

Neuroscience and cultural psychiatry - Part II: From the *intuition of duality* to the *religious double register*

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Abstract. *This article suggests an interdisciplinary synergy between neuroscience and cultural psychiatry in order to search through the role of detachment and transcendence dynamics in the economy of psychic functions. As neurosciences are currently researching some “normative” areas still obscure in psychiatry, as the spiritual experience, an interpretation in terms of evolutionary psychology and cultural neuroscience is being proposed. Data from neuroscience research suggest the existence of the intuition of duality as a fundamental psychic event during the course of the evolution of the mind. The intuition of duality appears to be the neural ground for the construction of the Self as well as possible psychopathological developments as derealitation and dissociation. In an aetiopathogenesis perspective, based on the study of cultural influences on the mind, the conditioning power of the cultural double register imposed by the modern world antinomy between science and monotheistic dogma is suggested.*

Keywords: Consciousness, intuition of duality, dissociation, culture, spirituality, religion, double register.

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INTRODUCTION I am aware that the study of the connection between neuroscience, psychiatry and the realm of the divine may appear too abstract for clinicians, burdened as they are by the many practical issues to solve. However, it is precisely as a clinician that I am addressing this topic to continue to approach the theme of psychiatry and the extramundane, considering that this field of study cannot be overlooked neither by anthropology nor by psychiatry for its proximity to many syndromes worked out by Western Psychiatry nosography. I am referring here to what I highlighted in my introductory lecture *Cultural Brain and Living Societies under the Influence of Theology and Medical Science* (Bartocci, 2009) at the II World Congress of Cultural Psychiatry (Norcia, Italy, September 2009) and in my paper: *A biopsychocultural framework for spirituality* (Bartocci, 2010). Some of the topics of this paper have been presented and discussed under the title: *Cultural psychiatry and spirituality: The study of the biopsychocultural roots of the supernatural: clinical application* at a Plenary Session at the *1st International Conference on Cultural Psychiatry in the French Speaking World* (Paris, April 2011).

NEUROSCIENCE AND CULTURAL PSYCHIATRY: THE STUDY OF SPIRITUALITY AND RELIGIONS Human sciences, anthropology, psychiatry, psychoanalysis and, more recently, neuroscience have shifted the definition of the driving engine of the individual from what was previously designated as soul, to a variety of more mundane interchangeable

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terms, such as: *state of consciousness, I, ego, Self, personhood, identity, personality, cultural Self, evolutionary Self, ethnic Self* or, in neuroscientific terms, *assembly of qualia, treasurization of inputs*. For once, neuroscience and psychiatry walk hand in hand in defining the concept of the state of consciousness. Consciousness is consensually defined as belonging to two main categories:

- i) Primary Consciousness, attributed to animals: namely, the capacity to generate a mental scenario of sensorial perceptions, enabling them to respond to the perceived stimulus in a present point in time;
- ii) High Order (Superior) Consciousness, characterized by «a sense of Self and the ability in the waking state explicitly to construct and connect past and future scenes» (Edelman & Tononi, 2000).

The human species is allegedly endowed with the specificity of potentially storing in their mind a considerable number of sophisticated experiences and notions that enable people to process thoughts, images and settings, both past and future, even without contingent sensorial stimuli.

Thus man, free from contingent constraints, is a machine capable of producing a large number of innovations, including the capacity to lie and therefore, to invent completely false stories (Edelman, 1992).

Scharfetter hinges the definition of superior consciousness onto culture when he indicates that the average state of consciousness is: «sharing, a common image of the world in which a person belonging to our culture, lives» (Scharfetter, 1976). It is worth noticing that, beside the high order consciousness, there is another, widely acknowledged particular kind of consciousness, which Scharfetter calls *cosmic, divine supra-consciousness*. This is a state of consciousness, in which «the spirit is utterly clear, active and concentrated», and is often related to «deep meditation, religious ecstasy and transcendent experience».

Kleinmann (1988), in the paragraph entitled *Psychophysiological Experiences* (Chapter 3: pag. 50) of his book *Rethinking Psychiatry*, goes well beyond the notion of a temporary divine state of consciousness, when he outlines a historical itinerary of the Self that, starting from the syncretic and social Self of so-called traditional peoples, has resulted in our Western societies in forms of a metasef.

Following the cultural path of modern technological societies that have embodied in their brain a metasef as a permanent state of meta-consciousness, Csordas (1994) prompts us to reflect on the cultural construction of a *sacred Self*.

Naturally, the entrance on the stage of hierarchically “strong” sciences as neuroscience (Crick, 1995; Edelman & Tononi, 2000; Crick & Koch, 2003; Solms & Turnbull, 2002; Richerson & Boyd, 2005; Ridley, 2003; Damasio, 1994; only to mention a few), molecular biology and astrophysics, reinforced a Copernican climate that enables us to study, with our own psychological means of investigation, the connections between religious beliefs, consciousness and theories of mind (**Note 1**).

Among the most influential and controversial books dealing with these issues, is *The God Delusion* (Dawkins, 2006) where the author treats religion as a by-product of genetic mechanisms. In the chapter *Tread softly, because you tread on my memes*, the by-product of genes producing the god delusion is linked to the influence of culture on the brain. In fact, Dawkins considers the genes as necessarily embedded in the *memeplexes*, a pool of specific cultural “genes” called memes which have the power to make one meme prevail on the other so to be good at getting themselves copied into dominant genes (Blackmore, 1999).

The hypothesis of a theory of mind which defines the notion and the experience of God to succeed because religious memes are particularly good at self-replicating, is worth considering since the beliefs in the supernatural and institutionalized religions are based on a very powerful memeplex, supported by liturgies, traditions, laws, interpersonal suggestions (Favazza, 2009).

Hawking & Mlodinow’s book (2010) *The Grand Design* reaches an equally peremptory conclusion: «It is not necessary to invoke God to light the blue touch paper and set the universe going». The authors indulge in a psychological digression: «Model-dependent realism applies not only to scientific models

but also the conscious and unconscious mental models we all create in order to interpret and understand the everyday world».

This sounds like an authoritative starting point to develop a dialogue between to hardly verifiable mental models, supporting illusory world views. In the field of cultural psychiatry, the starting whistle connecting evolutionism, neural shaping, conscious and unconscious mental models and the religious factor was already noted by Tseng & Streltzer (1997): «By the habitual act of thinking in a particular language, or believing in the forms of a particular religion, those thoughts assume a type of physical reality in the organization of neural networks in the brain».

If we wish to pursue the bio-psycho-cultural epistemological approach to the study of the interplay between the epigenetic influence of cultural factors embedded in theological ideologies and the physical brain, it is worth mentioning two findings hidden in the multitude of information provided by neuroscience: a) there is not, in the brain, a *separate 'I'* (Crick, 1995); b) the *intuition of duality* appears at a certain point during the evolution of the brain (Edelman, 1992).

THERE ARE NOT 'NON-I' NEURONS IN THE BRAIN: IS IT A NEW METAPHYSICS OF THE MIND?

«The aim of science is to explain all aspects of the behavior of our brains, including those of musicians, mystics, and mathematicians [...] the idea that man has a disembodied soul is as unnecessary as the old idea that there was a Life Force» (Crick, 1995)

Following the not so astonishing hypothesis of a scientific search for the soul, it has become increasingly frequent to look at the soul as the product of neural activities. The apparently provocative hypothesis that all aspects of the functioning of the brain are due to the activities of neurons overcame the medieval statement on a soul placed by God in the human body. The soul, no more a stranger to the body, becomes a part of the neural Self.

In the mist of the numerous data on the neural functioning, Crick hints to a result from the lab «For example, you cannot be aware of a defect in your brain unless there are neurons whose firing symbolizes that defect. There is no separate 'I' who can recognize the defect independent of neural firing. In the same way, you do not normally know where something is happening in your brain because there are no neurons in your brain whose firing symbolizes where they or any other neurons in your brain are situated» (Crick, 1995). The statement that a separate 'I' (namely a genetic pool of 'non-I' neurons, aimed at observing, from some kind of external platform, the activity of the brain and its possible dysfunctions) does not exist, introduces us to an extremely broad hermeneutic area (**Note 2**). The lack of neurons that can locate where other working neurons are situated can be translated in medical jargon as a *scotoma* in the panoramic view of one's psychic functioning. The lack of neural quanta able to orientate in spatial and functional terms the neural activity that, at a particular moment in time, is structuring the thought, determines a peculiar event: the thinking brain is unable to locate the sources of its own being!

While experimental neuropsychology shows the exceptional skill of the brain to integrate psychic phenomena – psyche as a whole “knows”, recalls, connects images and thoughts underneath or along the surface of consciousness as memories, dreams (whether recollected or not), thinking, day dreaming, future predictions, unexpressed emotions – the mind is totally unable to find the origins of its own ontic products.

As much as it tries, reason cannot complete its functions as a weaver: it moves the needle and the thread, it constructs the figures on the canvass, it moves them according to its own dispositions, yet it does not know the warp, hence the sources of thought present themselves as already transcended in the psychic product: the shift from the neural quanta to the psychic qualia remains unknown.

Facing such a black hole in knowledge, the human being as an *animal metaphysicum* quenched his thirst with the theological notion of the divine soul, which, in the past, has somehow “filled” a gap in

knowledge that could not be represented through other languages. Expressed through very strong concepts in the sacred books, the notion of a non corporeal soul was so successful that it could root even in technological cultures, although these were equipped with demonstrable theories on the evolution of the species.

Whilst creationism on one hand, and evolutionism on the other hand, gained a universal success, a valid theory on the appearance of the divine in the human consciousness is still lacking: the study of religious devotion and spirituality is still stagnant (Geertz, 1973).

The question: where and how does my thinking originate? Resulted in an uncomfortable intrapsychic dilemma: the brain of our *homo sapiens sapiens* wanting to know about himself ceased to be a natural-biological brain and became a “cultural brain”. Insofar the superior consciousness was not equipped for the task of discovering its own origins, hence it had to embark on a mission without the necessary biological preconditions for this hard enterprise.

A PSYCHODYNAMIC PERSPECTIVE: THE ‘NON SELF’ IS FUNCTIONAL AND NOT “OF NATURE” The discrepancy between the psychological theories on the development of a neural evolutionary Self and the beliefs in the mystery of the spirit placed by God in the human body, can find a way forward if the issue about the origin of thought is set in a dynamic, rather than an anatomic static form (namely, existence of ‘I’ neurons and non existence of ‘non-I’ neurons).

Edelman’s dynamic framework is based on the finding of neurons which delay the response deactivating the link stimulus-response. These groups of neurons detach themselves from the current functioning of the brain, while still contributing to the unwitting work of the brain, aimed at getting its unique and personal ontic result in that particular historical moment of its functioning. The deliverance from the dependency on the rigid binomial *stimulus/immediate-neural-response* is a characteristic of the high order consciousness. The latter enjoys the advantage of being able to break the «tyranny of the present» imposed by the primary consciousness of the animals, forced to mechanically react to the concrete sequence of the stimulating events. The superior consciousness, due to the suspension of immediate response, can reflect and develop a specific function: *the intuition of duality*.

THE INTUITION OF DUALITY ENABLES THE REALIZATION OF A SELF BEYOND The intuition of duality appeared during the evolution of the brain functioning. Edelman (1992) attributes the conceptualization of the intuition of duality to the Dutch mathematician L.E.J Brouwer, a supporter of intuitionism who believed that the concept of numbers derived from the contrast between the actual conscious experience and the awareness of past experiences. This would have determined the intuition of a spatial-temporal difference resulting in the realization of the number (**Note 3**). Edelman bases the appearance of the intuition of duality on the development of the brain which allowed it to perceive things as belonging to the outside as well as the inner world and in the evolution of the brain which at a certain point became capable of handling the non-Self: i.e. an area we could indicate as anything that is not contained within the Self.

From a psychodynamic psychiatric perspective the interaction between “subject” and “object” is not only a matter between a thinking being and the external material world, but it is a “discourse” developing within a thought process in an entirely intrapsychic way since many neural districts receive inputs directly from the brain without the intervention of the external world. Now, the importance of the interaction between Self and non-Self is enormous: in fact, Edelman declares that without the interaction between Self and non-Self there would have been no development of speech.

The interaction between Self and non-Self, not only allowed for the development of speech and writing but also opened the way to a new epistemological approach: “Speculative neurology” (Edelman & Tononi, 2000). May speculative neurology be applied to the study of the universal psychopathological phenomena, although with different representations (Rovera, 1994).

FROM THE BIOLOGICAL INTUITION OF DUALITY TO THE CULTURAL TENDENCY TO DISSOCIATE

Edelman & Tononi (2000) answer to this question realizing the need to link the results of their research with psychiatric data: «Perhaps the most direct indications of how important rapid reentrant neural interaction are for generating unified conscious experiences are disconnection syndromes in neurology and dissociation disorders in psychiatry». Their conclusion is discomfoting: «Unfortunately, hardly any data exist about the neural basis of psychiatric dissociative disorders».

For the time being, we can only search through the path of the radicalization of dissociative phenomena with the methods of psychiatry and in particular cultural and transcultural psychiatry. Let’s not forget that the study of macroscopic dissociative phenomena such as trance and mystic experiences was conducted within the field of ethnographic research (Prince, 1966) where all these phenomena were considered as “normal” in the sense that they did not fall within the label of “pathology” as they were socially shared and at times they represented the only chance of healing for mental disorders (Lanternari, 2000).

At the same time, the altered states of consciousness deserve attention for their proximity with dissociative syndromes. In the search for the biopsychocultural pool that gave birth to the experience of the Otherness we find the exceptional functional combination between the high order consciousness and the intuition of duality. It was able to pave the way for further sophisticated operations: to see beyond one’s actions, one’s thoughts, one’s own constructed images, namely the capacity to see images “from the outside”, thanks to the «vantage point of a socially constructed self» (Edelman, 1992).

But to what extent is the function to see the images from the outside healthy and worth taking to its extreme? It is a question of crucial importance since the dual function was taken to its extreme by Western culture «With the aid of this dissociative function, the creative person may partially decaethect the external object [...] and hypercaethect the symbol, as the representative of the completely absent» (Arieti, 1976).

SELF AND ‘NON-SELF’: TO MAINTAIN THE MUNDANE HIGH ORDER STATE OF CONSCIOUSNESS OR TO PURSUE THE MYSTIC PATH?

Here it appears on the stage the figure of the mystic: «I often wonder whether this abandonment [of high order consciousness] is what some mystics seek» (Edelman, 1992). At this point, rather than relaxing on the success of an illusion, I think it is crucial to reflect on Edelman’s subsequent serious warning, that attracts all the attention of the clinician: «Higher-order consciousness cannot be abandoned without losing the descriptive power it makes possible».

Now, the question is: to what extent does an individual risk losing the descriptive skills of consciousness once they get used to the constant use of hard transcendence techniques? Obviously, we have to distinguish among the active uses of transcendence mechanisms (Bartocci, 2004), i.e. between the spontaneous individual movements towards a self-healing by religious means and the indoctrination to derealization passively welcomed by various religious messages or various charismatic characters self-elected as founders of new religious movements. The point to search through is how an active transcendence, as in religious trance states, produces a neural mobilization able to trigger altered states of consciousness surely different from the one involved in other kinds of abandonment of superior consciousness, as in dreaming or in fantasies, where the loosening of the descriptive skills of consciousness occurs without devices aimed to trigger a specific transcendental experience.

The suspended states of consciousness such as hypnosis, where the floating state of consciousness is triggered by suggestion, is easily deactivated by the hypnotist's click of the fingers, while there is no such thing that can bring back a spiritual seeker to an ordinary state of consciousness when he has dedicated all his life to experiencing the «apprehension of the invisible real» (Wulff, 1997). In this case, the spiritual integralist not only has to abandon the ordinary high order consciousness but he must have constructed, at a cognitive level, an external realm that is so remote from the Self to whom he tries to re-connect (**Note 4**).

THE VICIOUS CIRCLE: THE CULTURAL DOUBLE REGISTER INCREASES DISSOCIATION

In order to develop a prospective view of the possible developments of the intuition of duality, it is likely to monitor the secondary influence of culture in the strengthening of the first form of the intuition of duality towards the construction of two ontic dual areas. The consequence of a doubled Self mirrors in a long and complex cultural history which lead to the realization of a “physical” existence of two independent worlds: the mundane and the extramundane.

Nowadays we are facing the product of the interaction of these two worlds which are deeply rooted and interacting both in the Self and in the culture. The issue is no longer about considering the consciousness as a flexible instrument able to organize, time after time, the contradictions between the various forms of external perceptions with his own memories in a somewhat inner dialogue. Nowadays, modern man finds himself facing a new, disorienting situation, as the world constantly presents itself as double faced: the two cultural spheres mundane and extramundane, are revolving on their own producing a odd burning friction easily leading the subject to experiment painful disorientation (**Note 5**).

How can we overcome the cultural dissonance between what god requires and what concerns the brute material facts? Several historians of religion focussed on moment when the traditional pagan vision of the realm of the supernatural started to break down in different parts of the world and was replaced by monotheistic religion (Vernant, 1975; Freeman, 2005). Dodds is among the strongest supporters of the thesis that the change in perspectives related to the notion of monotheism determined a gradual splitting of the previous syncretic world in two antinomic worlds (Dodds, 1965). In relation to the dichotomy between the ego and the body which pervaded the Mediterranean civilizations with Plato and the Christians, Dodds turned into a psychopathologist when he made the following statement: «The psychophysical unity was split in two not only in theory but in practice [...] That dichotomy comes, of course, from classical Greece - the most far-reaching, and perhaps the most questionable, of all her gifts to human culture».

This cultural dichotomy led in practice to a new and persistent performance of the mind, that had to conform to alternatively put in place an ad hoc double register to interpret the facts of a doubled world. In psychodynamic terms it is the continuous use of a double register in order to live in a mundane/extramundane shared world which practically made (and makes) it necessary to constantly use a flip side of consciousness from two levels of reality: the “ordinary” reality and the “non-ordinary” one.

I would like to quote an example represented by the way in which the Italian newspaper *Il Messaggero* in its 8th of November 1999 issue, just before the official sanctification in 2000, reported on the miraculous phenomenon of Padre Pio's bi-location: «In 1933 the friar from Petralcina was bi-located in flesh and bones and appeared to Pope Ratti in the Vatican during an audience with cardinals Siri and Gasparri. All three saw Padre Pio kneel in front of the Pope. ‘Who showed him in?’ asked Pius XI. The friar bent to kiss his hands and feet and told him: ‘Do not blame this priest.’ [...] After 2 days Cardinal Siri went to San Giovanni Rotondo and ascertained the fact that, on the miraculous day, the

friar who had been in the Vatican was simultaneously witnessed to be in the village, praying with his fellow-friars» (**Note 6**).

The *Messaggero* article on the bi-location is here quoted because it differs from other generic articles on magical or canonical extraordinary events, as it does not refer to a miraculous event or extraordinary healing performed on a crowd of peasants, but to a vision of the Pope himself. It is worth highlighting that the vision of Padre Pio bi-located in the Vatican rooms comes from three dominant figures of the modern Vatican State, while were in a normal state of consciousness and engaged in normal acts of their daily life.

In the 21st century it is difficult to find a consistency between communication levels that are compatible with the ordinary reality proposed by scientific paradigms and the levels of representation of a non-ordinary reality that is stretched beyond its limits by this report. Today it is necessary to avoid contact with reality and to activate an internal psychological division for us to believe in the bi-location of a living person. In addition to that, insofar as the vision was received by the recognised head of a hierarchical and social dominant ideology, it cannot easily be converted into and within a critical analysis of the event, being protected by norms and laws that endorse the risk of being charged with offence to state religion (Bartocci & Littlewood, 2004).

The previous quotation is aimed to underline that once the double register becomes a cultural norm it implies relating to the external world in a dual, binary code (**Note 7**) which forces subjects to shift from a model of relationship with the outside world to another, all different from the first one. In other words, whether you prefer the terminology of cognitive psychology or that of psychoanalysis, the relational shifting imposed by the double register is sustained by dynamics of annulment, denial - according to Freudian terminology - or in terms of attachment or detachment as suggested by the more recent theories of Bowlby (Bartocci & Dein, 2005).

Littlewood established the issue of the influence of the religious factor in the mental economy in these terms: «we have an implicit and experienced psychology of a detachment from immediate embodied experience in the world “which forces” to disassemble one Self and create another» (Littlewood, 2009).

BELIEF SYSTEM, DISSOCIATION AND SCHIZOPHRENIA Is this kind of mental gymnastic that the individual is subjected to by the use of the double register a positive psychic exercise or does it turn out to be an exhausting neural exercise?

When we search through the cultural phenomenology of dissociation in clinical psychiatry, it is likely to reconceptualize the notion of dissociation no longer seen as a genetic brain pre-disposition to avoid experiencing trauma but rather as a culturally tuned means to generically let oneself to detach from events not yet recognized and treasured in its own mental memplex.

Considering Edelman's statement (1992) that the methods of doing science with inanimate objects, albeit fundamental, are not appropriate for doing science with animals that have a brain and possess intention, it happens that the scholar of cultural psychiatry is quite isolated in conducting his research studies on physiological detachment or on its radicalization into dissociative syndromes situated on the interface between “normal” and “pathological” religious experiences.

Let us to bear on the cultural psychiatry “shoulder” to run this task with following consideration: on the one hand, the devotion to the double register enables the spiritual seeker to experience the joy of flying away from the monstrosities of the material world by possibly consolidating that suspended state of consciousness that Scharfetter defines as “cosmic”; on the other hand, the massive use of the attitude to dissociate as a continuous culturally tuned detachment of awareness from the immediate passage of ordinary events to shift into non-ordinary miraculous events, may result in strengthening ambiguous clinical aftermaths (Littlewood, 2001). In spite of the experience of a momentous pleasure, secondary to the detachment of awareness, an operation that Wulff (1997) calls the «transcendental contemplation of the mystic», the detachment from ordinary reality, whilst opening to mystical experiences, at the same time clashes with maintaining the descriptive skills of high order consciousness that have enabled us to transplant a heart or to land on the Moon.

DELUSION, DOGMA AND MENTAL HEALTH In trying to find a framework for understanding the kind of dissociation and derealisation, so frequent in schizophrenia, whose secondary frequent contents are delusional thoughts of being influenced by external agencies, Garrabè (1992), in his book *Histoire de la Schizophrénie*, underscored how, after the 1950 Paris Congress by WPA, the study of general psychopathology, up to then prevalently conducted by French and German schools, suffered a considerable setback as they were replaced by the epidemiological statistics. Reading this book I felt that scholars in cultural psychiatry are called again into action to continue the research studies performed by pioneers in transcultural psychiatry in this field of study. Among the most courageous and thought provoking studies in general psychopathology of religious experience, I have found *Delusions, dogma and mental health* (1970) and *Religious experience and psychosis* (1979), where Raymond Prince proposed that both religious experience and psychosis could be seen as culture-induced ways of adapting to stressful life events. Prince, in seeking a softer definition of religious beliefs, replaced the expression delusional beliefs with *integrational beliefs* with the aim to point out to beliefs that, despite their being unrealistic or at any rate unverifiable, are resistant to changes once called Articles of Faith. From this point of view, beliefs like «Jesus was borne by a Virgin», «If I confess my sins I will go to paradise when I die», «If I sacrifice my life in honour of Mohamed, I shall be met by a host of virgins in paradise», are seen as puzzling phenomena that need attention because of their proximity to the rigidity of delusions. Prince does not hesitate to define integrational beliefs as quite similar to psychotic delusions: the difference between the two being that the former are approved by the prevailing culture. Once they, missing Schneider's second rank symptoms, are validated by society, integrational beliefs are no longer defined as pathological. The point is that for a belief to be accepted as normal, it's not essential for the belief to be true: what matters is confiding that this belief can work. Neuroscientists pointed out that the most sophisticated performance of the neocortex has resulted into the capability to create fictional realities (Giroto *et al*, 2008) and to deceive others (**Note 8**). It may appear strange that the dictatorship of rationality has taken it for granted, but it is not so strange: once a society ratified the acceptance of the reality of illusions, the issue becomes extremely serious. Tatossian's (2003) warning is very clear: delusional knowledge «occupies a lot of space» (**Note 6**) and does not «leave room» for other interpretations of the world.

CULTURAL PSYCHODYNAMIC THERAPY AND DIVINE ENCHANTMENT According to neuroscientific findings it is possible to validate the statement by Tatossian even in neural terms. In spite of the enormous number of neurons available, the continuous shaping of the neural networks under the influence of experiences embedded in cultural factors produces a synaptical manipulation and re-orientation which does not leave enough quanta free in the brain for other functions apart from feeding the delusional one. When the two moments of the sacredness, the individual and the cultural, coincide and overlap so to build a biopsychocultural identity rooted in religious identification, it entails a high price to pay: «in the order of transcendence [the individual] can no longer take the structures of everyday life seriously» (Tatossian, 2003) (**Note 6**). The great amount of literature provided by Mediterranean Basin mystics and god inspired holy figures (Augustinus, 1953; Suhrawardī, 2008) has demonstrated that the path of transcendence is constellated with so many fascinating cornerstones that a subject, under the pressure of ineffable emotions becomes easily addicted to the charms of the divine enchantments. As Tatossian (2003) quoting Blankenburg (1965) underlined: in the order of transcendence the individual thematises subjects whose autonomisation he cannot prevent. Is it the case why the integrational beliefs are taken as an Article of Truth notwithstanding their fallacy?

In an overview of the many ways to heal mental disturbances we find a wide range of approaches. Traditional healers and modern thaumaturgists are skilled in manipulating beliefs based on the interplay of supernatural powers for triggering endogenous healing mechanism (Prince, 1982).

Mermaid songs are enchanting and it is pleasant for the two partners of the healing relationship to share an illusional approach to the world, to believe in Padre Pio's bilocation, to kneel in front of the tears of blood poured by the little ceramic statue of the Virgin Mary in Civitavecchia or to thrive in Natuzza' stigmata and her power to get in touch with deceased persons (Littlewood & Bartocci, 2005).

Ellemerger (1970) pointed out that the core of the traditional healer's role is to trace back the soul that has "escaped" or was taken away from the body of the patient. It has been working for a long period (Bartocci & Eligi, 2008).

On the contrary the scholar in psychiatry have no choice but to follow the path traced by the masters of classic general psychopathology (and now neuroscience) that grounded the soul's vicissitudes within the mind of individuals. Their duty is to recapture the extramundane and to engraft it within the mundane structures of everyday life. Hard job since the scholar in psychiatry will make to disappear the most attractive part of healing: let the eternal soul to fly under God's light.

In order to perform his treatment any psychotherapist will be involved in mediating, challenging, even criticise a vast number of integranal beliefs, theological dogmas, religious illusions and delusions.

It will be better if the therapist is furnished with a strong theoretic platform which places the human being, and him alone, at the core of his own operating:

*In order to speak of the Self, a person must be:
The subject of his own knowledge,
The craftsman of his own world,
The author of his own identity,
The master of his own temperament.*
(Ey, Bernard & Brisset, 1990) (Note 6)

NOTES

1. From my Roman perspective, I can follow the efforts of the Vatican to bridge «the epistemological gap between spirituality sine substrato and psychiatry with an organic substrate» (Bartocci, 2000). The issue as to how the neural network can realize the existence of a soul and of a disembodied intentional agency and became so culturally relevant for the Vatican's Universities that since the 90's the Holy Seed promoted the debate surrounding Science and Faith to smooth and modify to its own advantage the clash between prevailing scientific and obsolete religious models to face evolutionism and creationism. See LeDoux (2002) report about the large world congress on neuroscience and faith organized by Vatican Observatory and Center for Theology and the Neural Sciences.
2. Crick's statement on the lack of "Non I" neurons inaugurates a metapsychology on a neural basis, as it answers, with a more current terminology, the questions traceable in those remote philosophical roots as Parmenides of Elea (6th-5th century b.C.) who attempted to explain the concept of nothingness with the well known formula: "*Being is, not being is not*".
3. The principle of discontinuity, on which Edelman bases the historical appearance of the intuition of duality, is also identified by this author (1992) as the source of complex experiences such as the «personal sense of the sacred» and the «sense of mystery».
4. The ongoing use of transcendence techniques produced a "mental training" able to evoke one's internal emptiness up to the point to deactivate some genetic inheritances, such as the conservation instinct. When the religious seeker gets to the conclusion that the ultimate goal for the devoted is to sacrifice their or others' lives to God, martyrdom by blowing themselves at a bus stop becomes a "normal" path to paradise (Bartocci, 2004).
5. Devereux indicated disorientation as a primary cause for the increased rate of schizophrenia in the Western world: it is in terms of «cultural complexity that we propose to interpret the problem of schizophrenia [...] We have reasons to suspect that orientation in the cultural environment is much more difficult than orientation in the physical environment» (Devereux, 1939).
6. Translated into English by myself.
7. We can find an example of thought's binary code in the rhythmic alternation in fantasy of denial and re-affirmation. In *Mystical experience in Islam*, Landolt (1965) outlines the following method to induce a mystical experience: «The most important weapon of the mystical warrior is, undoubtedly, the so-called DHIKR, that is the remembrance or mentioning the divine being. It consists, practically, in a spoken repetition of the divine names or

the first part of Islamic credo: “There is no God but God”. It may be defined as wiping out from the conscience everything that wants to take the shape of a being, as a sufi says, and a mental representation of God as a real being. Thus, it is negation and affirmation at the same time ...»

8. «From this point of view there is no need for these shared beliefs to be completely correct, provided people can believe in them» (Crick, 1995). Also Edelman (1992) drives the attention to the men ability to handle a complex language and to denote objects in abstracts concepts. It lead us to «another strikingly human characteristic [...] our almost limitless capacity for self-deception. [...] without the discipline of scientific research, we shall often jump to the wrong conclusions, especially about rather abstract matters» (Crick, 1995).

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