ArtsIT + DLI: Invited Paper

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Abstract. In 2015 the EAI conference series steering board declared that the international conference ArtsIT, which began in 2009, was to be extended for its 5th iteration to reflect contemporary trends of increased activities in interactive and game-based arts and technology and be renamed as *The International Conference ArtsIT, Interactivity and Game Creation*. Hosting would take place in the new auditorium campus buildings of Aalborg University Esbjerg, Denmark where it was also successfully held in 2011.

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To complement and widen the scope of the offered programme, it was also decided to inaugurate *The International Conference on Design, Learning and Innovation* (DLI). Fittingly, the Center for Design, Learning and Innovation was opened at Aalborg University Esbjerg in 2011 coinciding with the second ArtsIT. Founder of DLI is Professor Eva Brooks who appropriately is general chair and steering person of the inaugural DLI conference.

This invited paper overviews the events' integrations and structures with information garnered from the affiliated organization's web sites. The paper is authored from the position as steering person of ArtsIT and initiator of the DLI event as a synched international conference.

1 ArtsIT/DLI/ICST/EAI – History and Alignment

1.1 ArtsIT

ArtsIT has been hosted in the cities of Yi-Lan, Taiwan, in 2009; Esbjerg, Denmark in 2011; Milan, Italy in 2013; Istanbul, Turkey in 2014; and now returns to Esbjerg once again in 2016, where it is expanded and re-titled as *The International Conference ArtsIT, Interactivity and Game Creation*.

In 2016, 74 authors submitted to the event and 23 papers were accepted and processed for publishing in the proceedings. Previously, in 2009[1] there were 33 papers published; in 2011[2] there were 19 papers published; in 2013[3] there were 19 papers published; and in 2014[4] there were 17 papers published. The links in the footnotes on this page are to the related *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering* (LNICST) series Springer books where the papers can be found.

The scope of the event targets to attract, motivate and promote meetings and discussions between people in arts, with a keen interest in modern IT technologies, and people in IT, having strong ties to arts through their works. Since inauguration in 2009 the event has become a leading scientific forum for dissemination of cutting-edge research results in the area of Arts, Design & Technology – now extended to include the open related topics Interactivity – and all the term may contain (e.g. Interactive music, Interaction Design, Virtual Reality, Augmented Reality etc.,) and Game Creation (e.g. Serious Games, Gamification, Gaming, GamePlay, etc.,).

Alongside the call for papers was a call for posters and gratis exhibition for industry and projects (students, regional educations, interested parties etc.,): The latter being an ideally timed opportunity for students to test prototypes with international delegates to receive "expert" input – as critique and reflection – to supplement and inform via their project reports due for June examinations.

In Aalborg University Esbjerg the Medialogy education, which is under the Media Technology department, links to ArtsIT having a focus on Project Organized Problem Based Learning whereby students work with authentic issues and related problems and challenges via links and activities/collaborations with local, regional and national industries. Thus, senior students are promoted to undertake internships in a growing number of industry partnering companies that typically lead to employment opportunities.

Over the years there have been internationally acknowledged luminaries from the field as keynotes. ArtsIT 2014 featured two keynote speakers, the first was Professor Paul Brown from UK/Australia, pioneered in art, science & technology since the late-1960s and in computational & generative art since the mid 1970s: http://www.paul-brown.com; and the second (in no particular order) was Professor Murat Germen, an artist using photography as an expression/research tool who has an MArch degree from Massachusetts Institute of Technology, where he attended as a Fulbright scholar and graduated receiving the American Institute of Architects (AIA) Henry Adams Gold Medal for academic excellence. Murat now works as a professor of art, photography and new media at Sabanci University in Istanbul: http://muratgermen.com.

Following the above keynotes in their footsteps is the 2016 keynote speaker - and it is a pleasure to welcome - Dr Antoni Jaume-i-Capó. Antoni obtained his Ph.D. in Computer Science at the Balearic Islands University in 2009, where since 2005 he has worked at the Mathematics and Computer Science Department. His main research

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[1] http://www.springer.com/us/book/9783642115769.
[2] http://www.springer.com/us/book/9783642333286.
[3] http://www.springer.com/us/book/9783642379819.
[4] http://www.springer.com/us/book/9783319188355.

interests include computational vision, vision-based interfaces, serious games and rehabilitation. His publications are featured in several international journals and he also has participated and led numerous funded research projects (Regional Government, Spanish Government, and European Union). He is also a leader of the international conference titled *AIRtech 2011: Accessibility, Inclusion and Rehabilitation using Information Technologies* – reflecting a collaboration between research groups of the University of the Balearic Islands and the University of Havana, Cuba. This author met Antoni when invited as *AIRtech 2011* plenary speaker/keynote when hosted in December 2011 at the Hotel Parque Central of Havana, Cuba, which resulted in a special collection: Accessibility, Inclusion and Rehabilitation using Information Technologies in the Journal of Research and Practice in Information Technology, Vol. 45, No. 2, May 2013 (JCR indexed, Impact Factor 2010: 0.205)[5], Australian Computer Society.

1.2   DLI (Conference Website[6,7] Extract Included)

The Esbjerg hosting includes the inauguration of the international conference for Design, Learning and Innovation (DLI). This builds upon the opening of the Centre for Design, Learning and Innovation at Aalborg University Esbjerg in 2011 adjacent to when the ArtsIT conference was hosted in Esbjerg for the first time. The steering person and local chair is Professor Eva Brooks who originated and directed the Centre in Esbjerg, which is now established at the main campus in Aalborg under the learning faculty.

Design, learning, and innovation frame the world of ICT, play and playfulness opening doors into an increasingly playful world. Whether it is about developing tools, technologies, environments, as well as content and approaches that can spark and nurture a passion for learning and transforming domains such as education, rehabilitation/therapy, work places, and cultural institutions, design, learning, and innovation is a powerful catalyst in empowering individuals to participate, communicate, and create to be able to exceed their own limits in a playful way: Such is the spirit behind driving the DLI 2016 conference. Making this spirit explicit and visible is crucial to identify how specific tools, technologies, methodologies and solutions shape opportunities for how people can learn and engage with the demands of life. Today, challenges in the fields of design, learning, and innovation are often approached by trans-disciplinary teams and solutions, such that tools, technologies, methods and theories developed for other purposes are mobilized to be utilized in unlocking new frameworks for understanding these fields and thereby opening up to partnerships that can enrich learning in formal and informal learning practices.

Keynotes for the DLI2016 are Sudarshan Khanna and Surabhi Khanna from Delhi, India.

Sudarshan Khanna is a Professor and Design Educator. He was Principal Designer, Chairman of Education & Research, and Head of the Toy Innovation Centre at the National Institute of Design (NID), Ahmedabad, India. He is acknowledged as an

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[5] Journal of Research and Practice in Information Technology, Vol. 45, No. 2, May 2013.
[6] http://designlearninginnovation.org.
[7] http://designlearninginnovation.org/2016/show/keynotes.

internationally acclaimed designer and educator, who have established several new courses and programmes, including the Post Graduate Programme in Toy & Game Design. Sudarshan Khanna is a pioneer in the research of interesting facets of indigenous toys and crafts communities all over India. In 1996 he was conferred the National Award for his lifetime work for design-science among children by the Department of Science and Technology. He is recipient of the international BRIO Award 2013 for his lifelong contribution to research and innovation for toy design and development in India. Professor Sudarshan Khanna is the past president of ITRA (International Toy Research Association) and founder Chairperson of "Toys for Tomorrow"- vision-action international forum. As author of three books and many articles on toy design, culture and creative education, he features in many educational TV programmes. He has been conducting workshops in India and other countries all over the world, for teachers, trainers and students, relating the value of design methods and creativity as parts of innovative learning processes.

Surabhi Khanna is a designer, educator and workshop specialist. She has a Master degree in design from the National Institute of Design (NID), Ahmedabad, India, focusing on toy and game design, after her graduation in architecture. She has been working on projects and workshops related to heritage, innovations, and culture-based design. She is associated with several institutions of design and education as a part time and visiting faculty. She was an exchange designer in Germany, invited participant for UNESCO Creativity Workshop on Inclusive Education and Development, and she was co-invitee to Colombia, South America for talks and workshops on design and education. Surabhi Khanna has developed courses and electives related to playful design concepts for students of design and architecture. She conducts design and education workshops for teachers, trainers and children at several organizations and schools.

The title of Sudarshan Khanna and Surabhi Khanna's joint keynote is *Toys & Tales with everyday materials relevance of ingenious, playful ideas for design, learning and innovation*. They describe is as such: -

> "The best thing a child can do with a toy is to break it; the next best is to make it"
> Ingenious toys and tales are innovative tools for holistic learning. Such resource exists in every society. As design educators, we have been involved in the study and documentation of what children play, make and develop. In the presentation, we will discuss how this tangible resource is relevant in today's context of digital environment.
> A good toy would normally integrate aspects of social science, technology, art & aesthetics. Play is a basic and natural instinct and is also an entertaining activity. The process of making and playing innovative toys can make integrated use of 3H: Hands, Heart and Head. Creating products with such a process can provide joy and insights. The sense of curiosity is the starting point of learning. This design medium facilitates interactive, collaborative and creative initiatives.[8]

The Sudarshan Khanna and Surabhi Khanna's joint keynote takes place on the second day of the activities.

All papers are published in the EAI conference proceedings (USB stick) and in the Springer book series run by ICST – namely *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST).* ICST is described next followed by a description of the EAI organization.

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[8] http://designlearninginnovation.org/2016/show/keynotes.

1.3   Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (ICST)[9]

ICST is a professional society that sponsors research; innovation and technology transfer to harness and maximize the benefits and impact of ICT in all sectors of human society. ICST views the advancement of ICT as the axis of the next technological and societal revolution and it aims to create a global, grass-roots organization of research communities in diverse technical and geographical areas representing the academic, research, regulatory and business sectors[10].

A wide array of technical and scientific activities falls under the ICST umbrella:

- Over 70 annual scientific events worldwide – summits, conferences, workshops, symposia;
- An extensive publication portfolio – journals, books, proceedings and magazines;
- On-line tools and portals – social networking, multimedia sharing, collaboration;
- Digital libraries – articles, audio-video recordings;
- Recognition mechanisms – awards, lecture and seminar series;
- Technical and functional organizational units.

As a member of the European Alliance for Innovation (EAI), ICST provides the society tools and framework to support EAIs community to achieve its mission to foster innovation in the Information and Communication Technologies (ICT) sector at all levels of the innovation cycle. EAI is described in the following section.

1.4   The European Alliance for Innovation (EAI)[11]

The European Alliance for Innovation (EAI) is a vibrant eco-system for fostering ICT enabled innovation to improve European competitiveness and to benefit society. EAI is unique in its use of open e-platforms to inspire matchmaking, collaboration and to reduce fragmentation among all relevant actors, from organizations to individuals. Through active participation, organizations find ideas and talent, and individuals find organizations for their ingenuity and craft.

EAI's activities are centered on the Innovation Cycle, a framework for classifying the different stages and stakeholders related to the development of innovation. Supported by EAI's platform of online tools, innovation-centered events, and online portals, EAI allows participants to leverage the power of crowd-sourced innovation and engage where and how it is most relevant to them.

EAI's mission is to drive innovation in emerging Information and Communication Technology (ICT) enabled areas by decreasing fragmentation between key participants in the innovation cycle. From education to business to government institutions and Europe itself, EAI provides a bottom-up, grassroots forum for participants to contribute

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[9] http://icst.org/about-icst/.
[10] http://icst.org/about-icst/.
[11] http://eai.eu.

knowledge, communicate views, and collaborate together to advance their respective innovation initiatives.[12]

Special Issue journals have also resulted from the events featuring significantly extended and enhanced versions of the work of conference delegates who are invited to submit. These have primarily been under the Inderscience publishing house *International Journal of Arts and Technology*[13]. Additional opportunities to publish are through the introduction of the peer-reviewed research journals EAI Endorsed Transactions that are submitted for inclusion in major indexing services.[14] EAI is linked to CREATE-NET Research Consortium, which is introduced next.

1.5   CREATE-NET: Center for REsearch and Telecommunication Experimentation for NETworked Communities[15]

CREATE-NET is a non-profit association headquartered in Trento, Italy, that was established as an international research center now recognized as one of Europe's leading institutions in ICT and telecommunications technologies. CREATE-NET acts as a promoter of "globalization of knowledge and research", facilitating the cooperation and interaction of research competences around the world to become the focal point in Europe for "engineering of research/innovation", through the promotion and strong participation into the European Alliance for Innovation (EAI).

The above presents the history and dimensions of the two international conferences and the magnitude of the background affiliated organizations that organize and manage the events. In so doing it is fitting to highlight that this will be the final international conference of it type at Esbjerg campus run by Medialogy personnel due to the "dimensioning" that has taken place in the Humanities in Denmark. The result of this is the closure of Medialogy in Esbjerg.

2   Dimensioning

It is appropriate that two international events having creativity, technology and human foci are presented in Esbjerg, Denmark at the time when the Danish Ministry of Education is closing and reducing humanities focused educations under its "Dimensioning" act – originally a resizing plan to cut 4,000 study places from Danish universities[16]. Thus, 2016 will be the final presentation of these events in Esbjerg due to such closures. In welcoming the conferences international delegates to the city, region, and country, the general chairs – including the technical programme committee - and local organizing committee especially will put on a brave face though tinged with anticipation of a

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[12] http://icst.org/eai/.
[13] www.inderscience.com/ijart.
[14] http://eai.eu/about-us/organisational-model.
[15] http://www.create-net.org/about-us.
[16] Education 1/12-14 11:03
      Title: Dimensioning plans could still be stoppedhttp://universitypost.dk/article/dimensioning-plans-could-still-be-stopped.

regional education profile without a future-oriented state-of-the-art creative industries university education. As campus guests, delegates may note low student numbers. Notably, this relates to the closure of the Medialogy education in Esbjerg and the relocation of the Centre for DLI to the main campus in Aalborg – some 3 hours drive North.

It is fitting to state that since Professor Jens Arnspang founded Medialogy in September 2002, many students in the region have benefitted through graduating and successfully opening their own local business spin-outs (industry start ups) that have achieved international recognition resulting in creating a large number of jobs – often employing Medialogy or other Esbjerg campus students – and attracting significant investment. Other Medialogy graduates have been employed in the region, nationally and internationally, successfully bringing a unique "out-of-the-box" creative edge to their employers' profiles. Evidence points to a 98-percentile employability within one year of graduation for Esbjerg Medialogy students, which confounds the reason for Humanities closures announced at the Education Ministry web site and press[17]. The Dimensioning action has been criticized in the Education Press as "an attack on the open society"[18] where Werner Schäfke, a post doc at the Faculty of Law, University of Copenhagen writes:

> In effect, the Danish government gains the power to decide what kinds of studies Denmark's universities are allowed to offer, and thus what kind of studies Denmark's citizens are allowed to study. This is a degree of centrally planned economy in education and control over education rather known from socialist states like the German Democratic Republic, and even darker comparisons spring to one's mind.
>
> The message the Danish government sends is, however, easily understood when keeping the prejudice in mind that especially graduates with degrees in the humanities or social sciences are ascribed the ability to think critically, and reflect what the government is doing. The Danish government's message then is: We do not want our citizens to be critical and reflective. We do the thinking, and we shape your opinions for you. We do not want citizens who know how societies work, that is our business, not yours.
>
> The true message the "dimensioning"-plan sends is easily misunderstood as yet another economically motivated plan to reduce costs for education, and the uproar it causes is easily discarded as the usual whining of scholars from the humanities who fear for their cozy university jobs.
>
> The true message is: Your government does not want you to reflect upon its decisions. It wants well-behaved citizens who dutifully follow the way they show. This is most easily demonstrated by targeting groups of citizens who are commonly ascribed as the ones most likely to critically reflect what happens in society.
>
> But the message is directed to all citizens. And the message comes from enemies of an open society.

The action resulted in an outburst by academics in the form of a petition with many thousands of Danish signatures and an international petition against Danish education reforms generated more than 1,700 signatures as well as words of solidarity and support from established academics. One Danish academic, Associate Professor Jan-Ullrich from the University of Copenhagen wrote:

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[17] http://politiken.dk/indland/uddannelse/ECE2469128/opposition-vil-presse-ny-plan-for-studier-igennem/.

[18] Education 6/11-14 9:43 4
Title: Comment: 'Dimensioning' – an attack on the open societyURL – http://university-post.dk/article/comment-dimensioning-attack-open-society.

> We appeal to our colleagues internationally to voice their concern about this unprecedented, large-scale attack on the humanities in Denmark, he adds. If implemented, the planned cuts would lead to a serious impoverishment of the Danish and Scandinavian academic landscape and to the irreversible disappearance of highly specialized expertise at a time when it is most needed

Professor Richard Gombrich at the University of Oxford in the UK, who is one of the 2,641 + international petitioners who had signed the petition wrote: "I hate to see a civilized country like Denmark committing cultural suicide. If the minister thinks that education is too expensive, has she assessed the cost of ignorance?"

Professor Richard Nance of the Department of Central Eurasian Studies, Bloomington, United States writes that "the threatened loss is not just Denmark's, though that loss would be grave enough. The loss is global. We eliminate the humanities at our collective peril."[19]

Danish university management were subsequently given authority to close and cut back the educations they believed would address the ministry requirements for dimensioning. Despite Esbjerg Medialogy achieving outstanding positive accreditation in a governmental board review, stated as the highest of the three campuses that educate Medialogy, it is being closed thus cutting out the heart of the creative economy in the southwest Jutland region within which such educations exist nowhere else.

3 Conclusion

International conferences offer unique opportunities for networking and learning. Students often get their first experiences of public speaking to amassed academics, scholars and professors at conferences – a challenging but rewarding learning experience. The affiliated organizer of the two events presented, The European Alliance for Innovation (EAI), alongside Create-Net and ICST promote such international conferences as well as supporting resulting networking and publishing in their hosted journals. The foresight and vision behind realizing such a collaborative venture is significant. It exemplifies a core creative industries perspective in supporting across many fields, and in our case over these two days in May, the Arts, Design, ICT, Interactivity, Learning, Game Creation, and Innovation. The pleasure of welcoming delegates is tinged with the sadness of the closing of Medialogy at the host establishment, i.e. the Aalborg University Esbjerg campus. It is especially sad due to the many years of excellent examples of Arts, Design, ICT, Interactivity, Learning, Game Creation, and Innovation at the core of students' Medialogy projects and course work. Aalborg University will move forward yet there will be an empty crater on the south west Jutland coast where Medialogy was established and developed, where a productive student pipeline fed the local creative industries (employed student percentile around 98% within one year of graduation) in a fine manner and where some students realized their dream of an own company with an international media profile.

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[19] https://www.change.org/p/minister-sofie-carsten-nielsen-denmark-minister-sofie-carsten-nielsen-preserve-the-humanities-at-copenhagen-university.

This chapter thus closes as a form of elegy to the Medialogy 'dimensioning': It is written as a tribute to all students and staff that have passed through the doors of Medialogy at Aalborg University Esbjerg. Long may the pioneering efforts be remembered of those in the original team, and I for one anticipate that the legacy of Medialogy founder, Professor Jens Arnspang, will continue onwards through its presence at the other campuses in Aalborg and Copenhagen.