

## **The Self Representation in Schizophrenic patients: Considerations on the Draw a Tree Test**

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**Abstract** The tree is the archetypal symbol of the identification in the growing life. The objective of this study is to evaluate the representation of the self in schizophrenic patients through the tree drawing.

Were identified 36 patients, 22 women and 14 (M-age=53), suffering from schizophrenic disorder. Through the Scale for the Assessment of Negative Symptoms (SANS) and the Scale for the Assessment of Positive Symptoms (SAPS) positive and negative symptoms, and the reactive tree representation of the self were assessed. In patients with negative symptoms archetypal figures are more frequent, such as images that are part of the collective unconscious, or thought more archaic. In patients in which emerges the delirium, that is part of the most evolved thinking, near to the secondary process, the reality testing is better preserved. In cases where there are symptoms mixed the tree structure leads to an archetypal image.

This study shows that in the draw of the tree trunk-to-crown ratio in schizophrenic patients was significantly higher than that of healthy individuals. The usefulness of the study insert itself in the Jungian analytic thought, for which psychotic thought corresponds to an *abbaissement* of the self activity.

**Keyword:** Representation of Self; Schizophrenia; Draw a Tree Test.

### **Introduction**

In the work “Der philosophische Baum” of Jung (1945), reads the image of the tree appears among the most frequent representations of archetypal unconscious. The tree is a symbol of life evolving, ascending to heaven, with great power and evokes the symbolism of verticality. As archetypal symbols of the tree over time has increased its meaning even if some fundamental traits remain immutable. His form “Psychoid” is the basis of every archetypal representation even though it may have endless variations. Also the exterior form of the shaft can vary in appearance over time. The tree is the archetypal symbol of the identification in the growing life. The three-dimensional nature of the tree consists of roots, trunk and foliage has a symbolic character, it is linked to the triads of sacred time and space. The shaft connects the three levels of the cosmos. Finally the tree is a symbol of death and rebirth. An image can be considered archetypal whenever they can attest to the presence. For this it is necessary to distinguish between two extremes one hand the image clearly defined and connected with the tradition; the other the image that there is no indigenous tradition. The tree is compared to the self and in a forward-looking and is depicted as a process of growth of the same.

### **The importance of the tree in psychodiagnosis**

The tree drawing projective although only partially meets the criteria of psychometric research, is considered by the authors (Inadomi et al., 2003; Kaneda et al., 2010) an investigative tool useful to study the representation of the self, becoming a scientifically valid methods especially in clinical psychology. It's important associate a protocol and the clinical interview to be a diagnostic tool that helps in the understanding of the patient. A major criticism of the reagent of the tree is that of being deficient from the point of view of the methodology, which pursues the elaboration of rules and principles can to support and guide the researcher in the objective knowledge of the facts (Inadomi et al., 2003; Kaneda et al., 2010). For reactive graphics attempts validation showed good indices especially for some psychoanalytic hypotheses such as object relations, while other indexes interpretative personality are left to the intuition of the clinician, performing evaluations within a theoretical paradigm scientifically recognized. In the study by Inadomi et al. (2003) show that the reactive of the tree allows the assessment of cognitive dysfunction associated with

schizophrenia, even when the positive and negative symptoms of the same improve with therapy. But confining the cognitive aspect does not give reason and on behalf of the self in which the reagent is included, the authors are limited to the function of the ego excluding the historical aspects and future self. Moreover, even if patients are responding positively to the clinical evaluation, the trees drawn have a severe disorientation because cognitive function in schizophrenic patients is compromised. In the study by Kaneda et al., (2010), the authors report, specifically it can highlight that an open line in the Baum Test indicates the lack of a clear distinction between self and non-self (Kubo et al., 2002).

Inadomi et al., (2003) have found that the open trunk in the Baum test is one of the signs associated with schizophrenia. In addition, another study (Yoda et al., 2007) found that an open line in the Baum test, schizophrenia is associated with hallucinations, delusions, suggesting that the logs can be an open ego altered.

### **Tree connected to tradition and distanced from tradition**

The tree drawing projective has been used for the first time by Emil Jucker in 1928 to study the personality. Later Koch (1949), considered the analogy between the image of the human body and the structure of trees in relation to the standing position, the Swiss researcher suggested the creation of a psychological test known as "Der Baumtest" (or test tree). His research had confirmed that the man, through unconscious dynamics, is identified in the tree and is projected in the vertical shape reminiscent of the standing position, exactly as assumed by the psychoanalyst Carl Gustav Jung. The tree design is therefore considered the equivalent of a self-portrait. In other words, the way a person draws a tree shows his personality; for example any disharmony in the design expresses the disharmony in the personality itself. Koch collecting the results of the research of Dr. Jucker, presented a comprehensive study on the design of the tree used as a method of psychological analysis. For the interpretation of this reagent is taken into account data graphology, formal and content. First we must consider the spatial symbolism. Koch is based on the graphic scheme of Max Pulver that the interpretation of the writing distinguishes four zones each with a symbolic meaning in fact the upper area represents the area spiritual, intellectual and mystical.

The lower area is the area material, the unconscious instincts; the area left is the introversion, the attachment to the past, the regressions, the infantile fixations; the right area is the extroversion, relationships with others, the

trend towards the future and progress (Passi Tognazzo, 1999). Because the tree is grows from the bottom up the lower part of the tree represents the origin of life, the most primitive part of the self, the unconscious element; the top will mean the expansion of the self to the world, into the future, the detection of the most advanced and spiritual personality. Therefore, the design of a tree with the trunk and the branches stretched stretching upwards is interpreted as an expression of an individual who aspires extrication of their personality; on the contrary, a tree trunk with short hair flattened and will make us suspect of being in front of an individual personality repressed and constricted (Passi Tognazzo, 1999; Koch, 1949).

Referring to the spatial symbolism, a shaft extending to the left and the bottom features a personality inhibited and introverted that attaches to the past, to be contained in itself, while the tree that extends to the right and up revealed an extroverted personality, in constant contact with the outside world. Even interpreting handwriting accentuation of tree tops means lively intellectual, spiritual interests and ideals. Instead the emphasis of the lower parts expresses liveliness in the material, instinctive and practical. Before analyzing the various elements Koch advised to get an intuitive understanding of the global, which is derived from the first impression of the design. A tree design can for example create the impression of calm, joy, stillness, of order, of agitation, heat, coldness and so on. It then moves on to consider the different elements, giving each its meaning characteriologic (Passi Tognazzo, 1999; Koch, 1949; Bernet, 1971; Stora, 1963).

## **Method**

Were identified 36 patients, 22 women and 14 men average age of 53, suffering from schizophrenic disorder. Through the Scale for the Assessment of Negative Symptoms (SANS) and the Scale for the Assessment of Positive Symptoms (SAPS) we were assessed positive and negative symptoms, and the reactive tree representation of the self.

The Scale for the Assessment of Negative Symptoms is created is a widely used instrument for measuring negative symptoms in schizophrenia. SANS assesses five symptom complexes to obtain clinical ratings of negative symptoms in patients with schizophrenia. They are: affective blunting; alogia (impoverished thinking); avolition/apathy; anhedonia/asociality; and disturbance of attention. The final symptom complexes seems to have less

obvious relevance to negative symptoms than the other four complexes. Assessments are conducted on a six-point scale (0=not at all to 5=severe).

The Scale for the Assessment of Positive Symptoms (SAPS) is a rating scale to measure positive symptoms in schizophrenia. The scale is composed by 34 item divided in: hallucinations, delusions, bizarre behavior, positive formal thought disorder. SAPS is split into 4 domains, and within each domain separate symptoms are rated from 0 (absent) to 5 (severe).

Through the scale, SANS and SAPS, it was possible to separate patients into three groups, specifically 24 showed a positive symptomatology, 9 had a mixed symptomatology and 3 only showed negative symptoms. In reference to the scale that assesses the SAPS hallucinations, delusions, behavioral abnormalities and disorders of the positive formal thought it was possible to separate patients into two groups. Of these 13 have a prevalence of hallucinations and behavioral anomalies as regards the perceptive aspect. In the other 23 shows a prevalence of delusions and disorganized thinking as regards the aspect of thought.

## Results

The hypothesis of our study is to identify if there are differences in the characteristics of self-representation, through the tree drawing projective method in schizophrenic patients and how the characteristics of the representation of the tree vary.

The tree is composed of core elements such as roots, trunk, branches and foliage, which represent the substantial and stable structure of self, and additional elements of decoration such as leaves, flowers and fruits.

A preliminary analysis of the trees of patients belonging to group 1 (with prevalence of symptoms such as hallucinations and bizarre behavior) highlights the presence of the following signs:

1. absence of roots and foliage,
2. the trunk is split, divided and thin,
3. the branches are drawn unique trait, sometimes enriched with fruits.
4. In some cases there are archetypal images of the plant or the triangle.

In group 2 (patients whose prevailing delusions and thought disorder), are observed the following characteristics:

1. the roots are absent.
2. the foliage is characterized by a line spherical closed or is curly, wherein inside, sometimes are present fruits, other times there are branches.

3. The branches are often embellished with leaves and fruits, sometimes there are flowers.

4. In some cases the trees lead back to archetypal images of the Christmas tree, the plant, and the leaves and fruits lead back to the flames.

The study shows therefore, in relation to gravity of the disorder, usually and clinically detected, these correspondences; however, the above mentioned can't be quantified since they are best represented as qualitative phenomena. But they can have access to the intuition of clinicians who, as in the study in question, have found concordance, through an analysis conducted by them separately.

Figure 1-6: Trees of patients with prevalence of hallucinations and bizarre behavior.

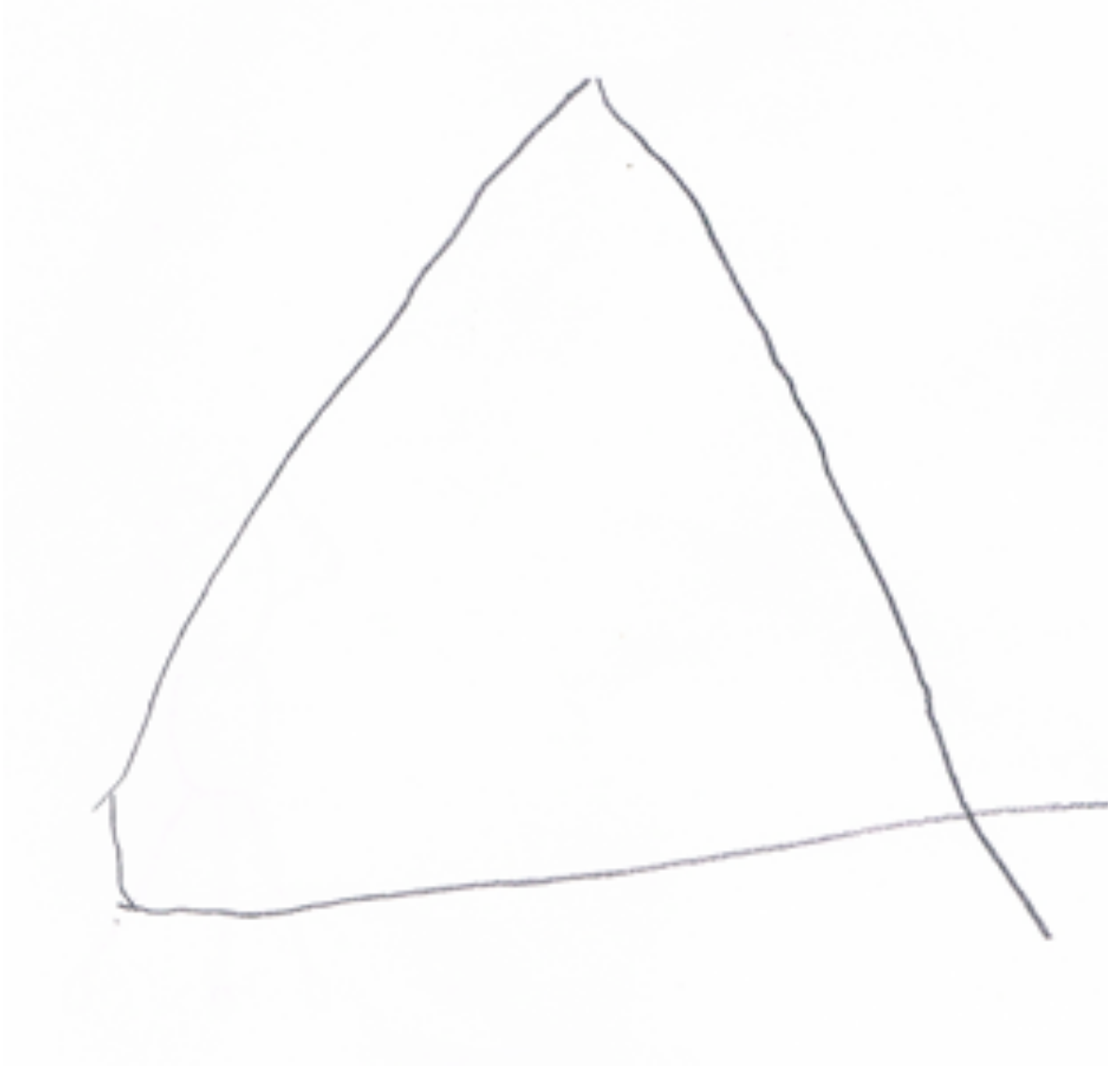


Figure 1

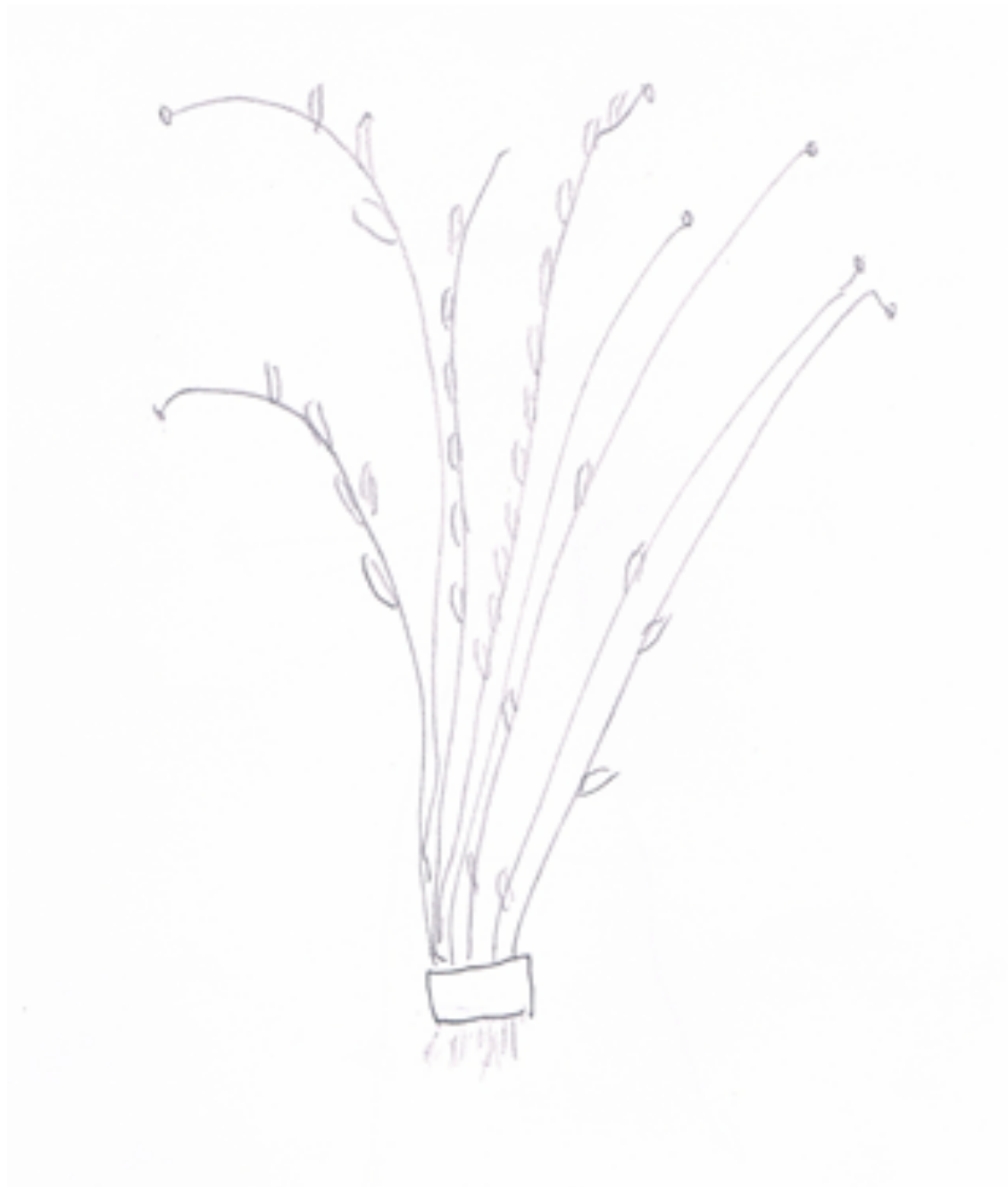


Figure 2





Figure 3



Figure 4



Figure 5



Figure 6

Figure 1-12: Trees of patients whose prevailing delusions and thought disorder.



Figure 1

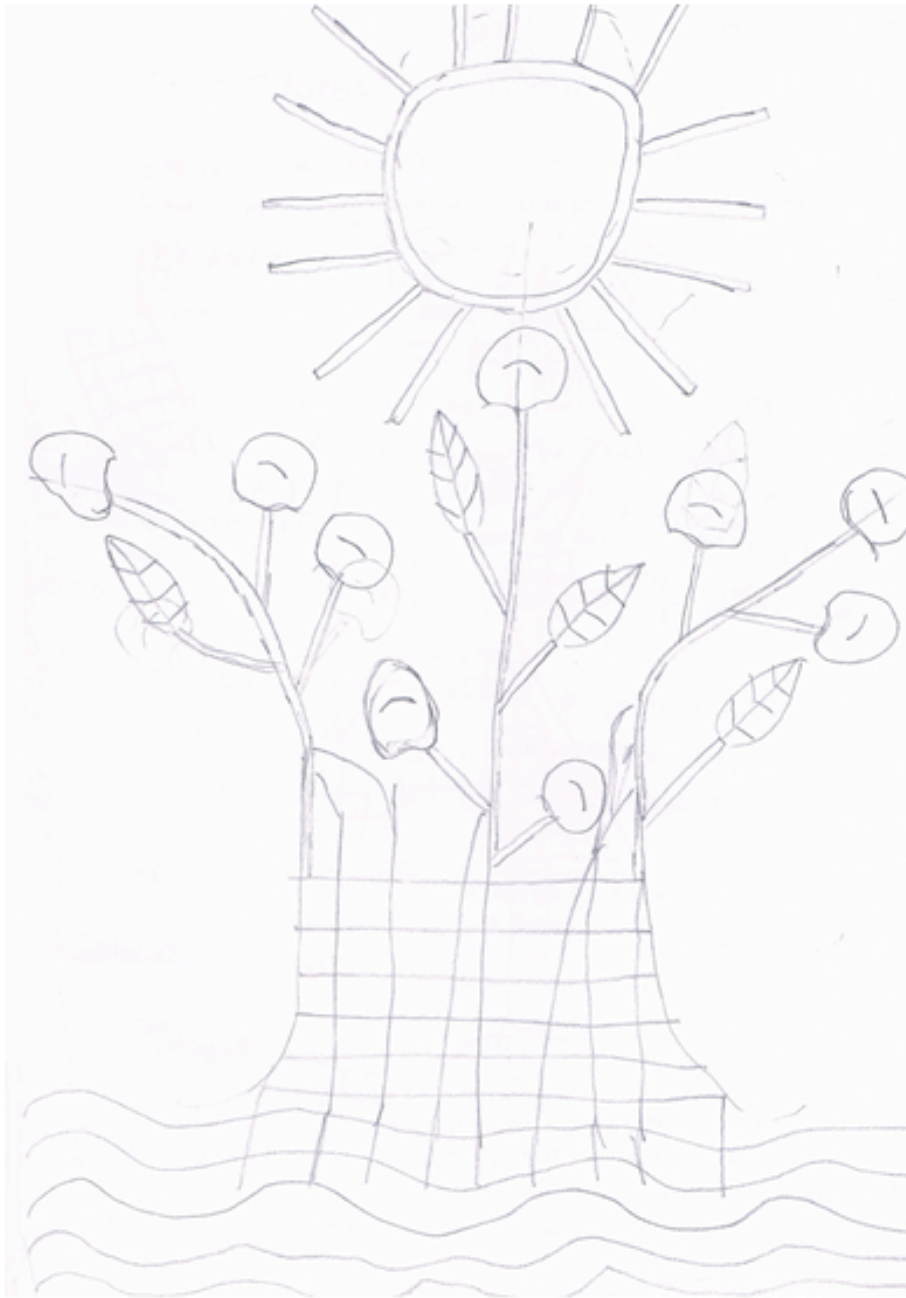


Figure 2



Figure 3





Figure 4

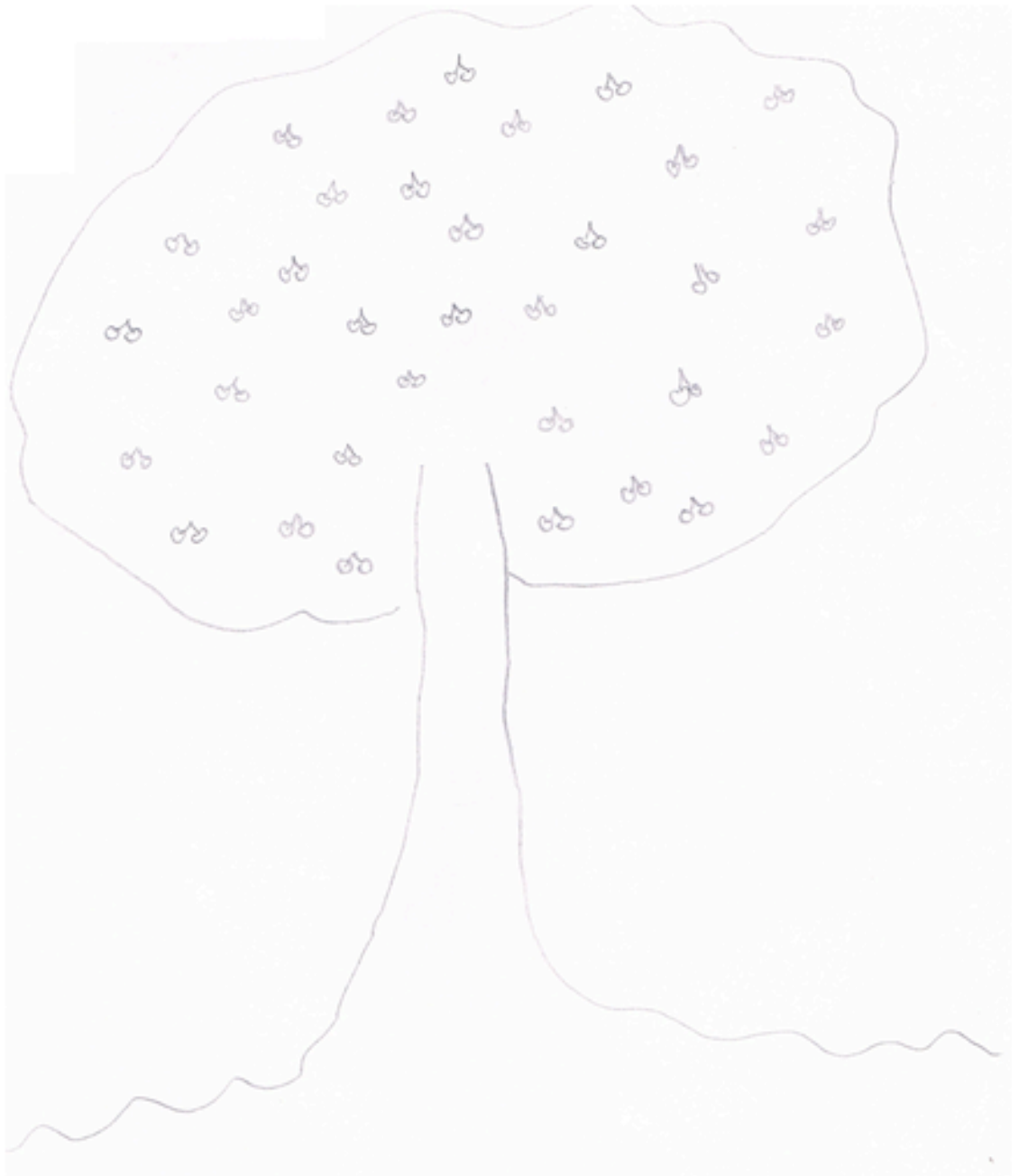


Figure 5



Figure 6

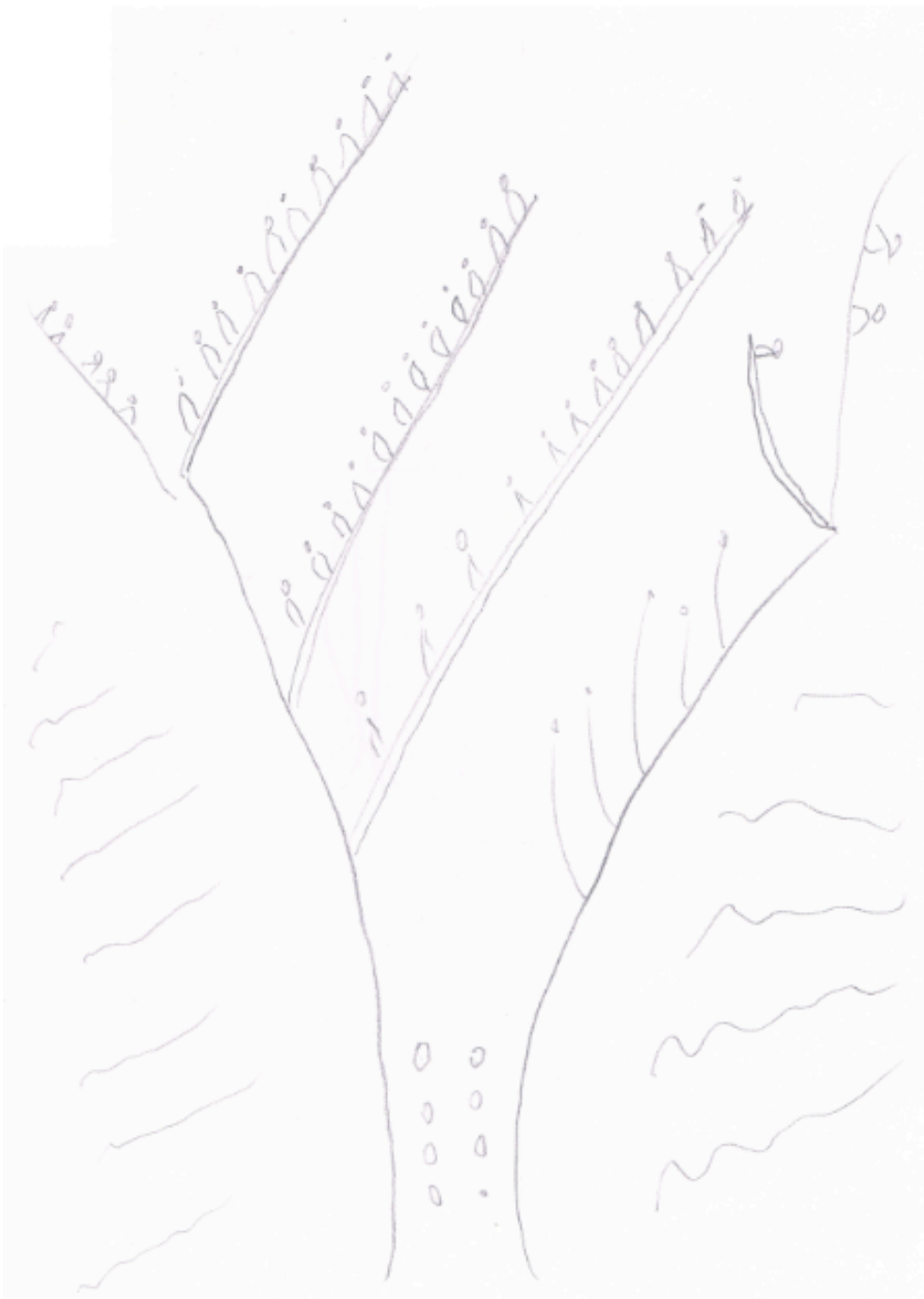


Figure 7

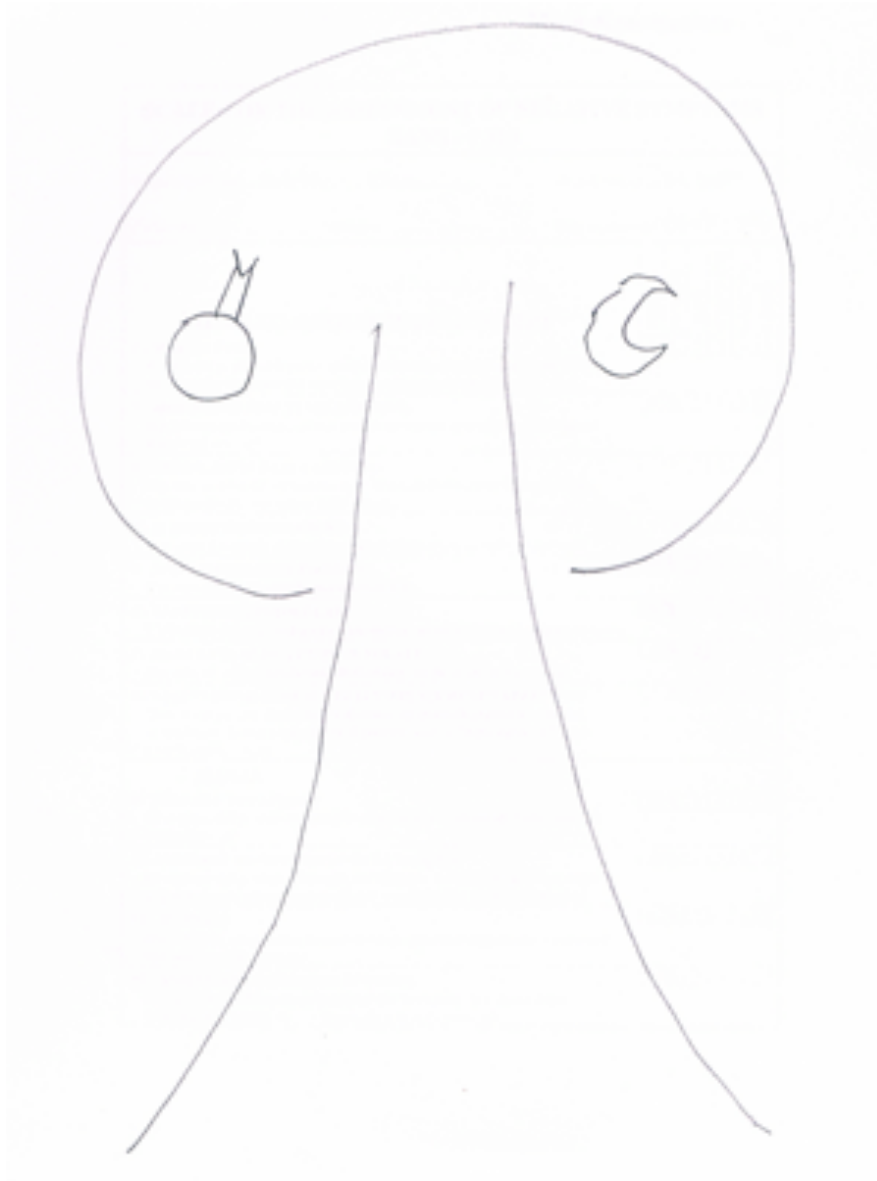


Figure 8



Figure 9



Figure 10

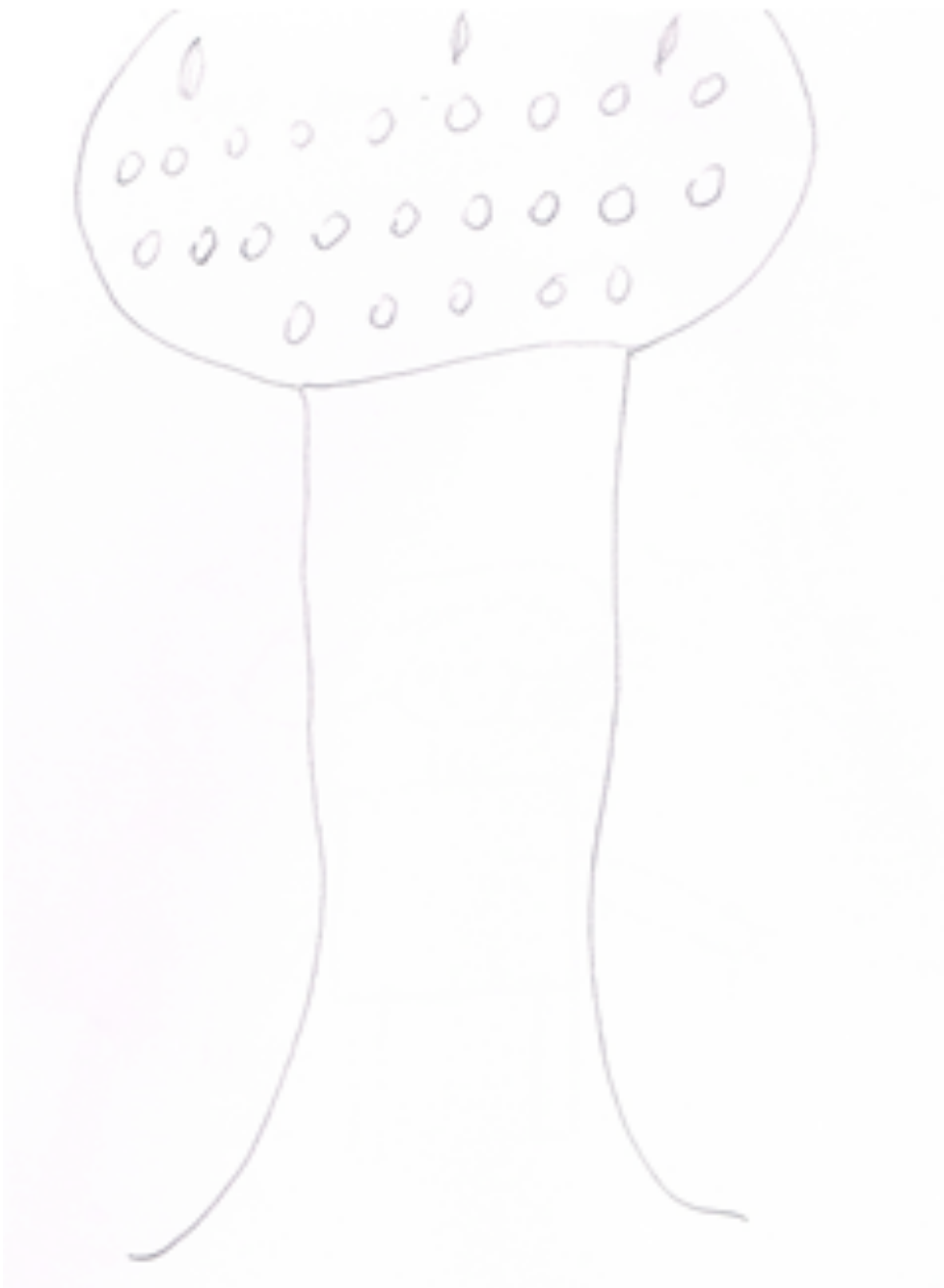


Figure 11





Figure 12

## **Discussion**

The disorder of the ego is the base from which spring the positive symptoms of schizophrenia such as hallucinations and delusions, which are manifested by the difficulty in discriminating between information (verbal, tactile stimuli) from inside and from outside with, thus giving thoughts or prejudices coming from inside to outside sources (Wang et al., 2011; Oorschot et al., 2012). The distortion of the self can then encourage the development of delusions and hallucinations, which are nothing more than an attempt by the patient to explain or justify the anomalous experience, to make less incomprehensible the reality, as it appears (Nelson et al., 2014; Hur et al., 2014). Schizophrenic patients with positive symptoms have the characteristic of making decisions and jump to conclusions more quickly than healthy controls, probably because of the difficulty in making decisions and assigning an abnormal meaning to normal sensory perception, which becomes a false belief (Averbeck et al., 2011; Mirian et al., 2011). In patients with negative symptoms the reduced perception of emotion could be due to reduced ability to experience pleasure (anhedonia) or reduced ability of expression, that is, affective flattening (Ventura et al., 2013). Anhedonia is a typical feature of the schizophrenic patient with negative symptoms, which are indicative of a poor emotional expression and a reduced use of the muscles of the face (Postmes et al., 2014; Leung et al., 2010; Healey et al., 2010).

Another key aspect of the disease, treated in these article, is apathy, defined as lack of motivation, which is manifested by a lack of interest in pursuing a goal and with a poor response to emotional events. Apathy is considered to be the main component of the negative symptoms, from which derives more dysfunctional outcome in schizophrenia (Konstantakopoulos et al., 2011).

Another characteristic of schizophrenia is the lack of insight, that has a negative influence on adherence to medication, treatment outcome and social functioning. Insight is a multidimensional phenomenon that affects the ability of awareness in mental illness, the ability to recognize unusual mental processes as pathological and treatment compliance. It also seems associated with the severity of symptoms and cognitive deficits (Konstantakopoulos et al., 2014; Zhou et al., 2015).

In literature the schizophrenia is defined as the result of alterations of the self (self disorders), a dissolution that results in a significant and marked permeability between the individual and the other and between the self and the outside world (Sass, 2014). The sense of self, is the self-awareness that

allows the perception pre-reflexive firsthand experience. The sense of immersion in the world should be seen as automatic tuning and unreflective with the surrounding reality. Human experience is normally experienced firsthand thanks to the sense of presence, that is, automatically processed as our experience. The patient experiences a sense of alienation towards subjective experience, which can describe various forms of depersonalization or derealization, sense of inner emptiness, feeling never really present and involved by events or by other people (Nelson et al., 2014).

Jung argues that the tree as Mandala is the symbol of the individuation process. The identification is defined by Jung (1921) as the differentiation process that tends to the development of the individual personality; it is, therefore, the development of the characteristics of an individual, based on his natural disposition. This process, if not obstructed, inhibited or hidden by specific disorders, represents the psychic parallel of growth process and body aging.

According to Jung, the individuation process is constituted of two main periods, that have opposite signs, influencing and complementing reciprocally: one representing of the first half of life and is defined by *the initiation to external reality*, of which the goal is the adaptation of the individual towards his environment; one concerning of the second half of life characterized by *initiation of inner reality*, aiming at a deeper understanding of self and of the unconscious processes (1921).

The tree drawing projective represents a valuable tool for the study of personality and self-representation. In a study by Inadomi et al., (2003) emerged that the characteristics of the tree draw of the patients with paranoid schizophrenia were strictly connected: the relationship between the subtypes of schizophrenia and the morphological characteristics of the tree in the test Baum were significantly related. The study carried out with 46 patients with schizophrenia and 53 healthy subjects showed furthermore significant differences in morphology between the trees designed by patients with schizophrenia and those drawn from healthy individuals.

According to Koch (1970), in the Baum test, the relationship trunk-to-crown is linked to the development of language skills and thought. Patients with schizophrenia that draw the largest ring of the trunk showed good social regulation (Yamashita, 1981; Saito & Owada, 1969). In addition, another study shows that a split trunk in the test Baum is often associated with hallucinations, delusions and chronic schizophrenia, suggesting that this sign can indicate an ego altered in its structure (Yamanaka, 1976).

### Conclusions

Personality is the result of the comparison of the individual on the one hand with his own unconscious contents, and the other with family influences, social and cultural. In other words, all instances of the psyche (ego, Self, individual unconscious and collective) must be enriched, differentiate and evolve as much as possible, and then allow the individual the full and complete realization of his own potential. The ego, through the differentiation process, is characterized by unconscious contents both personal and collective; by comparison often painful and distressing with such contents, it is integrated into a global structure of the upper level (the Self integrated), through which the person can calmly accept his own limitations and contradictions.

When in fact these processes of differentiation and integration do not occur, or occur only partially, the ignored instances (needs, unconscious archetypes, repressed contents in the unconscious individual, specific psychological functions) do not develop fully and emerge as disturbances (Jung, 1921).

In this study has been observed that in the group of patients with negative symptoms are more frequent archetypal figures, such as images that are part of the collective unconscious, or thought more archaic. In patients in which emerges the delirium, that is part of the most evolved thinking, the reality testing is better preserved. In those cases in which the symptoms are mixed the tree structure leads to an archetypal image.

The results of this study shows, in conclusion, that in the draw of the tree from trunk to crown in schizophrenic patients presents an higher occurrence of archetypal signs and that schizophrenic patients may not process properly the real world, because of the disharmony between the self and the outside world.

The usefulness of the study enriches the Jungian analytic thought, according to which the psychotic thought corresponds to an *abbaissement* activity of the self (Jung, 1939), this process allows the emergence of archetypal images, that normally wouldn't manifest, or limited to complex less hypertrophic, in limited complex areas. Such relevances prove fundamental issues to an approach to the schizophrenic patient, based more on subjective experience despite of a symptoms classification. The subjective evaluation is a prerequisite for any psychotherapeutic and rehabilitative treatment.

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