BEYOND ART, BEYOND HUMANITIES, BEYOND TECHNOLOGY: A NEW CREATIVITY

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Abstract — *The history of humanity shows how important it is the communication made in many ways by means of art! Communication and arts are part of human life in a daily basis such that it is necessary to attempt to the importance of communication of its many channels and now more than ever-in real time. Not to mention the art that expresses in many ways the beauty, the odd and the reflections of realities. The academic community dedicated to the search of science of communication and arts can count with an international forum for the discussions about communication and arts research. It is the WCCA'2012 -* World Congress in Communication and Arts *organized by COPEC - Science and Education Research The theme of* **WCCA'2012: "Beyond Art, Beyond Humanities, Beyond Technology: A New Creativity"** *has brought researchers and professionals of these areas to participate at the conference showing their interesting scientific works.*

Index Terms — contemporary art, high technology, communication research, art discussions, world scenario.

INTRODUCTION

Twelve years has already passed of 21st. Century and so far the changes in world scenario have promoted the adoption of many different interesting social adaptions to global economy that has imposed deep changes in human life. The financial and political crisis, natural catastrophes and humanitarian demands are now at the news every day in a world scale.

It is a time in human history the world is going through frustrating times where present youth do not see their needs and aspirations respected. It is equally interesting to note that the same young people from the seventies who claimed for peace and love where respect for diversity, human rights and a less voracious capitalism is now in charge of the world. It is a fact that shows how men can deeply change in in many ways.

Men have changed, the political and economical scenario too and so has communication and arts, which take advantage of science and technology developments making it more and more disseminated in a global scale The same way professionals of any field should pay attention to what is going on worldwide to improve personal skills and to identify the different opportunities available because nothing has more impact than personal experience that allied to the theoretical basis raise the bars professionally.

Attempt to this new world scenario COPEC has been organizing the WCCA – World Congress in Communication and Arts [1-3] and this one now in Guimaraes, in Portugal. An amazing historical city that is the European capital of culture.

Guimarães is a unique and special city! It is distinguished by its heritage, its inspiring landscape, its entrepreneurial capacity, its sense of belonging and the dynamism if its inhabitants.

THE CITY OF GUIMARÃES

The origin of the city of Guimarães goes back to the tenth century since it was here, in 1128, that the Portuguese nation was founded and D. Afonso Henriques was recognized as the first king of Portugal.

The importance of its cultural worth and investment in its heritage resulted in a network of high quality infrastructures and renovation of the historical center,

recognized by UNESCO as a World Heritage, in 2001.

Guimarães is the seat of a densely populated district with more than 160 000 inhabitants, and as such is the second largest municipality outside the

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metropolitan areas of Lisbon and Porto in terms of residents and has one of the youngest populations in Europe –almost 50% of its inhabitants are less than 30 years old.

Alongside the traditional significance of the textile industry, other sectors have emerged with a higher technological element and having a significant economic impact, confirming the strategic importance of the University of Minho as a generator of knowledge and innovation for the city and the region.

UNIVERSITY OF MINHO

The host Institution is the University of Minho well known as UMinho. It was founded in 1973, began its academic activity in 1975/76. UMinho is renowned for the quality of its teaching, the quality of its students, the public recognition given to its Alumni, and for its intervention and strong links with the local community and the surrounding region. UMinho has a student population of 16.000, out of which 1.900 are postgraduate students. The University has 1.200 teaching staff, of whom 850 hold a PhD, and 600 administrative and technical staff. Throughout the years the University has achieved a high reputation as an institution of learning and leadership, combining strategic vision with a capacity to innovate, and rigorous scientific, academic, administrative and financial management.

CCG - COMPUTER GRAPHICS CENTER

The CCG is positioned as an 'interface' between sources of knowledge (University) and economics (Companies, Institutions) through applied research and development in technological fields related to computer graphics, information technology, communications and electronics and its applications.

CCG has a wide experience regarding development and implementation of projects. Its activity is targeted to the following areas of applied research:
-Computer Vision;
-Engineering Process Maturity and Quality;
-Perception, Interaction and Usability;
-Urban and Mobile Computing;
-Virtual Characters and Actors.

COPEC – SCIENCE AND EDUCATION RESEARCH COUNCIL

The Science and Education Research Council – COPEC is constituted by scientists of the several areas of human knowledge committed with education and the development of science and technology. Its members believe that education is the main beam in the construction of a better society and that sciences and technology are the big agents in the fostering of progress to promote the welfare of human being.

The history of COPEC has started with an idea shared by some scientists of creating an organization to foster the

research mainly in education and sciences. This idea seized proportions and after some meetings the Council became reality. It is a group of scientists, professors and professionals whose vision of future has driven them to start this work. Through its activities COPEC maintains relations between universities, institutions of education, enterprises and the society of the several countries for the discussion of education, technology and sciences directions. It works to stimulate and to foster the efforts to bring an international perspective in education.

Constitute powers of the institution:
- General Assembly;
- Deliberative Council;
- Board of Directors;
- Fiscal Council.

The main goal of COPEC is to enhance the advancement of sciences and technology in every field of human knowledge.

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Communication can be done by many different ways such as letters, telephone and e-mails, however the message is the key element in the communication process. It has to be comprehensive, well formulated and reach the others properly. It is the essence of good communication. No discussions that emails have shortened the distance and time, once it is possible to work in projects in an international team, in different countries. Although emails help to develop the across-region co-work, it is inferior to face-to-face communication in the efficiency standpoint. Face to face is still necessary because of the sensitiveness regarding the perception of signals that are important as feedback in a communication such as facial expression, eye contact and others that are also part of the communication process. In this sense the communication via skype is extremely efficient and it is an advance in communication technology.
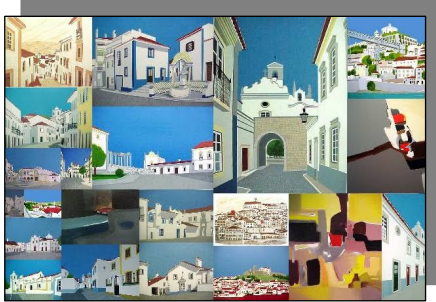
Discussing visual aspects in according to specialists visualization is more than a method of computing. It is a process of transforming information into a visual form enabling the viewer to observe, browse, make sense, and understand the information [4]. Therefore the purpose of information visualization is to amplify cognitive performance, not just to create interesting pictures.

The importance of knowledge can be seen basically when people try to get more and more knowledge all life long. Acquisition and expansion of knowledge can also be

taken in the terms of sharing knowledge with others it surely helps to increase knowledge. Taking these aspects into account communication and art can be seen along history as an important element for knowledge acquisition [5].

They are everywhere and they are fundamental for society once they establish a strong bond among people around a common objective. Communication is a very sophisticated tool principally for contemporary man, who lives immersed in technology, where computers and telecommunications play an important role because together they overcome the barrier of time and space linking people from extreme places, fostering business development and enhancing culture and education [6].

And what about art? It says for itself. It is the expression of inner man always stating what millions of words cannot do. It is the universal language congregating people and influencing generations. Since caves men have communicate through arts [7]. It is everywhere and timeless so-called society of information is taking advantage of technology to improve art and communication in every level. It is common to see in internet thousands discussions about anime, design, graphics, writing, poetry, theatre, music virtual art, visual art, pop art, to everybody and more [8].

More than ever the bizarre, the odd and the unusual are part of day-by-day life of any person at present time. The comprehension of present world cannot be done without acknowledgement of past and present history of the world. It's a process that can be easily achieved counting with technology available for mass communication [9].

These notions are fundamental for the survival of any professional nowadays and just so our schools are failing to motivate students to develop communication skills. Writing and speaking is a pleasure for those who are able to understand and interpret the contest. But communication is more than this it transcends time and space and it is capable to move people and change society.

The edge of design is moving quicker than before due to very fast technological achievements leading people to a fast real time communication, fast achievement and proliferation knowledge. Nevertheless as for the future, it would seem wise to expect unexpected, due to the fact that how rapidly art, science, and technology are all evolving at present time. There is more of digital media, of the digital manipulation of art forms; and new radical integrations of media when network bandwidth becomes sufficiently big. Certainly new kinds of art will be seen as well as new kinds of aesthetics and new theories of art [10].
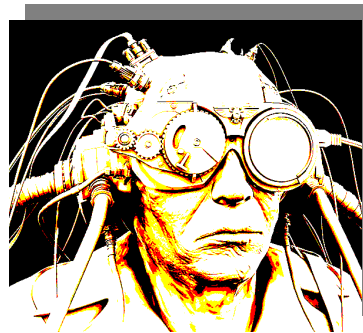
EDUCATION IN PRESENT CONTEXT

Sophisticated learning-management systems, distance learning and the opportunity to collaborate with research partners from around the world are just some of the transformational benefits that institutions of education are embracing and getting benefits. Today students come to class with laptops, smart phones, iPod's etc. Advanced technologies will put education within the reach of many more individuals around the world, and will allow greater specialization in curriculum and teaching methodologies than ever before. These benefits bring also the challenge of ensuring that university infrastructure and operations are in place to support the adoption of technology on campus. More than ever administrators will need to carefully determine how best to support these technological advances while avoiding the ever-present risk of obsolescence.

Certainly there are also economical and social constrains that are overwhelming families and communities. Technological power is shifting from west to east to countries that have the size and weight to transform 21st global economy, like India and China. This aspect will certainly have an impact on education in western world too.

Although reality is that India and China will always have an advantage in their numbers, by the other hand in western world there are freest markets, most highly trained workforce, resources and ability to innovate, and the best universities in the world [11].

The crucial problem is the necessity of thinking again the kind of education, which has fragmented knowledge that drives people to an inability of articulating its several parts. Education must promote natural ability of mind to set and to solve problems and by inter-relation to stimulate full usage of general intelligence [12].

University for centuries has an important mission that is essentially the conservation of cultural inheritance generating ideas, values and knowledge. This same University has to defeat the challenge of present world serving the contemporary society viewing the future. New World order demands a new kind of professional, capable to think global without loosing the dimension of local peculiarities and vice-versa. It is not easy to form this kind of professional although it is known exactly what is necessary [13].

Certainly communication and arts are fundamental in this process of education that means achievement of knowledge using the information in a way that improves the intellect in order to solve problems. Communication skills, art sensitiveness, comprehension and capability of using

information are very important and it is possible to be improved by means of education. It is the best way to achieve new skills and to go furthering any field. Creativity is from now on the key element for success, principally in this deep economical and social crisis of this period of human history [14].

FINAL CONSIDERATIONS

Great art and great science involve a leap of imagination into a world that is different from the present. Society often views the new ideas as fantasies without relevance to current reality. However the whole point of art and science is to go beyond what is now considered real and create a new reality. What makes an idea creative is that once people see it, sooner or later recognize that, strange as it is, it is true, it is new and interesting [15]. The outcomes of what is called creativity add to the richness and complexity of the future. Creative people are remarkable for their ability to adapt to almost any situation and to make with whatever is at hand to reach their goals.

Lately communications, skills, management of information, use of technology are very important for the development of any career. This is the era of global competitiveness a fact that leads to the importance of "something else". So Communication allied to technology and the addition of art is the best recipe for any business development. Even education can benefit from this alliance that shows infinite ways of getting to the point in any field of expertise [16].

Every form of art such as theater, music, literature, dance, crafts and etc contribute for the betterment of human communication. The use of art as an element of communication adds to human development once it helps to foster democracy and the fight for freedom.

This year the WCCA'2012 is congregating researchers from many parts of the world to show and discuss their recent achievements in their areas of expertise. Another interesting aspect of this edition is that it is happening in an extraordinary place, Guimaraes, a historical city with a strong cultural life, in the year that it is the European capital of culture. A wonderful place to see and enjoy. These elements certainly contribute to make of this a great event.

REFERENCES

[1] Brito, C. da R.; Ciampi, M. M. Communication, Arts, Science and Technology Allied to Build the Society of Knowledge. In: World Congress on Communication and Arts, 1, São Paulo, 2007. **Communication, Arts, Science and Technology Allied to Build the Society of Knowledge**. São Paulo: WCCA, 2007. p. 01-3.

[2] Brito, C. da R.; Ciampi, M. M. Communication and Arts beyond Words and Images. In: World Congress on Communication and Arts, 2, São Caetano do Sul, 2009. **Communication and Arts beyond Words and Images**. São Caetano do Sul: WCCA, 2009. p. 01-3.

[3] Brito, C. da R.; Ciampi, M. M.; Vasconcelos, R.; Amaral, L. Information Technology in Arts and Information Visualization. In: World Congress on Communication and Arts, 3, Guimarães, 2010. **Information Technology in Arts and Information Visualization**. Guimarães: WCCA, 2010. p. 01-3.

[4] Brito, C. da R.; Ciampi, M. M. Interactive Expansion of Knowledge: Communicating with Art in the Information Era. In: World Congress on Communication and Arts, 4, São Paulo, 2011. **Interactive Expansion of Knowledge: Communicating with Art in the Information Era**. São Paulo: WCCA, 2011. p. 01-3.

[5] http://www.infovis.org/

[6] Brito, C. da R.; Ciampi, M. M. The World as the Classroom for Engineers. In: International IGIP Symposium, 35, Tallinn, Estonia, 2006. **Engineering Education - Priority for Global Development**. Tallinn, Estonia: IGIP, 2006. (in CD-ROM).

[7] Brito, C. da R.; Ciampi, M. M.; Budny, D. New Strategies for a New Concept of Education: Cultural Immersion Fostering the Engineering Formation. In: International Conference on Engineering and Technology Education, 9, Union, 2006. **Research-Education-Entrepreneurship**. New Jersey: INTERTECH, 2006. (in CD-ROM).

[8] http://bemcomum.wordpress.com/2010/11/02/pintores-portugueses-amadeu-de-souza-cardoso/

[9] Brito, C. da R.; Ciampi, M. M. Engineering and Technology Education Innovating for Growth. In: International Conference on Engineering and Technology Education, 11, Ilhéus, 2010. **Engineering and Technology Education Innovating for Growth**. Ilhéus: INTERTECH, 2010. p. 01-5.

[10] http://www.santos.sp.gov.br/nsantos/index.php/noticias/ltima-semana-para-conferir-as-exposicoes-passageiros-e-face-not-book

[11] http://www.cm-guimaraes.pt

[12] http://www.psychologytoday.com/articles/199607/the-creative-personality?

[13] http://pintoresdomundo.blogspot.com/

[14] http://www.vidroimpresso.com.br/

[15] http://compthink.files.wordpress.com/2011/02/cyborg.jpg

[16] http://www.ccg.pt/index.php?option=com_content&view=article&%20id=8&Itemid=2&lang=en