Psychosomatics in Analytic Psychology
Clinical methods and therapeutic effectiveness

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Abstract: The authors analyze the most recent and current neurocognitive studies on psychosomatics that are most accredited in the scientific community, in order to identify the findings that could allow for a readjustment of the clinical method of analytical psychology, for the analytical psychotherapy of the psychosomatic disorder. They identify the most important neurocognitive contributions in the polyvagal theory of S.W.Porges and in the mulitple code theory by W.Bucci.
Regarding the central therapeutic factor, strong similarities have been detected in the following: the concept of love of the 'foreground' Symbolic Object (Bucci), the concept of 'the Compassionate Mind' (Gilbert 2010), which inspires the entire Polyvagal Theory (Porges 2017) and the notion of the 'Archetype of the Great Mother' (Jung 1927-1931).
To this end, these studies propose Consolation as an indispensable "instrument" for the therapeutic action of the aforementioned central factor, demonstrating its effectiveness in terms of change through a clinical case report.

Introduction

In the psychodynamic concept of the mind, the body has been the focus of many theories of various authors who study depth psychology over the years. However, in our opinion, these theoretical formulations have been negatively affected by their anthropological visions. This occurred until the 1970s, an era in which the advent of cognitive neuroscience brought about an opportunity to revisit different clinical theories and methods concerning both psychosomatic and general patients. In fact, since the 1970s, we have witnessed the flourishing of cognitive-communicative neuropsychological research. The discoveries in neuropsychology not only debunked many dominant paradigms belonging to previous eras, including the concept in which libido was viewed by Freud as psychic energy linked to sexuality, but also made use of some fundamental concepts of depth psychology, recognizing the existence of an unconscious psychic dimension rooted in the neurobiological tissue of the human being.

Hence, it is necessary to integrate psychodynamics' basic concepts with the emerging discoveries of cognitive-communicative neuroscience, based on scientific proofs. In the last decades, the studies of Wilma Bucci and Stephen W. Porges have been highly appreciated within the scientific community. Bucci's studies led her to the formulation of the multiple code theory while Porges' studies prompted him to come up with a neurocognitive theory which he defined as the polyvagal theory.

The two researchers have been extensively working with psychosomatic diseases, in the past and present, while at the same time focusing on different but functionally similar features of the nervous system. They both reached similar results that agree with psychology's idea of the unconscious. From a perspective that connects the two studies, in similar words, "meeting of the ways", we aim to highlight the similarities of their findings from the perspective of analytical psychology, as well as to supplement analytical psychology with theories, methods and applications to the clinic from a neuroscientific viewpoint offered by the two authors. We will pay particular attention, first to the reformulation of the basic principles of the psychosomatic psychoanalytic setting, and then to the central therapeutic component of psychotherapy, described in slightly different terminology by Bucci and Porges, as well as Jung. Nevertheless, their descriptions of the discipline's therapeutic pillars still share a semantic halo.

Brief review of previous studies

In the modern era, Sigmund Freud was the first who studied the mind-body relationship. In December 1894, Freud (CW2, pp. 249-255) claimed that anguish neurosis was the somatic correspondent of conversion hysteria, since both were characterized by a "sum of excitation". This gives rise to "aberrant" somatic processes due to a hypothesized psychical insufficiency. The only difference between anguish neurosis (one of the actual neuroses) and conversion hysteria (one of the psychoneuroses) was that for the former, the excitation was purely somatic, while for the latter, the excitation was psychic, caused by the conflict. Still regarding conversion hysteria, Freud (CW1, pp. 333-335) pointed out for the first time a conceptual difference between a functional somatic disorder and an organic disorder. A functional somatic disorder is not followed by organic damage, while in a disorder that causes an organ injury, if the psychic content is not present, we won't be able to see any causal relationship to the biological, real body. For Freud, more generally, the psychosomatic disorder arose from the conflict between the attempt to satisfy the desire and the acknowledgment of how difficult or impossible it is.

Already during the period in which Freud was developing his theory, some supporters of his work made more personal proposals on many of his psychoanalytic concepts, in particular on the psychosomatic disorders. For example, Groddeck (1912) studied the relationship between the Id and the sensory organs of the body, such as the eyes. He stated that psychoanalytic treatment that rebalances the Id could heal myopia. Shortly afterwards, William Reich (1951) introduced body observation into psychoanalysis, which led to his work on "character armor", which is the set of attitudes developed by the individual to block his emotions and desires. Also in 1951, Franz Alexander was the first to identify the implicit causal correlation between conflicts and psychosomatic diseases by studying the neurovegetative system. Moreover, from the 1950s onwards, post-Freudian psychoanalysis diverged into three different branches of psychosomatics: intrapsychic-functional,

affective-emotional and sensory-visceral. The first branch, which dealt with the drive and behavioral intrapsychic dynamics, was most extensively supported by Cremerius (1986), who also managed to statistically back up his school of thought. The author, a supporter of German psychoanalysis followed and applied the dynamic concept of disease that was introduced by Freud and widely practiced in Germany, then he somehow moved away from the drive theory, to a social theory instead. In fact, his studies focused on the idea that there is not a nosologically categorized psychosomatic structure, but psychosomatic patients that belong to the same social stratum could be grouped together, since "the disease is linked to daily life" (ibid., p. 159).

The second branch instead stressed the importance of the emotional sphere in determining the psychosomatic symptoms, identifying the factors specific for the psychosomatic disorder in alexithymia[1] (Toronto school) and in operational thinking[2] (French school). From the 1960s onwards, operational thinking was examined by the Paris school, with Pierre Marty (1963), Cristian David and others. According to them, the psychosomatic patient suffers from a severe phantasmal inhibition associated with an essential depression and a progressive disorganization that makes him regress to the primitive levels of his psychic functioning, up until the point where his biological function is compromised. The Toronto group, instead, was founded in the 1970s by the psychoanalyst Graeme Taylor (along with others, each having their own theoretical-methodological orientation). Taylor (1992), starting initially with the concept of somatization as an alexithymic disorder, in 2003 proceeded to ask the question "somatization and conversion: distinct or superimposed constructs?" He concluded that the two concepts are distinct from a clinical-methodological perspective. The symptoms of conversion require an interpretation and a conflict resolution, while the somatization symptoms require an approach aimed at consolidating the referential connections between symbolic and subsymbolic elements within the emotional sphere, hence "transforming the meaning attributed to the symptoms" (Bucci, 1997b, 1999).

The last branch, the sensory-visceral one, functioned based on bioenergetics, a combination of psychoanalysis and body work, of Reichian origin.

The current state of the art

Finally, in our time, studies in cognitive neuroscience, especially those of Wilma Bucci (1993a) and Stefan W. Porges (2017), offer scholars the opportunity to develop a holistic vision on how the psychosomatic disorder comes about, as the disorder involves the entire central nervous system in all its facets. Compared to the earlier developed theories in the 1950s, Porges' neurovagal studies on the autonomic nervous system and Bucci's research on emotion schemas related to the limbic system and the right hemisphere, seem to have acquired a strong scientific value nowadays. These two areas of neurocognitive research are accompanied by neuroscientific discoveries on hemispheric lateralization and the cortical functions, especially of the prefrontal cortex, in monitoring the balance between the sphere of the cortical cognitive controller, the emotional level and the drive dimension (part of the subcortical system of Reward). In this context, the ascending reticular system of the brainstem assumes central coordination by modulating attention and arousal. This system of the

[1] *Alexithymia is the word that we call the difficulty in identifying and describing what we are feeling (Sifneos 1976).*

[2] *Operational thinking is a thought that usually accompanies the state of alexithymia; a thought that is hyper-rational, concrete, without any affective or symbolic aspect.*

brainstem could be identified as the seat of nuclear consciousness (Solms, 2002)[3]. Shallice's studies (2001) make it possible to conceptualize a Supervisory Attentional System (S.A.S.) of coordination between afferents and afferents of sensori-motor, neuro-vegetative, emotional and superior cognitive pathways. In our opinion, a thorough analysis of Bucci and Porges' theories would allow us to acquire a metatheoretical reflection on possible integration between two research orientations. This can be feasible since each author focuses on different dimensions: thalamic/right hemispherical emotion schemas in Bucci's studies and the neuroception of the vegetative nervous system in Porges'. In fact, their studies also provide fertile ground for our proposal for further metatheoretical integration of cognitive neuroscience and psychoanalysis. Henceforth, it would be helpful to briefly explore the contributions of the two authors.

The Multiple Code theory

Wilma Bucci, trained in psychoanalysis, in the 1980s embarked on research in the area of cognition-communication. This study first led her to the theory of "dual coding" (Bucci 1985), a concept borrowed from Paivio (1971), which revealed the existence of only two communicative codes: the verbal code and the iconic-perceptual code. She then came up with a "multiple code" theory[4]. In fact, she only took into account three of them, all relevant to her research. This theory describes three codes, one non-verbal and non-symbolic (nv-ns), one non-verbal but symbolic (nv-s), and one symbolic-verbal (s-v). It also defines nv-ns code as subsymbolic, which cannot be represented in any way and which develops 'in parallel'. This explains why it can only be unconscious, given that consciousness is 'serial' by nature. This code communicates preliminary information on the movement (playing ping-pong, dancing, etc.) and the interpersonal functioning. The subsymbolic elaboration produces rapid and complex computations, in an implicit and continuous way, without any discrete categories, according to computational principles that cannot be managed by consciousness, despite being systematic in nature. This continuous, intuitive elaboration is specific, method-wise, and constitutes the object of interest of the new Parallel Distributed Processing (PDP) models, also called "connectionists" or subsymbolics (Smolensky 1988). These computations also manage to identify the slightest changes in facial expression, voice quality and shifts in body state (Bucci 1997). For this reason, one may wonder whether Porges' neurovagal studies also on the body state (mentioned below), played any role at all in deepening Bucci's research on the neurovagal roots of the subsymbolic world. Another code is the non-verbal, symbolic code[5] (nv-s), which recognizes and communicates through images and emotions and is made up of emotion schemas[6]. Activation of

[3] *Solms (2002), in a classic study, defines nuclear consciousness as a 'state of pure awareness', a 'blank slate', seated in the brainstem, in which we find the afferents originating from various subsystem of the central nervous system. This must be then differentiated from extended consciousness (a function of the cortex) which represents a state of awareness of the external world. In this way, Solms reevaluates the role of the cortex in the function of consciousness as a whole.*

[4] *The code concept of Bucci, referring to the language area, can be defined as a 'form' of cognition and communication.*

[5] *The notion of symbol and the symbolization process are information processing (Fodor Pylyshyn 1988). Symbols are then defined as discrete entities that refer to or represent other entities; they can be recombined according to the norm of system processing. Psychoanalytic symbols belong to a subset of symbols intended in this general sense.*

[6] *For Bucci, an emotion schema is thought of as a schema of image-action, inside or outside of consciousness. Terror,*

the emotion schemas is associated with patterns of visceral and somatic experiences associated with such arousal (visceral refers to what we feel or expect to feel when we are angry, scared or in love). Finally, the third code which is symbolic-verbal, integrates emotion schemas and transfers them to a further and higher dimensional level by referential activity (R. A.)[7]. At this further dimensional level, the link between words and the emotional experience is established, in order to express this experience in the symbolic "single channel" format. This is distinguishable from the non-verbal format that is both symbolic and subsymbolic, which run in parallel, forming multiple channels. From a neurological point of view, this final transformation takes place through the nerve fibers that pass through the corpus callosum, connecting the non-verbal, analogue and global representations associated with the right hemisphere, with the "denominable" images associated with the left hemisphere – the primary location of the symbolic-verbal elaboration. This process then involves the cortical structures of the brain and its elaboration of abstract concepts[8]. W. Bucci (1997b) believes that each of the three codes, even the subsymbolic one, has their own "thought", which has not only a cognitive, but also an evaluative and judgmental function. She therefore admits the existence of an awareness that belongs to the unconscious dimension of the subsymbolic code and the emotion schemas. For the experience to be translated through this cognitive-communicative symbolic-verbal code, the caretaker figure is of utmost importance, since the caretaker assumes the "foreground" role and the function of a primary central symbolic object

sense of loss, desperation, pleasure, desire are able to activate an emotion schema, which is manifested by approach, attack or flight. It can also be activated without any eternal stimulus or internal need.

[7] *Referential activity is a process that converts episodic experience into a more abstract, conceptual dimension, in which an emotion schema acquires a denomination. These denominations then are connected with other words belonging to the hierarchy of the verbal language. For this reason, highly abstract and symbolic concepts, like beauty, goodness, fairness and truth (Bucci, ibid.) are better integrated if expressed with specific examples and episodic memories, done by an efferent referential process that descends from a symbolic and verbal system to a non-verbal symbolic system, created by images and actions brought about by emotion schemas. For example, the infant's awareness of their mother is brought about by subsymbolic factors and emotion schemas, in which visceral neurovagal experience and the concomitant organized motor reactions (kicking, sucking, crying, grabbing-ibid., 1997) become considerably important. The Referential Process, according to Bucci, refers to a set of functional phases (ibid., 1997b) that describe the cognitive process of transforming non-verbal material, which exists in or outside of consciousness, into a form that is decipherable by the use of language. The process is bidirectional, since the semantic entity, being verbal in nature, such as words spoken by others or those we read, can be translated into their non-verbal form. The referential process consists of three phases: arousal, symbolization and reorganization. These three phases usually take place in this order, even if they may tend to recur, especially the symbolization and reorganization phases. Empirical research (Kingsley 2010; Khan et al. 2010) found out that the components of the referential process can be distinguished across the level of referential activity, as measured by the Weighted Referential Activity Dictionary (WRAD) or by the method of agreement between the raters. Each phase of the process is defined by its variable connection between verbal systems and non-verbal ones, and between symbolic systems and non-symbolic ones.*

[8] *Jung's concept of the archetype as an a priori category of experience and knowledge is structurally made up of an instinctual pattern of behavior in its biological dimension and pictorial dimension in its representational level. The archetype concept includes, as an a priori category of experience, motor and visceral experiences that are typical of Bucci's subsymbolic and symbolic non-verbal code, as well as the pictorial dimension found in the non-verbal symbolic and the symbolic-verbal code. Bucci's emotion schema could be an equivalent of the Jungian concept of Complex, not elaborated on the conscious-verbal level but defined by the author as a set of images connected by a strong emotional tone, deriving from the impact between the archetype and the experience lived by the individual (Jung 1927-1931).*

about which the emotion schemas are organized from the beginning of life. The caretaker's capacity for love makes the feeling of love the central primary process of schema organization (ibid., 1997b).

The Polyvagal Theory

Bucci's emphasis on the emotional dimension, in which visceral dimension is one of the components of the affective schemas, together with sensory, motor, somatic and representational elements, contributes to the Polyvagal Theory of Porges, which proves the importance of the visceral autonomic nervous system in the cognitive and communicative process of the individual. This neurocognitive theory focuses on the concepts of neuroception[9] and safety/trust[10] (Porges 2017, pp. 38-40). Especially for individuals who lived through stressful and/or traumatic past experiences, upon danger or trigger, their defense system goes into activation, which can be divided into two separate phases, according to Porges.

In the first phase, activation of the sympathetic nervous system occurs, turning on the fight-or-flight response. If this activation restores the individual's previous sense of safety, the activation ceases and he then can resume his social involvement by activating the social involvement system[11].

In the second phase, when the safety and trust conditions cannot be restored, the body may resort to older defenses, mediated by the vagal system, recruiting the non-myelinated neuronal fibers that belong to the dorsal nucleus of the vagus. This vagal activation produces the typical dorso-vagal reactions: bradycardia, apnea, and behavioral responses like immobilization with fear, shutdown (faking death), fainting and even dissociation.

The social system generally reacts to this adaptation with a negative evaluative feedback on the particular trigger; the individual then further adapts with more reinforcement of his dorso-vagal reaction. Thus, a self-perpetuating vicious circle is established[12]. This happens when risks and dangers are detected by neuroception.

Instead, regarding the physiological development of the autonomic nervous system and human

[9] *Neuroception is the process in which the nervous system assesses the risk or safety of the individual without resorting to awareness (Porges 2004; 2017, p. 19). Neuroception produces sensations at the belly or the heart or even a sort of intuition regarding the environment and surrounding people. Neuroception can also be wrong (Porges 2017, p.20), but in this case it would be appropriate and necessary to explore the adversities experienced by the patient in his original environment as a child and as an adult.*

[10] *Security is defined by feeling safe without removing the threat. The feeling of security is characterized by three conditions. The first is when the autonomic nervous system is not in a defensive mode. The second is when the social involvement system is in an activated state, while the sympathetic activation is reduced, creating a homeostasis between the sympathetic and the vagal systems. The third is when it is possible to detect signs of safety by neuroception, such as prosodic vocalizations, facial expressions and positive gestures.*

[11] *The social involvement system is made up of two components: a somato-motor component, which involves special visceral efferent pathways which regulate the striated muscles of the face and head, and a viscero-motor component, which involves the myelinated supradiaphragmatic vagal fibers that regulate the heart and the bronchi. From a functional point of view, its activation stems from a heart-face connection, in which the heart rate is synced with the activity of the face and head muscles. In early life, this system coordinates sucking, ingestion, breathing and vocalization. Disorders in these functions in early life are reflected in difficulties in social behaviors and emotional regulation in adulthood (idib., pp. 20-40)*

[12] *Similarly, all exposure treatments can work. By exposure treatments, we mean all those that fulfill the basic criterion according to the relevant psychophysiological processes and psychopathological organizations, each of which is specific for the particular disorder. In this dichotomy, what's wrong and what's right are markedly differentiated. This approach not only aims at the psychic problem, but affects the person himself who will also be judged right or wrong.*

relationships, Porges (ibid., p. 40) believes that the social goal of the individual, in physiological terms, starts from immobilization with fear, then transitions to immobilization without fear and finally reaches the final objective in activating the social involvement system. When security is detected by neuroception, the sympathetic tone weakens. On the contrary, dangers can prompt sympathetic activation, starting with the fight-or-fight response, possibly resulting in a hypertonic immobilization with fear in the individual. When the sympathetic hyperesthesia weakens and the myelinated vagal system is activated, the transition to immobilization without fear is possible. The detection of safety and trust conditions takes place through sensory-visceral information that gauges the qualitative meaning of the other person's eye contact, listening and help (ibid., p. 42). These are the same channels of information that characterize the subsymbolic system (Bucci 1997b). We can therefore hypothesize that this sensory-visceral information is transmitted from the neurovegetative system to the limbic system's nucleus tractus solitarius, responsible for emotion processing, and that they constitute the sensory-visceral elements of emotion schemas (Bucci 1997b). Although immobilization without fear recruits the same neuronal pathways that immobilization with fear does, it shares some features with the social involvement system and neuropeptide system such as oxytocin release. In this way, immobilization is recruited by the social involvement pathways during affection-related behaviors, for example, from a simple face-to-face interaction to then a hug, after which immobilization without fear is made possible. The information detected by the individual's neuroception in fact allows him to assess, initially on an unconscious level, whether it is safe being in the arms of the other person, and then ask himself whether it's better to stay or escape to protect himself. In other words, whether our body changes its state or not depends on whether the other person, while conversing with us, continues or stops being engaged in the conversation, for example when they look away or turn away from us.

According to Porges, human beings need safe social interactions, in the absence of fear, with other people in order to develop and optimize their potentials. The author calls it a construct of "symbiotic regulation", in which the ventral vagus plays a fundamental role. This myelinated ventral vagal parasympathetic neuronal pathway is developed and nurtured by a caregiver with a loving mind, which is the underlying concept of the whole Polyvagal Theory, with an indirect reference to Gilbert's concept of the Compassionate Mind (2010)[13]. The ventral myelinated vagal system, which produces immobilization without fear, is becoming increasingly important for health, growth and energy recovery. It regulates the heart, the bronchi, the striated muscles of the face and the head, the chewing muscles, the middle ear, the face, the pharynx, the larynx, and the neck, by activating the nucleus ambiguus, the trigeminal nuclei, and other cranial nerves through special visceral efferent pathways. In this condition, a mobilization without fear, which is necessary for social involvement, is made possible. Thanks to Porges' findings, while studying the psychosomatic symptomatology, we are able to see the convergence point where psychopathology and psychophysiology unite, in terms of the higher order of adaptation. We are hence able to visualize an ascending, dimensional and non-categorical development path, starting from the lowest state (already defined as pathological in other contexts of exposure treatments) of hypertonic

The person's neuroception will perceive this prejudice as a danger, making him resort to primitive defenses. Here is the short circuit!

[13] *Similar to Gilbert's viewpoint, to allow readers to grasp the only terminological difference between the concept of love of Bucci and Porges, we will use the expression the Compassionate Mind to indicate the feeling of love by Porges and the expression Feeling of Love to refer to that of Bucci.*

sympathetic immobilization with fear, then ascendind to vagal immobilization with fear, then vagal immobilization without fear, and finally sympathetic mobilization without fear, in balance with the activated vagal tone of the myelinated fibers involved in social engagement.
At this stage, we find it useful to propose a theoretical and methodological integration of the two viewpoints, as they seem to contribute to one another.

For a theoretical and methodological integration of the two viewpoints

The main conceptual difference between the viewpoints of Bucci and Porges is that Bucci gives more weight to the approach pattern and the flight-or-fight response, which are behaviors linked to sympathetic activation, while Porges studies more extensively the vagal system of defenses and social involvement. Bucci focuses on the emotional system which, as we know, is processed by the right hemisphere and considers vagal information as one of the many components of the emotion schemas. Porges instead, on a deeper level, focuses on the vagal system, processed by the autonomic nervous system, and its function to evaluate and make unconscious judgment through neuroception. Langs (1973-1974) also once identified the perceptual-cognitive functions in the deep unconscious and Jung, using symbolic language, visualized various forms of awareness of the unconscious, representing them in images like bright stars of the night sky or the midnight sun (1927/1931). According to Porges, the information from the visceral-vagal system becomes the starting point for all subsequent processing (emotional and cognitive).
From our point of view, the works of the two authors converge extensively. Firstly, they both agree on the adaptive nature of the psychosomatic symptomatology. Porges views it as a form of adaptation of the vegetative nervous system to a context in which safety and trust are lacking for both the child and adult. Similarly, Bucci interprets it as a form of adaptation of the individual to the emotional imbalance in an inactive relational context. Furthermore, both consider play as a fundamental step for the repair of psychosomatic damages. Porges speaks openly on play as a facilitator of social involvement (2007), while Bucci speaks directly and indirectly when she mentions the transitional area of Winnicott and the psychosomatic symptom as a datum that can be transformed into a transitional object. Moreover, in semantically related events, both agree on the central therapeutic factors which are love (Bucci 1997a/b) and the attitude of the compassionate mind (Gilbert 2010; Porges 2017). The love of the Primary Symbolic Object is the feeling that produces the integration of conscious/unconscious emotion schemas to the symbolic-verbal code (Bucci, 1997b), while the Compassionate Mind permits the state of security/trust that allows the vegetative nervous system to loosen the defense system and to enable social involvement.
In light of the aforementioned observations and the current state of the art, we would like to propose a form of Jungian analytical psychotherapy for psychosomatic disorders, making use of the contributions of both the polyvagal and the multiple code theories. We can start from the conclusions reached by both authors – conclusions that are, if not exactly identical, very similar and able to be combined up to 80%. The findings provided by the two theories and related research allow for a review and a reflection on the two "fundamentals" of analytical therapy: the setting and the therapist's interventions (verbal, non-verbal and preverbal). Considering that both authors study extensively the conditions for the physiological development of the child's and adult's mind by dwelling into the signs and symptoms of psychosomatic pathology, we would like to follow the same path to provide metatheoretical and clinical reflections on the two factors considered therapeutically central by the two authors: the feeling of love and the compassionate mind.

Bucci and Porges' thoughts on the psychotherapeutic process

According to the multiple code theory, during the psychoanalytic process, the development of the emotional meaning of relational experiences in free associations occurs in a three-stage process, called the referential cycle (Bucci 1993, 1997b). This process has origins in emotional development and it is evident how it fails in somatization. In the first stage, the patient experiences the different non-verbal components of the subsymbolic code (feelings, smells, bodily experiences, motor patterns), which are difficult to express in words. In the second stage, the patient retrieves a memory or specific fantasy derived from past experience, daily events or traumatic events, to transform the subsymbolic elements into affective schemas with images (right hemisphere) of the non-verbal symbolic code and then in verbal-symbolic code in which the images are combined with words (left hemisphere). The symptom, as a subsymbolic element, is transformed into a transitional object and play in the transitional area becomes fundamental for this step. Finally, in the third stage, the patient reflects on the images and stories that he told and tries to make further connections within the verbal system and the shared conversations. In the end, the process of verbalizing the contents of the emotion schemas allows one to define the emotion itself: anger, fear or affection towards whom and for what reason. Similarly for dreams: the latent content in subsymbolic format, is connected to specific discrete images of the manifest content and then verbalized in the dream narratives (Bucci 1993; Bucci et al. 1991). The process can be developed through a corrective emotional experience in the transference-countertransference psychotherapeutic relationship in which the therapist becomes the "foreground" symbolic object of awareness and verbalization. The process is also strengthened by the central conscious factor in organizing emotion schemas - love (Bucci 1997b).

In Porges' polyvagal viewpoint, the effectiveness of psychotherapy is based on the ability to create a relationship grounded by safety and trust that are detected by neuroception (2017, pp. 19-21). Psychotherapy requires the following three conditions: the autonomic nervous system should not be in a defensive state; the social involvement system should be activated; and finally safety/trust should be detected by neuroception. In specific clinical interactions during psychotherapy should involve eye contact, listening and assisting (prosodic vocalizations, facial expressions and positive gestures).

The Psychotherapeutic Process

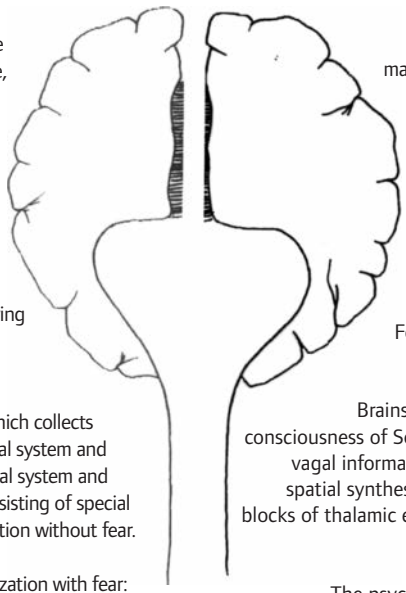
The psychotherapeutic process encourages the transition from immobilization with fear to immobilization without fear, then to the intermediate stage of mobilization without fear, where play is a fundamental step to achieve the final objective of social involvement, symbiotic self-regulation and development of the individual's potentials.

The entire therapeutic process is fortified by a central conscious factor of emotional nature: the attitude of love[14] *(Porges 1998) which strongly assimilates the Compassionate Mind (Gilbert 2010). One prerequisite for psychotherapy is the bi-directionality between bodily sensations, emotions and thoughts related to the cognitive sphere, and feeling safe - a prerequisite for developing creativity and for solving*

[14] *Porges (2003, 2007) confirms that the myelinated vagal system are developed together with the system responsible for attachment, with the ability to inhibit defense behaviors against threats (modulating sympathetic activity) and to promote a calm and pleasant physiological state that derives from interpersonal closeness or relational behaviors. The signals of interpersonal safety allow one to self-sooth more easily upon stress.*

and/or implementing solutions to complex problems. In our opinion, a psychological-analytical psychotherapy that uses an integrated, theoretical reference to both the polyvagal and multiple code theories, is particularly suitable for psychosomatic patients with psychosomatic symptoms during critical moments of life, in which the body changes while transitioning to different life phases, physical sufferings, old age and death; all of which are parts of our physiological course of life. Regarding the neurophysiological pathways that analytical psychology might follow for therapeutic purposes, we present the following image:

PORGES	BUCCI
Establishment of the compassionate mind as the primary central instance, at the center of the psyche.	Establishment of the primary maternal love as a central symbolic object of organization of affective schemas, at the center of the patient's psychic life.
Limbic system: play with the activation of mobilization without fear. Sympathetic at the function of social involvement and inner involvement with the content of the unconscious through inert material objects transformed into living and animated forms.	Limbic system: play in the transitional area in which subsymbolic objects are transformed into transitional objects (Winnicott 1951). Formation of symbolic and non-verbal emotion schemas.
Brainstem: the control unit of the neurovegetative nervous system, which collects information from the afferent visceral system and transmits it upwards to the emotional system and downwards to the vagal system consisting of special connections. The couch: immobilization without fear.	Brainstem: the blank slate of nuclear consciousness of Solms, to which sensory, visceral vagal information and images such as visuo-spatial synthesis (right hemisphere), building blocks of thalamic emotion schemas that are non-verbal and symbolic, belong.
The psychoanalytic couch: immobilization with fear: reclining position that activates the primal anxieties (claustrophobic, paranoid, separation-abandonment, death). Spinal cord: sensory motor afferents and efferents that regulate mobilization/immobilization with and without fear.	The psychoanalytic couch: activation of associations related to the psychosomatic symptom. Spinal cord: afferents and efferents that produce unconscious information in the form of unconscious subsymbolic elements.



Tab. 1 - *Neurophysiological pathways that analytical psychology might follow for therapeutic purposes*

Reinterpretation of the analytical setting in light of Porges' polyvagal theory and Bucci's multiple code

The analytical setting, as we all know, is structured by a set of rules, acts and behaviors that define a psychotherapeutic framework. According to traditional analytical psychology, there are three possible structural aspects of the psychotherapeutic session: vis a vis, the use of the psychoanalytic couch and role playing or the imaginative activity intended as play and active imagination (Von Franz 1978).
Up to now, from our point of view, the type of psychotherapeutic discipline and the therapist's personal

choice determine the most important structural element out of the three, anthropologically speaking, based on a philosophical vision of mankind. For example, the psychoanalytic couch has been identified as the most important element for Freudian psychoanalysis, while vis a vis for Jungian analytical psychology, with few exceptions. Although the use of the psychoanalytic couch was advocated by Freud due to its adherence to the rules of abstinence and neutrality, he himself had chosen the bed at first because personally he could not bear to be stared at for hours by all his patients (1913, CW 17, p.343). The use of play in psychotherapy was initially introduced by M. Klein (1929-1955), but its systematic use in child psychotherapy was adopted by Winnicott (1951), one of the psychologists who studied the Self. Play has also entered the practice of analytical psychology with Sand Play Therapy (Kalf 1966)[15], a tool also used in the Jungian context in adult psychotherapy.

So what are the anthropological visions mentioned previously that may have inspired each discipline and consequently each clinical method?

Psychoanalysis has a very organic perception of human beings. Freud followed a Darwinian vision of mankind and his description on the human subject followed the metaphor of the beast. The drive concept of the psyche's nature and libido as a biological energy linked to sexuality cognitively justifies the choice of the bed, which aims to attain neutrality and abstinence (obviously when dealing the 'bestial' drive of the patient). Freud denied the existence of a metaphysical dimension, and even on a merely anthropological level, he also excluded the possibility of a specific spiritual dimension of humankind.

Instead, vis a vis becomes the structural aspect of choice for Jungian analytical psychology because for Jung, mankind is a symbolic animal and the psyche is a sense of self that is animated by a non-sexualized libido - a vital spirit, a kind of "elan vital" (Jung, 1927-1931). Unlike Freud, Jung believed in the presence of the individual and transpersonal spiritual reality, even if it is immanentistic and not metaphysical by nature. The conscious and unconscious collectives are concepts related to the visible and non-visible universe, but of the human sphere. Jung's spiritualism is most abundantly culturally expressed in the symbolic interpretation of alchemy. By comparing the psychoanalytic session to a process of alchemical combination of elements (patient and therapist), Jung adopted vis a vis as an expression to conceptualize mankind. In fact, by bringing alchemy's principle "Ars totum hominem requirit" into psychoanalytic setting, he affirmed that the therapist must fully expose himself to what

[15] *The Sand Play Therapy was created from an intuition of the Swiss psychologist Dora Kalff (1904-1989), a student of Carl Gustav Jung. It can be defined as a method of analytical psychotherapy that uses the individual's creative resources, through the integration of verbal communication to scene construction that allows him to confront and elaborate his knots of conflicts. The Sand Play Therapy uses a drawer-like tray of a size compatible to the visual field of a person standing about 75-100 cm away, half-filled with sand and placed next to a collection of many miniature figures of the historical and present material world, both living and imaginary-mythical-religious. The sandbox allows the individual to represent not only the unconscious aspects of his childhood, but also the content belonging to the primordial archetypal predispositions theorized by Jung. Hence, by dealing with these unconscious personal and transpersonal issues, the sandbox enables a process of psychic transformation and a harmonious development of the personality and potentials. The psychologist analyzes the patient's content, then facilitates the interplay between consciousness and the unconscious, integrates the psyche and mends the patient's relationship with the individual Self. The Sand Play Therapy acts as a symbolic instrument that facilitates communication for those who can't express their hardship in words (see Bucci's non-verbal symbolic code), through a representation of how the patient's internal world is constructed. In this way, the creative function allows the patient to overcome their passivity and thus undertake the active role of the player.*

he defined, using metaphorical-medical language, "a psychic infection". The analyst and the patient could then engage in a complete, bipersonal interaction, which is granted only by vis a vis according to Jung, while the bed may fail to deliver this requirement due to the distance created between the patient and the therapist and the absence of the eye contact – a crucial factor in communication.
Both Winnicott and Jung stressed the importance of play. For Winnicott, play, in the setting of the psychic reality, is an expression of a transitional area in which transitional objects can be moved. For Jung, in the setting of an imaginative dimension, play is an expression that allows the patient to develop relationship with the inner images of his personal unconscious and his archetypal collective unconscious. Unlike Freud's psychoanalytic theory, which is a strong theory based on precise and limited variables – an ad excludendum theory, Jung and Winnicott's viewpoints are weak theories that are not yet proven based on exclusion, only on inclusion. Winnicott considered the transitional area first as a phase, then as a stable dimension of the mind as a precursor to the cultural dimension. Jung considered imaginative activity as the precursor to an experiential and cognitive relationship with the unconscious and as a gateway for mankind to access to his spiritual dimension. Also according to the Swiss author, a trait of the psyche is always present. In this sense, both Winnicott and Jung were strong believers in a cultural and spiritual dimension of humankind, though without any metaphysical conceptualization.
We decided not to discuss other forms of psychotherapy treatment due to economic constraints. From our point of view, this technical process dealing with two different psychotherapeutic theories adheres to the principle that we call here "ideologization"[16]. Instead, in light of Bucci and Porges' scientific studies, we would like to propose the 'de-ideologization' of psychotherapeutic theories and related clinical methods for the purpose of re-establishing them from a scientific outlook. The field of neuroscience has indeed brought about many fresh perspectives that would be able to prompt these clinical methods to either gain or lose their meaning. A review of the described clinical methods, based on the two authors' findings, would allow us to identify the neuroscientific correlations of each technical model. For these methods, we would propose a link to the patient's neurocognitive states and processes, as well as an ideal path of development where the methods could be assigned accordingly. However, knowing that this path doesn't go in a straight line, but in a spiral (Jung 1927-1931), we believe that the analyst should go back and analyze the patient's psychodynamic and psychological issues, for as many times as needed. The treatment, consisting of various methods, would follow an order based on a criterion - the depth of the analytical work, in order to take needed actions as the process goes along, unlike the general mentalization-based therapeutic orientation and the "as if" mentality.

Vis a vis
In Porges' polyvagal theory, the initial vis a vis during a psychotherapeutic course of treatment activates the entire autonomic nervous system, including both sympathetic and vagal components. It is unlikely for the patient during the first few sessions to be completely free of any sort of fear. In

[16] *By "ideologization" we mean the process by which a theory and its application methods are assumed to be explanatory of the entire human reality. For example, for Freud, man is a beast which, once the superego has dissolved, will manifest itself as a perverse polymorphic child. The theoretical ideologization, which should in reality be recognized only as an interpretative paradigm of the human being, is quite highly regarded nowadays as it is believed that it can apparently explain completely 100% the psychic reality of mankind.*

other words, it is common that the patient presents with a set of phantasmal fears which are difficult, if not impossible to be verbalized. Hence we can hypothesize that in vis a vis, an initial state of hypertonic immobilization of sympathetic origin, associated with fear, is induced. In fact, during the initial phase of psychotherapy, an anguished patient, instead of elaborating the anxiety associated with his immobilization, could assume a hypertonic vis a vis with fear and act in an unconscious way. This would result in transference being "acted out" and not merely "thought of" (for example, showing a defensive attitude of complacency towards the therapist). In fact, the patient, wrongly interpreting the therapist's eye contact, voice or gesture, could defensively and unknowingly project onto the therapist his phantasmal source of distress, thus manifesting transference in action instead of processing it using the "as if" mentality. Porges (2017) discusses that this might be due to a possible error by neuroception, formed by distorted past memories. In these cases, vis a vis could unknowingly induce defensive behaviors in a relational dynamic that is obviously determined by the severity of the relevant psychopathology. From Bucci's perspective of multiple code, in this phase of vis a vis, in the presence of defensive reacting, we face the predominance of a subsymbolic cognition-communication, that is blocked from advancing to higher levels of cognition-communication.

The psychoanalytic couch in the initial phase (from immobility with fear to immobility without fear)
The psychoanalytic couch promotes relaxation associated with less awareness of the surrounding environment. In fact, Porges (2017, p. 181) mentioned that in a reclined position (provided by the psychoanalytic couch) we literally become a "smooth muscle" organism, which is a vagal identity. In the upright position, skeletal muscle tone must be maintained and therefore we become an interactive organism, capable of social involvement (ibid., 2017). Meanwhile in the reclined and still position, specific physiological processes can take place, favoring health, growth and recovery of energy. A lack of social behavior, while in this position, is not maladaptive, while it would be viewed as a sign of maladaptation in the presence of a group of friends (ibid., 2017). It is the context itself that defines whether the behavior is appropriate or not. In reality, what happens in an analytical setting is, yes, something more complex, but the coordinates provided by the polyvagal theory are the neurobiological pillars that allow us to better understand the use of the bed as a tool. In fact, on the one hand, the bed stills the patient, who is then less aware of the surrounding environment, therefore allows him to relax and lessen his fear; but on the other hand, one might wonder: why would the patient, despite being relaxed, reacts with anxiety and defensive behaviors? To answer this question, look no further than the polyvagal theory itself: the bed subjects the patient to a state of immobilization, yes, but with fear, since he is immersed in the dynamics of power, conflict or deprivation, hindering him from relaxing. It is this sense of fear associated with immobilization that tips the scale.
But what are these fears? The answer comes from Langs (1988): there are the four types of anxieties present in a safe work environment - claustrophobic anxiety, paranoid anxiety, separation anxiety and finally, death anxiety (ibid., 1988). The initial analysis, as suggested by Porges, should carefully work on loosening the defenses, instead of unintentionally strengthening them. At this point, integrating Bucci's observations, we would stress that the bed also allows the patient contextually to associate the symptom with its specific anxieties, specifically ones that are phantasmal in nature. Dealing with very precise anxieties and at the same time their phantasmal component, which is still

very generic and not episodic in meaning, we could, by connecting the somatic symptom to the phantasm, attain a basic sketch of what would later on become an emotion schema. According to both authors, interpretations during exposure treatment that tend to define or blame the patient, subjecting him to more shame, should be avoided. Furthermore, both highlight the important and positive role of those defenses. For Porges (2017) they are adaptive to an internalized relational context lacking in protection and security, while for Bucci (1997b) they belong to a lower cognitive-communicative spectrum of the subsymbolic dimension.

Sand Play Therapy (from immobility with fear to mobility without fear: social involvement)
Once we are free from not having to attack or escape, we can move and play. This mobilization is no longer fueled by the defense system and the fight-or-flight response, since play deactivates defenses through a face-to-face connection (Porges 2017, p. 183). Winnicott, a pioneer of the school of object relations, mentioned that play takes place in an intermediate area between the primary state of omnipotence where the child feels he himself can create anything that he wants, and the next phase of the mother-figure. This intermediate phase, no longer as hedonistic as the omnipotence phase, is referred to as the transitional space, constructed subjectively but perceived objectively. It is a non-traumatic transition to objective reality, which preserves the child's omnipotence and simultaneously introduces him to the first form of social involvement. In the transitional space, the child can play with the transitional objects in a creative way which will then be developed into cultural life. Therefore, this transitional space allows two partners to participate in a developmental phase. More importantly, it is also the potential space between the individual and the environment, in which "…in all subsequent ages of the human being, every form of creative mental process that allows us to develop personal reflective autonomy and seize the opportunity to give a personal name and meaning to one's existence and to the world, starting from previous social and cultural experiences, takes place" (Winnicott 1951-1965).
Bucci, who stresses the importance of the transitional phase in structuring emotion schemas, also suggests that the somatic symptom, after being reconnected to the patient's phantasm in the general sense, can then be associated with specific episodes and images that can reveal what this general phantasm does to the patient's psyche that results in the somatic symptom (for example, paranoid anguish). To illustrate, role playing or using the sandbox and the miniature figures to mimic events and people belonging to the patient's real life (the Sand Play Therapy), facilitates the conversion of the symptom into images, which are symbolic but not yet verbal. The physical features of the transitional objects are originally of tactile-pressure quality (plush toy, blanket, piece of cloth). These objects are the first items perceived by the child as "not me". Both in role playing and the Sand Play Therapy, these original objects become increasingly animated, living entities. In particular, in Jung's reference to the Sand Play Therapy as an imaginative activity, the term "activity" seems tantamount to Porges' concept of mobilization, while the term "imaginative" is in consonance with the concept of representation within the emotion schema of Bucci.

Active imagination, a more advanced phase that takes places after the Sand Play Therapy
In the next level of development, active imagination, a different conceptual formation from the Sand Play Therapy, enters the picture. It is considered as the achievement of an imaginative activity. Active

imagination (Von Franz 1978) induces a phase of immobilization in which images take the initiative to move toward the patient. In this way, the images play the active role, while the patient instead is able to completely relax in the state of immobility without fear. He is then able to disengage his senses and perceptive apparatus from the external environment and its constant stimuli. In the fog of future and past memories that blurs the awareness of the present, the patient can now access to the images present in his internal world and enter a cognitive-communicative dimension with what Jung calls the objective psyche[17].

At this point, a final reflection on the central concept of Porges (security/trust) seems appropriate, still referring to the analytical framework and the rules of the setting. It is a matter of outlining the features of safety in an analytical setting with both its general rules and the contents, based on the ground rules of life, declined in psychotherapy as the main rules that structure a safe framework (Langs 1988).

Porges's statement "The polyvagal system loves predictability" (2017) gives us very precise behavioral indications for the therapist, for example on the management of absences. A solid framework for psychotherapeutic work, able to promote safety and trust, requires prior notice of a month and a half for any holiday that the therapist takes throughout the year (Langs 1988). Additionally, specified exact date and hour of the next available appointment should also be provided. The precise announcement of the therapist's absences during summer and winter should be done even before starting the course of therapeutic treatment, so that they are always clear and "predictable" to the patient. The predictability, mentioned by Porges, can be ascertained also by establishing a fixed date and time for the session.

In conclusion, after studying Porges' and Bucci's different psychotherapeutic perspectives, we would like to infer that the use of any of the aforementioned tool (vis a vis, the psychoanalytic couch, Sand Play Therapy, etc.) should be chosen according to the phase of psychological development that the patient is currently going through. These choices should not be based on any dogmatic preferences determined by the therapist's training or personal choice, which may end up restricting and over-simplifying the therapeutic process. These tools have been already proven by evidence-based neuroscience, and if chosen appropriately, will be tremendously effective in therapy.

Contents and objectives of analytical psychology in light of the polyvagal and multiple code theories

From a Jungian angle and perspective, the final objective of analytical psychotherapy is indeed to carry out the individuation process, which as we know is done by following step-by-step different stages of life and their corresponding developmental states, in terms of psychological maturation and ability to answer existential questions about life's meaning. So, from this perspective, how does Porges' discussion fit into the picture? This is answered by Porges himself. By restoring the patient's condition

[17] *In this phase of psychological development, accessible by only a few patients, the predominant factor is no longer the sign or symptom, but it is the collective unconscious that, with its images, can communicate to the ex "patient" his inner authentic sense of his life and the way to achieve it. Immobilization without fear shares the same goal, for example, with Eastern Zen meditation or the Western spiritual retreat of mystical ascetics. In this case, the therapist plays the role of a travel companion in the "patient's" interior world, at the same time maintains a secure framework and support that are indispensable for the process.*

of inner security, he then can live creatively[18] *or immobilize without fear in order to access intimacy, play and the comfort of being embraced and embracing others without fear. Within these expressions, on the clinical level, we, as analytic psychologists, again come to face the coniunctio archetype, which is the union of opposites. Opposites (e.g. in the case of male and female intimacy) may be called upon to unite in a convivial relationship. The union of opposites presents as an ongoing, existential task, precisely for the purpose of carrying out the aforementioned identification process.*

The compassionate mind and the primary love feeling: the two central factors for psychological development and an effective psychotherapeutic process

Through the analytic study of one "single case", representative of other similar cases in our clinical experience, we ponder upon broadening the prospective horizon of neuroception (Porges 2017). Instead of merely detecting danger in the absence of awareness, neuroception's function could also be extended to the opposite direction of predicting the quality (which are accessibility and receptiveness) of the "foreground" Object of Symbolic Love (Bucci 1997b), still in the absence of awareness. This applies to the patient's psychosomatic symptoms as well as the body's states typical of the physiological development of a particular life stage, including psychological-existential developmental changes from childhood to adulthood as well as ones anticipated in suffering, old age and the end of life.

Bion already spoke extensively about the accessibility and receptiveness of the object of love in his discussion of reverie and projective-introjective identification (Bion, 1970); however he only refered to the context of early life's critical moments. Instead, we would like to exemplify, with the following clinical case, the indispensability of the compassionate mind and the primary love also in other life stages, including the end of one's existence. This idea allows us, in our specific case, to explore the action of the two aforementioned factors in consolation, a further and deeper level of the dimensional spectrum of love.

The concept of consolation, much explored in the theological and metaphysical field, has never been studied in depth in psychoanalysis, neither in metatheoretical nor statistically standardized form, for obvious objective reasons.Before talking about consolation, we think that it is essential to describe the object or the psychic event that requires consolation: death anxiety, in its two possible semantic variations: 1) Death anxiety as anguish of the limit; 2) Death anxiety as anguish of the end of the human destiny. Each of these two variations are accompanied by a corresponding type of consolation.

1) *Death anxiety due to the sense of knowing the limit in the psychosomatic disease.*
   The experience of the sense of limit begins at birth, not surprisingly marked by the newborn's crying, and will continue across all stages of the individual's psychological development throughout life until the ultimate limit, that is death.

[18] *Security: In psychoanalysis, the concept of security as an essential factor for the human psychological development from birth till death will be first explored, looking at the psychology of object relations. Bowlby speaks about the concept of a safe base (1988), identifying its clinical aspects and studying it in large samples of children and clinical cases. He came up with an attachment theory of humans. Similarly, in analytical psychology, Neumann deals with safety by studying the archetype of the elementary female who, in the presence of a secure base, would become the archetype of the female transformer (Neumann 1956), who is oriented towards psychological exploration and growth of the individual, from infancy to old age. In the clinical context, R. Langs deals with the setting's conditions that ensure a safe psychotherapy framework (1988).*

We are all aware that life without death is not possible: in every moment that we live, we are at the same time dying. Similarly, in all crucial moments during our life, components of interpersonal relationships die, so that a new system of human connections can be born. For example, let's think about the transition from childhood to adolescence, or from adolescence to adulthood (getting married, having children, etc.) According to Langs, death anxiety in this case is understood as knowing this sense of limit, which prevents the patient from "dying" out of the anachronistic psychological balancing of life which is meant to give birth to new and more balanced interpersonal contexts. Hence, the psychosomatic disorder, while opposes change in a classical analytical perspective, paradoxically forces the patient to perceive this sense of limit inherent in his suffering and the corresponding death anxiety, from which until then he has protected himself by avoiding the "madness" of his emotional disorder (Langs 1988) or the "madness" of experiencing his disorder on an emotional level.

2) *The death anxiety as anguish of the human destiny.*
Langs moreover, bases his entire psychoanalytic theory on the principle that death anxiety is the engine of all forms of mental suffering, from the mildest anxiety disorders, to the most serious psychosis. The author (1988) refers to death anxiety in this context as anguish of the person's own annulment and the absolute annihilation of his own life. However, he also regards this state of mind as a reaction that can determine in a patient a safe framework for therapy, confined within the rules of the setting, which decline the Ground Rules of life in the context of the psychotherapeutic session. In our case study, we included both variations of death anxiety: one due to the sense of limit caused by the psychosomatic disorder and one due to approaching the end of life in a patient of advanced age and deteriorating health. For the therapist, facing a disease with a certainly unfortunate outcome, which is death in this case, might induce a wound that hurt much more than in other cases. The therapist might be challenged beyond his resilience resources. Apart from shouldering the wounds that cause the psychosomatic symptoms in the patient, the therapist would also be subjected to the additional stress of confronting the concrete and imminent prognosis of death, which subsequently exposes him to the emperor of all anxieties: death anxiety as anguish of the human destiny.

The nothingness

In a brief and exclusively anthropological perspective, death is an experience that does not bring us any knowledge, since it represents the nullification of all our previous and future knowledge (Jankélévitch V. 1994). As it is not part of a life that still goes on, death is a catastrophic event (Bion 1970), and at the same time, a mystery. Similar to birth, which nothingness precedes, death can also be defined as a mystery, which nothingness follows. The "psychosomatic" disease, firstly for all of us, is our finitude. Although the therapist is there, right in his room, trying to live and let live, there is one thing against which he can do nothing as a man, but defines him as a man: the inescapable fate of death. Men know they have to die, but they don't really believe it. If death means a poor prognosis for the patient, things from a psychodynamic point of view change not only in form, but also in substance. In this case, although the psychotherapist is involved in the patient's death, there is no action that can bring about any change. Death transforms us from form and existence to nothing. From an exclusively anthropological perspective, without considering the metaphysical-theological

viewpoint, as happens in atheistic humanism (De Lubac 1945), it is obvious that life is reduced to three fundamental axioms (sex, money and power).

Both variations of death anxiety relating to the sense of limitation and human destiny require consolation. To provide an in-depth description of consolation, in our opinion, it is essential to outline the dimensional continuum of the development of a compassionate (Porges) and loving (Bucci) mind, from the most basic quality to the most advanced:

- *Notation, through which the therapist objectively records what happens to the patient (Bion 1963): for example, "she has an expression of fear today".*
- *Sympathy: the term sympathy derives from the Greek word that is made up of sun + pasco, which literally means "to suffer together". For example, it can be defined as an instinctive inclination to like someone or something. It arises when the feelings and emotions of one evoke similar feelings in another, creating a state of "shared sentiment".*
- *Empathy: a term that derives from the Greek word that is made up of in + pasco; it is the ability to actively enter another person's emotional situation by immediately understanding their psychic processes; neuroscience attributes this ability to mirror neurons (Rizzolati 2019); for example, if I see a child being beaten by an adult, I feel his own feelings, pain, as if I myself am the beaten child.*
- *Pity: it is a feeling of compassion, felt in front of others' sufferings and unhappiness; it can also be a feeling towards a family member: filial piety of the pious Aeneas who took care of the elderly father.*
- *Understanding: the therapist can say to the patient: "today while talking to me about this topic/memory, you are asking me to validate your pain/emotions".*
- *Compassion: or: "Today you are asking me to be close to you in this moment of great suffering/joy";*
- *Projective-introjective Identification[19]: for example, at the beginning of therapy, if the patient has some phantasmal reactions after knowing the rules of the setting: "You are telling me that I am being oppressive towards you through the restrictions of our relationship that I mentioned (claustrophobic distress); because I want to hurt you, I enjoy making you suffer and humiliating you for having needed me (paranoid anguish); I don't care about you because I ended the session while you were still talking to me about your emotions (separation anxiety and fear of abandonment); you are anguished because you cannot get rid of me immediately, as much as you want and feel the need to (death anxiety understood as anguish of the limit). So, in order to avoid the pain caused by my absence and the feeling of loneliness, you try to protect yourself by keeping me at a distance and blaming me for all the bad things";*

[19] *According to Bion, the maternal "reverie" concept refers to a relationship in which the mother receives and absorbs "within" herself her newborn child's sensory experiences, emotions, bothering and unexpressed physical discomforts through the projective identification from the newborn, enriches them with meaning then returns them to the child. This is done through what Bion calls the "alpha function" – the mother's ability to process emotional experience and transform it into elements that are useful for thinking and dreaming (alpha elements). In this case, no part of the self is lost. On the contrary, the infant receives back from the mother not only his original experience "digested" by the maternal mind, but also the creative, loving relationship from a receptive object, capable of emotional processing. By being a part of this creative interpersonal experience, the infant in turn learns to think (Bion 1962).*

– *Consolation: regarding this last quality of a loving and compassionate mind, we could imagine two types of consolation. One is to help the patient exit a situation of psychic suffering, while another is to create a relationship with the patient that can enable him to accept an inevitable outcome, as painful and discouraging as it might be. An example of what the therapist could say to provide the first type of consolation is: "You are now experiencing tremendous pain to the point of desperation, and you feel that it is impossible to escape from this suffering brought about by your relationships"; or, an example for the second type of consolation is: "You are now experiencing tremendous pain to the point of desperation due to the inevitability of what is happening to you, and hence you are entrusting me with your tears, as well as your whole self".*

It goes without saying that the given examples are not exhaustive of what the therapist can say to the patient. Used inappropriately, these examples can even become analytical clichés, which will not correspond to what the therapist intends to say, at the level of neuroception. However, they can be viewed as simple examples that are very much representative of what we are trying to bring across. Next we would like to discuss in greater details the last and also the most advanced quality in the list above – consolation.

Consolation

This quality has little to do with the other qualities of a compassionate mind – sympathy, empathy, pity and compassion, which also play a vital role in the therapist-patient relationship. What does it mean to console the patient? By using the word 'console', we don't mean only a conscious state of mind, but one with both conscious and unconscious dimensions. To console (cum-solar) is to internally experience (both in the therapist and the patient) a warm and luminous spiritual radiance (the luminosity indicates the cognitive component while the warmth refers to the affective element [with author's note]). By reverie, Bion refers to the state of mind that precedes consolation. Reverie is also the dream memory that is simultaneously conscious and unconscious. He also defines it as Faith, intended as a state of mind, which can be achieved with a discipline of spiritual asceticism that frees the psychic faculties (sense, intellect, memory, will) from their attachments to worldly objects. Those faculties of the soul converge internally in a dimensionless space, as defined as the "depth of the soul" (Eckhart 1314), which is completely disengaged from worldly attachments. In this "unsaturated" space of the soul, the psychic faculties can be directed towards attaining psychic and spiritual experiences and knowledge within the inner world. From this observation, the concept of Faith as a mental state of mind in the Ultimate Reality was developed (Bion 1970).
Regarding the depth of the soul, Bion also quotes St. John of the Cross: through the dark nights of the soul, so called by the mystic, you can reach the "depth of the soul". The harmony with Ultimate Reality[20] is, for Bion, a fundamental prerequisite for the analyst who studies the deep unconscious. Consolation, according to the British psychoanalyst, is indispensable to dissolve death anxiety in the newborn from

[20] *Bion assigns Ultimate Reality as O, the "Void and Formless infinite", the unknown, the unknowable, able to be felt only through faith. The author writes: "The discipline that I propose for the analyst, namely avoidance of memory or desire, in the sense in which I have used those terms, increases his ability to exercise "acts of faith". An "act of faith" is peculiar to scientific procedure and must be distinguished from the religious meaning with which it is invested in conversational usage." (ibid., p. 50)*

a perspective of psychic development. In our opinion, consolation is also crucial for each of us in relieving our own anguish of death, interpreted as both the unavoidable critical passages of life as well as the inevitability of our and others' demise, as we ponder upon the deep meaning of our life.

Consolation for death anxiety caused by knowing the sense of limit and facing the personal demise - clinical case

Scene 1 (The Ghost) - *death anxiety and the defenses against it: the primitive violence, the spirit of a warrior, a constant state of conflict towards the world, the narcissistic grandiose self like a king in all relational contexts.*

Scene 2 - *The Grim Reaper, representing Death, becoming the focus of his conscience.*

The patient of our clinical case was already the subject of our other publications (Grassi & Berivi 2018). He was an atheist hence referred little to religious symbolic entities. He was an ex gambler, suffering from a serious form of a neurological disease, complicated by hypertension, diabetes, previous heart attacks, poor vision, postural instability, as well as severe chronic spastic colitis. His medical condition and his old age (more than 70 years old) prompted him to reflect on his possibly forthcoming demise. Anguish of death had long been established at the center of his conscious and unconscious thoughts. This following scene in the sandbox (scene 1) represents his psychic state and his defenses against his death anxiety. His emotions and feelings regarding the awareness of his own finitude might have been expressed firsthand through the sandbox, according to the symbolic-verbal code.
His unconscious defenses against death anxiety were then confronted in a conscious manner. This convinced the patient to abandon them and face "The Grim Reaper", that is death.

Immediately after this session in which death was established to be the center of this attention, the patient had the following dream:

> *I attend a funeral ceremony of Eastern tradition: An elderly monk douses the body with alcohol and sets it on fire. I see flesh and visceral organs burning until the dead person is reduced to skeleton. I am seized with horror and terror.*

After listening to the patient's dream, the therapist experienced the patient's horror and terror in some moments during the following session, and in the following night he himself had two dreams: In one dream, as a dead man, out of the dream scene, he cried desperately for having lost his loved ones; a fatal blow to his relational dimension (to his social involvement, as Porges would have said, 2017), an endless pain;

In the other dream, immediately after the previous one, he cried desperately, also alone, looking at the living world from the eye of a dead man, since he was then nothingness, he was then gone while others, who had been to his funeral, returned to their daily life; also for them he didn't exist anymore. This time it is a fatal blow to his existential identity. In a form of me/not-me internal elaboration, the therapist, through an introjective identification of not-me from the patient, realized consciously those strong emotions of horror and terror, as strong as they are undifferentiated in their meaning. It was the therapist's unconscious; or in other words, it was his neuroception detecting the danger that provoked in him the horror and terror that transformed these undifferentiated emotions into non-verbal symbolic, specific dream images (Bucci), following verbal expressions of the patient's loss of identity and loved ones.

The consolation of the therapist

These unconscious experiences of the patient became then the therapist's (dream and conscious). He could thus communicate to the patient that he understood his terror of losing all his personal relationships and the horror of no longer existing as a person. The patient cried. This analytical interpretation from a viewpoint of the compassionate mind was an act of consolation. This statement was not said by us but was confirmed, during the following session, by the patient's unconscious, represented in the sandbox as below:

Shortly after, he also reported a dream to confirm this interpretation:

> *I am looking at a very large painting in front of me: there I admire the entire color spectrum of the rainbow, in which colors fade into each other in an almost imperceptible way. In the background of the rainbow, the image of Madonna appears. I feel a sense of peace.*

After this dream, the patient suddenly lost for good a specific verbal tic, directed to his partner (You must die!), which had always been strong and persistent. Thus he also healed from a psychosomatic symptom. We noted two final observations from this dream. The first is that the patient was certainly atheist, at the level of his conscious ego, as mentioned above.

The second is that before the dream, the therapist had not spoken to the patient about a God and/or a religion to maintain a sense of professional psychoanalytic neutrality. Despite this, the deep unconscious shared by both parties used a religious image - Our Lady of Consolation to produce objectively therapeutic effects as well as a sense of relief from death anxiety. The positive effects include the disappearance of the psychosomatic symptom – the tic and the violent attitude towards his partner. The patient's anguish of death was then overcome by a feeling of peace, which resulted in his sudden newfound availability and tenderness towards his partner's physical and psychological vulnerabilities. Before, he was blinded by his radical selfishness, violent attitude and continuous exploitation towards his partner, using his illnesses as justifications for his "disabled" state.

Scene 3 - *the patient placed Michelangelo's Pietà in the sandbox and nearby, a coffer.*

In scene 3, the image of Michelangelo's Pietà represents the Consolation that the patient

received not so much from the therapist's conscious ego, which was the decoder through his own deep psyche, but from the Depth of the soul at the center of the unique and unitary universal unconscious, to which both the patient and therapist belong. The Great Mother, as an archetype in its "healthy", non-matriarchal meaning brings about a sense of peace. In this case, the therapist was only an instrument of Consolation that perhaps could have had transpersonal origins. Through the scene, we also could interpret that Consolation is a very precious asset of high value, kept in a coffer hidden in the depths of the patient's unconscious. The image of Madonna in the patient's dream, as of many other patients we saw, suggested that we confront the specific object of consolation: despair. It is the very image of the Virgin that connects us to the figure that probably experienced the highest degree of despair: Christ. To address this delicate topic, we did not rely on a theological-metaphysical perspective which might not be relevant to our scientifically oriented work. Instead, we dissected the issue from an archetypal perspective of analytic psychology, in other words, from an experiential-cognitive perspective that involves the mythologem – a part of the collective human unconscious based on anthropology.

Example of despair caused by anguish of an imminent death in complete solitude: Christ in the Garden of Gethsemane

A psychological analysis of Christ's despair, being face to face with death has not been conducted according to the archetypal criteria of analytical psychology. Diverting our focus from Jesus's religious meaning and instead studying his symbolic significance, we can say that his historical existence and tragedy tell us a lot about human reality, as well as the hardship in daily life that each of us must face emotionally. What happened to Christ in front of his death, on the one hand, could be defined as a psychosomatic symptom (from a perspective of exposure treatment). On the other hand we would dare say, that from a psychological-archetypal angle, it allows us to free the psychosomatic event from the psychopathological stigma of the psychic abnormality and see its adaptive component.

So far, we have encountered very few, certainly not psychoanalytic, references to Christ sweating blood in the Garden of Gethsemane, in the face of his imminent death. According to a medical diagnosis based on stigma, Jesus at that time might have suffered from a psychosomatic form of hematohydrosis (sweating blood), a medical condition similar to hemorrhagic purpura, but much more serious. According to current research, hematohydrosis is caused by a condition of acute stress, resulting from the threat to one's survival. Christ hence might have suffered from an acute psychosomatic condition while approaching his own death. In other words, he might have experienced death anxiety in his own human skin and found no consolation around him, despite having asked for it several times[21] from his disciples who instead fell asleep in the unconsciousness of the ego.

However, what does the disciples' slumber represent right at the time when their teacher's death was approaching? We could put forward the hypothesis of the sword, which a disciple, following the law of retaliation, used to sever an ear of one of the conspirators; this is the diabolical split between good and evil, in which death acts against one another (give and receive death: the demon of violence

[21] *(... he began to be deeply distressed and troubled. "My soul is overwhelmed with sorrow to the point of death," he said to them. Going a little farther, he fell to the ground (Gospel: Mark, 14:34), fell with his face to the ground (Gospel: Matthew, 26:39) and prayed "Abba, Father," he said, "Take this cup from me." (Gospel: Mark, 14:35), and then, addressed the disciples: "Pray that you will not fall into temptation." (Gospel: Luke, 22:46).*

inflicting Caravaggio [Resca G. 2001])[22]*. However, Jesus, in the face of his own demise and his boundless solitude, met the Consolation of an angel descended from heaven. As a gift of the risen Christ, for those "who have not seen", consolation is present in the deep collective unconscious of humanity (Jung CG 1927, 1955) and is symbolized by the image of Madonna, as the depth of the universal soul. However, it is up to the individual to find it within oneself, preferably through the mediation of another being. Mary's appearance in dreams and in the Sand Play Therapy of patients whose thoughts and actions are those of atheists, seems to reinforce the idea that Mary is an archetypal figure of the Great Mother in the collective human unconscious.*

Conclusions

The "depth of the soul", symbolized by the archetype of the Universal Salvific Great Mother, is the condition of total intelligibility and absolute clarity derived from complete understanding. In our opinion, its corresponding neurological location could be in the nuclear consciousness of the brain stem, the blank slate of Solms (2002). The internal spiritual man knows differently from the external man: his knowledge surpasses that of all in the same way that those who comprehend the essence of "whiteness" know the "white" concept better than those who know it only as a color (Bucci 1997). Analytical psychology, with its clinical aspect, shows us that the concept of internal rebirth, only by emerging from the deep universal consciousness, can be truly authentic. At the core of consolation, we find two complementary entities: the compassionate mind (Porges) and the feeling of love (Bucci), which then become the organizing factor of all affective schemas in the primary symbolic object which establishes itself as the focus of the patient's psyche.

The depth of the soul (Eckhart M. 1314) seems to coincide with the feeling of love (Bucci 1997) as well as the state of Compassionate Mind (Porges 2017, from Gilbert 2010). This sense of understanding resolves the opposition of two extremes, like the sun that "rise upon evil men as well as good," (Gospel, Mt 5:45), then addresses with equal tenderness both the "good" and the "bad", thus allowing the conciliation of the Good and the Evil.

We wonder if it is too bold to approach the state of pure awareness of the Nuclear Consciousness, the Compassionate Mind and the foreground Symbolic Object, from a neuroscientific perspective of the psychic dimension designated as the depth of the soul. The image of the Great Heavenly Mother is their psychic representation that is produced by the collective deep unconscious in the individual and social psyche. The capacity to understand, the compassionate mind and the feeling of love are, however, also the three pillars of Consolation. Therefore, a reflection on the neuroscientific contributions of Porges and Bucci seemed useful as regards to the central factor of change and healing for a patient. Through the works of the two authors, we are able to glimpse not only at the latest perspectives of neuroscientific research in the psychological – analytical field, but also at the philosophical implications and the outlook of life to which their neurocognitive studies are oriented.

[22] *At the basis of this split we can perhaps also find the escape from the anguish of death in Christ's promise of the resurrection of the body, ([with author's note] Here it is no longer the man who speaks, but the son of God): "... But after I have risen, I will go ahead of you into Galilee ..." (Gospel: Matthew, 26, 32). Many Christians, entirely of good faith, take refuge in this promise of resurrection only to block their conscience from the sorrow of their own death, a tragedy from which even Jesus did not escape. For example, a caregiver can be inclined to comfort the patient having a poor prognosis with the prospect of resurrection, hence avoiding the deep work that the situation requires.*

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