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Children and Virtual Reality – Some dilemas of Education

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Possible responses to the extremely complex and delicate question of the influence that «virtual reality» exercises on the development of a child as a unique personality, on the child's psycho-social development and on the education of a child generally may be provided by serious research of a cohort sequential design, either in research programmes in the field of educational sciences or of other social disciplines. The present paper confronts some dilemmas of the modern world. Particularly those between the «traditional» educational values, «obsolete» families and schools and «progressive» education supplied (imposed) by virtual reality that promotes the social standardization of behaviour and the perception of values and of the world around us. The aggressiveness of the mass media in presenting «virtual reality» as « progressive» and without an «alternative» often results in a virtual life for a child, with virtual friends, education and even virtual families. In the time of developing technology, an important question arises: how to deal with such a situation. Do we direct young people to carefully select from what modern virtual reality has to offer and how do we do that?

Key words: virtual reality, education, values, environment, children, family, school

1 Introduction

Thanks to new technology, the limits of progress are pushed back and the contemporary world is definitely not the same as that of one decade ago. Thanks to scientific achievements and the development of technology, the public has been presented with a few revolutionary scientific discoveries - the genetic map of human being; in astronomy, three new planets were discovered outside our solar system; in Northern Ireland, a shell was found that, based on top scientific research, is estimated to be the oldest living creature on the Earth; the brightest explosion of a star so far was photographed; 700 new species have been discovered in various places on the Earth and in the oceans (while of course a number of species have also become extinct); and all this only in the course of 2007. Among the most significant scientific discoveries of the past year was the discovery of kryptonite in Serbia, a mineral that, according to scientists, is allegedly of the same composition as the mineral from the Superman cartoon (Zloković and Dečman Dobrnjič, 2008).

We live in a constantly changing world and, as a result of this, the life of children, young people and adults follow these changes, which are reflected in different levels of functioning, mutual relationships and communications. New technologies become «new tools», which may promote our knowledge or generally improve our lives if we can master them as not only a formal technical and communicational literacy (Karli, 2008).

2 Generation Y

Alongside virtual communication and/or «friendships», the current generations of children and adolescents will prefer to travel in «virtual reality» to imaginary worlds of jungle or the seashores of Tahiti and Hawaii, to pay a visit to Taiwan or participate in safari adventures instead of wasting their time with their «real» parents, families, peers or reading «dusty» and «obsolete» books for days or weeks. Some children claim that virtual reality brings about more excitement and satisfaction than real life. Instead of direct contact, more and more children will spend their time (free or otherwise) chatting with «friends» on the net, «changing costumes» on media stars and even «taking care» of pets. Virtual dolls have even overshadowed the popularity of Barbie (though this is not true for the millions of children that are dying of famine or diseases in this world). Among the many who are enraptured by this virtual reality is nine year old P. Montemayer (Texas), who thinks that the virtual Barbie doll is indispensable: «If you want to change her clothes that will cost money. On Internet, it is free» (Černetič et al., 2007). It seems that it is no longer a sporadic event that children like more than anything to spend their time in

interactive socializing using the computer. The company Gartner Research created virtual pages that are presently visited by 20 million of users and the growth is highest among the youngest. Beside Cartoon Doll Emporium, the most popular pages for children today are Club Penguin, Cyworld, Habbo Hotel, Webkinz, WeeWorld and Stardoll. Children are offered innumerable interactive games and chatting opportunities as an imperative form of communication. And, while psychologists claim that interactive games cause social and emotional alienation, the young experience them as a unique form of socializing. More than 3000 people from the Western Balkans participate in the millions of interactive games available at the moment.

Communicating with people of different ages and attitudes, they attempt to solve some strategic tasks. Many children play these games night and day while their parents often ignore the situation or claim that they are a «normal» phenomenon of modern life, which they themselves are not ready for or do not know how to respond to. The virtual worlds are a «promised land« for various groups of people and their objectives or professions (Giddens, 1990).

Thus, in the virtual game Second Life, the economists may monitor the behaviour of the consumers, the changes in the foreign exchange market and the efficiency of the free market. In a virtual economy, real money is also a subject of trading and the virtual currency of the Linden dollar can be swapped for US dollars. Since millions of dollars may be earned in this way, it is obvious that the main «player» is the author of the game. The market for virtual property is difficult to estimate. It is believed that in the course of just one year, it reached the figure of 1.5 billion dollars. The system of the virtual economy is developed in such way that you may well buy a house with a swimming pool, a luxury yacht or a small tropical island even when you, the buyer, have no money. But virtual users will be sold virtual real estate with which they may do what they want, but which cost a significant amount of money. There is even tax to be paid on this real estate, which is collected by the taxation authority - the ruler of this virtual world Linden Lab. The company Linden Lab from San Francisco created the Internet game Second Life, in which the tens of thousands of players find various excitements. Children and adolescents, as well as the «generation y», who are exposed to the opportunities inherent in the wide use of micro computers and who daily absorb «vast» amount of information in various ways, are offered and even forced into the virtual world, «which has become an inevitable part of their daily life». Many will wake up to it in the morning and will even not go to sleep (Prensky, 2005).

It is estimated that, in Croatia alone, there are between 600,000 and 700,000 people, of whom many are as young as twelve, for whom e-mail, SMS, instant messaging, chat, skype, facebook, playstation, etc. is considered obsolete. The present generations of children will prefer to socialize in a virtual world rather than in the real world. After the simple web services that aim at internet communication

and socialization, new generations of internet services are developing the so called «social networks». Facebook is one of the latest internet phenomena. In the USA and Canada, this popular web page for virtual socializing is visited by 73 million registered users. The number is increasing by 200,000 daily. The informatics newspaper Bug says that more than 50 thousand Internet users from Croatia regularly visit Facebook (Černetič et al., 2007).

What makes Facebook so special in comparison with other similar internet services for socializing (MySpace, Flickr, hi5, blog-services) is that it stimulates communication/socializing between people who know each other already. Since 2004 – i.e. since the registration of this web service – the number of registered users aged 13 years and more increased from 13 million to 60 million. The users of these services claim that the number of new «friends» has been increasing at lightning speed. One user says that, for the first week after he had created his profile, he only had three friends. But in the next few days the list grew to 50 people (!) and, after that, invitations just kept pouring in (Tomić-Koludrović, 2001). Not wishing to enter into an otherwise inevitable broader analysis from the aspect of different professions, it is obvious that the term «friendship» requires relativisation by the user of this Internet service.

The Borders Between the Virtual and the Real World

There are different opinions and attitudes towards the development trends of technology. All those who think that the technological and virtual world is a key to the development of an individual and of the society will readily find excuses to present to the critics of «the world of ever-growing technology», who speak of alienation, behavioural disturbances, aggressiveness and some other negative consequences of this «new world». They produce arguments about the numerous benefits that modern (information) technology allegedly offers. These arguments claim that, in spite of the criticism, it enables two way communication, different ways of acquiring information and it promotes the development of pace and the active involvement of children and adolescents in different stimulating developmental contents and activities. The weaknesses of the obsolete mono-tasking and the advantages of the multitasking generation, and also of the traditional linear and modern successive learning, will be compared as and how the obsolete/old and new skills of learning with icons-ability of intuitive learning are compared as the ones that are indispensable to enter the world of the omnipotent market and to fulfil the requirements of modern life.

The fascination with virtual reality and its oddities, which really borders on real life, is illustrated by the example of «virtual fishing» («Fishing with a Rod and Classic Hook» Ippon Zuri). Tens of thousands of Japanese catch and collect virtual prey on the display of their mobile phone and this prey may be exchanged for real ones. Depending on your success, the virtual prey, transformed into real fish, will be delivered to your doorstep. The Japanese economists are even considering the possibility of defining this catching and trading of «digital» fish as a new real profession. A question arises in connection with this: should the government maintain official records on persons who are employees in a virtual reality world? One of the experts, University professor of law Wharton d. Hunter, is convinced that work in virtual reality deserves the title of a real profession. And some people think that we must accept that the virtual world and real world are increasingly intertwined (Reilly 2007 in Zloković 2007).

With the growth of various aspects of individual and social development, the opinions are stated that the human brain works like a computer and that it can be connected to it, which resembles the plot of the movie The Matrix. There, people of future are apparently asleep in their dens while they actually (virtually) lead «normal», even «turbulent» lives, merely while connected to a central computer.

4 Criticism of Inter-Human Alienation

We do not belong among the defendants of the thesis of «determined chaos» and /or of collusive activities. Moreover, we do not even mention them in this paper but we wish to indicate many cases of the manipulation of children in society and in families. We aim to indicate certain situations in which young people are prevented from deciding or are not stimulated to decide for themselves and in accordance with their interests about their future. Along with the numerous advantages of the technological and virtual world, there are many questions still to be answered - e.g. why morals or ethics are pushed to margin or lost in pursuit of profit and why we often ignore the fact that virtual reality (and various forms of escaping from the «real life»), where children spend an important part of their development period, is attempted to be shown as indisputable, contemporary and «progressive» education.

The results of several studies are quoted as an attempt to reply to criticism of inter-human alienation due to these «new communication technologies». Thus, in the study «Technology Unites not Divides Families», more than 4,500 families from 16 countries in Europe, Asia, America and Australia who have access to Internet were interviewed. The interviewees were asked how much time they spent together, what kitchen gadgets they own and use and similar questions. The authors' conclusion was simple - the information era leads to a revival of the family and its importance as well as of the importance of inter-generation relationships (Reilly 2007, n Zloković, 2007) questioned the validity of the results of the study, considering the fact that there was no reference (control) group interviewed. The conclusion of a greater cohesion in «Internet Families» is considered premature as multidisciplinary and extensive research is necessary for the objectivity and validity of a study (ibidem). In spite of

that, the results of the study show how many families with internet access and mobile technology use these possibilities to strengthen family bonds. 70% of the interviewees responded that the technology helps to maintain contact with family and more than half of the interviewed young people (aged between 18 and 34) claim that this is not just a help but a necessity.

Also, according to some other studies, the importance of accepting the development of technology and general competences (efficiency, achievements, training etc.), as well as of generic competences (analysis, synthesis, communication, solving problems, teamwork, creating ideas, etc.), is obvious for all generations, not just for the young. This is especially true in the context of life long learning. Among others, these competences should be a foundation for positioning in the labour market, to get employment in a modern society, for work in an international environment and for being prepared for teamwork and to process a great deal of information.

The fact is that many unemployed people today are «pushed to the social margin». These are persons of various ages and are precisely those who have not mastered the virtual world. Openness for the modern, the new and the better is indispensably important but the adults who are in daily contact with children, parents, teachers and other people who are expected to carry out educational functions need to be taught and respectively reminded of their educational and moral duties to children and young people. These people however need to be daily stimulated to critically refer to and to carefully consider what is offered by the ever changing world – what they are told, what is expected from them, what their objectives and needs are and what are their idols.

We attempt to stimulate young people to consider their personal idols as the highest standard of something that they or that we are all aiming at. Do we really want anonymous experts and manipulators to offer and impose mental complexes of daily behaviour on us or that they are transformed into «somebody else's clones».

5 Fundamental Educational Values and the Virtual Reality World

To marginalize certain basic educational values, manipulators will apply all «modern» means and advantages - particularly of technology – presenting them as indispensable conditions for «new progressive education». One of the critical views on the trivialisation of education values can be found with Platonov, who says: «We educate children in corruption and immorality and call it progressive education. We are wading in the pornography and blasphemy and call it freedom of speech or expression. We mock the spiritual heritage of our ancestors and call it enlightenment» (2002, 50). Due to their stage of development, children and young people will be a population subject to various influences and thus to numerous forms of possible manipulation and «seduction» towards a «new» and often imaginary «virtual progressive» world. Intrigued by

various unsuitable contents and even «virtual» life, which is offered to children and young people, we consider some of the series of problems and cases where basic educational values are rendered trivial and pushed to the margin, pointing out to their alleged educational and pedagogic «nonsense» and their often overt entry into the area of manipulating children.

Self-declared and very often anonymous «experts» offer children and young people numerous ways of leaving the real world and entering a virtual life as a way of escaping from oneself, family, school or achievements. Some young people, stimulated by the idea of a «virtual life», even wish to create themselves as a virtual person and spend a part of the day with their virtually created partner in a virtual city, in a virtual apartment, watch a movie in a virtual theatre, swim in a virtual sea, sleep in a virtual bed, have virtual children and a virtual pet.

Following the inter-disciplinary and human-development theories about man as a unique individual, it seems necessary to raise the question of why young people often wish to be somebody else - "someone else's clone". For instance, in the USA every other teenager wants the gift of a plastic surgery for his or her 18th birthday (breast implants, silicone filling for lips, the backside, operation on the nose, only in order to look like their idols as much as possible). In Germany, every third teenager is a victim of this trend (Spiegel, $05^{\hbox{th}}$ February 2004, more in: Miliša and Zloković, 2008). It is alarming that children no older than 14 years should demand that their parents let them have an operation to make sure that they look as much like their idols as possible. In Germany, this trend has covered every third teenager. (Miliša and Zloković, 2008). Obviously, morals and losing one's identity do not count. The aggressiveness of capital, in which media and technology seem to have a rather large share of responsibility and which goes for the parents as well as some will indifferently let their own children be sophisticatedly manipulated – or even with approval. Instead of creativity, children are offered idleness as a value and mediocrity and banality are elevated to the rank of desired virtues. In the television repertoire, programmes like Big Brother begin to like even slavery. (Tylor, Brainwashing, 2006 in: Miliša and Zloković, 2008). At the same time, a mere demand to comply with some basic rules of behaviour at home or in school is quickly considered tyranny and an incomprehensible encroachment into a young person's intimate space. Instead of promoting the development of personality and of real life, a world of fiction is offered full of glitter and false glamour. The desire to be important and prominent or for quick earnings, escaping responsibility for oneself and for others, seems to override all criteria of human dignity. It seems that, in relation to development and promoting the basic human and educational values, the commercialization of everything that can be sold at a profit has become the priority. The objective is to turn everything into a good commodity - somebody else's and one's own private and intimate life, underwear, the birth of a child and even death, particularly of the famous or notorious. A manipulator is an excellent crea-

tor of false needs and a designer of mental maps. Instead of cosmic dimensions, the young are offered an infinite chaotic depth, from which they are unable to exit once curiosity has been satisfied. The exit has a price that is not payable in one lump. A manipulator does everything to get closer to the young, to woo them, to please them but not to awaken their intellectual curiosity.

"He" knows their needs perfectly. He skilfully moulds these real needs into false ones. He will, for instance, never say that it is a sin to indulge in addictive pleasures. Instead, his message will be about how to, e.g., "cure depression" in the biggest shopping mall in the city. On the other hand, before and after that mad therapeutic shopping spree, the educators will say that there is no capital that may replace basic values and spiritual investments into oneself (Alborghetti, 2007a).

There are many cases of social regression, of making things trivial and of changing theses that are educational and moral. The criticism, though rare and lukewarm, will be declared not well meant (at least) and not in the best interest of "progress".

Virtual Life – Progressive Education or Profit?

There are numerous cases of media and «virtual» content offered to children and young people becoming less and less places of quality and analytical value, of confronting different views and numerous others very important functions of technology, instead becoming media who sacrifice themselves for the benefit of profit, sensationalism and triviality. The culture of silence and sacrifice, general human educational values for the benefit of profit and the transformation of a human being into a thing, plaything or someone's profitable and obedient machine, all contributes to a situation where virtual life is presented as progressive education.

While analysing social and educational trends, sociologists, pedagogues and psychologists (and others) point to a general «crisis of values». The public will often say that the family and school are the culprits for such situation in society. There is no question that these are two key subjects in promoting the development and education of children. However, the problem needs to be considered in a broader social context of values. In such a context, it is worthwhile to attempt finding a reply for the question: «Why has school become obsolete in a time of top scientific achievements?»

Observing the problems of the marginalization of education from the "system of social values", opinions emerge that are spurred by numerous negative events in the modern world. They call for a return to traditional values and for the reformation of modern society (Gillis, 2000; Hoblaj, 2008).

By briefly presenting considerations on the attitude of education towards manipulation, we can observe that, in order to resist the standardisation of behaviour and the mind, it is necessary to have the courage to confront not

only the manipulator but oneself as well, with one's own needs and desires, with decisions about our own aims, to clarify who our own idols are, what we are told, what is expected from us, as well as if we really wish to have maps of our daily behaviour imposed on us (Giddens, 1990).

Conscious of the complexity of the problem, we do not plan to cover everything, only to consider some questions that confront modern pedagogy from a pedagogical point of view, believing that, in the context of new international and national initiatives in the field of protecting and ensuring the welfare of children and young people, we shall also contribute towards raising the level of cultural responsibility to them. We believe that young people need to be taught how to use social progress, "virtual life" and the media as a means of personal expression and social activism, where positive human characteristics and achievements are promoted (Zloković, Dečman Dobrnjič & Černetič, 2007).

After all, Kant (in Platonov, 2002) said a long time ago that the only part of universe that can be changed is us. And also, with reference to values and morals, he thought that there is a sky with stars above us and the moral law within us.

7 Conclusion

Education, as a phenomenon, is the subject of studies and papers in various disciplines, as well as a subject for disputes. While, in the contemporary definitions of education, the basic objectives are self-realization and the full development of an independent and free personality, liberation from any inequality of rights, the creation of abilities and equality in participation in all social levels, all forms and sources of manipulation that virtual reality offers abundantly have one basic objective – exclusively to create a personal profit. Education is also a phenomenon that has been developed over the course of time in various civilisations. Consideration of this complex phenomenon has become a topical subject of the 21st century. An answer to the question of what education is – is it omnipotent or impotent, are there limits, definitions, senses, purposes, objectives, tasks, contents and methods for its realization and educational influences; do we educate a child even when we think we do not do so at all. These are just a few of the infinite number of questions that make the experts from various scientific fields think that it is just as deep as the secret of the human being itself. The recognition of education means the recognition of a man. Education - whether educated or not educated - or re-education, the antagonisms of education or educational manipulation are mentioned in highly diverse situations of life. The pluralism of theories on education, which offer various answers to the phenomenon, leads to a conviction of its complexity (Alborghetti, 2007b).

To realize one's personal objectives and benefits, a man will be managed as an «object», which becomes the manipulators' «thing», «plaything» or «work machine». The manipulation of a human being, particularly a child is rarely easily or readily spotted. It is masked by different messages and phrases, which can be read as: «We do the thinking for you», as well as many other messages that children or young people may be subject to for various reasons.

The «virtual life» is a metaphor used to describe the uncritical acceptance and consent to the serial production and perception of the world around us, to the imposing of mental schemes, to accepting the world of glitter and glamour which (too) often causes a darkening of personality, morals and uniformity in the post-modern generations of children. However, it is true that sometimes we ourselves agree may almost consciously with that «virtual life» and with the manipulator's requirements – not wishing to undertake the responsibility for one's own destiny and actions and not wishing to «fight» the problems.

References

- Alborghetti, I. (2007a). *Dossier Djeca digitalnog doba. Mali Hrvati kojima više ne treba škola*. In: Globus, No. 858, 18.05.2007, Europapress Holding.
- Alborghetti, I. (2007b). Hrvati na Oxfordu Lakše nam je bilo dobiti punu stipendiju na Oxfordu nego pomoć od Hrvatske države za studij na Zagrebačkom Sveučilištu. In: Globus, No. 859, Europapress Holding.
- Giddens, A. (1990). *The Consequences of Modernity*. Stanford: Stanford University Press.
- Gillis, J. R. (2000). Our Virtual Families: Toward a Cultural Understanding of Modern Family Life. New York. Rutgers University.
- Hoblaj, A. (2008). Odgoj i obrazovanje za vrijednosti u kontekstu vrijednosno usmjerenog društva. In: Dijete i društvo, časopis za promicanje prava djeteta. 9(2):311, Zagreb. Ministarstvo obitelji, branitelja i međugeneracijske solidarnosti.
- Karli, S. (2008). Nova internetska mreža za druženje. "Prijatelji stari gdje ste". (8.01.2008). In: Nacional, neovisni News magazin, no. 634.
- McCarthy, C. & Reilly, E. (2006). *Study: Teach unites, not divides* "*Family 2.0*". Retrieved May, 17. 2007 from http://www.articles.hechrepublic.com.com/2100-1035_11-6120320.html.
- Miliša, Z. & Zloković, J. (2008). Odgoj i manipulacija djecom u obitelji i medijima. Zagreb.
- Platonov, O. (2002). Zašto će propasti Amerika. Split. Labus.
- Prensky, M. (2005). Digitalni urođenici, digitalne pridošlice. In: Edupoint, časopis o primjeni informacijske tehnologije u obrazovanju, www.carnet.hr/časopis/40/članci/3.
- Tomić-Koludrović, I. (2001). Skeptična generacija. Životni stilovi mladih u Hrvatskoj. Zagreb. A.G.M.
- Zloković, J. (2007). Suvremene obitelji između tradicionalnih i virtualnih odnosa. In: Previšić, V. & Šoljan, N.N. & Hrvatić, N. (eds.). Zbornik Prvog kongresa pedagoga Hrvatske: Pedagogija prema cjeloživotnom obrazovanju i društvu znanja, 19-21. June, 2007, book 2, (pp.761-770). Zagreb. Hrvatsko pedagogijsko društvo.
- Zloković J. & Dečman Dobrnjič O. (2008). *Djeca u opasnosti!* Zagreb. Hrvatsko pedagogijsko društvo.
- Zloković, J., Dečman Dobrnjič, O. & Černetič, M. (2007). Pomen individualnega sodelovanja med šolo in starši, *Iskanja*, 28: 11-19. Celje. Skupnost dijaških domov.

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Otroci in virtualna resničnost - nekaj vzgojnih dilem

Možni odgovori na ekstremno, kompleksno in delikatno vprašanje o vplivu virtualnega okolja na otroke kot edinstvene osebnosti, vpliv na njegov psihosocialni razvoj in splošno vzgojo otroka, se lahko pridobijo z resnimi raziskavami, kot je na primer raziskovanje po "cohort seguentional" metodi in z drugimi podobnih raziskavami s področja vzgojnih in drugih družbenih

V spodnjem članku so konfrontirane neke aktualne dileme sodobnega sveta, še posebej s stališča tradicionalnih "zastarelih" vzgojnih vrednot, tako družine kot šole in s stališča "progresivne vzgoje", ki jo ponuja sodobno virtualno okolje. Konfrontacije se dotikajo socialnih okolij in standardov vedenja s stališča percepcije vrednot sveta in posameznika. Pogoste posledice agresivnih medijev v prikazovanju "progresivnega" vizualnega okolja brez "alternative" ima pogosto za posledico, da otroci živijo v virtualnem svetu, z virtualnimi prijatelji in z virtualno vzgojo in izobraževanjem. Na področju vzgoje se v svetu sodobnih virtualnih ponudb postavlja pomembno vprašanje: kako se obnašati v dani situaciji ali kako mlade usmerjati k selekciji tega, kar jim nudi virtualna resničnost v primerjavi z dejanskim svetom.

Ključne besede: virtualna resničnost, vzgoja, okolje, družina, šola