

The Disruption of Space and Identity in Schizophrenic Experience

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Abstract

The present paper aims to closely consider the notions of ‘space’ and ‘identity’ from two different perspectives of the human experience. We are most of all interested in the psychological realm to which we devote the major part. As such we intend to define a brain disorder known as schizophrenia in light of the duality of ‘space and identity’. We consider aspects of the deterioration of these notions that interact to further accentuate the breakdown of the patient diagnosed with the disease. These notions can be altered by factors that are not essentially biological or psychological. We argue that technology does also interfere to rework these notions as such bringing about a less rigorous effect but, still, triggering a less balanced human experience to dwell. This does not entail the onset of schizophrenia. However, it may lay behind other psychological problems. These may share to some extent a fragmented character that turns out to reveal aspects of a schizophrenic nature.

Keywords: Identity, Internet Technology, Schizophrenia, Space

1. Introduction:

The psychological balance of the human being is the outcome of the interaction between several factors, of which a simple disruption is most probably the first performer of a psychological pathology. In parallel path with the advancement in neuro-imaging studies, psychology is more and more inclined to define self perception and space perception as important to the stability of a person. Importantly, the disruption of the notions of *space* and *identity* reveals to be highly related to the onset of psychosis. One of the most severe types of psychosis in which this disruption is brought to its ceiling is *schizophrenia*.

The present paper aims essentially to reflect on this facet of the mental disease. Hence an objective is to define schizophrenia in light of the complex paradigm of 'space and identity'. Then we will shift the focus from the perspective of 'diagnosis' to the one of descriptive while tackling the issue from a socio-cultural angle. In a digital network culture, 'schizophrenic' may turn out to be the 'best word' to describe the 'connected' community. Space believed to shape identity is inhabited not only physically but also virtually in an age where people of the same stay may need to disconnect in order to be connected (Doran, 2012). This suggests another use of the pathological term, 'schizophrenia', being a state of a whole community instead of being a state of a pathological mind. This shifts the concern from an unusual pathology to a shared terminology.

The paper is divided into three parts. The aim of the first part is to reflect on the notions of space and identity; to show *how* and *why* they are related. The second part is devoted to a purely psychological perspective which interferes a bit with some neuro-anatomical considerations. The intention is to show the psychological and anatomical basis of the relation between both concepts. In parallel path, *schizophrenia* will be defined with most focus on "self perception" and "space perception". In the last part, a socio-cultural perspective is adopted while referring to the role that technology undertakes to recreate the notions of space and identity. Focus will be on the negative side of the fact. This is meant to prepare the ground for us to suggest that the ever growing technology may be a chief cause for the emergence of many psychological problems in society.

Note: we admit that the identity of a person is a self-perception construct, hence, for the sake of simplicity, we will use the term "self perception" throughout the paper interchangeably with "identity" with no intention of literally equaling them.

2. Space and Identity; relation and correlation:

In this part, our intention is not to provide perfect definitions of these notions, nor do we intend to establish clear barriers between confounding terms. We simply propose that these notions as they can at their best be understood are quiet important and somehow interrelated. As living entities our interaction with space is a direct necessity that we experience from the prenatal phase until death that, supposedly, excludes us from time and space. This interaction is unique to each of us which reinforces its important aspect in shaping a person's identity. This uniqueness is reflected in the following statement cited in John Welwood (1977):

"Through every human being, unique space, intimate space, opens up to the world"

According to the Merriam-Webster online dictionary space can be defined as: ‘the opportunity to assert or experience one's identity or needs freely’. The perception of space, then, has a narrow connection with self-image and body awareness (Colpani, 2009) both of which are essential in creating the person's identity. This way, the connectedness between space and identity is well established: Identity can be shaped by how one manipulates the space provided. The following figure taken from a website (with slight adaptation) may illustrate the idea:

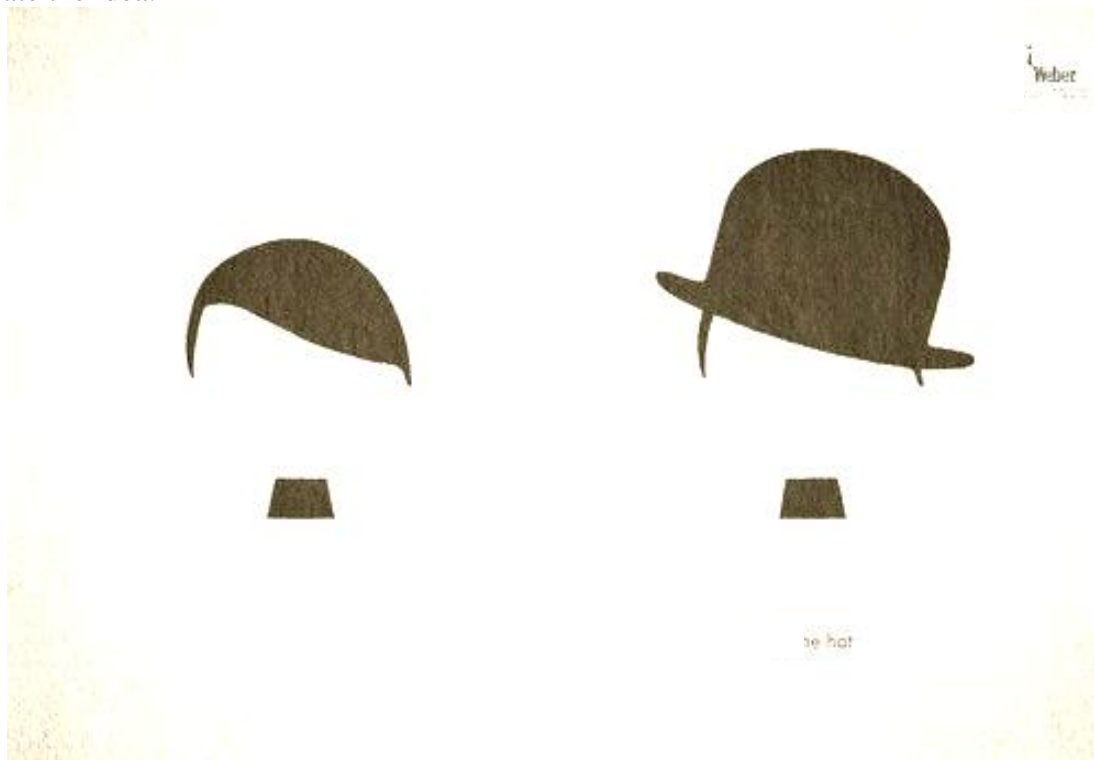


Figure. 1. An illustration of the relation between space and identity

Color contrast and choice of ‘how’ and ‘where’ to apply specific actions in the space provided serves to create an illusion about two different identities of famous personages; Hitler & Charlie Chaplin. The main point we want to deduce from the illustration simplified above is that the person's existence is somehow traced in the space in which s/he moves. In the words of Doran (2012) space shapes identity. The trace you make will identify you from a set of thoughts transformed into existential acts that definitely mark the direct space in which you live, perform and act.

If we think about space as revealing aspects of identity then it normally follows that the notion of space we are so far considering is the interaction of different perspectives. On the basis of the work of John Welwood (1977) there are different types of space and this depends on how we choose to approach the notion itself:

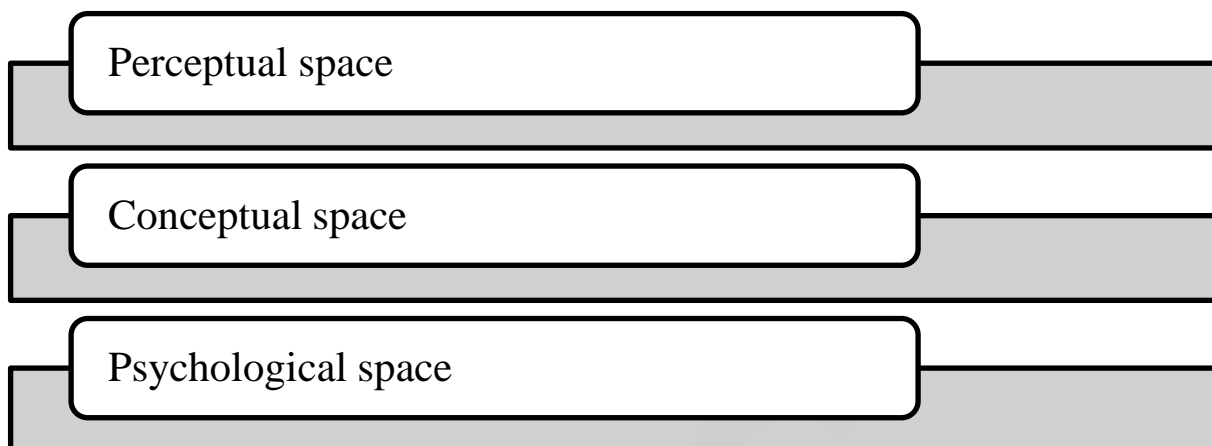


Figure.2. Types of Space According to Welwood, 1977

While the perceptual space is the space ‘out there’ in the words of Welwood, referring to the person’s ability to reach space through different modalities whether tactile, visual or auditory, the conceptual space is something we ‘physically’ cannot reach into. However it is still measurable through mathematics and physics rules as explained Welwood (ibid.).

We are most interested in the last type, the so called psychological space. It is defined by Welwood as ‘space-as-experienced’. Minkowski (1970) better refers to this notion as the ‘lived space’ (cited in Welwood, 1977). The term seems to allocate the directness of the actual perception of the spatial experience in live time. As Welwood declares, the term "lived space" refers to our ‘living, pre-articulate feeling of space’ (1977).

There exist three interrelated kinds of lived space as classified by Welwood (1977):

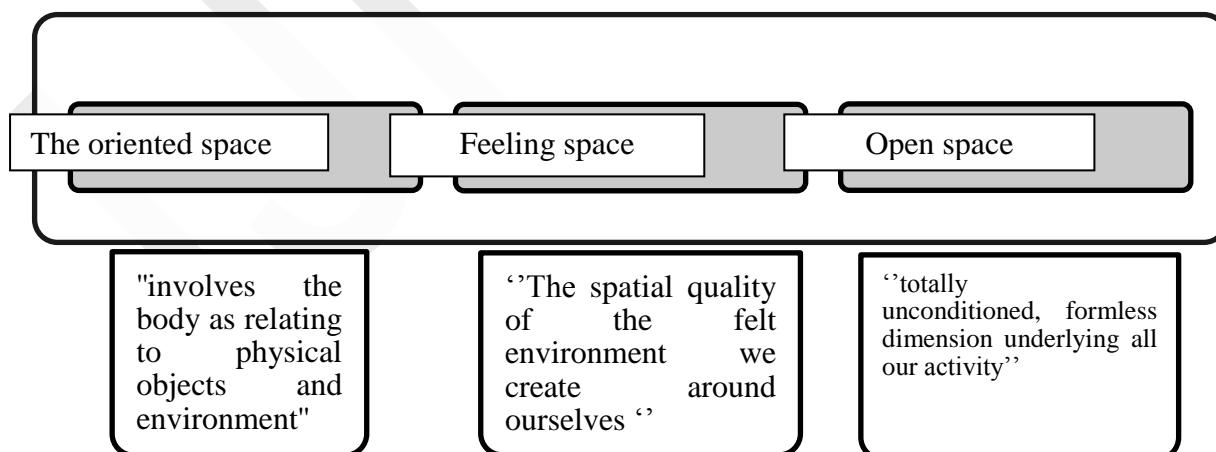


Figure. 2. Types of Lived Space According to Welwood (1977)

The notion of Open space is very important. It excludes the self from the center. This way it smoothly refers us to the socialization process which gradually inherits children a kind

of fear from the center less dimension of space. This fact can lead to becoming “threatened” by space and to developing various psychological problems. This is better explained in the previously mentioned work of Welwood. Important to us at this point is simply to witness the truthfulness of the connectedness between the notions of “space” and “identity”. This in its worst manifestations can lead to some pathological conditions.

3. Psychological Perspective:

Any kind of imbalance that affects space and self perceptions will inevitably impair the person’s psychological stability. The imbalance of this duality has been extremely linked to the onset of an abnormal spectrum of behavior referred to by the term schizophrenia.

3.1. Introduction to schizophrenia:

In 1911, The Swiss psychiatrist, Eugen Bleuler, coined the term, “schizophrenia” to refer to a specific set of pathological conditions. The pathology itself was first distinguished some time before. However, the term used to refer to the disease was quite a mystifying word that tends to classify the illness as a kind of dementia. Bleuler’s term then comes to better suit the symptoms. Schizophrenia originates from Greek with *schizo* translating as *split* and *phrene* as *mind*. In Greek that would perfectly refer to the somehow “fragmented thinking” of people diagnosed with the disorder. Interestingly, schizophrenia is commonly misconceived as split or multiple personalities, which is not true. These are quiet separate conditions and there exist other technical terms to express them. (Information adopted from <http://schizophrenia.com/history.htm#>)

Schizophrenia is a severe psychiatric disorder in which the patient undergoes a pathological experience of distorted sense of reality. It is associated with “impairment in four principal domains of cognition: attention, working memory, verbal learning and executive functioning” (Renée Testa, et al., 2009). The highest cognitive functions are then disrupted marking the life with a serious trouble that makes the patient out of time and space to the extent of being ‘out of self’.

According to Jablensky (1995), it is clinically characterized “by abnormal experiences” [Hallucinations] and atypical “beliefs” [Delusions],” disturbances of emotion and affect, as well as behavioral disturbances and impaired social functioning”. Worldwide statistics estimate that at least one person in every hundred is subject to the diagnosis of schizophrenia.

Every pathological experience can be unique prior or towards the onset of the disease just as much as the fact that human experience, in its different aspects, is all unique. Generally, relatives report that at an early age of their loved concerned, especially after the onset of puberty, there was a kind of a sudden change of personality most described as stubbornness. They may also report the development of a ‘new’ habit of talking to oneself or sometimes laughing out loud without seemingly a logical reason. A societal withdrawal has been also reported.

Schizophrenia goes through three stages and the earlier the diagnosis takes place, the better the prognosis will definitely be. However, professional diagnosis is not easy at the first stage of the disease. Many symptoms may be assigned to certain psychological changes linked to the onset of puberty or to certain environmental stressors. The psychiatrist/psychologist may go determined with the identification of a certain kind of depression till symptoms worsen to question the initial diagnosis.

According to the American national Institute of mental health:

“ People with the disorder may hear voices other people don't hear. They may believe other people are reading their minds, controlling their thoughts, or plotting to harm them. This can terrify people with the illness and make them withdrawn or extremely agitated. People with schizophrenia may not make sense when they talk. They may sit for hours without moving or talking. Sometimes people with schizophrenia seem perfectly fine until they talk about what they are really thinking”

The previous passage describes some of the symptoms of the disease. Knowing that types are quite varied, the occurrence of several symptoms depends on the type of schizophrenia in question.

The causal psychopathological mechanisms are not perfectly understood as declare Gordana Rubeša et al., (2011). There is no simple magic blueprint with which we can explain the onset of the disease. Marcotte et al. (2001) declares that "Current research into schizophrenia has remained highly fragmented, much like the clinical presentation of the disease itself." (Cited in Simon J. Hadlich et al., 2010). Most of all, the disease is due to the interaction between several factors of different nature. The following account, being very simplified, does not pretend to cover the theoretical rationalization and does certainly overlook a lot of important details.

Many of the information below are taken from the academic online course (October 2015) entitled *Caring for people with psychosis and schizophrenia* in which the lead educator is Dr Juliana Onwumere . (Available at <https://www.futurelearn.com/courses/caring-psychosis-schizophrenia/1>)

Schizophrenia is believed to be the result of the interaction between genetic and biological factors that necessitates the co-occurrence of some psychological/environmental factors to develop. Very rare genetic mutations are supposed to occur so to mark the body with a genetic predisposition. A neuro-chemical imbalance results in the occurrence of specific positive symptoms such like delusions. We can cite the Dopamine neurotransmitter as an example. Excess Dopamine may disrupt the normal thinking and make everything looks like significant. The patient starts considering surrounding things as signals or private messages. A lot of patients report receiving messages from TV. This neurotransmitter grasps their attention to everything and so they feel as if they are the center of everything which further nurtures the irrational prevailing thinking. Anomalous observations are documented in relation to cerebral mechanisms and structure, all revealing to be highly related to symptoms of the disease.

What actually triggers the onset of the disease is usually additional to the pre-existing genetic or biological abnormality. James Koenig (2014) states that "Early-life exposure to environmental stressors such as [...] childhood psychological trauma [has] been identified as possible risk factors of schizophrenia". Drug use and most particularly the cannabis drug, are much related as well to the onset of the disease.

3.2. Space & Identity in schizophrenia : a fragmented self experience

If the wellbeing of the person is a construct of several factors some of them psychological and biological, the pathology we are so far considering disrupts the normal condition while disordering a lot of these factors with much like a fragmented style. Important to the person is his/her sense of self and how s/he manages to unconsciously construct a self understanding of 'facts' whether physical or psychological that reflect his/her identity. But identity is also a social construct so to admit the importance of external and societal conditions. This 'outer' condition is drawn into an 'outer space'; the surrounding space. In schizophrenia, the patient witnesses a deterioration of the important notions of both: space and identity.

Je-Yeon Yun et al. 2013 declare that "anomalous sense of self is central to schizophrenia" and that "distorted implicit self-awareness is a core clinical manifestation of the disease (Parnas and Handest, 2003; Thakkar et al., 2011, cited in Je-Yeon Yun et al. 2013). This sensation is further accentuated by transcending the boundary of the self as a physical entity to reach up different components of actual human perception. M. Mancini et al. (2014) state that "Fragmentation appears a basic feature of lived time, as well as space, body and selfhood". This fragmented awareness overwhelms the patient and cut him/her off the normal life spectrum.

Space and identity, as discussed earlier, are inevitably correlated. For a stabilized state of mind, the human being needs a steady conception of space and, of course, identity. From a psychological perspective, this may reflect and explain the spiritual crisis experienced by the schizophrenic patient. A painful disruption of reality interferes with the experience of space in a way that brings the amount of damage sufficient to dislocate the patient who loses in the process the notion of the self. The deterioration of spatial capacity along the distorted cognitive identity leads to a sore human experience.

At this point we are interested in sharing the following text, taken from an article written by Clara Kean, a patient diagnosed with schizophrenia. She wrote the article after being stabilized with medication. At the time of her writing the article she was an undergraduate from the Department of Physiology and Pharmacology in the UK:

" the real 'me' is not here anymore. I am disconnected, disintegrated, diminished. Everything I experience is through a dense fog, created by my own mind, yet it also resides outside my mind. I feel that my real self has left me, seeping through the fog toward a separate reality, which engulfs and dissolves this self. [...] it is purely a distorted state of being[...] My thoughts, my emotions, and my actions, none of them belong to me any more [...] Schizophrenia has silenced my real self" Clara Kean (2009)

This abstract reveals how the patient perceives herself, and how she experiences space in which she exists. The following figures are meant to illustrate what we can deduce at least from this short passage.

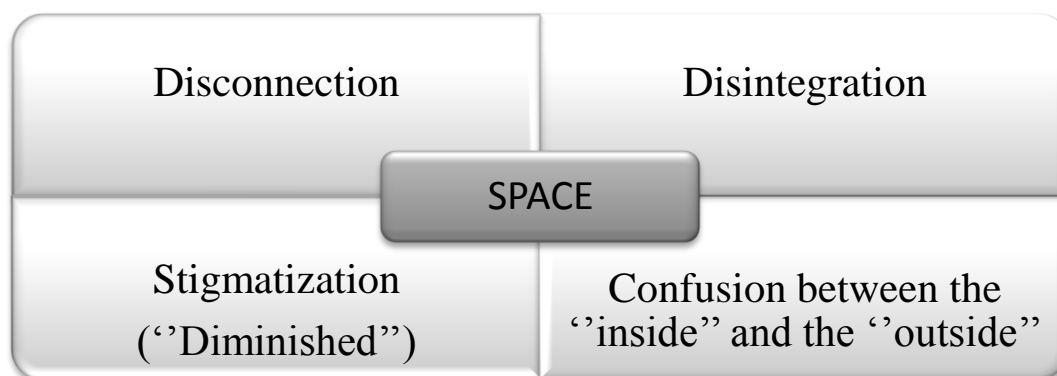


Figure. 2. Components of space perception in schizophrenic experience

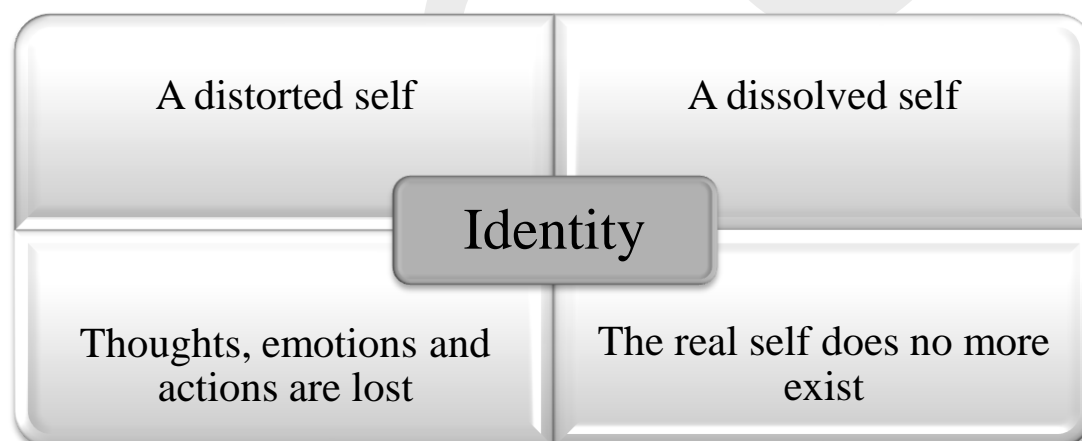


Figure. 3. Schizophrenic identity: the construct of instability

Very perplexed, confused and lost, Kean seems to be fractured into meaningless thoughts to which she totally surrenders. The pathology she cares has really "silenced" herself. She admits the non existence of her real self as if the one with which she actually performs is a disguise or may be a phantom of her reality. The external force controlling her thoughts, which in fact is nothing but one of her delusions, is defeating her. Her spatial awareness is totally disrupted. She feels unrelated to everything and she marks her 'admitted' self with stigma.

The disruption of space is a normal condition when the sense of self itself is lost and fragmented. The disconnection from space is rooted in the non-existence illusion of the self the same way as feeling distorted results in stigmatization and disintegration. The psychological relatedness between space experience and self perception is well established. If one thinks of his self as bodiless and non-existent then this will mark the first step towards the

fragmented space experience. Interestingly, there is an underlying anatomical connection strengthening the link between the two.

Neuro-pathological data acknowledges the evidence for frontal (Michael H. Thimble, 1990) and parietal lobes (Yildiz. M, et al., 2011) dysfunction in schizophrenic patients. Several neuro-imaging studies brought the evidence supporting that the prefrontal cortex is extensively involved in spatial working memory (Kessels. R.P et al., 2000). Any disruption occurring at the level of frontal lobe will inevitably disrupt this function and space perception will end up impaired to a certain extent. Besides, it is well admitted that there is an integral link between the personality of an individual and the pathology of the frontal lobe (Chow. W.T, 2000). The personality of the person is tightly linked to his/her identity. Thus, the frontal lobe is responsible for a stable conception of the person's identity which entails that any trouble taking place at that cerebral element will so far affect the person's identity.

In parallel path, neuropsychological data have shown that parietal lobe damage results in deficits of "spatial orientation" (De Renzi, 1986; cited in Min-Shik Kim & Lynn C. Robertson, 2001), "spatial attention" (Posner, Walker, Friedrich, & Rafal, 1984; cited in Min-Shik Kim & Lynn C. Robertson, 2001), and "spatial awareness" (Bisiach, Capitani, Luzzatti, & Perani, 1981; cited in Min-Shik Kim & Lynn C. Robertson, 2001). Therefore, parietal lobe is responsible for spatial judgment and spatial recognition. Other studies have also shown that it may play a role in self perception and therefore self identity. Studying the dysfunctional role of parietal lobe during self-face recognition in schizophrenia, Je-Yeon Yun et al. (2013) show how "deviant effective parietofrontal connectivity may underlie altered experience of self in SZ". The inferior parietal cortex is believed to control "body image, concept of self, sensory integration, and executive function" Nasrallah (2012). Indeed, several preceding studies stressed that considerable processing for "spatial perception, attention, and self-awareness" do actually occur in the parietal lobes (K. Vogeley, et al. , 2003 ; M.F.S. Rushworth, et al., 2001; cited in Yildiz. M, et al., 2011).

We can, therefore, deduce that related disrupted space experience and deteriorated self perception is rooted in the anatomy of the brain. This explains the dilemma of the patient and reinforces the connectedness of the notions of space and identity.

In relation to space perception in schizophrenic experience, Henry A. Nasrallah (2012) declares that "the unconscious perception of movement and spatial orientation arising from stimuli within the body itself" is impaired in schizophrenia. This refers us to the notion of proprioception which means essentially "the unconscious perception of movement and spatial orientation arising from stimuli within the body itself" (<http://www.thefreedictionary.com/proprioception>). Nasrallah(2012) indicates that mental proprioception "enables one to be fully aware of his identity and self-boundaries, and that his thoughts and actions are generated from within his own sphere of consciousness[...]. In schizophrenia, this function is altered. This perfectly explains why the sense of self in this pathology is fragmented along space perception.

M. Mancini et al. (2014) suggests that we can categories disorders of lived space

experienced by patients diagnosed with schizophrenia into three categories. The following is his account:

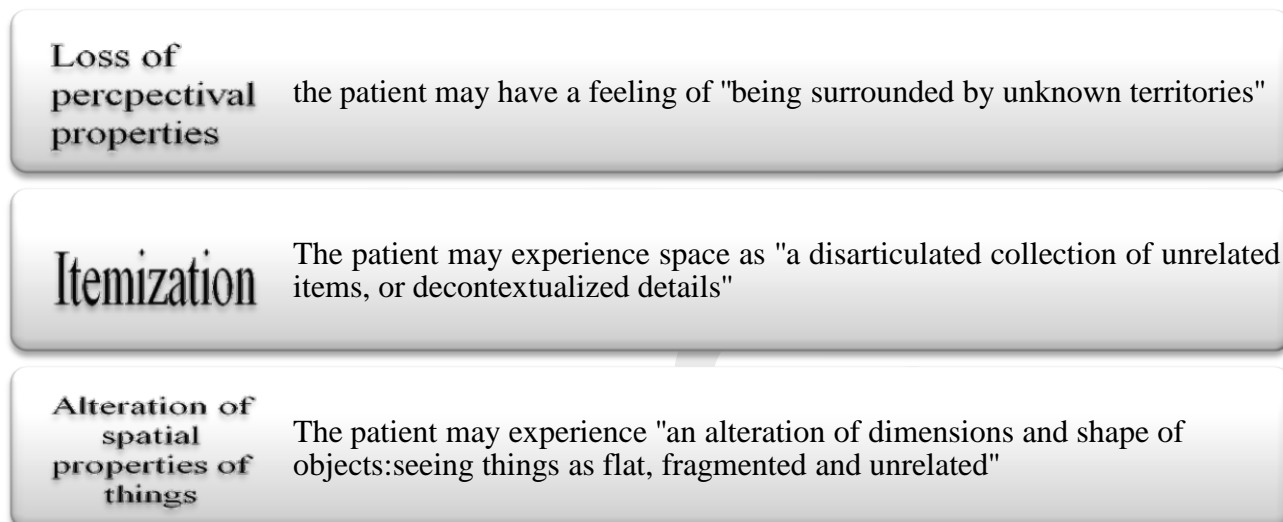


Figure.4. Categories of disorders of lived space as described by M. Mancini et al. (2014)

The patient diagnosed with schizophrenia may be unable to be fully conscious of his/her body which affects self awareness and also movement perception. The coherent sense of self and the surrounding space fade into confused illogical sensations. The phenomenon of fragmentation as such seems to perfectly describe the schizophrenic experience. Indeed, this phenomenon is believed to be a common denominator of the schizophrenic experience (M. Mancini et al., 2014). Patients experience this fragmentation both internally and externally what would be very painful for them to handle. Whilst the identity is split into pieces, the space as perceived and experienced may fall into unrelated items. Items themselves may lose dimensions or any physical detailed criteria. The patient may feel unrelated to the space in which s/he dwells despite how intimate in fact it used to be. STRANGE is what summarizes the way s/he conceives things and sometimes the way s/he admits conceiving one's personal self. The self becomes a puzzle of detached pieces hard for the patient to gather. Clara Kean (2011) admits trying suicide in search of her 'real self'. A paradox that is not easy to figure out unless aware of the never ending sense of disintegration and self-destruction to which the patient is submitting.

4. Socio-cultural perspective:

Definitely, internet technology is changing our lives with the power of transcending space and time boundaries. It offers new paths of knowledge and acquaintance. Beyond doubt lies the positive role it plays in extending human resources and shaping a new world image that we praise for goodness. Nevertheless, a dreadful side effect is veiled underneath the joy of this sensation. Whether conscious of the fact or still yet, internet is altering our identities and confusion to who we really are is establishing strong barriers between truth and lie. Transcending spaces, we are also excelling the truthfulness of our existence as a part of a

social community. Community in this digital age seems to fade in the walls of 'Facebookers' and 'Twitterers'; in the walls ... of the virtual.

Digital media is constantly changing how we act in space and how we perceive space itself. We spend most of our time surfing the web, skipping over different websites, sometimes consulting different windows at the same time, as such occupying different spaces with an omnipresent performer. As Colpani states " [o]ur exploration of reality becomes progressively mediated, abstracted from physical space" (2009). This way, virtual space is prevailing over real space which definitely leads virtuality to dominate our actuality. We end up with a relative exclusion of reality in a fashion that recreates the notion of the occupied space.

How we perceive space in which we live and act and how we understand the notion itself is changed into something unfixd. Space notion is all the way varying with the ever shifting space parameters linked to the virtual illusionary force. We are there and not there. We navigate in a way that makes us "over existing and over existence" in the words of the artist Ryan Trecartin (cited in Doran, 2012). We seem to get acquainted to this virtual existence because certainly it pleases us through promising opportunities.

Annet Dekker (2009) observed that the use of advanced mobile devices "facilitates isolation in a private space, which is at the same time immersed in public space" (cited in Colpani, 2009). She admits that while preferring to be in contact with "distant others", people, in fact, are "distancing themselves from the people around them" (ibid). Instead of directly contacting people we are most of the time virtually connecting to them. You may have a lot of connections but none of them is well experienced. The direct physical contact is all the way missing. To establish a strong connection with others, physical contact used to play a great role; direct eye contact, as a mere example was a key to create affection and friendliness.

This new aspect actually recreates the notion of space in a fashion that undermines the opportunities we think we have in the real. One of the most central skills we hope our children master well is how to engage in society "the open space" and how to interact with other people. The importance of social engagement is most highlighted when it reveals to be the cue towards detecting many psychological problems when it shows deficiencies. The network technology is rather encouraging withdrawal from society while offering virtual spaces full of virtual opportunities leading to a certain kind of isolation. If you have problem facing people and interacting effectively you are most likely undergoing a certain psychological problem not to say a specific pathology.

Having hundreds of friends in the virtual space may confuse our thoughts onto what friendship essentially means in the crowded Cyber world and whether in the real we still have that huge number of relations! You may end up feeling very lonely in a crowded virtual space. Many admit losing touch with their "real" friends while spending hours "keeping up contacts with the "friended"" (Turkle, 2011). The best phrase to describe this state may be "alone together" in the words of Turkle (2011).

In the same realm, technology has a say in recreating a person's identity. Our newly based preferences are actually affecting our selves 'perceptions and hence our identities. Technology interferes to alter the way we think about ourselves and the way we choose to act in the virtual community.

Doran (2012) argues that the self "as represented on a Facebook profile is one that is uploaded, modified, and edited according to the parameters of the site". Turkle (2011) describes how young generations keep on "composing and recomposing their digital personae". One can then argue that when it comes to this kind of social media every person ends up fragmented into selves instead of a unite self. Turkle (2011) says that in presence of many games, sites, worlds one has to remember "the nuance of how you have presented yourself in different places". You are constantly changing and adapting your "connected" self.

We are externally defined. "Information about and images of oneself must fit into the predetermined categorical boxes presented in the layout" (ibid). When using Facebook, twitter or the like, there is a constant feeling of being watched and that feeling causes people to mind every posting, every comment in order to build a positive image about one self. "We come to see our identities as those we would like to have or that we want people to see rather than who we really are" (Taylor, 2011)

"One of the most powerful ways in which technology is altering self-identity is through the shift from being internally to externally driven" (Taylor, 2011)

Internet users are constantly thinking how to construct a positive image that pleases others so that they become 'accepted' and approved. "impression management and self promotion" summarize the daily struggle of many of the internet users. We unconsciously "sacrifice our true self-identities and shape our identities to conform to what the digital world views as acceptable identity" (Taylor, 2011)

We may think that we are using technology but in fact technology is using us while alienating us from others and more importantly from our real selves. We are in a daily basis recreating our identities to fit into the standards of the network community. Editing oneself to the extreme of ideal image about oneself, users "create highly fictionalized and performative identities" (Doran, 2012). Internet technology is consuming time, effort and the parameters of personality construction. Teenagers are so busy liking, so busy posting and commenting on others' profiles. They are constantly thinking to update their profiles with truthfulness and sometimes the lie is needed to fascinate others and maintain the brightest social image in front of public. A new Big Brother is watching over the steps of everyone. The psychology of the person will be somehow affected by a certain feeling of instability and insecurity. The psychological need to be accepted by others and cherished is more and more accentuated and

instead of thinking to please ourselves we may end up more inclined to please others. Self control is as such vibrating in the virtual empire.

Societal withdrawal is very important to thoroughly consider. People are less interested in “directly” communicating with others, less engrossed in formulating relationships in the real since the virtual offers a lot of mediated intimacy. Doran (2012) declares that the Facebook site is enabling another kind of interaction to dwell; by “looking at a user’s profile, one is able to learn about that individual, depending on the information they disclose, wall posts by the individual or friends, postings on other users’ walls, and uploaded photos”. This type of interaction is “paradoxical”, since the Facebook user is still interacting with another user by the mere viewing of their “digital representation”, however the interaction is “one-sided” (ibid). This way the definition of ‘interaction’ as needing at least two individuals is simply violated and out-dated.

The spirit of the virtual is dominating and prevailing. This dilemma is highlighted inside families since interactions seem to be reduced due to the influence of internet use. We may spend more time in front of screens than chatting with our relatives in the same household. Jose Van Dijck (2005) argues that the digital mode “suits the contemporary, fractured notions of family and individuality”. This suggests another use of the term, ‘schizophrenia’, being a state of a whole community instead of being a state of a pathological mind which shifts the concern from an unusual pathology to a shared terminology.

In this concern Doran (2012) suggests that the internet in the prevailing network culture allows one to fracture its identity into a multitude of roles, forming a conception of self that she argues is “schizophrenic.”

The emerging technologies enhanced by a network culture are creating a new ground for possible emergence of several psychological problems. If we think of schizophrenia as the mental disease alienating the patient from reality and isolating him/her from the normal flow of life, are not we charring this alienation and isolation with too much internet embodiment in our lives? Turkle (2011) describes young people most engrossed in popular social networking sites as “feeling more alive when connected, then disoriented and alone when they leave their screens”. The physical reality is less enjoyed and less required since it may entail loneliness and isolation among other depressive feelings. The sensation of blurred identities may be taken to the extreme while establishing a feeling of instability and insecurity. Excess engagement in the virtual world may lead to addiction and loss of self control which along the former outlook may generate several psychological problems.

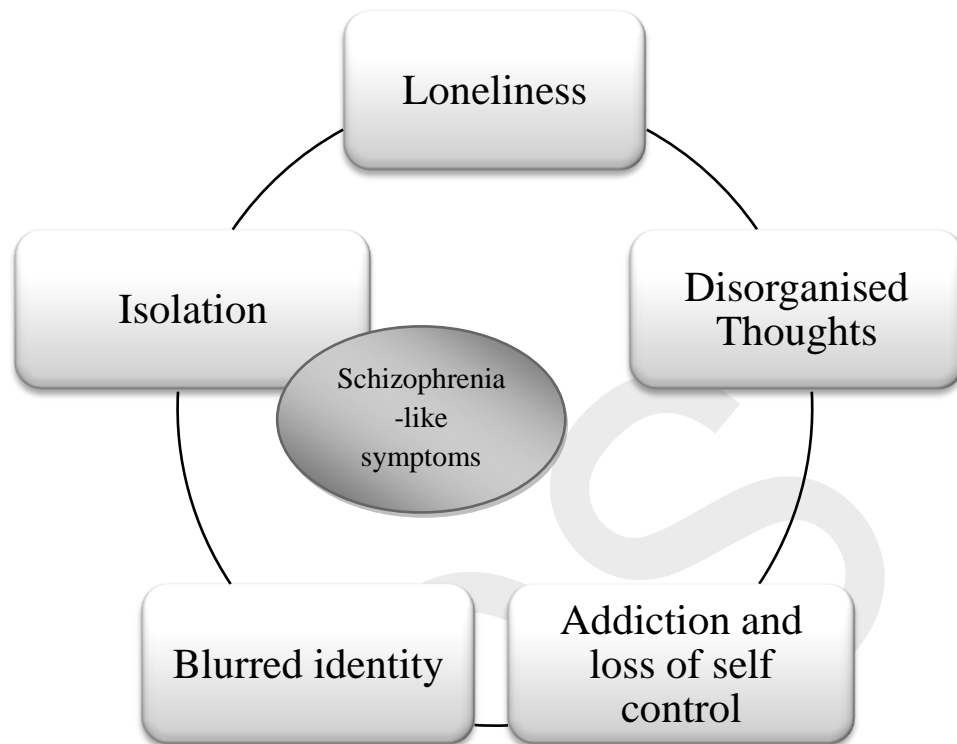


Figure.5. Technology side effects compared to schizophrenia like symptoms

5. Conclusion:

In the digital network culture, the term Schizophrenia may turn to describe a whole trend of thought and behavior, fully destructive of what stands to be an ecological definition of the term community. If patients diagnosed with this pathology are unconsciously drawn to a harsh sense of loneliness, added to the misery of living out of the real, the 'un-diagnosed' community is choosing consciously to share, to a certain extent the bitterness of fragmented thought, space and identity.

References

- Chow. T. W. 2000. *Personality in frontal lobe disorders*. Current Psychiatry Reports. 2(5). pp 446-451. Available at <http://link.springer.com/article/10.1007%2Fs11920-000-0031-5>. Accessed the 13/10/2015
- Colpani. M. 2009. *New Media Shaping of Perception of Space and Perception of the Body. The Impact of New Media on our Experience of Space and of the Body*. Available at <http://mastersofmedia.hum.uva.nl/wp-content/uploads/2010/09/mcolpani-5812682-master-thesis.pdf>. Accessed the 15/10/2015
- Dijck. J. V. 2005. Capturing the Family: Home Video in the Age of Digital Reproduction. Shooting the Family. TRANSNATIONAL MEDIA AND INTERCULTURAL VALUES. Ed. Pisters. P. and Staat. W. Amsterdam University Press Amsterdam . Available at <file:///D:/Mes%20documents/Downloads/340208.pdf> . Accessed the 07/10/2015
- Doran. K. 2012. Performative identity in networked spaces: Resisting the logic of late capitalism in the digital age. Undergraduate Honors Theses. Paper 279. Available at http://scholar.colorado.edu/cgi/viewcontent.cgi?article=1474&context=honr_theses. Accessed the 03/10/2015
- Jablensky, A. (1995). *Schizophrenia: recent epidemiologic issues*. *Epidemiol. Rev.* 17, 10–20. Available at <http://epirev.oxfordjournals.org/content/17/1/10.long>. Accessed the 01/10/2015
- Hadlich. S. J. , Kirov. A, and Lampinen, T. 2010. *What Causes Schizophrenia?* Available at <http://www.simoncolumbus.com/wp-content/2011/04/BQSCI-CZonneveld-Essay-What-Causes-Schizophrenia-SJHadlich-AKirov-TLampinen.pdf>. Accessed the 10/10/2015.
- Kean, C. (2009). Silencing the Self: Schizophrenia as a Self-disturbance. *Schizophrenia Bulletin*, 35(6), 1034–1036. <http://doi.org/10.1093/schbul/sbp043>. Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2762621/> . Accessed the 05/10/2015.
- Kean, C. (2011). Battling With the Life Instinct: The Paradox of the Self and Suicidal Behavior in Psychosis. *Schizophrenia Bulletin*, 37(1), 4–7. <http://doi.org/10.1093/schbul/sbq076>. Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3004176/>. Accessed the 05/10/2015.
- Kim. M. S and Robertson. L. C. 2001. *Implicit Representations of Space after Bilateral Parietal Lobe Damage*. *Journal of Cognitive Neuroscience* 13:8, pp. 1080- 1087, Massachusetts Institute of Technology. Available at <http://istsocrates.berkeley.edu/~lynnlab/pubs/JCogNeur01KimLCR.pdf>. Accessed the 02/10/2015
- Koenig. J. 2014. DEVELOPMENTAL STRESS IN SCHIZOPHRENIA: EPIDEMIOLOGY AND POSSIBLE MECHANISMS. *Abstracts of the 4th Biennial Schizophrenia International Research Conference / Schizophrenia Research*.

SCHIZOPHRENIA RESEARCH AN OFFICIAL JOURNAL OF THE SCHIZOPHRENIA INTERNATIONAL RESEARCH SOCIETY 153(1). S1–S384. Available at http://www.nmr.mgh.harvard.edu/kuperberglab/publications/chapters/Kuperberg&Kreher_Hn dbkNeuropsychMentalDisChapter6_2009.pdf. Accessed the 01/10/2015

-Mancini. M., Presenza. S, et al. 2014 . *The life-world of persons with schizophrenia. A panoramic view.* JOURNAL OF PSYCHOPATHOLOGY. Available at http://www.jpsychopathol.it/issues/2014/vol20-4/10_mancini.pdf. Accessed the 04/10/2015.

-Merriam-Webster. 2015. Full Definition of SPACE. Available at <http://www.merriam-webster.com/dictionary/space>. Accessed the 01/10/2015.

-Nasrallah. H. 2012. *Impaired mental proprioception in schizophrenia. Myelin pathology in schizophrenia leads to brain disconnectivity and a shattered sense of self.* Current Psychiatry. 11(8). Available at <http://www.currentpsychiatry.com/articles/from-the-editor/article/impaired-mental-proprioception-in-schizophrenia/5d9d2d6cb4cc9b66550bfcdab383bf37.html>. Accessed the 20/ 10/2015.

-National Institute of Mental Health . Schizophrenia. 2009. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES • NIH Publication No. 09-3517. Available at http://www.nimh.nih.gov/health/publications/schizophrenia/schizophrenia-booklet-2009_34643.pdf. Accessed the 02/2015

-Onwumere. J. 2015. *Caring for people with psychosis and schizophrenia.* Future Learn Online Course. Available at <https://www.futurelearn.com/courses/caring-psychosis-schizophrenia/1>. Accessed the 12 /10/2015.

-Rubešal. G. & Kubinska. 2011. *ETIOLOGY OF SCHIZOPHRENIA AND THERAPEUTIC OPTIONS.* Psychiatria Danubina. 23(3), pp 308-315. *Medicinska naklada Zagreb, Croatia.* Available at http://www.hdbp.org/psychiatria_danubina/pdf/dnb_vol23_no3/dnb_vol23_no3_308.pdf. Accessed the 10/10/2015.

-Taylor. J. 2011. *Technology: Is Technology Stealing Our (Self) Identities? Who or what is defining your self-identity?* Psychology Today. Available at <https://www.psychologytoday.com/blog/the-power-prime/201107/technology-is-technology-stealing-our-self-identities>. Accessed the 20/10/2015.

-Testa. R, Wood. S.J, and Pantelis. CH. 2009. Schizophrenia. pp. 378-388. *The Neuropsychology of Mental Illness*, ed. Stephen J. Wood, Nicholas B. Allen and Christos Pantelis. Cambridge University Press. Available at http://www.nmr.mgh.harvard.edu/kuperberglab/publications/chapters/Kuperberg&Kreher_Hn dbkNeuropsychMentalDisChapter6_2009.pdf. Accessed the 06/10/2015.

-The Internet Mental Health Initiative. 1996-2010. *History of Schizophrenia.* Schizophrenia.com. Available at <http://www.schizophrenia.com/history.htm>. Accessed the 01/ 10/2015.

-Thimble. M. H. 1990. *Psychopathology of Frontal Lobe Syndromes. Seminars in Neurology*. 10(3). Available at <http://www.ect.org/effects/lobe.html>. Accessed the 10/10/2015.

-Turkle, Sherry. 2011. *Alone Together: Why We Expect More from Technology and Less from Each Other*. New York, NY, USA: Basic Books. ProQuest ebrary. Available at <http://www.amazon.com/Alone-Together-Expect-Technology-Other/dp/0465031463>. Accessed the 20/10/2015

-Welwood. J. 1977. *ON PSYCHOLOGICAL SPACE*. *The Journal of Transpersonal Psychology*, 9(2). Available at <http://www.atpweb.org/jtparchive/trps-09-77-02-097.pdf>. Accessed the 03/10/2015

-Yildiz. M, Borgwardt. S. J, and Berger. G. E. 2011. *Parietal Lobes in Schizophrenia: Do They Matter?* Article ID 581686. Hindawi Publishing Corporation. doi:10.1155/2011/581686 Available at http://www.researchgate.net/publication/230770000_Parietal_Lobes_in_Schizophrenia_Do_They_Matter. Accessed the 13/10/2015.

-Yun, Je-Yeon et al. 2013. *Dysfunctional role of parietal lobe during self-face recognition in schizophrenia*. *Schizophrenia Research*, 152(1), 81 – 88. Available at [http://www.schres-journal.com/article/S0920-9964\(13\)00354-X/abstract](http://www.schres-journal.com/article/S0920-9964(13)00354-X/abstract). Accessed the 04/10/2015.