Chapter #5

TRANSITIVE AND VIRTUAL SPACES: COMMON AND DIFFERENT FEATURES

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ABSTRACT
In recent decades, a new sphere has emerged, the sphere of virtuality, which a person constructs himself. Phenomenologically, one can speak about many similar features uniting real and virtual spaces. We can assume the similarity of different types of transitivity (crisis and fluid) with different types of work in virtuality (on-line and off-line). Therefore, it is important to understand the styles of behavior, the emotions of people in a situation of different changes, different types of transitivity and different types of Internet communication. These questions became the base of the empirical study which was carried out in 2018-2019 years and consisted of two stages. The study involved young people, students of Moscow universities. The obtained results showed that in general in the on-line situation the overall level of psychological well-being is lower than in an off-line situation. The similarities in the profiles obtained by presenting positive and negative words showed the similarity in emotional responses to crisis situations in the real and virtual world. Thus, we can say that the constant on-line situation becomes a difficult life situation for many young people. The transparency of the network most negatively affects people who assess the situation as rigid transitivity.

Keywords: virtual space; transitive space; on-line and off-line; rigid and fluid transitivity.

1. INTRODUCTION

The space and time in the modern world are rapidly changing. These changes affect people's lives in several temporal and spatial dimensions. Life passes in parallel in the social (objective) and personal (subjective) space and time. Such multidimensional number of possible combinations not only strengthens the mismatch between the different components of space and time, but often leads to disharmony between a personal assessment of the situation, attitude to what is happening in the present or what has happened in the past, foreboding of future changes.

Naturally, for each person, it is precisely his own attitude to objective space and time, however, subjective space-time - a personal chronotope, must always correlate with external, social changes. Of course, a person can fence himself off from the outside world with barriers of varying degrees of rigidity, he can build his own exist-sphere (Grishina, 2017), but however, awareness of disharmony (serious or small) is always present.

In recent decades, a new sphere has emerged, covering precisely personal space and time, the sphere of virtuality, which a person builds himself and for him-self. The appearance of a virtual parameter gives greater freedom for self-realization and, at the same time, increases disharmony of different spheres of life. We can state that sphere of virtual life transfer into new mode the process of identification and enhances the borders of possible selves (Markus & Nurius, 1986). It can also be assumed that the degree of self-awareness

and awareness of interpersonal contacts affects the balance of harmony-disharmony of different spheres of life - real and network (Gackenbach & Karpen, 2007).

The estrangement of reality, the barriers which person built in virtual space-time are much more impenetrable to the outside world than the exosphere barriers. Such a "departure" from reality into a virtual world is not only more cardinal than in real world, but it is also much easier. It does not require a high degree of spirituality and / or reflection, and that's why makes this path quite common and possible even for children. The ability to construct one's own reality is one of the advantages and one of the dangers of virtual space-time.

No less important at the present time and the study of instability, transitivity of the world. We can say that modernity, both real and virtual, is characterized by the continuity of changes that occur in parallel in the network and in reality and always with an uncertain outcome. At the same time, many options and contexts, many possible choices feed the transitivity, which is constantly changing from fluid, to crisis and vice versa.

Currently, the influence of transitivity is increasing significantly, affecting all areas of everyday life. The role of the information space is also growing because information sets not only the trajectory of socialization, but also patterns of behavior, identification standards for a large group of people (Benkler, 2006; Barker & Bornstein, 2010; Chan-Hoong & Soon, 2011). The fact that broadcast media samples are constantly changing in accordance with the variability and multiplicity of social contexts of the environment helps people, especially children and adolescents, to cope with uncertainty (DePaulo & Morris, 2005). Changing and therefore remaining relevant information enables people to preserve themselves, their individuality and integrity in the ever-changing circumstances of everyday life (Grishina, 2017; Borkenau &Mauer, 2006).

The connection between network and transitive spaces appears, first of all, in the uncertainty and multiplicity of contexts, groups, languages, and variants of identity. The uncertainty of these spaces is closely related to variability. The criteria by which people evaluate and present themselves to others are constantly changing. It's "likes" and reposts, social status or the number of citations (h-index). At the same time, the number of socialization groups is an important indicator both in a transitive real society and in a networked, virtual space.

It is possible to distinguish two interconnected phases - hard, crisis and fluid, soft transitivity. But uncertainty, multiplicity and variability remain dominants of the general direction of development of society, changing the degree of their cardinality (Martsinkovskaya, 2018, 2019; Astrid, Bernd, & Machilek, 2006).

From a psychological point of view, we can say that crisis hard transitivity is a specific shock situation for people, with high demands on their vitality and emotional stability. But psychologically, fluid transitivity becomes much more severe. Changes occur, varying lives, values, communication, information streams and the technological environment of people. And the confidence is arising that these changes are inevitable and unstoppable (Osman, 2018).

In recent years, the phases of crisis and fluid transitivity coexist with each other, and, most importantly, their relationship is closely connected with the information flow. At the same time, constant inclusion in the information flow reduces uncertainty, making variability a familiar component of the world. Therefore, the new generation connects the real and network spaces into a single whole, which actualizes the problem of studying the determinations of mental development simultaneously in two spaces.

Along with different types of transitivity, we can talk about different forms of virtuality - on-line and off-line. We can also see the relationship between crisis and on-line situations. These situations are similar because in both cases it is difficult to change something and a

quick reaction to the situation is needed. There is also a certain similarity between fluid transitivity and off-line in virtual space. Here you can slightly change the reaction, evaluation, standards. Therefore, these situations are reversible within certain limits.

It is possible to say that the transitions from crisis to fluid transitivity and vice versa reflect changes in society. Changes that occur when various styles of work dominate in virtuality may reflect changes that occur in the worldview of a particular person.

Therefore, it is important to understand the trajectories of behavior, the emotional state of people in situations of different changes, different types of transitivity and different types of Internet communication. The determinants that define these individual styles of behavior and condition can be social, cultural, and personal. If social factors are more or less investigated, then personal trajectories and styles of activity on the Internet have not been studied well enough. And almost completely unexplored are the emotional experiences of people included in different styles of real and network communication and different phases of transitivity.

Therefore, it is important to understand the styles of behavior, the emotions of people in a situation of different changes, different types of transitivity and different types of Internet communication.

2. PROBLEM

Theoretical and empirical works show that the emergence of a new technological space, the Internet, social networks and gadgets poses several questions that are closely related to each other and with an analysis of the impact of information socialization on the mental development and emotional well-being of children, adolescents and youth. At the same time, the question arises of how on-line and off-line options for using gadgets affect the psychological well-being of young people and what factors help to overcome the psychological, emotional discomfort and tension associated with the constant positioning of young people simultaneously in network and real spaces.

3. DESIGN, METHODS, STUDY PARTICIPANTS

Based on the posed questions, an empirical study was carried out. The study involved young people (N = 140, age 18-21), students of Moscow universities. At the first stage, students were asked to answer questions of the C.D. Riff "Scale of psychological well-being" in different versions - on-line and off-line (Lepeshinskiy, 2007). After that, they were offered two series of stimuli - words related to positive and negative events occurring in the real and virtual world with the fixation of RAG.

All study participants were aware of its objectives and agreed to participate in the work.

4. RESULTS

At the first stage students were asked whether they consider the actual social situation as a transitive, crisis situation. Based on their answers to a number of direct and indirect questions that help to reflect the environment, a conclusion was made whether they consider the changes that are taking place abrupt or gradual. Based on the content of the answers, two groups of students were selected – those who considered the situation rigid or fluid in terms of variability and uncertainty.

Then the students were asked to answer the C.D. Riff scale questions, the on-line option was proposed, and after three days the off-line option. Thus, re-testing was carried out in an obviously more favorable variant for the participants. The answers are presented in table 1.

Table 1.
Results of different scales of C.D. Riff"s questionnaire.

Scales						
Positive relations	Environmental management	Self-acceptance	Personal growth	Autonomy	Life goals	Overall level of psychological well-being
67	64	58	64	52	68	373
58	56	64	59	58	60	365
66	51	63	63	50	65	358
65	66	57	60	59	63	370

The results of the correlation analysis of the components of psychological well-being by groups according to the Spearman criterion showed statistically significant differences on the scales:

Positive relations	Environmental management	Self-acceptance	Psychological well-being	Life goals
p = 0.042	p = 0.001	p = 0.016	P = 0,038	p = 0,015

At the second stage, the general background of the skin-galvanic reaction was measured, and then stimulus blocks of words were presented with a break of 2 seconds between words and 5 seconds between blocks. In total, five blocks of stimulus words were used: positive; neutral; negative; transitive; virtual. Blocks were formed on the basis of the most frequent assessment of the word as bearing the positive / neutral / negative meaning by the expert group of psychologists.

It was measured the general background of the skin-galvanic reaction of the subject for 40 seconds; then stimulus blocks of words were presented with a break of two seconds between block words and five seconds between blocks.

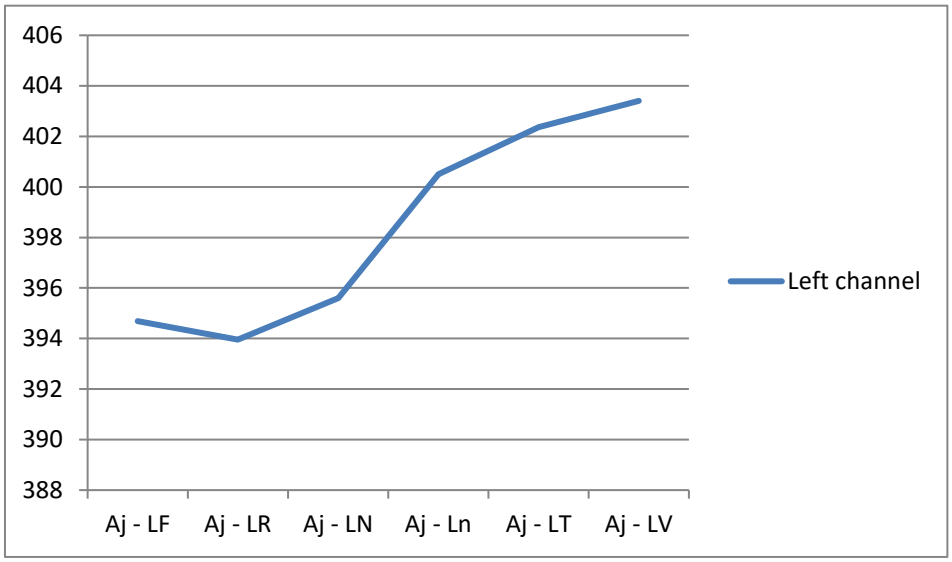
Processing of the obtained data was carried out using the statistical software package STATISTICA 12.0.

At the first stage of the analysis, we divided the sample by gender in order to identify differences in reactions according to the Mann-Whitney U-test criterion. No significant differences were found in the reactions of boys and girls. Then we compared all sets within the group for the presence of reaction changes according to the Friedman test criterion. According to the analysis, it can be seen that, compared with the background activity of RAG, in the group of students were recognized changes both in the left recording channel and in the right channel during the presentation of verbal stimuli.

It can be seen a decrease in activity upon presentation of positive stimuli compared to recording the background activity. When neutral stimuli are presented, the activity is equal to the initial background. A noticeable surge in RAG activity is observed upon presentation of negative stimuli and increases significantly upon presentation of special blocks reflecting network and real transitivity. As expected, negatively charged stimuli cause a more emotionally vivid reaction than positive ones.

It can be seen that obtained data is equal both in the left and right channels (see figures 1 and 2).

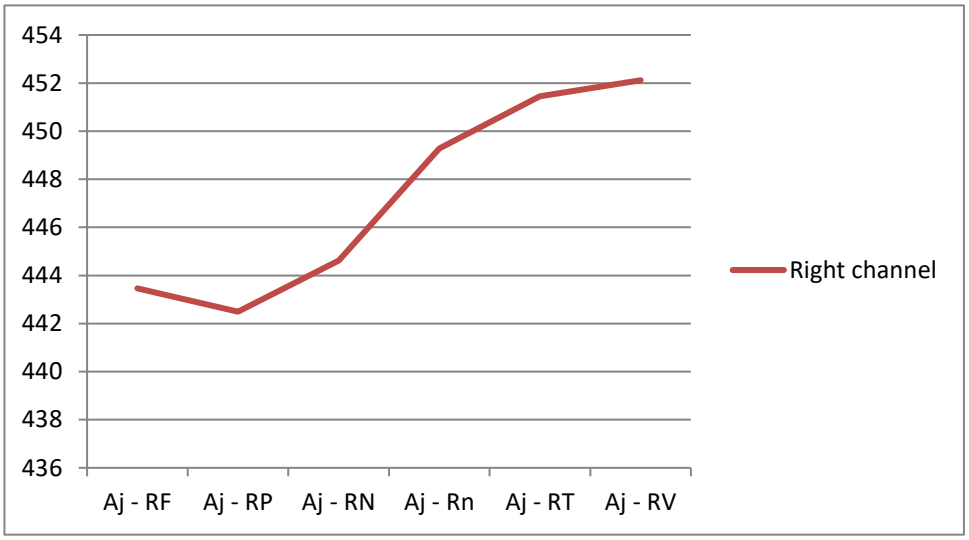
Figure 1.
Data of RAG activity on different stimuli from the left channel.



Measurements of the parameter Aj by the Friedman method:

LF - left channel - background	LR - left channel - positive stimulus	LN - left channel neutral stimulus	Ln - left channel - negative stimulus	LT - left channel - "transitive" stimulus	LV - left channel - "virtual" stimulus

Figure 2.
Data of RAG activity on different stimuli from the right channel.



Measurements of the parameter Aj by the Friedman method:

RF - right channel - background	RP - right channel - positive stimulus	RN - right channel - neutral stimulus	- Rn - right channel - negative stimulus	RT - right channel - "transitive" stimulus	RV - right channel - "virtual" stimulus

5. DISCUSSION

We can see that for the students of the first group (rigid transitivity) the in on-line situation the overall level of psychological well-being is slightly higher than in the off-line situation. Of particular interest are indicators on separate scales. In the on-line situation are higher indicators: Environmental management; Personal growth; Positive relationship; Life goals. Considering that a permanent stay in the network is a common situation for most students, these data show that the online situation stimulates their desire for personal growth and self-realization, as well as to establish empathic relationships with others. These data show the exigence of close connection between well-being and self-assessment in situations of rigid transitivity and online.

As can be predict in offline situation the level of autonomy is higher. However, it is troubling that self-acceptance is also higher outside the network. That is, the constant “transparency” of communication and the openness to others, possibly stimulates personal development, but reduces self-esteem and self-acceptance.

In the second group (fluid transitivity), the situation is somewhat different - here the general level of psychological well-being is higher precisely outside the network. Perhaps this is associated with an assessment of the general situation - with fluid transitivity it is easier to give answers not immediately, but, perhaps, to change something after a while.

Of particular interest in this case is also the data on separate scales. The connection between off-line and fluid transitivity is confirmed by the fact that environmental management in this group is higher outside the network. At the same time, Positive relationship; Life goals and Personal growth are also higher “online”.

Based on compresence of answers of two groups we can conclude that for young people on-line is a familiar, natural environment in which they are constantly open to new experiences and can evaluate their actions with others. Therefore, such “transparency” is somewhat annoying for users. No less interesting is the analysis of differences in the responses assessing the “environmental management” parameter. If in the first variant they must manage situation quickly, since it can radically change, then in the second, on the contrary, the focus on the long-term fixation of changes that do not need to be forced becomes obvious.

Apparently, the situation of constant changes exhausts some students and leads to a decrease in the indicators Environmental Management and Life goals. Thus, we can assume that the situation of transitivity in the network and in reality becomes a difficult life situation, reducing subjective well-being.

The data obtained at the second part of the work with RAG fixation showed the decrease in overall activity at the moment of presenting a positive background. It reflects a feeling of calm and acceptance of images caused by verbal stimuli, and also confirms that for the selected audience, the set of suggested words evokes positive associations. Neutral stimuli do not carry any emotional charge and are comparable in quantitative and qualitative values with background activity recorded at rest. As expected, negatively charged stimuli cause a more emotionally vivid reaction than positive ones. Verbal blocks during the experiment caused the participants in the study the most emotionally vivid reaction, especially the stimuli that describe network transitivity.

The data of the skin-galvanic reaction confirmed a positive reaction to the words of the network transitivity block as reflecting the daily activity of students. Young people noted that in the network space they not only chat with friends, but also find very quickly the necessary information. Words reflecting the transitivity of time-space also caused a high skin-galvanic reaction. This reaction was caused by the individual attitude of students to the words of the block, which are important for them.

6. CONCLUSION

The obtained data confirm that there is a relationship between rigid and fluid transitivity situations and network and non-network operation. This similarity is associated with a lack of time and the need for a quick response to environmental influences.

The similarities in the profiles obtained by presenting positive and negative words showed the similarity in emotional responses to crisis situations in the real and virtual world. In this case, a steady increase in excitation from stimulus to stimulus occurs.

The incapacity to manage the environment, including positive contacts with others, the inability quickly navigate information and the harshness of the situation negatively affect attitude to one-self, reducing self-esteem and intention to self-development, which generally reduces the subjective feeling of emotional comfort and well-being. Thus, we can say that the constant situation on-line becomes a difficult life situation for many young people.

The mixture of network and real situations is constant for most students. This becomes the reason for the close connection of the virtual and transitive worlds.

The problems arising from the active spread of the digital information space are associated not only with difficulties in the intergenerational transmission, but also with the fact that the constant on-line situation, fubbing and "transparency" of the network become a difficult life situation for many young people. The phubbing and "transparency" of the network most negatively affects people who assess the situation as rigid transitivity.

The prospects associated with the expansion of digital information socialization, in many respects become the flip side of the problems. Expanding the world-image, obtaining new experience leads to the development of intellectual and social activity and helps to understand the world. This fact reduces the fear of uncertainty and increase the willingness to change.

7. LIMITATIONS OF EMPIRICAL RESEARCH

Inequality in presentation of C.D. Riff test in different situations.

Subjective parameters of assessment situations as situations of rigid and fluid transitivity.

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