REWRITING NEURAL PATHWAYS TO STOP DEPRESSIVE DISTRESS IN A SUSPENDED SPACE AWAY FROM EVERYDAY LIFE

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SUMMARY

An increasing number of human behavior scholars are redirecting their professional curiosity towards studies carried out with innovative research and intervention methods, far from the obsolete and reductive systems of analysis of the past. As part of these studies, aimed at the individual's bio-psycho-social betterment, the fascinating perspective of using the opportunities offered by a trip as a catalyst for important changes, has an important place. A sort of 'Journey' in the Journey, in which the suspended space-time of a travel can be the frame for innovative and interesting situations of parallel discovery of one's inner world. According to Hippocrates, therapy was not just a question of medicine and diet, in fact the cure he gave to his patients included also a trip to an island in order to temporarily move away from their environment, and therefore from the context that, somehow, had contributed to the emergence of the disease. Furthermore, the journey in itself, produces extraordinary beneficial effects. According with another study, for example, conducted by the Global Commission on Aging and Transamerica Center for Retirement Studies, in partnership with the U.S. Travel Association, women who vacationed every 6 years, or less, had a significantly higher risk of developing a heart attack or a coronary death, compared to women who vacationed at least twice a year. Similarly, another study showed that men who did not take an annual vacation had a 20 percent higher risk of death and 30 percent greater risk of death from heart disease. (www.globalcoalitiononaging.com, 2013)

As regards the therapeutic value, the idea of facing a fascinating "Journey" in a Journey, could prepare the individual to enter in a sort of a suspended space, in which, according to many authors, the travel can induce both psychophysical and psychosomatic beneficial changes.

For this reason, Body and Mind project, prepared by the Genius Academy Research and Psychological Studies Center, started in 2015, thanks to a protocol of intervention which includes associated psycho-physical inductions, with the aim of demonstrating the increase in the level of well-being (from the 30% to the 60%). The research, continued in 2016/17 with the objective of raising the level of well-being perceived and measured, has shown a further health improvement. This improvement was evaluated and compared to data expressed by measurement of heart rate, blood pressure, hours of night time sleep, headache, sense of anxiety recorded an increase in well-being of 67% by stimulating the organisms affected by a specific suffering such as depression in the oncological patient. As the results of three years of study have been so encouraging, it was decided to continue the research by making the necessary changes to contextualize the Body and Mind project within a travel situation. The project a "Journey" in the Journey, which for the last five years optimizes the opportunities offered by a trip to promote the psychological growth of individuals through prescriptions, work shops, seminars, drinking and talking, social dreams, has therefore widened the research space, also bonding the objectives of the Body and Mind project.

A "Journey" in the Journey in the places of Body and Mind, develops along two main directions: 1) the places of Body and Mind; 2) the Body and Mind project.

But the red thread that binds and unites the study and research initiatives we have talked about is always the same: the innovative strategic approach where the individual is at the center of the scene, in contexts where life is live and where it is always the person to have the role of leading actor.

Key words: suspended space - places of body and mind - journey as therapy - changement

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INTRODUCTION

Embarking on a journey means putting oneself in comparison with different realities and cultures.

For this reason the tourist experience, in all its aspects, is impregnated with interesting but underestimated psychological dynamics. The novelty of environments and people could be perceived by the traveler as a loss of points of reference, experienced with a feeling of uncertainty, as well as with a confused and not well defined feeling of unconfortable state. The professionals who devote themselves to the study of human behavior, aimed at bio-psycho-social improving of the individual, will be interested to use the opportunities offered by a journey as a catalyst for important changes. The project a "Journey" in the Journey moves from these assump-

tions, conceived since 2013 and realized by the Writer in her professional role of Psychotherapist, Director of the "Genius Academy" Psychological Research Center, and as Tourist Manager of Genius Handling Vip (GHV) sector, present in Italian and European airports. GHV is another project, born in more recent years, with the aim of studying the behavior of people traveling, in transit (airport tourism), and working in the airport, as well as doing training activity dedicated to this last type of people (Alitalia Training Genius Academy).

Thinking about the psychology of tourism, means to think mainly about purchase behaviors of touristic products. It seems to be very interesting to study the behavior of tourists with other objectives, different from sales or advertising. The stimuli and the circumstances offered by a trip, can be important occasions for growth and well-being, if adequately optimized in situations of reflection and psychological therapy, as it will be studied further on. In the meanwhile one detaches from ones living environment, in order to enter in what can be defined as a kind of suspended time-space, with an experience of new rhythms, habits, sensations, emotions, as well as new cognitive, emotional-behavioral and psychophysiological stimulus: a kind of suspended space far from everyday life.

THE JOURNEY AS A THERAPY

Traveling means changing: place, look, idea, and consequently discovering places, discovering oneself, to heal. According to Hippocrates (Lopez 2004) therapy is not just a question of medicine and diet, in fact the cure he gave to his patients included also a trip to an island in order to temporarily move away from their environment, and therefore from the context that, somehow, had contributed to the emergence of the disease.

This is the first evidence of the therapeutic value of traveling, of moving, of going elsewhere, this is what sometimes is called dromotherapy, from the Sanskrit "dremi", wandering, from the Romanian "drom", travelling, and from the Greek "dromos", race. Another important aspect of travelling and vacation is the presence of new incentives which provoke new reactions, but also the absence of the usual familiar, working and social pressures. Some studies would seem to point out that inner paths of self-awareness and changing can be favoured and stimulated in particular in circumstances other than the walls of a study. Some researchers, such as Marc G. Berman and collaborators at the University of Michigan, wanted to test the positive effect of experiences of moving outdoors compared to closed environments, on cognitive functions, in particular on short-term memory. According to these researches the experiences of outdoor travel, like a journey, would seem to increase the memory up to 20% (Berman et al. 2008).

A review of 17 independent studies (Whear et al. 2014), has highlighted a decrement, even without medication, of the symptoms of dementia in patients who are given the opportunity to leave their rooms and move outdoors. Researchers at the University of Exeter Medical, in particular Dr Rebecca Whear (2014), noted that the possibility of getting out and moving in new spaces provided new stimulation to dementia patients, reducing agitation and depression and promoting states of relaxation and resurfacing of memories at the same time. Therefore, if the possibility to make trips or walks in the clinicized patients has produced excellent results, we can imagine the positive effect produced by a journey on the cognitive and emotional psychological sphere in people not affected by disabling diseases.

According with another study, conducted by the Global Commission on Aging and Transamerica Center for Retirement Studies, in partnership with the U.S. Travel Association (2013), women who vacationed every 6 years, or less, had a significantly higher risk of

developing a heart attack or a coronary death, compared to women who vacationed at least twice a year. Similarly, another study showed that men who did not take an annual vacation had a 20 percent higher risk of death and 30 percent greater risk of death from heart disease. (www.globalcoalitiononaging.com 2013)

The 1992 Framingham Heart Study, which still stands as the gold standard for long-term health studies (www.framinghamheartstudy.org), tracked workers over 20 years, found that "men who don't take vacations were 30% more likely to have heart attack and for women it went up to 50%," according to Brigid Schulte, author of "Overwhelmed: Work, Love & Play When No One has the Time" and the director of the Better Life Lab at the New America Foundation (Starre 2018).

Experts affirm that benefits of traveling are almost immediate: after only a day or two of holiday, 89% of the study participants saw significant stress reduction, with undoubted benefits both physically and mentally.

ANXIETY AND DEPRESSION: SECONDARY BIOLOGICAL DAMAGE

Anxiety is a spontaneous and fundamental emotion necessary to protect against external threats as it has the function of activating the available resources of an individual to prepare him/her to face the dangerous situation in the best possible way. When the risk persists over time, or when the individual feels oneself inadequate to go up against the situation, then the environment is perceived as an important danger to one's balance and anxiety becomes a negative emotion. Anxiety is a defect that limits the performance, productivity and quality of a person's life, causing a loss of thoughts, concentration and attention span and, sometimes, it causes energy blocks. If this state remains, generalized anxiety can evolve in situations of different diseases, such as panic attacks and depressive states. Possible symptoms of these situations of discomfort are: psychological state of anticipation, characterized by fear, expectation of unpleasant or tragic events for ones self and for loved ones; mental alertness, characterized by hyper-attention that paradoxically transforms into distraction, difficulties in concentration and memory, impatience, irritability, physically blocked, highlighted by tremors, muscle pain, inability to stand still and relax, eyelid tremors, easy exhaustion, vegetative hyperactivity (which affects that part of the nervous system not controllable by will) that determines tachycardia, dizziness, dry mouth, increased sweating, tingling in the hands and feet, digestive difficulties, sensation of heat and sudden cold, knot in the throat, difficulty in swallowing, increased breathing, cold and wet hands, diarrhea, feeling of "empty head" or "floating", knot in the pit of the stomach. These situations of depressive or anxiety psychological distress can be induced either by external events or by inner states (an example of which is the level of sensory and perceptual sensitiveness of the individual), as well as a combination of both.

Stressors, or external situations, that one perceives as negative or dangerous, can be transitory or permanent and impact differently, modifying an organism according to the amount of time they have been able to act. However, stressors impact on bodily functions by modifying it, and in turn causing further psychological changes. This results in a dysfunctional self-feeding body and mind cycle (Spurio 2016). In a depressed organism different areas of the neuroendocrine system are involved, such as the hypothalamoipofisario axis, which directly stimulates the adrenal gland, triggering a secretion of adrenaline and cortisol which consequently causes a lowering of the immune system (Spurio 2016).

The persistence of a pathological condition of this type is manifested by a symptomatology of the depressive states already mentioned, anxiety, lowering of immune defenses, as well as mental burden, insomnia, cramps, changes in sensory perceptions, migraines, tachycardia, apathy.

Therefore, the permanence of a depressive state, can produce a non-ignorable psychophysical damage, called "secondary biological damage", since it involves an alteration of the balance of the endocrine system, with, consequently, an incorrect production of neurotransmitters and the development of psychosomatic illnesses. Recently it has been shown that the sympathetic and parasympathetic system are directly influenced by a particular area of the brain called the limbic system that has the function of activating and manifesting emotions. Each emotion corresponds to either an affective reactivity or a response from the organs of the body mediated by the autonomous nervous system. Therefore, it is

widely demonstrated that the first response to environmental stimuli, emotions, condition not only rational processes, but they also act on neuroendocrine and immune systems, responsible for well-being, as well as the onset of diseases (Spurio 2017).

A "JOURNEY" IN THE JOURNEY IN THE PLACES OF BODY AND MIND

A "Journey" in the Journey in the places of Body and mind, develops along two main directions: 1) the places of Body and Mind; 2) the Body and Mind project.

The places of Body and Mind

The journeys studied with an itinerary and a program to induce to work on specific psychological realities are included in this first line of research. It is possible to take as an example the journey to the space temporal doors in the Yucatan. An ethnographic research has shown that some descendants of the Maya people, in order to explain the mysterious disappearance of that ancient people, report that the Maya used a sort of space-time doors to disappear into nothingness. They abandoned their beautiful cities, as well as the archaeologists who found those sites and passed through the same space- time doors to realize their dream of leaving a dimension of reality too hostile and unsuitable for them. As many observers affirm, for example Lacandones, that people did not leave definitively, because it is as if it still existed in those places, even in a different dimension (Figure 1).

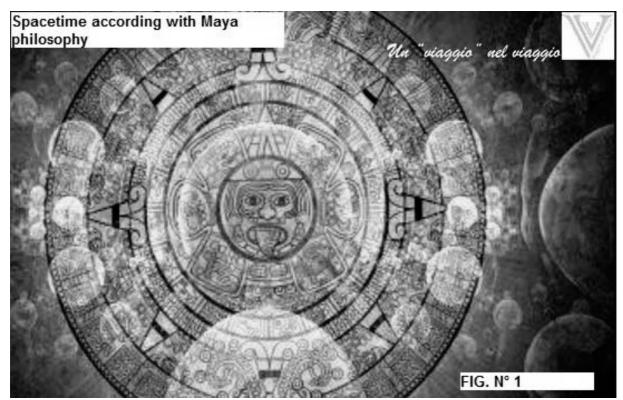


Figure 1. Spacetime according with Maya philosophy

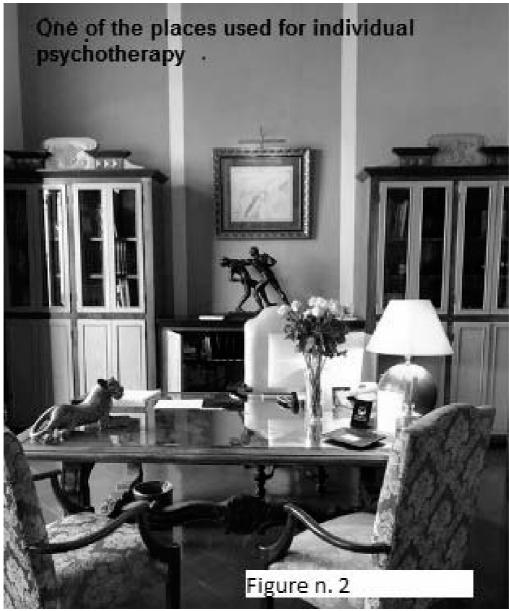


Figure 2. One of the places used for individual psychotherapy

Beyond the legend, the idea of facing a fascinating and mysterious on the spot - "Journey" in the Journey, could prepare the individual to enter in that sort of suspended space time, so favorable, according to many authors, to both psychophysical and psychosomatic changes. The suspended space-time of a journey can be the frame for innovative and interesting situations of parallel discovery of one's inner world.

In this kind of journey the suggestions produced by places where, as the most ancient and secret Mayan legends tell, there would exist passages between different temporal space dimensions, make possible an important psychological work. The passage through the door of self-awareness (Tulum), the door of courage (Chichen Itza) and the door of hope (Merida), allows a synergy between the places visited, mystical, full of charm, suggestion and mystery, and specific psychological situations associated, the places of the mind.

Within these journeys, in fact, the emotions evoked by the experiences lived in the visited places are associated within the places of the mind, such as individual and group psychotherapy (Figure 2).

Seminars held during a cruise are always part of this first guidelines of research. Five years of research and experimentation have allowed us to produce encouraging results. Results have also been confirmed by documented positive feedback (www.mariagraziaspurio.com) from the participants of the project. The program of the seminars has been specifically prepared taking into account the itinerary, the places visited as well, which are able to evoke sensations and emotions, and they have been associated to specific psychological programs: seminars, individual and group psychotherapy, social dreams, prescriptions, and more. In this way they provided the energy of change, even after the travel experience was completed and travelers returned home.

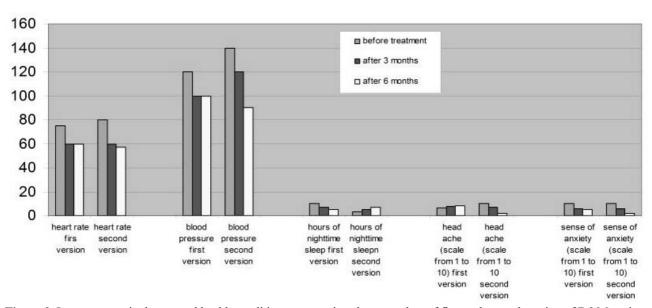


Figure 3. Improvement in the general health conditions: comparison between data of first and second version of B&M project

The Body and Mind project

Body and Mind project, in its three years of research, involved a sample of 150 people, with the aim of creating the right mind and body synergies to restore energy and well-being, starting from the assumption that a situation of emotional distress can easily be transformed in a situation of physical discomfort. Treatment protocols have been proposed to people involved, in which the administration of body stimulations, such as kata Shiatzu, have been associated with psychotherapeutic and psychological interventions such as guided fantasies, regressive techniques and hypnosis. The subjects involved in the research have therefore received a psychological, emotional and physical stimulation at the same time. The precise bodily stimulations, associated with psychological inductions, have involved and stimulated the organs touched by a certain situation of distress and suffering, such as depression in the oncological patient. The results were encouraging, as there was an improvement in the general health conditions, measured quantitatively and qualitatively, from 30 up to 67% (Figure 3).

CONCLUSION: Future perspectives

As the results have been so encouraging, with the support of other researches as, for example, the one conducted by Hunter and colleagues at the University of Sheffield (Hunter et al. 2010), which highlighted the beneficial effect of natural scenarios, such as marine landscapes, which allows different areas of the brain to work in sync, it has been decided to expand and move the protocols, successfully tested in the three years of laboratory research. Special spaces within Cruises were created for the Body and Mind project. In this case the Body and Mind project (B&M) adds and aligns its objectives to those of a "Journey" in the Journey.

This means to combine the achievement of a psychological, physical and emotional well-being that you expect to experience when you undertake any journey. In fact, one decides to travel for many reasons: to rediscover physical and mental energy, to seek transgression and otherness, to rediscover the meaning of life and interiority, to discover new places and new people. In fact, it is precisely when we travel that changes occur in our mind linked to new situations. The moment you leave your home and habits, you enter a kind of suspended time. In this area of suspension new rhythms and habits are experimented, feelings and emotions are sought, subjected to cognitive, emotional-behavioral and psychophysiological stresses. Satisfaction is not the result of a moment's judgment, but it is a process that begins when we leave and can continue indefinitely every time that experience is called into question.

Benefits and positive personality changes solicited by the travel experience are not self-evident.

The conditions partly favored by the trip, partly induced by a specific program, constitute the right combination, a prerequisite for starting the change, and rewriting neural pathways to stop depressive distress in a suspended space away from everyday life.

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