KEEPING THE GLOBAL SOCIETY CREATIVE AND FREETHINKING: NEW CHALLENGES TO ICT ON COMMUNICATION AND ARTS

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Abstract *— WCCA'2016 – IX World Congress on Communication and Arts is organized by COPEC – Science and Education Research Council and promoted by WCCA – World Council on Communication and Arts. WCCA'2016 has the objective to provide a high level forum for experts to discuss both common and critical advancements in order to meet the growing needs in communication and arts areas, and the exchange of new ideas and experiences. It is also an opportunity for those who are interested in collaboration and investment in communication and arts. It seeks to explore the complex relationships between the digital world and the creative process, the nature of creativity and its impact on cities or even nations, and what goes into making a city/country 'creative'. WCCA – World Congress on Communication and Arts will take place in Guimarães, a historical city of Portugal, in a partnership with UMinho and CCG.*

Index Terms *— art, digital technology, ICT, creative communication, 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 economic 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.

GUIMARÃES

Guimarães is located in the District of Braga, in the North of Portugal. Its population is of circa 52,000 inhabitants living in an area of circa 243.000 Km2. Human presence is documented ever since pre-historical times and significant settlements dating from the Iron Age are well preserved and can be visited as archaeological sites.

FIGURE. 1
GUIMARÃES, PORTUGAL

The early Middle Ages were an important period: ca. 950 Mumadona Dias, a local noblewoman, established in her will the foundation of a monastery; for the purpose, she donated substantial land property to the monastery, stretching from Galiza (North) to Beiras (South), on the border of Muslim territory. That monastery then became one of the main reasons for the development of the medieval "Vimaranes", side by side with the castle, located up-hill. In the following century, Vimaranes was to become the main town and administrative centre of the Condado Portucalense, i.e. the feudal lands between the Lima and Ave rivers under the rule of the Kings of León (Spain).

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FIGURE. 2
AFONSO HENRIQUES, FIRST KING OF PORTUGAL

According to the local tradition the first king of Portugal (Afonso Henriques) was born and baptized in Vimaranes, in the early years of the 12th century, although there is no indisputable evidence of this. Nonetheless, in 1128 he fought and won the battle of S. Mamede, in a field nearby the town the battle being commonly referred as the beginning of his ruling. However, the independence of the new kingdom was only recognized by his cousin (the Emperor of Léon Y Castilla) in 1143, and by the Pope in 1179 [1].

THE UNIVERSITY OF MINHO – UM

University of Minho is a Public Foundation governed by private law, under the legal Regime of Higher Education Institutes.

"The University's mission is to create, spread and put knowledge into application, with free thinking and pluralism as its core values.

Our goals are to promote higher education and to contribute to shape a model of society based on humanistic principles, in which knowledge, creativity and innovation contribute towards growth, sustainable development, well-being and solidarity".

Founded in 1973, the University of Minho welcomed its first students in the academic year of 1975/76. At present, the University is renowned for its competence and quality of teaching staff, excellence in scientific research, wide range of undergraduate and graduate courses offered and for its high level of interaction with other institutions.

For these reasons, UMinho has a central role in the region and is an important reference for the country and a recognized partner in the European and global scene. Located in the north of Portugal, the University has a campus in Braga and two others in Guimarães, Azurém Campus and Couros Campus.

Originating from the ancient Roman town of Bracara Augusta, Braga is currently the third largest city in Portugal. Guimarães is known as the "cradle of the nation" and is classified as World Cultural Heritage by UNESCO.

The University's organizational structure is flexible and conducive to innovation and interdisciplinary research on emerging topics. The teaching and research courses and the Schools and the Institutes are the basic structure of the University: Schools of Architecture, Sciences, Health Sciences, Law, Economics and Management, Engineering, Psychology, Nursing, and the Institutes of Social Sciences, Education and Arts and Human Sciences.

The courses and research projects have a strong international reputation. UMinho is a targeted research university, committed to the value chain of knowledge, in other words: Research, Development and Innovation. It also points to the socio-economic environment, with many successful partnerships in research, cultural and socio-economic development projects.

FIGURE. 3
LOGO OF UNIVERSITY OF MINHO, PORTUGAL [2]

Internationalization is a strong commitment and international activities are quite intense, not only within the EU and Portuguese Official Language African Countries (PALOP), but also with several other countries on different continents. The academic year of 2010/2011 was marked by the introduction of a wide range of courses which extended to distance-learning programs and evening classes. This educational offer had a great social impact and opened the University to a new public, within the framework of demand and quality which has always been the hallmark of this Institution [3].

CCG – RESEARCH AND TECHNOLOGICAL DEVELOPMENT

The Association CCG/ZGDV – Center for Computer Graphics (CCG, www.ccg.pt) was founded in 1993 and established at the University of Minho in 2001 as a research, development, training and consulting entity, a private and non-profit organization, and integrated in the Portuguese Scientific System. Headquartered at the University of Minho, in the Azurém Campus in Guimarães, CCG has a young and dynamic team that consists of more than fifty employees and fifteen external researchers. It´s also has support from founding members and constituents - the University of Minho and ZGDV - Zentrum für Graphische Datenverabeitung (German Institute for Computer Graphics, Darmstadt, Germany) and twenty-three members, from business and associative area, as well as participation in four companies and six trade associations.

Centro de Computação Gráfica
Investigação e Desenvolvimento Tecnológico
Research and Technological Development

FIGURE. 4
LOGO OF CENTER FOR COMPUTER GRAPHICS – CCG, PORTUGAL [4]

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 [5].

COPEC has organized many congresses since the decade of 90's: 9 editions of WCCA [6-13], 15 SHEWC (organizing the 16th. Edition) [14-28], 14 INTERTECH (organizing the 15th. Edition) [29-33], 9 ICECE (organizing the 10th. Edition) [34-38], 2 WCSEIT (organizing the 3rd. Edition) [39-40], 1 WCCSETE (organizing the 2nd. Edition) [41], 1 IGIP [42], 1 GCMM [43], 1 WCETE and 1 GCETE.

KEEPING THE GLOBAL SOCIETY CREATIVE AND FREETHINKING: NEW CHALLENGES TO ICT ON COMMUNICATION AND ARTS

The theme of the congress is "Keeping the Global Society Creative and Freethinking: new Challenges to ICT on Communication and Arts" and during the congress it is expected that discussions and state of the art research will be presented as a contribution to the wide comprehension of human life dynamic as structured groups.

Presently it is visible that art is a part of the process of social movements, once they express the historical moment of places and peoples as well as they can influence the mind of population when used in mass media.

It is possible to notice that along history research in arts and arts-based innovations also have been major contributors and disruptors of the ways that societies, economies, and political systems perform. Its uncountable the value of the art and communication to congregate thoughts and ideas towards ideals and objectives.

About communication status it is now far beyond it's own time. Human beings are capable of communicate in several ways, not only by letters, by images, by performances and so on. It is and has been part of human life and it is no coincidence that human communication skills and art have developed hand in hand, and accompanied the progress of civilization.

Art is as a form of communication that is not limited to be beautiful or pleasant, it has to tell something.

FIGURE. 5
ARTS OF PORTUGAL [44]

Arts and communication have a wider, more measurable impact on economy, health and wellbeing, society and education. It's important also to recognize this impact to help people think of arts and communication for what they are and have been: a strategic national resource in some ways.

The major dictators of the 20th century understood the power of art to influence the population. In Nazi Germany, Hitler set up the Ministry of Propaganda and National Enlightenment. In Stalinist Russia, there was also a keen understanding of the power of art. Art portrayed contented peasants, industrious workers, and Stalin himself. In fact, Stalin was shown god-like in many paintings, a phenomenon known as the Cult of Stalin. Just as in Germany, gigantic architectural projects expressed the power of the state [45].

These are examples of the powerful use of communication arts to influence society and drive the political scenario and enhance work force to economy growth.

FIGURE. 6
ART OF PICASSO [46]

Another example of art and communication influence can be the Picasso'master piece the Guernica that so far has impacted the viewers all over the world, a black and white canvas portraying the atrocities of totalitarian regime [47].

Since the electronic age of motion pictures, recording, radio, and television, these media to be played or broadcast in other spaces and times may capture drama. No doubt these new media of communication have altered greatly our life-style.

It is a fact that technological development offers new spaces for artists that has evolved to a very distinctive and strong presence in many ways. In terms of virtual world internet have altered forever the way people communicate. Face book is a great example of communication and art use as a way to influence the society, a parallel world where people can express themselves, teach and learn as well as make movements. In a culture where the dominant form of communication is visual, verbal, and written, art explores the power of each of these personal and public forms of communication.

FIGURE. 7
ARTS [48]

SOCIETY AND EDUCATION IN 21ST CENTURY

It is notable that technology plays a central role in the 21st Century skills for life mainly the outcomes for Information Literacy, Media Literacy, and Information, Communication, and Technology Literacy all reference the use of technology. Digital technologies are engendering new platforms to produce, distribute, and display knowledge for all in a very democratic and open way. Besides its usual broad range of themes on the relation of the communication and arts to society, there are different ways in which digital technologies have altered the way that the work of art, as a category of labor, and art objects they, are perceived, conceptualized, and theorized for example.

Education plays an important role today and more than ever once it is imperative to ensure the continuing development of nations. 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 economical benefits. 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.

There are also economic 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.

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.

University today 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 losing 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.

Education process 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 economic and social crisis of this period of human history Communication and art are co producers in this new world education system providing tools to inspire people to get knowledge and advancing society.

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Society of Civil Engineers), ABENGE (Brazilian Society for Engineering Education), AENUI (Asociación de Enseñantes Universitarios de la Informática), ASEE (American Society for Engineering Education), ASIBEI (Ibero-American Association of Engineering Education Institutions), GCMM (Global Congress on Manufacturing and Management), IEEE-Ed.Soc. (Education Society of the Institute of Electrical and Electronics Engineers), IFEES (International Federation of Engineering Education Societies), IGIP (Internationale Gesellschaft für Ingenieurpädagogik), INTERTECH (International Council for Engineering and Technology Education), ISTEC (Ibero-American Science & Technology Education Consortium), OERN (Institute of Engineers of Portugal – North Region), Porto Gente (PortFolk), RBE (Brazilian Network of Engineering), RCI (Réseau Carthagène d'Ingénierie), SBA (Brazilian Automation Society), SEFI (Société Européenne pour la Formation des Ingénieurs), SHERO (Safety, Health and Environment Research Organization), SPEE (Portuguese Society for Engineering Education), SPEED (Student Platform for Engineering Education Development) and WCSEIT (World Council on Systems Engineering and Information Technology) as well as the support of Agencies: FAPESP (State of São Paulo Research Foundation), CNPq (National Council for Scientific and Technological Development) and CAPES (Coordination for Improvement of Personnel of Superior Level).

FINAL CONSIDERATIONS

Contemporary art is the work of artists who are living in the twenty-first century. Contemporary art mirrors contemporary culture and society, offering teachers, students, and general audiences a rich resource through which to consider current ideas and rethink the familiar. The work of contemporary artists is a dynamic combination of materials, methods, concepts, and subjects that challenge traditional boundaries and defy easy definition. Diverse and eclectic, contemporary art is distinguished by the very lack of a uniform organizing principle, ideology, or -ism. In a globally influenced, culturally diverse, and technologically advancing world, contemporary artists give voice to the varied and changing cultural landscape of identities, values, and beliefs.

Audiences play an active role in the process of constructing meaning about works of art. Some artists say that the viewer contributes to or even completes the artwork by offering his or her personal reflections, experiences, opinions, and interpretations.

These are some of the aspects of a better society dynamic, however the achievement is a long path away in the future.

Modern concept of social justice that refers to the aim of realizing equal opportunities and life chances provides a conceptual ideal able to garner the consensus needed for a sustainable social market economy. The concept of justice is concerned with guaranteeing each individual genuinely equal opportunity for self-realization through the targeted investment in the development of individual "capabilities"

Great science involves a leap of imagination into a world that is different from the present. The virtual world contributes a great deal for the enhancement of imagination transforming the new ideas relevant to current reality. The whole point of art and technology is to go beyond what is now considered real and create a new reality with many implications for society.

In this new paradigm of education and development communication and arts are structuring elements of wellbeing and social justice once art can teach people how to see with less discrimination, more sensitivity, and understanding. Art can inspire us toward ideals to defeat social problems. The use of art as an element of communication adds to human development once it helps to foster democracy and the fight for freedom and social justice.

This edition of WCCA gathers researchers from many parts of the globe to show and discuss their recent achievements in their areas of expertise. It is happens in an rich cultural environment place, Salvador, a pleasant city up the northeast of Brazil, a wonderful place to see and enjoy. These elements certainly contribute to make of this another high quality great event.

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