego states that have existed for many years or a few moments or that are simultaneously active. The most convenient and probably most correct way of saying this is to speak of each ego state as possessing a boundary separating it from other ego states." (Berne, 1961, p.37).

It is possible to relate this understanding to the complex chain described by Damasio (2004) and the neural networks referred to by James Allen (2000), proposing to understand ego states as specific neural networks in which sensations, emotions, feelings, experiences and related behaviours are co-interpersonally constructed in human evolution.

Berne (1988) wrote: “Because each person is the product of a million different moments, a thousand states of mind, a hundred adventures and, generally, two different parents, a thorough investigation of his position will reveal much complexity and apparent contradictions.” (p.83).

It is also possible to relate this understanding to the ontogeny of Maturana & Varela (2005), the "history of transformations of a unit, as a result of a history of interactions, from its initial structure” (p.277)

For Berne, societies are organized in such a way that they encourage lack of autonomy through the transactional social contract, which says: “You accept my persona or self-representation and I will accept yours. The result is a lack of confrontation: confrontation with others and with oneself. To say hello correctly is to see the other person, to be aware of it as a phenomenon, to happen to the other and to be ready for the other to happen to you” (Berne, 1988, 19).

**Final Considerations**

Eric Berne's transactional analysis, immersed in its philosophical orientation, allows us to know and value the importance of transparent, cooperative and trustful relationship and respect for human nature to overcome intra and interpersonal conflicts. In defining transactional analysis as a theory of personality and social action and a clinical method of psychotherapy, under the assumptions cited in this article and having as central concepts those of ego states, transactions and lifescr ipt, Berne contemplates the possibility to move from the physiological to the relational, from the individual to the social, in a way similar to that understood in Maturana's biology of knowing and biology of love, for the understanding of the human in its multiplicity.

Although it does not encompass the evolutionary dimension, Damasio, in bringing into the public domain the understanding of sensations and emotions, of what appears even when we do not know what appears, and the feelings in the private domain, made in the multiplicity of neural networks that constitute us throughout our process of interactions, provides us with important information when we draw a parallel with the possibility of interactions in the field of the emotion of love as fundamental in human evolution. It also offers us biological bases for the understanding of ego state networks and the primary emotions mentioned in the transactional analysis language. Adding the level of sensations to the definition of ego states as neural networks broadens our systemic relational understanding.

As we alienate ourselves emotionally, we are diminishing our possibilities of immune defence, healing and elevation of our quality of life, as well as our evolution in the network of human interactions.

To relate Damasio's tree of emotions to the characteristics of primary emotions and rackets, considering the adequacy in intensity, quality and
duration of the stimulus that provokes them (ECS) seems to be an interesting focus for later studies.

The purpose of this article was to contribute, through a dialogue between Eric Berne, Antonio Damasio and Humberto Maturana, to the understanding of the universe of human feelings and its importance in the evolution of the individual and the species.

Jane Maria Pancinha Costa is a Certified Transactional Analyst (Psychotherapy), a Clinical Member of UNAT Brazil, and a member of the Brazilian Academy of Emotional Education. She can be contacted on janempcosta@gmail.com.

References
Berne, Eric (1977) Intuition and Ego States San Francisco: Harper & Row

Steiner, Claude (Ed) (1975) Readings in Radical Psychiatry. New York: Grove Press
Steiner, Claude (1976) Os papéis que vivemos na vida: A Análise Transaccional de nossas interpretações cotidianas. (The roles in life: A transactional analysis of our everyday interpretations) Rio de Janeiro: Artanova