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An Algorithm of Behavior at the Moment of Informational-Emotional Attacks via Social Networks

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Abstract

The paper sets forth a new way of considering impressionism under the frame of cognitronics. It is a new scientific discipline aimed at compensating the negative shifts in the cognitive-emotional development of personality and society caused by stormy progress of information and communication technologies (ICT) and globalization processes. An original algorithm of transforming the negative emotions (caused by the messages received from social networks) into the positive ones is proposed. This algorithm considers the possible reactions of a human (including the recommended reactions) to the emotional attacks via social networks. A new look at impressionism underpins this algorithm. The algorithm is a part of an original interdisciplinary course “Foundations of secure living in information society”.

Keywords: early socialization of children; virtual reality; impressionism; cognitronics; informational-emotional attack; secure living in information society

Introduction

Numerous observations have shown that the borderlines between digital space and real life space in the consciousness of the teenager are too vague. They easily deal with cultural and human matters in either space paying no attention to the peculiarity of “living” and problem solving in the digital space and know little about art of living in the reality. But there is one thing that puts together two sides of one coin – the imperative to give priority to morals in life. In this case the body warm sincerity in life might be balanced by kind words in social networks, immediate online reaction to remarks, the feeling of community, and online sharing.

These two domains of living are not isolated in the consciousness of teenagers, but in difficult situations, the situations of moral see-saw, the situations of offence, rage, despondency, lack of clarity (do I make myself clear situation or a situation of ambiguity) these two dimensions suggest different behavior of teenagers caused by the peculiarities of the domains.

The question is how to build a bridge of understanding these in fact isolated domains, how to find an acceptable compromise lest a teenager should suffer the consequences and make him/her grasp the idea that the lack of understanding the value of these two domains will trigger off a chain of events.

The main subject of this paper is the topicality and central ideas of an original interdisciplinary course “Foundations of secure living in information society”. It has been elaborated under the framework of cognitonics – a new scientific discipline aimed at compensating the negative shifts in the cognitive-emotional development of personality and society caused by stormy progress of information and communication technologies (ICT) and globalization processes (Fomichov and Fomichova, 2006, 2011; Fomichova and Fomichov, 2007, 2009).

From the standpoint of educational practice, cognitonics proposes an answer to the following question: what precious ideas and images accumulated by the mankind, at what age, and in what a way are to be inscribed into the conceptual picture of the world of a person in order to harmonize his/her intellectual and spiritually-colored emotional development and to contribute to the successful development of national cultures and national languages (Fomichov and Fomichova, 2011).

This paper shows how the central ideas of impressionism have helped to elaborate an algorithm of transforming the negative emotions (caused by the messages received from social networks) into the positive ones.

An original look at impressionism

Studying impressionism is a great pleasure. The emotional response of children can't be overestimated. In case children are asked to come very closely to the pictures, they become deeply impressed by the fact that they can't see anything except for the mixtures of dabs, a kind of colourful chaos. Watching the pictures from some distance, children come to understanding the beauty of canvases, in fact, they make their discovery of transfiguration. An apparent transformation from the colourful chaos to the visual feast produces a deep lasting effect on the mind and feelings of the child. It is a discovery of an illusion (first impression which is false, though bright).

Take “Water lilies. Green harmony” by Claude Monet. In fact, there are no white lilies there, though the water surface is dotted with the common white water lilies. Children suppose that it is one more example of illusion: we are sure that water lilies are white, but in fact it is impossible to point at and list one white lily.

The acquired experience of perception can be applied to various communicative situations at school with teacher, classmates or to any kind of misunderstanding. When a child or a teenager is at sea or in a fix, he/she is sure that everything is “black”. But the idea that he or she didn't see pure white lilies on the canvas makes him/her think that it may be an illusion, and everything is not so bad, and it is necessary to step aside and look at this situation from some distance.

It is the process of establishing a link between the constructed mental representation of the seen pictures and the constructed inner visual image of the life situation. The suggested conclusion: no panic, no chaos, no black situations. It is not passive reflection, it is an active transfiguration that makes the life brighter, stimulates a creative response to it.

The cross-disciplinary course “Foundations of secure living in information society”

The information society we live in has its peculiarities, advantages, and disadvantages, as any other society. In order to speak about successful socialization of children and teenagers, it is necessary to make children understand the ways of living, participating in the social networks, communicating via e-mail, taking on-line courses, receiving information, etc. They should know how to avoid negative “digital” situations or overcome them, how to distinguish virtual reality and emotions caused by that virtual reality from the real life and emotions caused by that life.

Children should be aware that in both cases they should be ready to suffer the consequences of their careless behaviour or ignorance. Children should be taught the rules of acting in the digital space, paying special attention to the moral standards, lest they should hurt somebody’s feelings while communicating with the help of information and communication technologies (ICT). They should understand the power of ICT and the responsibility of the users. The teachers should find a correspondence between the situations taking place in the real life and similar situation from the virtual reality.

For example, if someone reveals aggression in any way, he/she can suffer the same aggressive feedback, can be hurt. In case of the digital space, not a child or a teenager him/herself is hurt and experiences pain, but his/her feelings are hurt and his/her reputation is in danger because of the quickly spread negative information.

The core idea of the course “Foundations of secure living in information society” is the same for real and virtual life: treat others the way they want to be treated, show compassion and consideration, learn from success and failures, appreciate learning opportunities, etc. But children should be aware of the difference between person-to-person communication and person – digital environment – person communication, because the digital environment has its own power that can enhance the communicative (and any other) situation.

The goal of the course is to contribute to successful socialization of children and teenagers in the information society. The subject of the course is to introduce students into the digital space, paying special attention to ethics, to the rules of interaction and communication.

Students acquire knowledge of what is strongly prohibited and what kind of behavior is expected. The course shows the clear difference between virtual reality and reality and establishes correspondence between the ways of perception by people of various situations happened in digital space and real life, on the one hand, and the possible consequences caused by that difference.

The idea of this cross-disciplinary course and ethical approach to its development are suggested under the frame of cognitonics.

An algorithm of transforming negative emotions into positives one

Let us consider the possible reactions of a human (including the recommended reactions) to the so called emotional attacks via social networks. An analysis of the kind could be introduced into the program of the course “Foundations of secure living in information society”.

Head Module of the Algorithm ”Processing Messages from Social Networks”

begin

If the first impression (a strong one, it can be either true or false) is POSITIVE then
Procedure 1

else { the first impression is NEGATIVE }

Procedure 2

end

Description of the Procedure 1

begin

Make conclusion 1: no harm at the moment of getting an impression;

Make conclusion 2: the feelings are not hurt;

Make conclusion 3: The situation is over

End

Description of the Procedure 2

{The condition of calling this procedure: the first impression is NEGATIVE, that means that the impression causes panic, confusion at the moment of getting it }

begin

FIRST AID: a reminder of the white lilies on the canvas by Claude Monet (if the mental representation is strong and clear);

Make conclusion 1: It is a situation of uncertainty, not apparently a bad one;

Make conclusion 2: The situation needs reflecting, reasoning;

Start some kinds of intellectual activity, thinking over the situation and diminishing emotional activity;

A little later make conclusion 3: The situation is getting much more balanced, less harmful;

Make conclusion 4: The situation is turning into an intellectual riddle;

Make conclusion 5: Now the situation causes another kind of emotions, they are based on the feeling of curiosity;

Make conclusion 6: A situation of another kind emerged, it aims at solving the riddle

{the transformation of the emotions into the positive ones is over }

End

Conclusions

The development of civilization is the endless process of challenges and answers. Internet, new informational technologies are a challenge. It is not only an intellectual challenge but a spiritual challenge as well. The illusion of the true existence of the Cyberspace gives birth to new kinds

of emotional attacks via e-mail, social nets, and cell telephones. It is difficult to resist these attacks, because lots of teenagers and grown-ups become aware of the information together with the attacked child.

Impressionism as a manner of painting, rooted in the idea of the first impression, being taught under the frame of cognitronics helps to construct the vivid mental representations of the illusive situations in the minds of children and teenagers. The example considered in this paper is positive, impressive, and it is based on children's life experience (they acquired it while watching the painting). On the other hand, they have already thought about their own examples taken from the real life: one child is sure that the dog is angry, because it barks; another child says that his particular dog is kind, because it wags its tail every time the child sees it.

To make children and teenagers understand how the illusion and first impression work, explaining to them emotional constituent of these notions, providing them with thrilling and clear examples is very important, especially in the information society when they deal not with one partner of communication but with many partners from the nets.

People communicating via social networks don't take into account the child's mood, character, the events of the day, child – parents relationships at the moment, background of the child. New possibilities of ICT demand much more developed ability of the child to resist to any reply or replies, much stronger confidence in oneself, and clear understanding how the illusion works.

References

Fomichov, V. and Fomichova, O. (2006); Cognitronics as a New Science and Its Significance for Informatics and Information Society; Special Issue on Developing Creativity and Broad Mental Outlook in the Information Society (Guest Editor Vladimir Fomichov), Informatica. An International Journal of Computing and Informatics (Slovenia), Vol. 3, No. 4 (pp. 387-398)

Fomichov, V. and Fomichova, O. (2011); Preface/Predgovor. Second International Conference on Cognitronics (Cognit 2011); Proceedings of the International Multiconference Information Society – IS 2011, Slovenia, Ljubljana, 10 – 14 October 2011, Vol. A. Jozef Stefan Institute (pp. 349-350); available online at <http://is.ijs.si/is/is2011/zborniki.asp?lang=eng>.

Fomichova, O. and Fomichov, V. (2007); Cognitronics as a New Science and Its Social Significance; The Age of Computers and Globalization. IAS-Transactions on Systems Research and Cybernetics. Vol. VII, No. 2; Intern. Journal of The International Institute for Advanced Studies in Systems Research and Cybernetics. Published by The Intern. Institute for Advanced Studies in Systems Research and Cybernetics (IIAS), Tecumseh, Ontario, Canada (pp. 13-21)

Fomichova, O. and Fomichov, V. (2009); Cognitronics as an Answer to the Challenge of Time; Proceedings of the International Multiconference Information Society - IS 2009, Slovenia, Ljubljana, 12 – 16 October 2009. The Conference Kognitonika/Cognitronics. Jozef Stefan Institute (pp. 431-434); available online at <http://is.ijs.si/is/is2009/zborniki.asp?lang=eng>.