

# The Virtual Reality in a Context of the “Mirror Stage”

Aron Brudniy , Angelina Demilhanova

Psychology department, American University Central Asia, Bishkek, Kyrgyzstan

Psychology department, Kyrgyz-Russian Slavic University, Bishkek Kyrgyzstan

Email: gelya1981@gmail.com

**(Abstract)** This article is about the virtual reality of computer games and the peculiarity of its influence on personal identity. And, for the first time, the virtual reality analyses in context of the well-known Lacan’s Mirror stage. The methods of research were: the content analysis, and the psychodiagnostic method. The main conclusion is: that people, who play the computer role games, have the changing of the self identification. It can develop in appearance of additional personal identification. This mechanism of such identification is similar to the identification mechanism which takes place in early childhood at the “Mirror Stage” described in works of Jacques Lacan.

**Keywords:** Mirror Stage; Identification; Virtual reality; Additional Personal Identification.

## 1. INTRODUCTION

It is very popular now to speak about the virtual reality. Especially is popular the researchers of the reality created with computers. The virtual reality closely concerned with the game’s phenomenon today. But, in spite of such widely interests to the theme of virtual reality, the psychological mechanisms of involving to the artificial game reality is poor analyzed.

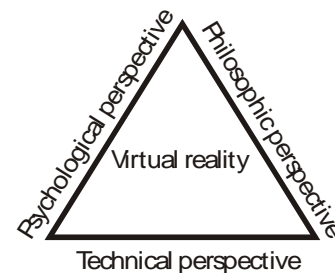
So, the purpose of our research is the influence of the virtual reality on psyche of the person who plays the computer role games.

The hypothesis of research: active and continuous participation of individuals in role games leads to changes in perception of self identification and emergence of additional forms of self identification.

The definition of the term “virtual reality” is very varied. There are different interpretations of this term.

We interpret the virtual reality as combination of 3 perspectives.

From the philosophic perspective - the virtual reality is possible area the subject interacts with. From the technical perspective - the virtual reality concerned with computer technologies and how this interaction occurs. From the psychological perspective - the virtual reality understands as artificial modification of the reality and how the person behaves to this modification (for example sleep, fantasy, myth, psychopharmacological action – drug or alcohol intoxication). We think, that the virtual reality is interaction of these 3 perspectives (Figure 1).



**Figure 1.** The construct of virtual reality

We define the virtual reality as the area created with computer technologies and sensed as real existence.

It is well known that the virtual reality can influence on personal identification. The identification is the process of the forming personality’s self conception.

The identification mechanism was described by Jacques Lacan.

He described it in "The Mirror Stage as formative of the function of the I as revealed in psychoanalytic experience". It is a phase in which the subject is permanently caught and captivated by his own image [1].

This stage occurs anywhere from 6-18 months of age. For Lacan, this act marks the primordial recognition of one's self as "I," although at a point before entrance into language and the symbolic order. This stage's misrecognition or *méconnaissance* (seeing an ideal-I where there is a fragmented, chaotic body) subsequently "characterizes the ego in all its structures". In particular, this creation of an ideal version of the self gives pre-verbal impetus to the creation of narcissistic fantasies in the fully developed subject. That fantasy image of oneself can be filled in by others who we may want to emulate in our adult lives (role models, et cetera), anyone that we set up

as a mirror for ourselves. The mirror stage establishes what Lacan terms the "imaginary order" and, through the imaginary, continues to assert its influence on the subject even after the subject enters the symbolic order.

## 2.METHOD OF RESEARCH

For researching the influence of the virtual reality on psyche of the person who plays the computer role games we've used the following methods: the Leary Interpersonal Behavior Test, Mini- Mult (short version of MMPI test), "Who am I" test by Kuhn-McPartland, the projective techniques: House-Tree-Person Test ( J. Buck), Draw-a-person (K. Machover), Draw- A – Person -In-The-Rain (Oster & Gould), Non-existent Animal ( M. Dukarevich).

The sample: The following criteria were used as a basis of determining the group: 1- intensity/activity of participation in computer role games (not less than 1 year); 2- regularity of participation (daily); 3- long hours spent in front of the computer (5-7 hours per day).

A group of 82 individuals at the age from 18 to 26 was tested. Average age of the tested persons was 20,9. Average «experience» of participation in computer role games – 3,2 years, regularity of using computer games – 3,6 hours per day at average. All tested individuals were males.

This group was called as gamers.

We pay the attention that we've researched the gamers, who played the computer role games. This is not the game -RPG in computer classification. The role computer games in psychology classification means, that the playing person takes the role of computer personage. The game makes a person to be a computer hero [2]. The main particular of the computer role games is the most influence on psyche of the person.

## 3. THE RESULTS

The results of Timothy Leary's test shows that the real self description, the ideal self description and the nick name (the virtual self description) has a lot of difference. We assume, that these distinctions can be the consequences of changing the self identification. According to Lacan, the forming of identification takes place on the "mirror stage". On this stage can be the breakdown of integral self perception. The Internal and External separates. The External - I at the display, and the Internal – I as subject. That is why the virtual self description presents the independent image (character). The game role character (Nick name) is the imago that exerts the back influence on the forming of I (ego) and his identifications[1].

We discovered, that increase of the octant "managerial-autocratic" in description of Nick name can be the consequence in the absence of the own actions social estimate. Also we can say that there is a sociopath in the group of gamers. It defines in combination of high level anxiety and disregard to the social responsibility, and also in nonproductive activity. This activity orients not to the

social contacts, but to the own feelings and introspection. We can find in Lacan's theory that the going out of own person (a view on myself from the outside introspection) is connected with introspection that is always realized from the outside (from the outside self position).

We suppose that the preponderance of "Reflexive features" category (according to the "Who am I" test) concerned with predominant meaning internal experience and feelings as compared with external experience. In the "Reflexive features" category prevail such features as: dominance, egocentrism, identification with virtual personages. All these and other features we explain poor unformed presentation of itself. That is why there is a tendency to self-determination. It proves by the "seeking" category answers in the "Who am I" test. The gamers answer: they are in search of themselves, they want to determine etc. The features as: incomplete figures, abstract figure, the figure with mechanical objects in "Non-existent Animal" test also show unformed presentation of itself.

The projective drawing tests allow us to make a suggestion that gamers have a sense of danger in the objective reality. And as consequence under the perception of real world they have imaginary life reception. The group of gamers also has difficulties in gender identification.

But the most interesting discovery was location of several men's figures in "Draw- A – Person -In-The- Rain" test (9.5 % of drawings). We met the drawings where the figure of a man has mirror reflection in addition (3.7 % of drawings) (Figure 2).

The drawings of the second person (we can also say that is double or doppelganger) can be the mechanism of defence. Because these drawings were found out in "Draw- A – Person -In-The- Rain" test. And, as we know, this test diagnoses the power of Ego, and the person's potentialities to resist and overcome the difficulties and negative situations.



Figure 2. The examples of several men's figures in "Draw- A – Person -In-The- Rain" test

The dissociation can be such mechanism. Carl Jung described pathological manifestations of dissociation as special or extreme cases of the normal operation of the psyche. According to Jung, the traumatic complex can produce the psychic dissociation. Such complex is out of

the volitional control and that is why it has a property of the psychic autonomy [3]. Dissociation indicates multiple personality. Our probationers must have absolutely diverse states then. And these states can take turns to each other without any notification. "I" must be defragment into several segregated parts. But we can't say that our probationers have dissociation, rather we can suppose that there is a process of forming additional personal identification, by the way of original or non-typical self perception.

#### 4. DISCUSSION

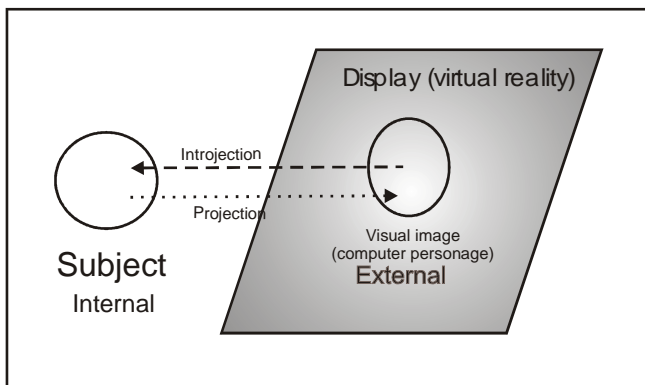
The idea of doubles presents in the human psychic. But it constantly represses and transforms.

The Lacan's subject begins from the mirror image, from the first identification with the own double [4]. It is possible that this figure is the double Lacan wrote about.

The changing of the self identification, we wrote about, can develop in appearance of additional personal identification. We can make a suggestion that I forms with body model at the same time. And the forming of such unity speeds up if the own subject's I forming by image of other person (Figure 3).

Jacques Lacan discovered correspondence between the beginning moment of forming Ego and primary narcissist experience, so-called "Mirror stage". The mirror stage is not only a passing phase of human psychological development but also a model for the relationship between the "I" and its image of itself [5].

The Ego deformation was considered by Sigmund Freud. Freud made an analog of the psychic function with the function of primitive organism -amoeba. Initially filled with a viscous substance (libido), the amoeba (ego) puts out protrusions of itself into the world (object cathexes), which is later able to retract (object libido is transformed back into libido) [6].



**Figure 3.** The mechanism of additional personal identification's appearance

The adaptation and progress of the psychic reaches by the processes of introjection and projection. It is essential, that the ego should admit entry only to those stimuli which are suitable, and bar off those which are dangerous. In both

parts of perception introjection and projection are operative. When the ego receives stimuli from outside, it absorbs them and makes them part of itself, it introjects them. When it bars them off, it projects them, because the decision of their harmfulness is subsequent to a trial introjection. Selection, discrimination, etc., are based on introjection and projection" [7].

Freud considers that perimeter of the I can changes. It as if reforms, deforms under the social, individual, and other impulses. The I form can stretch to the social, individual and other desires.

According to Aron Brudniy, the reality produces mirror to the probationers in our research in some peculiar "mirror"- on computer's display. But the reality is everything that exists [8]. The Ego of our probationers stretches that way. If use the Freud's analogue, there is amoeba's division. That proves by the second man figure in "Draw- A – Person -In-The- Rain" test. That is evidence of additional personal identification appearance.

We can have here the possibility of returning to the mirror stage. It is not more than only a supposition, of course. But, as we can remember, the genital stage in Freud's Psychosexual Stage Theory appears again the second time in puberty age. We know this stage as phallic at first. Between the age of 3 and 6 the source of pleasure is the genitals. During this stage the children can investigate their sexual organ; also they can be interested in the questions of sexual relationships. Their ideas about adult sexuality are usual mistaken, and can be not exactly formulated.

But Freud supposed that most children understand the nature of sexual relations more clearly than their parents think.

The latency stage begins after phallic. Freud described the latency phase as one of relative stability. No new organization of sexuality develops, and he did not pay a lot of attention to it. For this reason, this phase is not always mentioned in descriptions of his theory as one of the phases, but as a separate period. The genital stage is the fifth and final stage of Freud's stages of psychosexual development that begins during puberty. During this stage, the individual develops a strong interest in the opposite sex. If the other psychosexual stages have been successfully completed, the individual will develop into a well-balanced, warm, and caring adult[9].

It is possible that the mirror stage appears the second time in human life, but it appears as mechanism of defense.

#### 5. CONCLUSION

It can be stated that within the group of gamers there is an unformed self identification which is expressed in terms of uncertainty in describing physical identity, and predominance of abstract characteristics in self-description, selection of self-description categories related to search for self identification and self determination.

In the group of gamers there are high indicators of egocentrism and dominance, negative relation to oneself,

identifying oneself with virtual characters, as well the presence of problems with sex/gender-role identification.

The mechanism of appearance of additional identification forms that was discovered in our work lies on the fact, that the role character in the computer game, which is an image of a real object, as a result of a chain of identifications, the subject integrates himself/herself through the introjection mechanism. This mechanism is similar to the identification mechanism which takes place in early childhood at the "Mirror Stage" described in works of Jacques Lacan.

In 1936, Jacques Lacan presented his first analytic report at the Congress of the International Psychoanalytical Association in Marienbad on the "Mirror Stage", but Ernest Jones, the chairman and the Freud's biographer, interrupted and ended Lacan's reporting. This report formed the basis of his further studies. Lacan described the theme of double in this report for the first time. Lacan covers the problems of adaptation in the idea of mirror stage. He made a suggestion, that in the process of adaptation a person tries to adjust the reality to himself, rather than adjusts himself towards the reality. And, as a result, a new "I" appears. This is the double in actual fact. And person begins to identify himself with this double. We suppose that gamer identifies him with appearing in virtual reality double, that in the process of a game a person tries to adjust to himself. And as a result the double (doppelganger), that existence we discovered in our experiment, appears.

Thus the Lacan's idea in the field of adapting virtual reality to itself gets the experimental affirmation.

In this paper, we researched the data privacy protection in the cloud storage. We proposed a method based on distributed file system to protect data privacy in cloud storage. Compared to the traditional methods, it has a higher efficiency in great different sizes of data. The experiences in small Hadoop cluster prove the superiority of the method in the protection of data privacy. Considering the problems of data retrieval and key management, the application also needs to consider the problem of the encryption algorithm and the following work is encryption algorithm.

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## Author Introduction



Aron Brudniy: Professor, Doctor in Philosophy, Head of the Psychology Department, laboratory head at the American University of Central Asia (Bishkek, Kyrgyzstan), a Foreign Member of the Russian Academy of Natural Sciences, the Associate Member of the Kyrgyz Academy of Sciences, and Member

of the Californian Academy of Science and Education. Aron Brudniy studied psycholinguistics, but the major works written for psychology of understanding. He was the founder of the "radical psychology" direction, where he identified three fields of understanding. He was awarded the Hegel Philosophy Congress Medal, and the creator of the Theory of Information Trend, which is broadly applied now in Psychology.



Angelina Demilhanova: psychologist, PhD. Senior lecturer, psychology department, Kyrgyz-Russian Slavic University (Bishkek, Kyrgyzstan). She is the specialist in deviant behavior. The main research interests are around the study of virtual reality, cyberspace

and internet- addiction. The main practical interest is the psychotherapy of drug and alcohol addiction. The author more over 20 scientific publications in psychology and psychotherapy of addiction.