

WHOLODANCE

Whole-Body Interaction Learning for Dance Education

Call identifier: H2020-ICT-2015 - Grant agreement no: 688865

Topic: ICT-20-2015 - Technologies for better human learning and teaching

Deliverable 1.3

Workshop report

Due date of delivery: August 31st, 2016

Actual submission date: September 2nd, 2016

Start of the project: 1st January 2016

Ending Date: 31st December 2018

Partner responsible for this deliverable: ATHENA RC

Version: 6.0



Dissemination Level: Public

D1.3 Workshop Report	WhoLoDancE - H2020-ICT-2015 (688865)
----------------------	--------------------------------------

Document Classification

Title	WhoLoDancE Workshop Report
Deliverable	D1.3
Reporting Period	M1-M8
Authors	Katerina El Raheb, Akrivi Katifori
Work Package	WP1
Security	Public
Nature	Report
Keyword(s)	workshop, dance, technology, learning,

Document History

Name	Remark	Version	Date
D1.3_ToC	Table of Contents	1st	12 July 2016
D1.3_draft_1	Executive Summary, Introduction, Organizational Aspects, Participants, Appendix	2nd	23 July 2016
D1.3_workshop report_1	Presentations and Contribution, Hands On Session, Demos	3rd	30 July 2016
D1.3 Workshop Report	Conclusions	4th	5 August 2016
D1.3 Workshop Report_final	First Revision	5th	12 th August 2016
D1.3. Workshop Report_Final Version	Final Revision and Submission	6th	2 nd September 2016

List of Contributors

Name	Affiliation
Katerina El Raheb	Athena RC

D1.3 Workshop Report	WhoLoDancE - H2020-ICT-2015 (688865)
----------------------	--------------------------------------

Akrivi Katifori	Athena RC
Stefano Di Pietro	Lynkeus

List of reviewers

Name	Affiliation
Stefano Di Pietro	Lynkeus
Mirko De Maldè	Lynkeus
Antonella Trezzani	Lynkeus

Executive Summary

This document reports on the activities of the WhoLoDancE workshop which took place on the 6th and 7th of July in Thessaloniki, entitled "Dancing with Technologies: Interact to learn, analyze to create". The workshop has been mainly organized by ATHENA RC with the collaboration and support of all other partners of WhoLoDancE project and it was a Satellite event of the 3rd International Symposium on Movement Computing. At first, we describe the objectives of the workshop which are in alignment with the objectives of the first stage of WhoLoDancE project in general and WP1 Learning Models and Technical Requirements. In particular, this work package aims to create a common understanding about the needs of dance learning in terms of technology, and define its relations with whole-body interaction experiences within the context of the State-of the art and relevant achievements. In what follows the report describes the collaboration with the 3rd International Symposium on Movement Computing (MOCO2016) and the organization of WhoLoDancE workshop as a satellite event of MOCO2016. In the following sections, this document includes information on the logistics and organization details, as well as a short report on the activities held, and the discussions during the event. In the next section, the invited and WhoLoDancE speakers are presented through bios and a summary of their presentations. Finally, the activities and outcomes of the hands-on and demo sessions are described. In the last section we present an evaluation of the workshop, and in the Appendix all the relevant material is included

Table of Contents

Executive Summary	4
Table of Contents	5
Table of Figures	7
1 Introduction, Aims and Objectives	9
2 Collaboration with MOCO2016	10
3 Workshop in the context of the WhoLoDancE Project	13
4 Participants	16
5 Presentations and Contributions	16
5.1 Welcome and Project Presentation	16
5.2 Key-note -Invited Speaker	17
5.2.1 Decoding the process of dance making to provide tools for the thinking body.....	17
5.3 WhoLoDancE Speakers	18
5.3.1 Choreographic tools for technology design and Technology for artistic development	19
5.3.2 From Imagery and Skinner Realizing Technique to VR	20
5.3.3 Can the expressiveness of movement be measured?	21
6 Hands-On session	22
7 Demos	27
7.1 “Let’s move” – Interactive game installation.....	27
7.2 Neural Narratives - Dance with Virtual Body Extensions	28
8 Organizational Aspects	29
8.1 Venue	29
8.2 Thessaloniki Concert Hall	30
9 Dissemination of the event.....	30
10 Evaluation of WhoLoDancE Workshop	31
10.1 General logistical organization	31
10.2 Presentations, Discussion, Demos, Hands on	34
11 Conclusions	37
12 Appendix	38
12.1 List of Participants.....	38
12.2 Description -Call for Participation.....	40
12.3 Agenda.....	41
12.4 Speakers bios	42
12.5 Hands-On Material.....	47

12.5.1	Dance Genres	47
12.5.2	Movement Principles.....	49
12.5.3	Learning Principles	54
12.5.4	Visualizations and Avatars.....	56
12.6	Hands on Scenarios	58
12.6.1	Description Forms	58
12.6.2	Screenshots of the scenarios.....	59
12.7	MOCO-dissemination material	63
12.7.1	English version poster	63
12.7.2	Greek version	64
12.8	Wholodance Poster presented in MOCO16	65
12.9	Evaluation Questionnaire	67
12.10	Press Release in Greek	69
12.11	Dissemination Statistics	70
12.11.1	Social Media Statistics (ATHENA RC).....	72
12.11.2	Social Media Statistics (WhoLoDancE).....	73

Table of Figures

Figure 1 Presenting the main objectives of WhoLoDancE.....	9
Figure 2 WhoLoDancE workshop on the poster of MOCO16 -3rd International Conference on Movement Computing	10
Figure 3 WhoLodance description on the MOCO16 website	11
Figure 4 WhoLoDancE project is mentioned on the MOCO16 website, as one of the Supporting EU-funded projects	12
Figure 5 WhoLoDancE poster presentation at MOCO16.....	13
Figure 6-Workshop Description	14
Figure 7 Wholdance workshop opening.....	15
Figure 8:- presenting relevant work and objectives of WhoLoDancE	15
Figure 9 Edwin Morley-Fletcher opening the WhoLoDancE workshop.....	16
Figure 10-Key note presentation by Philip Barnard	17
Figure 11- Key-note presentation	18
Figure 12-Jean Marc Matos- K.Danse.....	19
Figure 13-Ruth Gibson: dance in AR and VR environments	20
Figure 14-Antonio Camurri presenting at WhoLoDancE Workshop.....	22
Figure 15-Hands On Participant exploring the cards.....	23
Figure 16 The WhoLoDancE Workshop hands on session cards	24
Figure 17 Hands on session -working in groups	25
Figure 18- a screenshot of the notes of the WhoLoDancE scenario for Flamenco	26
Figure 19 "Let's move" interactive installation demo	27
Figure 20 -Performance of Instituto STOCOS	28
Figure 21-Instituto STOCOS performing at MOCO16	29
Figure 22 Thessaloniki Concert Hall	29
Figure 23- Workshop Announcement on the WhoLoDancE webpage.....	31

Figure 24 General participant outlook on the organizational aspects of the Workshop 32

Figure 25 Workshop participant outlook of the registration process 32

Figure 26 Workshop participants outlook on provided information 33

Figure 27 Workshop participants outlook on the Workshop facilities..... 33

Figure 28 Workshop participants outlook on the presentations 34

Figure 29 Workshop participants outlook on the joint demo session with MOCO..... 35

Figure 30 Workshop participants outlook on the hands-on session 35

Figure 31 Workshop participants outlook on the discussions during the hands-on sessions..... 36

1 Introduction, Aims and Objectives

The main objectives of the WhoLoDancE workshop were the following: a) to present the objectives of the project within the wider context of movement computing, cognition, dance and technology, b) to communicate to and acquire feedback from experts of different relevant background on the initial conceptual framework of the project, c) to disseminate the project and bring together people with relevant interests (dance practitioners, choreographers, new media artists, ICT researchers and developers).

The WhoLoDancE workshop in Thessaloniki was the first official event organized by the project to communicate the objectives, activities and outcomes of the project. The five main objectives of WhoLoDancE project (1) investigate body knowledge, 2) preserve cultural heritage, 3) innovate the teaching of dance (Figure 1) 4) revolutionize choreography, 5) widen the access and practice of dance, underline the interdisciplinary nature of the project, as well as the need to be in continuous contact with both the research, education and creative communities of movement computing, motion capture technologies, dance teaching, choreography, human computer interaction and design. The 3rd International Symposium of Movement Computing MOCO16, which took place in Thessaloniki on the 5th and 6th of July, offered a great opportunity for collaboration and networking.



Figure 1 Presenting the main objectives of WhoLoDancE

WhoLoDancE workshop "Dancing with technologies: Interact to Learn, analyze to create" brought together experts and researchers from a variety of backgrounds, raising discussions that are hot topics in these relevant areas. The co-organization with MOCO16 (Figure 2) and the close collaboration with the Movement Computing community created an excellent field for exchange of ideas with the wider community not only during the days of the workshop (6th July evening and 7th July) but also during the main conference, since the vast majority of WhoLoDancE partners, have not only attended the main conference but also had the chance to present their previous and relevant work during the main-paper presentations, demos and artistic installations and performances. This fact highlights the excellence of the partners, through their involvement in one of the top and state-of-the art conferences which brings together technologies, computing, cognitive science, human computer interaction, movement and art.

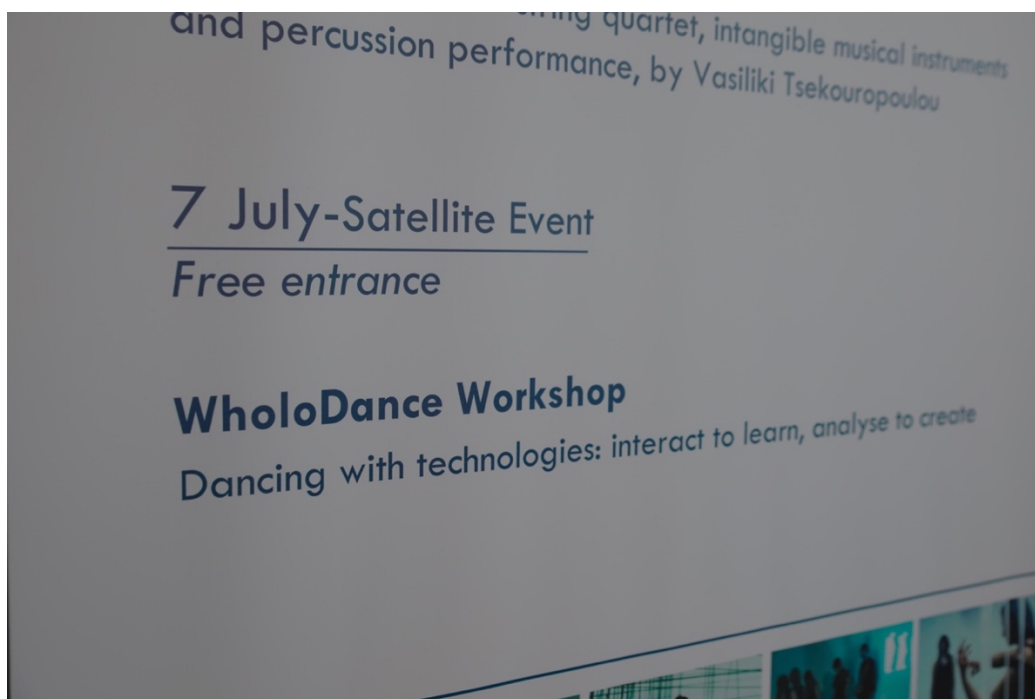


Figure 2 WhoLoDancE workshop on the poster of MOCO16 -3rd International Conference on Movement Computing

2 Collaboration with MOCO2016

MOCO16¹ is the 3rd international symposium on movement and computing. MOCO aims to gather academics and practitioners interested in the computational study, modelling, representation,

¹ <http://moco16.movementcomputing.org/>

segmentation, recognition, classification, or generation of movement information. MOCO is positioned within emerging interdisciplinary domains between art & science.

The symposium references the challenge of representing embodied movement knowledge within computational models, yet it also celebrates the inherent expression available within movement as a language. While human movement itself focuses on bodily experience, developing computational models for movement requires abstraction and representation of lived embodied cognition. Selecting appropriate models between movement and its rich personal and cultural meanings remains a challenge in movement interaction research.

Many fields, including Interaction Design, HCI, Education and Machine Learning have been inspired by recent developments within Neuroscience validating the primacy of movement in cognitive development and human intelligence. This has spawned a growing interest in experiential principles of movement awareness and mindfulness, while simultaneously fueling the need for developing computational models that can describe movement intelligence with greater rigor. This conference seeks to explore an equal and richly nuanced epistemological partnership between movement experience and movement cognition and computational representation.



MOCO'16
3rd INTERNATIONAL SYMPOSIUM ON MOVEMENT AND COMPUTING
THESSALONIKI

ORGANIZATION ATTEND PROGRAMME PAPERS EXHIBITION **WHOLODANCE**

WhoLoDancE Workshop

Tweet 13 Like 1 G+1

- WhoLoDancE Workshop
- Agenda
- Speakers

WHOLODANCE

ATHENA

When: 6th and 7th of July **Where:** Thessaloniki, Greece, Venue: Thessaloniki Concert Hall

Title: Dancing with technologies: interact to learn, analyse to create
Workshop Description: WhoLoDancE workshop invites dance practitioners, dancers, choreographers, movement enthusiasts and professionals, technologies experts and researchers to explore and discuss how recent whole-body interaction technologies can enhance the process of dance learning and support creativity.

moco16.movementcomputing.org/index.php/2016-06-07-07-05-20/workshop#

Figure 3 WhoLodance description on the MOCO16 website

The research interests and topics of MOCO Symposium and WhoLoDancE are obviously very relevant. For this reason, Athena RC came into communication with the organizers and the community of MOCO since the beginning of February 2016. Following a number of communications, between Athena RC, as a representative of the consortium and a fruitful collaboration with the MOCO organizing committee, we came to a common agreement of having the WhoLoDancE workshop as a satellite event of the MOCO2016, at the same venue. Both events have been disseminated and supported through MOCO2016, WhoLoDancE and ATHENA's webpages, posters and social media. The WhoLoDancE project has been announced as one of the supporting-sponsoring EU projects of MOCO. For more details about the dissemination see section 9 of this report.

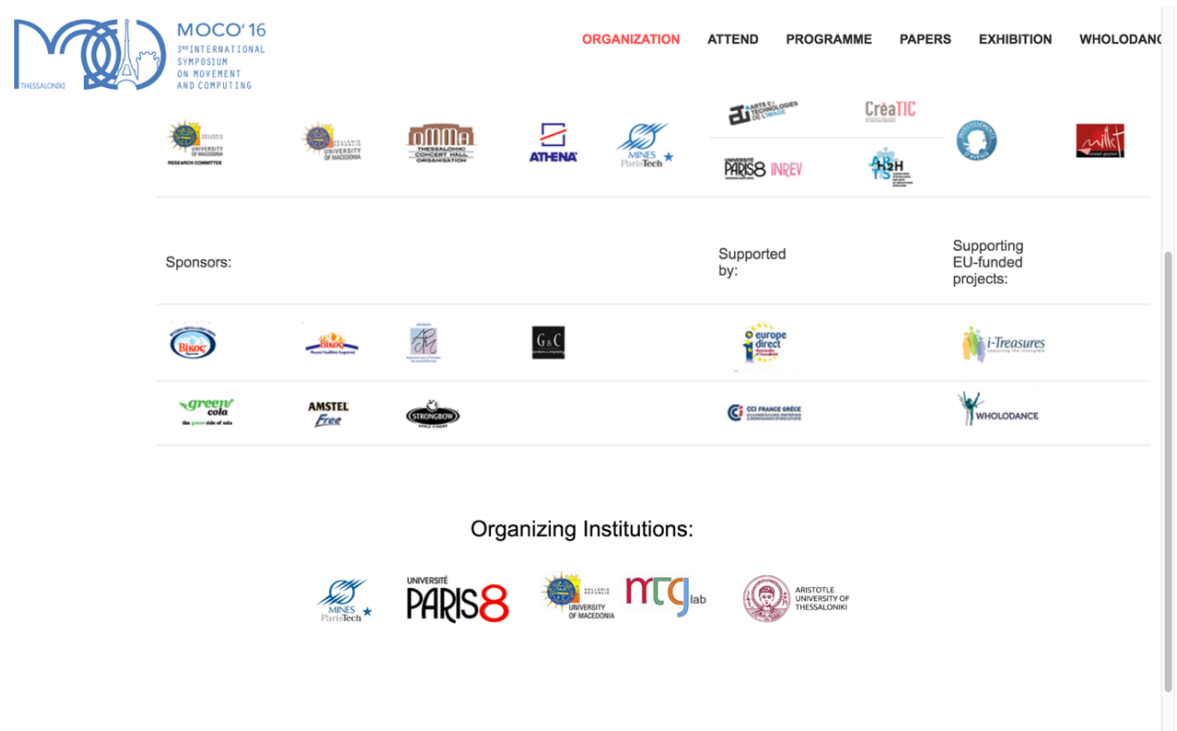


Figure 4 WhoLoDancE project is mentioned on the MOCO16 website, as one of the Supporting EU-funded projects

WhoLoDancE project has presented an extended abstract as a poster in the conference, entitled "WhoLoDancE: Towards a methodology for selecting Motion Capture Data across different Dance Learning Practice." (Figure 5 and Appendix 12.8)



Figure 5 WhoLoDancE poster presentation at MOCO16

3 Workshop in the context of the WhoLoDancE Project

The whole week from 4th to 8th of July combined several activities of the WhoLoDancE project which cross-fertilized ideas and topics: On the 4th of July an internal plenary meeting took place, on 5th and on the 6th of July all participants of the meeting attended MOCO16, on the evening of the the 6th July a joint session of demos, installation and a performance of WhoLoDancE partner instituto STOCOS took place, followed by the talks and hands on of the WhoLoDancE workshop on the 7th and finally on the last day a wrap-up internal meeting closed the week. All the activities took place at the same venue, as this was part of the collaboration scheme with MOCO16².

In, Figure 6-Workshop Description, there is the description of the workshop as it has been announced in the WhoLoDancE, MOCO16 and several other webpages. The agenda as well as the detailed bios of all the speakers can be found in the Appendix in sections 12.2, 12.3, and 12.4. Figures 7 and 8 present the opening and one of the featured talks of the workshop.

² <http://moco16.movementcomputing.org/>



WhoLoDancE Workshop

When: 6th and 7th of July

Where: Thessaloniki, Greece - **Venue:** Thessaloniki Concert Hall, Room CR2

Title: Dancing with technologies: interact to learn, analyse to create

Workshop Description: WhoLoDancE workshop invites dance practitioners, dancers, choreographers, movement enthusiasts and professionals, technologies experts and researchers to explore and discuss how recent whole-body interaction technologies can enhance the process of dance learning and support creativity.

On **Wednesday 6th of July** participants will have the chance to experiment with specific demos and reflect on of the state-of-the art technologies in various contexts, in a joint demo-session with the MOCO16 symposium.

The main day of the workshop **Thursday 7th of July** will start with presentations of the state-of-the art advancements on the intersection of embodied cognition, neuroscience, movement computing and human computer interaction and dance learning and making. In the afternoon, through interactive activities, hands-on sessions, panels and open discussion, the participants will have the chance to exchange reflections with each other on the material given during the previous sessions.

The WhoLoDancE workshop is organised by the WhoLoDancE EU funded project under H2020 and is a satellite event of the 3rd International Symposium on Movement Computing (MOCO16).

Target Group: Dance Education-Learning Experts, Dance Practitioners, Dance Teachers, Choreographers, Information and Communication Technologies Researchers, Movement Enthusiasts, Digital Artists

Figure 6-Workshop Description



Figure 7 WhoLoDancE workshop opening



Figure 8:- presenting relevant work and objectives of WhoLoDancE

4 Participants

The Workshop was attended by 31 participants, 14 of which were experts from the project partner organizations and 17 external experts, several of which had also attended the MOCO Conference, either as participants, program committee members or presenters. The participants were of diverse expertise, relevant to the field of interest of the workshop and WhoLoDancE in general. They included dance practitioners and choreographers, professional and amateur ones, movement researchers, HCI and whole body interaction researchers and designers, psychologists, and ICT professionals. The full participants list is available in Section 12.1

This mix of cross-domain expertise in the hands-on session contributed to the interesting results produced by each of the groups during the workshop hands-on session and significantly contributed to the cross-fertilization of the project conceptual model with feedback from selected active experts of the community.



Figure 9 Edwin Morley-Fletcher opening the WhoLoDancE workshop

5 Presentations and Contributions

5.1 Welcome and Project Presentation

The workshop started with a brief presentation about the objectives of the project by Edwin Morley-Fletcher (Lynkeus) (Figure 9), while the moderation was held by Katerina El Raheb (ATHENA RC) (see Appendix 12.4 for full bios). Following this, the invited key-note speaker Philip

Barnard gave a one hour talk about the mechanisms that represent the choreographic process and making of movement sequences from the cognitive psychology perspective.

5.2 Key-note/Invited Speaker

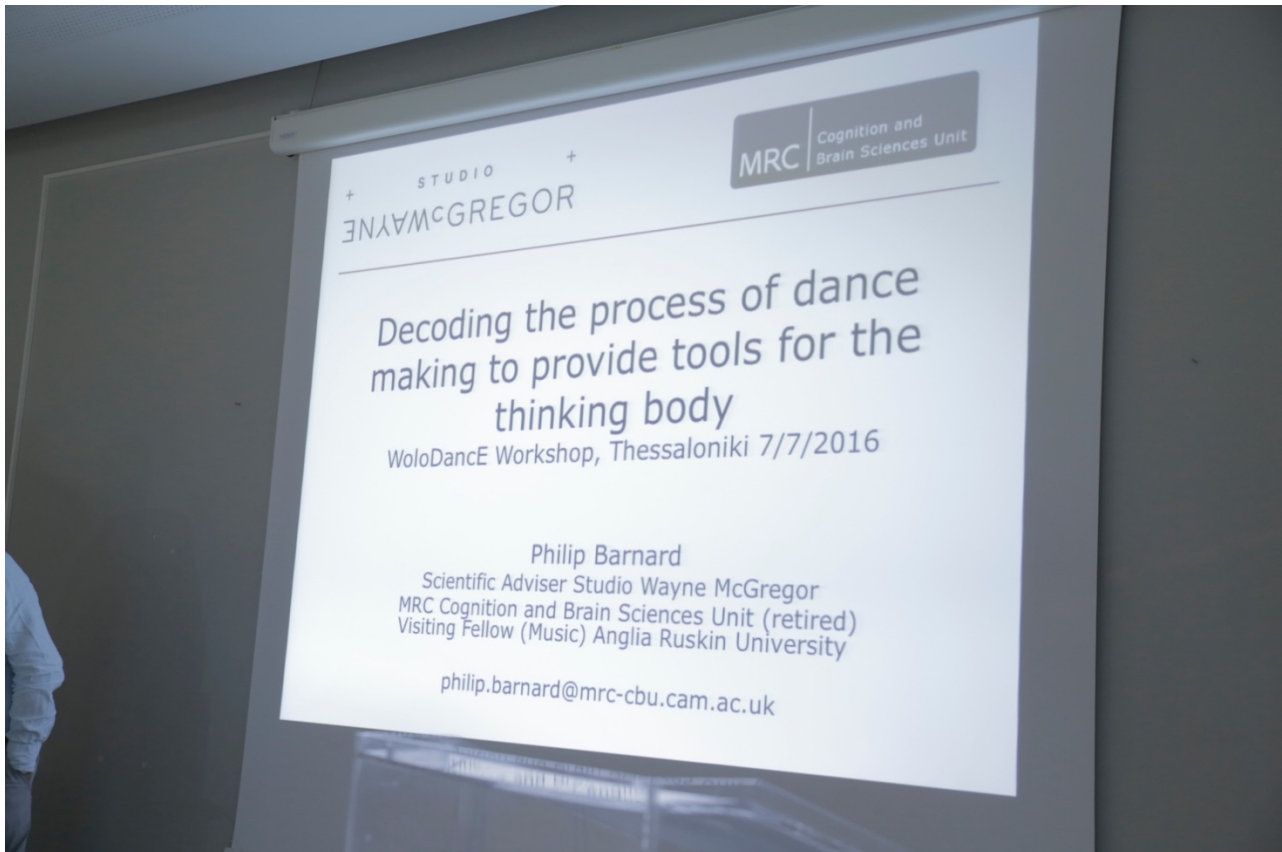


Figure 10-Key note presentation by Philip Barnard

5.2.1 Decoding the process of dance making to provide tools for the thinking body

Philip Barnard, during his one-hour presentation, has explained the representation models he investigates the last years to analyze the way the brain works to create new movement sequences. He explained how choreography, dance creation and memorization is a complex and heavy mental process and has briefly presented the "Choreographic Thinking Tools" ³ one of the main outcomes of his long-term interdisciplinary collaboration with Wayne McGregor. "Decoding habits, meaning, imagery", "breaking (imagery) habits", "augmenting mental imagery" are some of the points he analyzed during the talk and raised interesting questions regarding transferring this information as background knowledge for WhoLoDancE and the design of effective tools for both educational and creative purposes.

³ <http://waynemcgregor.com/research/choreographic-thinking-tools-mind-and-movement>

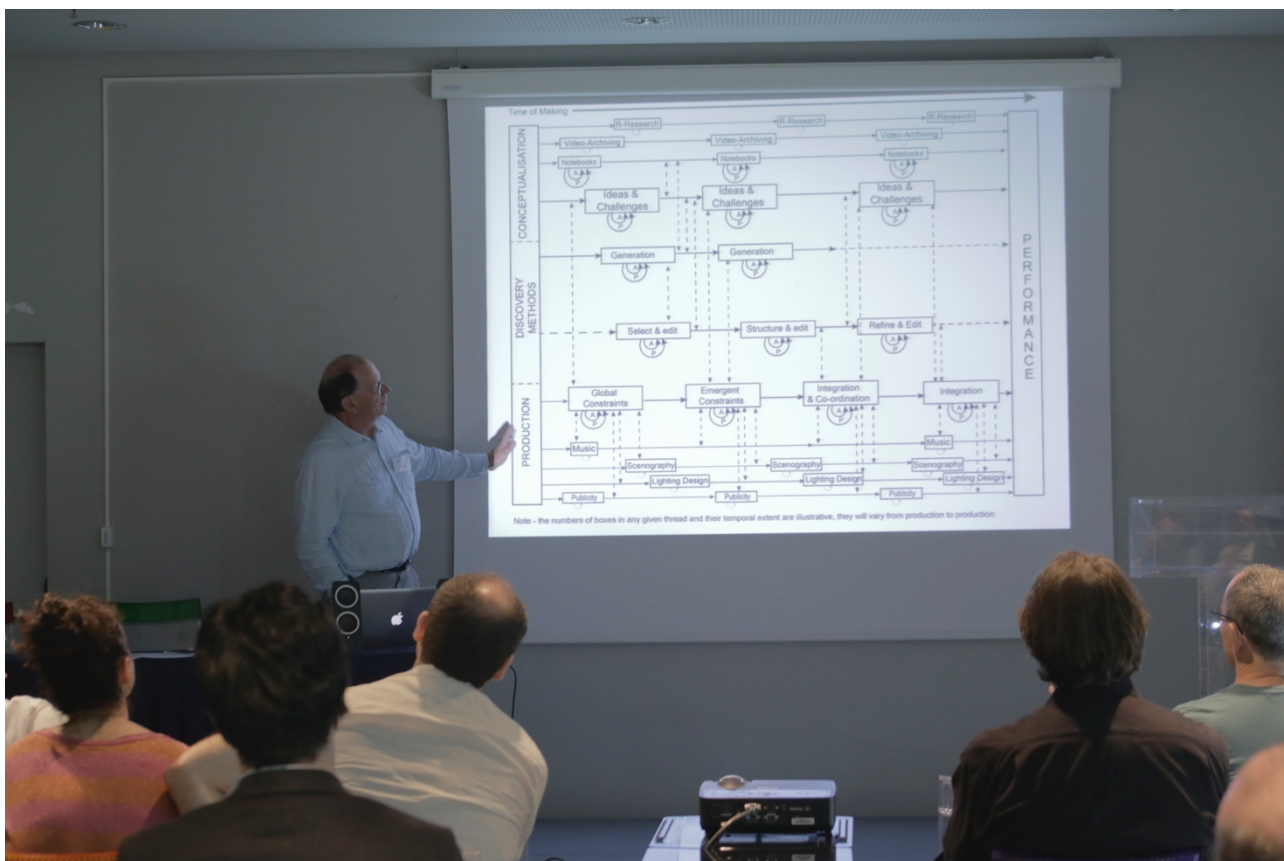


Figure 11- Key-note presentation

The key-note talk has closed with questions from the participants which led to an interesting discussion.



Philip Barnard is a cognitive psychologist whose scientific studies were focused on real-world problems associated with mental health issues and technology design. He currently concentrates on Sci-Art collaborations. He worked for the UK Medical Research Council’s Cognition and Brain Sciences Unit (CBSU) in Cambridge from 1972 to 2011, where he carried out basic research on how memory, attention, language, body states and emotion work together. He has published over 200 articles three books. He is now retired but remains a visiting researcher with the CBSU. Since 2003, he has been collaborating with Wayne McGregor | Random Dance (now re-named Studio Wayne McGregor) to develop productive synergies between choreographic processes and our knowledge of cognitive neuroscience.

5.3 WhoLoDancE Speakers

The following session includes the presentations of relevant work and expertise coming from WhoLoDancE consortium. Jean-Marc Matos (K.Danse), Ruth Gibson (Coventry) and Antonio Camurri (University of Genova) have presented different perspectives of combining technologies with dance and movement based on their background work and expertise.

5.3.1 Choreographic tools for technology design and Technology for artistic development

Jean-Marc Matos during his talk entitled "Choreographic tools for technology design and Technology for artistic development" has presented some of his choreographies and interdisciplinary, experimental projects in which he has used new technologies during both the process and the performance. This presentation served as a good introduction to the participants who were not familiar with this type of cross collaborations, as it included rich multimedia content including video extracts. The speaker explained in a very clear way how technologies can be used not simply as an after-thought effect on the production but rather how they can be really integrated in the dance making, practice, and the dramaturgy of the dance piece depending on the interactions and their semantics. He closed his talk with a remark on how new technologies can innovate the aesthetics of dance, create new perspectives and attract young people to dance both as audience and as practitioners.



Figure 12-Jean Marc Matos- K.Danse

Jean-Marc MATOS is dancer, choreographer and artistic director of the Compagnie K. Danse⁴. Trained at the Cunningham Studio in New-York, he has performed with David Gordon (Judson Church). He is interested in the impact of digital technology on society, in order to develop a meaningful relationship between dance and new media. He has choreographed more than 45 pieces which have been presented extensively in France (Avignon Festival, the Pompidou Center,

⁴ <http://www.k-danse.net/>

etc.) and in many countries (Europe, Central and South America, USA, Canada, North Africa, India, Pakistan). The choreographic approach of the K. Danse develops a contemporary movement language by the dialectic confrontation between the physical body (lived, experienced) and the visual body (seen, virtual). The performances question the borders between fiction and reality, the social construction of the body, and the psychological structures in human relationships. They investigate various digital technologies for the making of interactive immersive installations, performances integrating visual design and digital scenography, interactive real time image-sound environments, reactive costumes and augmented tactility, physiological sensors, semi-autonomous objects and interactive tracking, body sensors, interactive 3D and motion capture, telepresence via internet. The company develops four main areas of activity: performance making, pedagogical activities, art-science research, and organization of events. www.k-danse.net

5.3.2 From Imagery and Skinner Releasing Technique to VR



Figure 13-Ruth Gibson: dance in AR and VR environments

As being both a researcher, visual artist and choreographer Ruth has included in her presentation many examples of previous work where two different worlds are combined: Augmented and Virtual Reality and dance practice. Skinner Releasing Technique⁵, in which Ruth is a teacher, is a technique which relies a lot on using poetic visual and kinesthetic imagery and cultivating the imagery ability of the dancer to use it to enhance her movement. Using not solely mental ability and imagination, but also technology, Augmented and Virtual Reality, is another way to create an immersive experience for dance and opens many opportunities for different visual metaphors.

Ruth Gibson, visual artist and choreographer She works across disciplines to produce objects, software and installations in partnership with artist Bruno Martelli. She exhibits in galleries and museums internationally creating award-winning projects using computer games, virtual reality, print and video. A Senior Research Fellow in the Centre for Dance Research, Ruth investigates and creates new performance spaces using digital technology. Her commitment to the field of interdisciplinary and collaborative research was recognized in 2010 when she was awarded a three year Arts and Humanities Research Council (AHRC) Creative Fellowship to examine image

⁵ <http://www.skinnerreleasing.com/>

interpretation through motion capture, dance and computer visualization. She has received numerous awards including a National Endowment for Technology and the Arts (NESTA) Innovation Award for SwanQuake and a Henry Moore Foundation New Commission forVISITOR. Her first work with Martelli Windowsninetyeight won a British Academy of Film and Television Award (BAFTA) nomination for Interactive Art. More recently she won the Lumen Prize for MAN A, an augmented reality project. Ruth has worked as a motion capture performer, supervisor and advisor for Vicon, Motek, Animazoo, Televirtual and for the BBC. Skinner Releasing Technique underpins her practice, she is a certified SRT teacher and combines the technique with her performance technology research.

5.3.3 Can the expressiveness of movement be measured?

In this presentation with the intriguing title "can the expressiveness of movement be measured" professor Camurri showed various examples of research technologies which have been applied in different contexts to measure and investigate non-verbal communication, movement, and art-technology collaborations. During his talk, he presented recent and current research outcomes, aiming at designing and developing interactive experiences focusing not only on the shape of movement and symbolic meaning, but mainly on the qualitative aspects of movement, which are considered to be the characteristics of movement that define the expressive content of the movement and perhaps differentiate a competitive dance performance from a strict execution of movement sequences. In addition, professor Camurri has explained relevant examples, which were also shown by him and his team in the demo installation (see next section). Some of this relevant work was part of the outcomes or has been integrated in other EU projects such as DANSE⁶, which is still active, ILHARE⁷ and Metabody⁸.

Antonio Camurri (University of Genoa) is a senior HCI researcher Antonio holds a PhD in Computer Engineering, full professor at University of Genova where he teaches human computer interaction. His research interests include multimodal interfaces and interactive systems, kansei information processing, computational models of non-verbal multimodal expressive gesture, emotion, and social signals, and multimodal systems for theatre, music, dance, museums, therapy and rehabilitation. Founder and scientific director of InfoMus Lab and of Casa Paganini - InfoMus Research Centre (www.infomus.org) at University of Genoa, member of the Executive Committee of the IEEE CS TC on Computer Generated Music, founding member of the Italian Association for Artificial Intelligence, Associate Editor of Journal of New Music Research (Taylor & Francis); author of more than 150 publications in international scientific journals and conferences. Coordinator and principal investigator in EU projects (IST FP5 and FP6, ICT FP7, H2020, Culture, Erasmus Intensive programs, Cost Action, CRAFT), co-owner of patents on software systems, and responsible for University of Genoa of industry contracts. He is currently Coordinator of the EU Horizon 2020 ICT Project DANCE (dance.dibris.unige.it)⁹.

⁶ <http://dance.dibris.unige.it>

⁷ <http://www.ilhaire.eu>

⁸ <http://metabody.eu>

⁹ www.casapaganini.org.

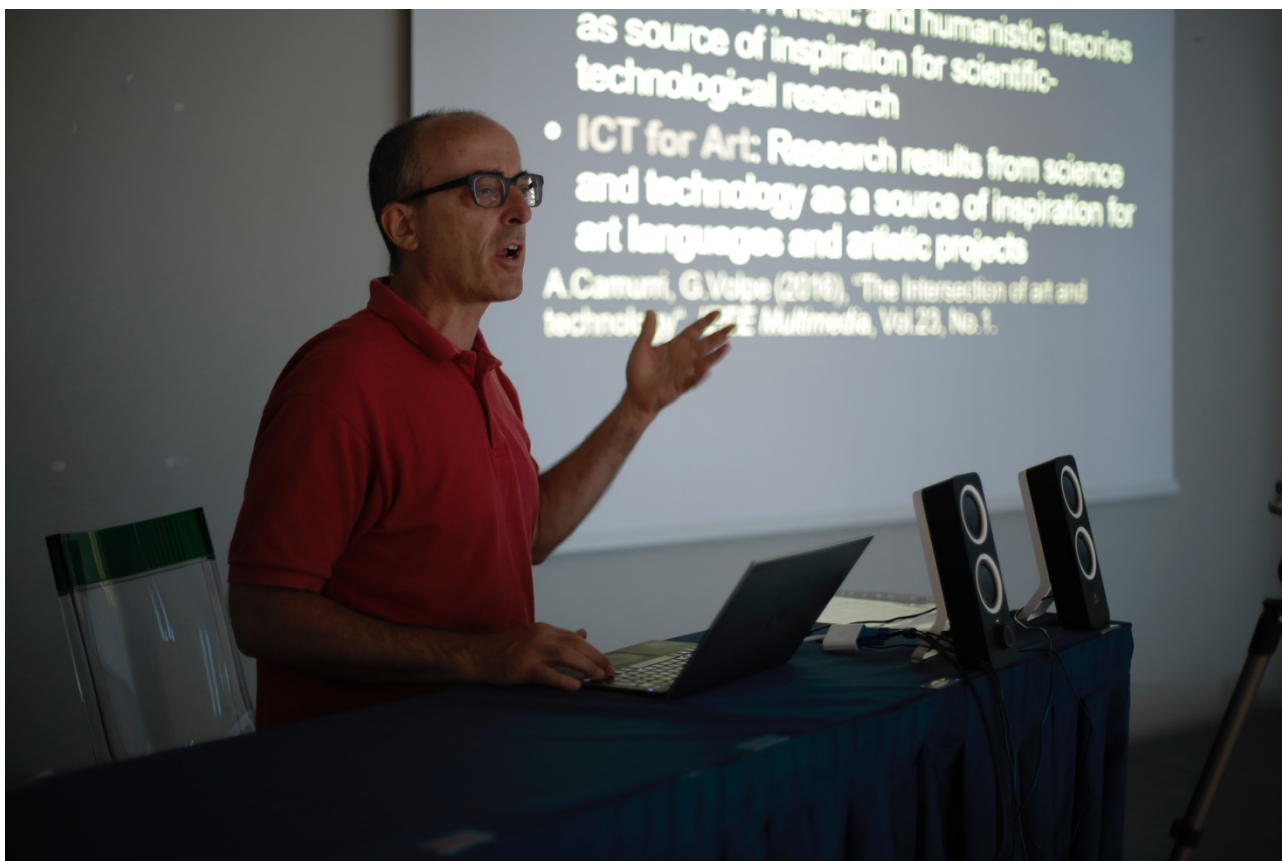


Figure 14-Antonio Camurri presenting at WhoLoDancE Workshop

6 Hands-On session

The objective of the hands on session was to consolidate in a creative manner the information and experiences gathered by the participants during the MOCO demo session and the Workshop talks. As the participants formed a diverse, multi-disciplinary group of experts in areas like dance, movement, whole body interaction, music, etc, the hands-on session would be an ideal opportunity to familiarize them with the practical aspects of the WhoLoDancE concepts, objectives and challenges.

During the planning of the Workshop it was decided that the most interesting aspects to combine and focus on, both for the participants and the project needs would be (a) the learning principles, (b) the movement principles, (c) the learning scenarios and (d) the available technologies.

To prepare the participants for the hands-on group session a presentation of these project aspects was made by Katerina El Raheb and the main points of interest were made available to the participants in the form of cards as props for the hands-on session (Figure 15). Appendix (section 12.5 Hands On Material) presents the cards made available to participants.



Figure 15-Hands On Participant exploring the cards

The objective of the activity would be for the participants to work in groups to propose dance learning scenarios focusing on learning principles, movement principles and technologies of their choice, for a particular dance genre. The hands-on session lasted 2 hours, from 15:00-17:00 and was followed by the presentation of the results and discussion. The Workshop concluded at 18:00. The rest of the section presents the activities that took place during the hands-on session.



Figure 16 The WhoLoDancE Workshop hands on session cards

Step 1 – Selection and distribution of participants in groups

During the coffee break when the list of actual attendees was formed and available, the organizers reviewed it in terms of expertise. The objective was to assign participants in multi-disciplinary groups according to expertise and interests so as to result in four groups, one per dance genre (folk dance, flamenco, contemporary and ballet), where the combination of participants would contribute to the formulation of interesting learning scenarios.

After the initial selection some of the participants assigned to other groups expressed the will to participate in the contemporary dance group. Furthermore, special attention was given to assign in each group an expert in the specific genre, so as to be able to provide meaningful insight on the genre particularities and needs.

As a result, the final assignment per group was:

- Folk dance: 6 participants
- Flamenco: 5 participants
- Contemporary: 10 participants
- Ballet: 6 participants

The participants moved with their group to different positions in the room in order to work together in their assigned tasks.

Step 2 – Working in groups



Figure 17 Hands on session -working in groups

As a first step the organizers distributed to each group the supporting material, which consisted of the informational cards (Figure 16, Appendix 12.5) and a one-page Scenario description form (Appendix 12.6.1) which the participants would use to record their learning scenario(s). The work in each group took different directions, some starting from particular learning principles and movement principles and trying to devise meaningful scenarios for the particular genre, whereas in other cases more focus was given to theoretical discussion about the principles. At the end of the two-hour session all four groups had produced concepts for specific learning scenarios.

Step 3 - Presentations

At the end of the hands-on session the groups were asked to present their work. After a description of the proposed scenarios, for each dance genre, there was commenting and discussion on the movement principles and issues related to the particular genres in relation to the envisioned technological solutions.

WhoLoDancE Workshop, Thessaloniki 6-7 July 2016



WhoLoDancE Workshop scenario description form

D	Participants group: Muriel, Daniel, George, Paolo, Stella, Xanthippi
	Learning principle: Traditional / Generative / Reflexive.
	Movement principle: Weight / Coord / Gross vs fine / Rhythm / Directionality
	Dance genre: Flamenco
Scenario description:	
<p>Weight: Height of Line & Stability & Low (Vis) Learning Scenario: Traditional</p>	
<p>Coordination: Continuous color code of joints/trails indicate amount of coordination between joints Learning Scenario: traditional</p>	
<p>Directionality & Alignment: main directions (ie. ^{to} feet & spine) as arrows & deviations between arrows as fans Learning Scenario: traditional & generative</p>	
<p>Large vs Fine: ^{Multiple} Traces of Motion (for example for the fingers) - Directionality: Bands whose tilting is dependent on direction - Weight: with of Motion Traces Learning Scenario: Traditional & generative</p>	
<p>Rhythm: piano roll notation that shows rhythms of feet & voice & guitar & castagniettas Learning Scenario: Traditional</p>	

Figure 18- a screenshot of the notes of the WhoLoDancE scenario for Flamenco

The proposed scenarios will be included in deliverable D1.4 Definition of learning scenarios – Needs analysis. In Figure 18- a screenshot of the notes of the WhoLoDancE scenario for Flamenco is shown, while the rest of the screenshots and the form can be found in the Appendix in the section 12.6.

7 Demos

The WhoLoDancE Workshop participated in the joint MOCO demo session with two interactive installations related to dance education, the “Let’s move” interactive installation by the University of Genova and an interactive demonstration of the “Neural Narratives - Dance with Virtual Body Extensions”. Both the MOCO Conference and the WhoLoDancE Workshop participants had the chance to experience the demos during the joint demo session that took place the second day of the conference, Wednesday 2nd of July, 17:00-19:00.

The rest of the section presents briefly the two demos.

7.1 “Let’s move” – Interactive game installation

The demo “Let’s move” was designed to present the potential of sonification and cost effective motion capture devices (in this case mobile phone accelerometers) in the dance education field through an interactive game.

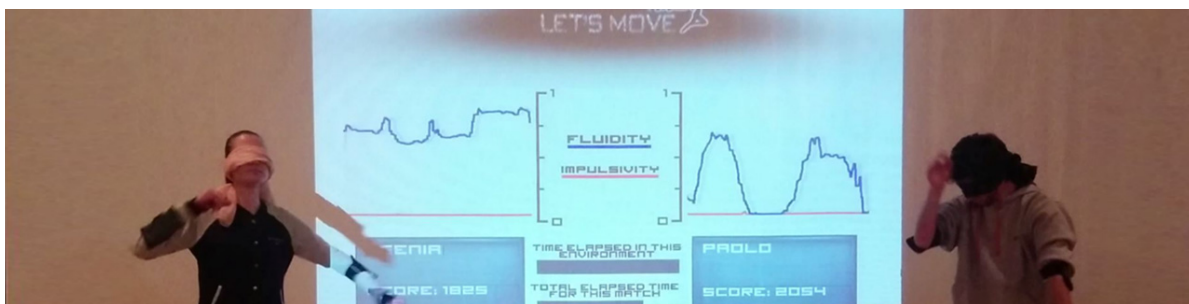


Figure 19 "Let's move" interactive installation demo

The game is a two-player challenge that proceeds in three phases:

Preparation: Firstly the two players are asked to write down their names on the participation list and state how long they would like to play. Each player is assisted in order to wear two smartphones attached to armbands and blindfolded.

Let’s Move: the system starts to play sonifications of movement features (fluid, rigid and impulsive). Each player is asked to interpret the sounds and translate them into movements. While the players are moving, graphs related to each feature are displayed in the interface, visible to the game spectators but not to the participants themselves.

Check your scores: depending on how much each player has been able to correctly translate the sonifications into features, a winner is determined according to the score.

The demo provoked the interest of several of the Workshop participants and was discussed as an interesting approach to using sonification as a means to promote expression through movement.

7.2 Neural Narratives - Dance with Virtual Body Extensions

The Neural Narratives project explores the application of simulation-based methods for creating artificial body structures that operate as semi-autonomous virtual extensions to a dancer's physical body. The simulation, visualization and sonification of these body structures allow a dancer to alter and diversify his or her bodily presence and movement possibilities. The purpose of this demonstration is to exemplify in an interactive installation setting some of the principles that led to the realization of the two dance performances "Neural Narratives 1: Phantom Limb" and "Neural Narratives 2: Polytopya".

Each presentation of the demonstration lasted approximately half an hour and was repeated upon participant request. The installation also ran in between presentations in an autonomous mode, allowing conference participants to engage with the installation at their own leisure.

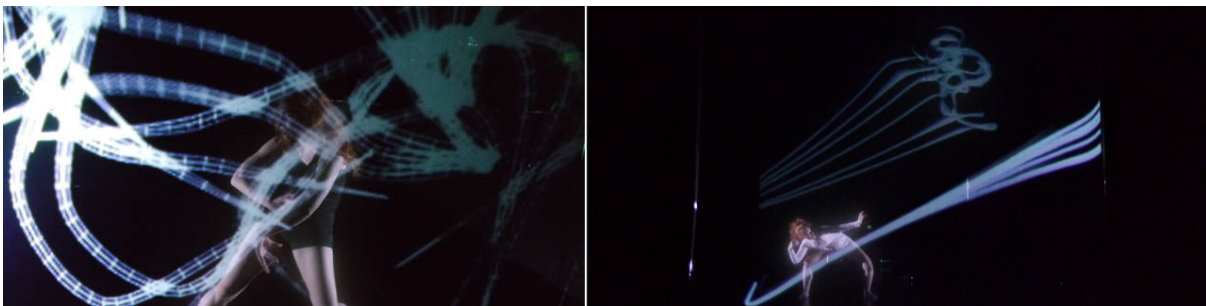


Figure 20 -Performance of Instituto STOCOS

The demo, in combination with the sensational performance by STOCOS during the Conference, provided to the Workshop participants a clearer view of real time visualization possibilities and motion capture for dance to feed the brainstorming process for innovative educational scenarios.

Finally, the second day of MOCO16, the 6th of July, closed with two performances and artistic installations. One of the performances was Neural Narratives-Polytopia (Figure 19) by Instituto STOCOS, partners in WhoLoDancE, which have been invited by the organizers of MOCO16. This was another point which highlights the close synergy and collaboration between MOCO16 and the WhoLoDancE consortium. Participants of the WhoLoDancE workshop had the chance to attend all the joint activities of MOCO16 and-WhoLoDancE from 5p.m. in the evening of 6th July, attending also all the other demos, artistic installations and performances.



Figure 21-Instituto STOCOS performing at MOCO16

8 Organizational Aspects

8.1 Venue

Thessaloniki (520 km. north of Athens) is the second largest city of Greece and the most important urban centre of the area. Built near the sea (at the back of the Thermaïkos Gulf), it is a modern metropolis bearing the marks of its stormy history and its cosmopolitan character, which give it a special beauty and charm.



Figure 22 Thessaloniki Concert Hall

8.2 Thessaloniki Concert Hall

Thessaloniki Concert Hall (Figure 22) was created in order to satisfy the need of the city for a venue that could house not only artistic, but also various other activities. The purpose of the Thessaloniki Concert Hall construction was to provide a contemporary cultural and conference center of international standards with the capacity to host various events, including concerts, ballet, theatre and opera, cultural and art expositions and conferences.

It was thus designed as a building that would satisfy all the requirements for this purpose as well as becoming a landmark, a jewel for the city. Therefore, the Thessaloniki Concert Hall has all the characteristics that make it important: exceptional acoustics, a main hall of 1.400 seats, a reception hall (foyer), the rooms of the administrative and technical offices, as well as all the necessary facilities for the support of the events (dressing rooms, rehearsal studios, repositories for instruments etc.). Special provision exists for people with disabilities, by means of appropriate seats and elevators. Moreover, the external appearance of the building has been entirely harmonized with the history of Thessaloniki, combining elements from its byzantine past as well as from its contemporary cosmopolitan role.

Designed by the renowned architect Arata Isozaki, M2 (building 2) adorns the city with a unique construction that epitomizes the virtues of modern architecture. Geometrical lines, extended glass surfaces and elements of steel compose an image of imposing simplicity, that comes as an antithetic, yet equivalent complement to the neighboring M1. Filled with natural light and enjoying a superb view to the sea, M2's foyer is a vast space of sophisticated aesthetics that develops in three levels and adjoins all of the Hall's important spaces. Equipped with cutting-edge technology and having an exceptional infrastructure, the Amphitheatron Hall can seat 500, whereas the Flat Hall, which can seat 300, can be subdivided by means of moveable partition to form three smaller rooms of 100 or two of 100 and 200 seats, thus able to host a wide range of events. Underneath the M2 building lies a two-level underground parking lot of 11.800 square meters, offering seats to over 230 vehicles, in order to enable the organization and attendance of events and preserve the city's urban environment. Consistent with its cultural role, the Thessaloniki Concert Hall is proud to house a Music Library and a Museum of Musical Instruments in its new building.

9 Dissemination of the event

Athena RC team have implemented a strategy for disseminating the event using its contact lists to promote the press release and announcement of the event in different websites, social media channels and email-lists. In addition, Athena RC has collaborated with Lynkeus and applied a complete dissemination strategy for the event through the official webpage, social media and contact lists. For analytical statistics see the Appendix (section 12.11). Finally, although all the activities of the workshop have been held in English, a Greek press release version has been distributed in order to contact more directly the local community of Thessaloniki and Greece in general (see Appendix -section 12.10).

WHOLODANCE HOME PROJECT DESCRIPTION MEDIA EVENTS CONSORTIUM PRESS KIT CONTACT

Wholodance's Workshop

Date(s)
06/07/2016-07/07/2016

Start/End
5:00 pm - 6:00 pm

Thessaloniki Concert Hall
Χδος 25 Μαρτίου & Παρاليا, -
Thessaloniki

Αγίου Δημητρίου Ορει Χρήστης Αναφορά σφάλματος χάρτη

Dancing with technologies: interact to learn, analyse to create

Workshop Description: WhoLoDancE workshop invites dance practitioners, dancers, choreographers, movement enthusiasts and professionals, technologies experts and researchers to explore and discuss how recent whole-body interaction technologies can enhance the process of dance learning and support creativity.

On **Wednesday 6th of July** participants will have the chance to experiment with specific demos and reflect on of the state-of-the art technologies in various contexts, in a joint demo-session with the MOCO16 symposium.

UPCOMING EVENTS
No events

WHOLODANCE KEYWORDS

3D Accelerometer Avatar Blending Engine
Bodily Knowledge
Choreography Create
Choreographies Cultural
Heritage Cultural Resources
Dance Data Dance Libraries dance
teaching Easy-to-use device
Educational Games EMG Hologram
holograms Holographic Display Immersive
Projection System Kinect Markers Mobile
Games Motion Capture Motion Capture
Database Ontology Similarity Search
Vocabularies

Figure 23- Workshop Announcement on the WhoLoDancE webpage

10 Evaluation of WhoLoDancE Workshop

The evaluation of the Workshop was accomplished through printed questionnaires (Section 12.9) distributed to all participants at the end of the workshop, explaining that the questionnaire would take them only a few minutes to complete and that it was anonymous. 16 participants returned a completed questionnaire.

In general, the results of the evaluation were very positive in all aspects of the Workshop, including organizational ones and the content and activities themselves. The following sections summarize these results.

10.1 General logistical organization

In terms of logistical organization, the general outlook was very positive. As Figure 24 shows, 94% of the participants felt that “overall the workshop was well organized”.

Overall the workshop was well organized

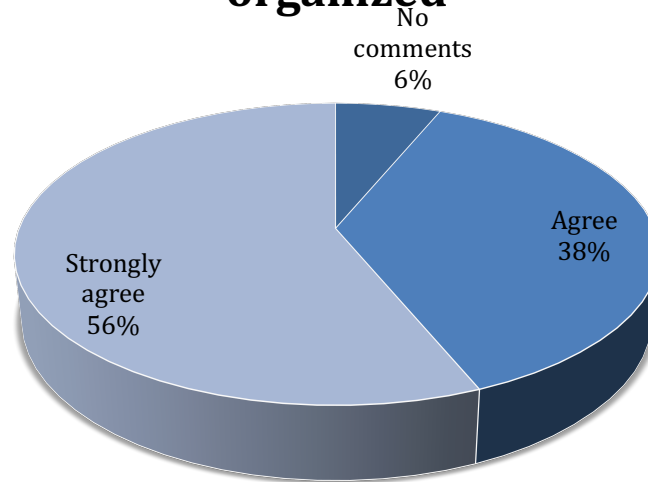


Figure 24 General participant outlook on the organizational aspects of the Workshop

Specifically, as Figure 25 and Figure 26 suggest, the registration process and information material offered for the workshop were clear and effective.

The registration process was effective

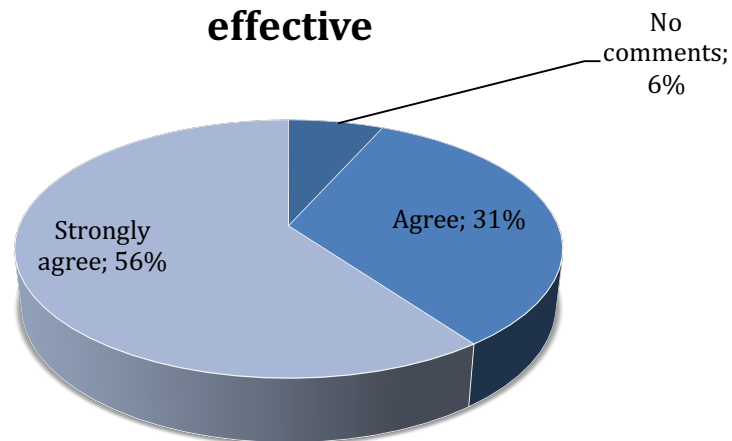


Figure 25 Workshop participant outlook of the registration process

Logistical information provided was useful and comprehensive

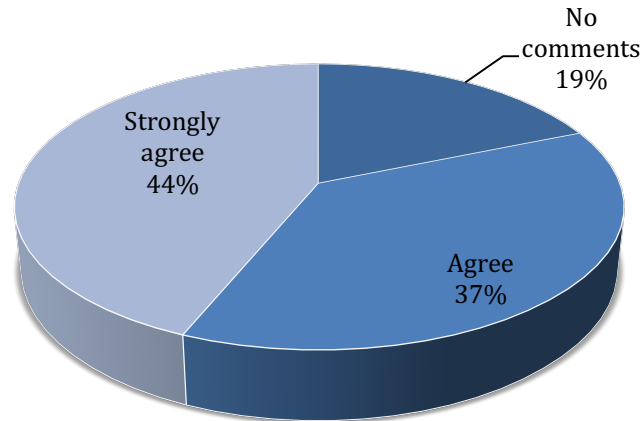


Figure 26 Workshop participants outlook on provided information

Lastly, as Figure 27 shows, 94% of the participants agreed that the facilities were suitable for the Workshop.

The venue facilities were suitable for the WhoLoDancE workshop activities

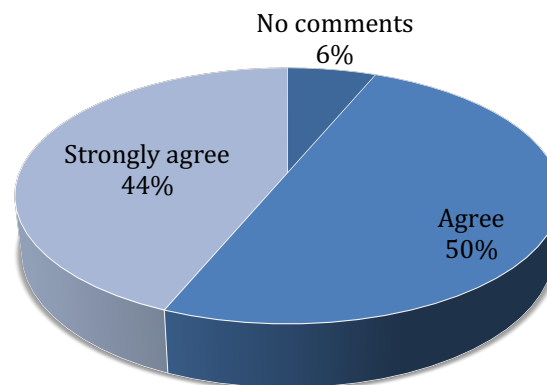


Figure 27 Workshop participants outlook on the Workshop facilities

A point mentioned in relation with the organization of the demo session of the Workshop is that during the joint MOCO and WhoLoDancE demo session there was no clear indication at the demo installations that they were related to the WhoLoDancE so the Workshop some of participants were not informed to dedicate more time to them and even some missed them all together.

10.2 Presentations, Discussion, Demos, Hands on

The evaluation results of the Workshop content are again positive. The questionnaire results confirm the general feeling of the organizers by observing the participants' reactions during the workshop.

As Figure 28 shows, the participants agreed that the presentations delivered valuable information and knowledge. As the organizers observed during the workshop talks, the participants seemed to be attentive and responded to the talks with several questions and comments.

Initial presentations delivered valuable information and knowledge

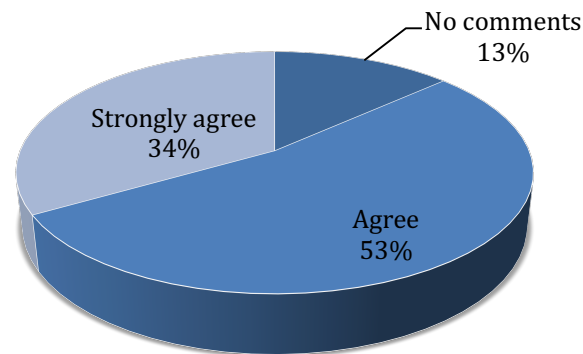


Figure 28 Workshop participants outlook on the presentations

Furthermore, as it was noticed by the organizers, all participants seemed to be actively involved during the hands-on break-out sessions, offering their opinions and ideas. They felt that discussions were interesting and constructive (Figure 31) and that the hands-on session offered opportunities for new knowledge (Figure 30). One of the participants, who gave a negative score to the hands-on session, commented that she would have expected more concrete knowledge on technologies from the hands-on sessions, whereas they have been more focused on the theoretical aspects of employing technology for dance learning.

The demo session was also considered useful and inspiring (Figure 29), although, as some participants mentioned, they were unsure as to which demos were more relevant to the Workshop so as to dedicate more time in them.

Demos on the 6th of July were inspiring and useful

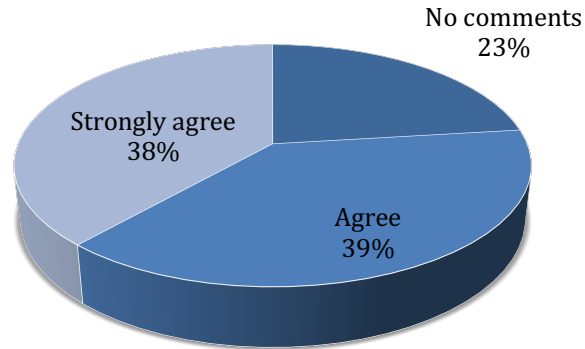


Figure 29 Workshop participants outlook on the joint demo session with MOCO

Hands on sessions offered concrete knowledge and training opportunities

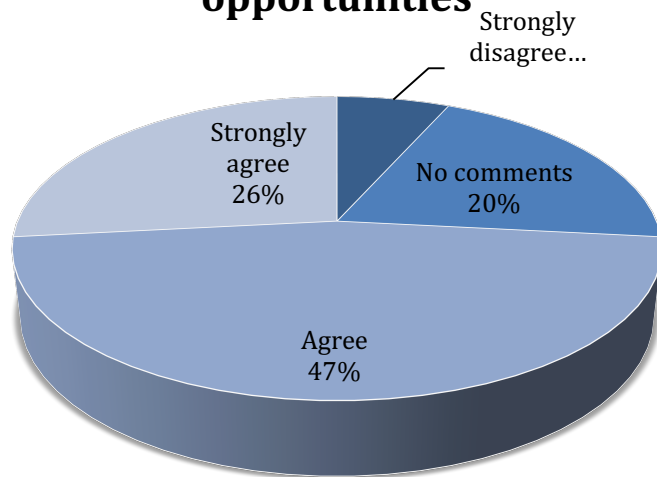


Figure 30 Workshop participants outlook on the hands-on session

Discussions were interesting and constructive

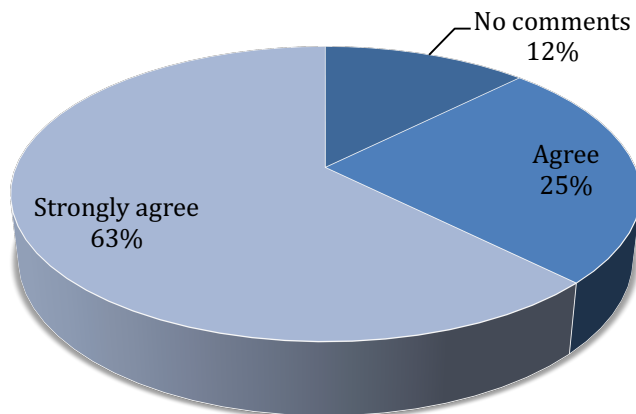


Figure 31 Workshop participants outlook on the discussions during the hands-on sessions

On the whole, the Workshop has been a successful event that served both as a means to disseminate the WhoLoDancE early research results and to bring together experts in the field, from within and outside the project partners in an informative and creative one-day event.

11 Conclusions

Overall, as also the evaluation data suggest the WhoLoDancE workshop has been a successful event and has fulfilled all three objectives that have been set: a) communicate the objectives of the project, b) network with the wider community, c) get concrete feedback on the primary conceptual frameworks of WhoLoDancE. The collaboration with MOCO16 significantly contributed to the achievement of the above objectives, and the venue has been proved to be an excellent choice for the event. The mixed background of the participants from choreographers and dance practitioners, to science technologists, artists and designers led to fruitful discussions and fertilized the hand-on sessions with new perspectives. Finally, the attendance to the workshop was satisfying, although the two days of MOCO16 which have been prior to the WhoLoDancE workshop were full of activities.

12 Appendix

12.1 List of Participants

	name	institution	job title	
1	Alborno Paolo	University of Genova	Phd student	project partner
2	Amalia Markatzi	LCGW		project partner
3	Antonio Camurri	University of Genova	Professor	project partner
4	Aristotelis Kasomoulis	Athena RC	Researcher	project partner
5	Edwin Morley- Fletcher	Lynkeus	President	project partner
6	Foteini Papadopoulou		choreographer, movement researcher	external expert
7	Frederic Fol Leymarie		Researcher	external expert
8	George Tsabounaris	Athena RC	Researcher	external expert
9	Jean-Marc Matos Juan Ignacio	K.Danse	choreographer	project partner
10	Mendoza		student	external expert
11	Katerina ElRaheb	Athena RC	researcher	project partner
12	Lida Theodorou		Phd student	external expert
13	Maria Christou			external expert
14	Massimiliano Zanoni	Politecnico di Milano	post doc	project partner
15	Mirko de Malde	Lynkeus		project partner
16	Muriel Romero	Stocos		project partner
17	Pablo Palacio	stocos		project partner
18	Philip Barnard			external expert
19	Sarah Fdili Alaoui	University Paris Sud	Professor	external expert
20	Stefano Di Pietro	Lynkeus	researcher	project partner
21	Svetlana Mironcika		Interaction designer and researcher	external expert
22	Vesna Petresin			external expert
23	Vladimir Viro	Peachnote	CEO	project partner

			Physisist research - theoretical modelling simulations	external expert
24	Xanthipi Zianni			
25	Karen Wood		Research Assistant Covuni	project partner
	Papadopoulou	University of		
26	Filomila	Surrey / RAD	Dance teacher	external expert
27	Hue Morgan	independent	Business manager	external expert
	Theodora	Open		
28	Kazakou	University	Dance practitioner	external expert
	Myrokidou			
29	Eleftheria	AUTH	postgraduate student	external expert
30	Stella Paschalidou	TEI Crete	member of staff	external expert
	Psomataki		Contemporary dance	
31	Marianthi		teacher, choreographer	external expert

12.2 Description -Call for Participation



WhoLoDancE Workshop

When: 6th and 7th of July

Where: Thessaloniki, Greece - **Venue:** Thessaloniki Concert Hall, Room CR2

Title: Dancing with technologies: interact to learn, analyse to create

Workshop Description: WhoLoDancE workshop invites dance practitioners, dancers, choreographers, movement enthusiasts and professionals, technologies experts and researchers to explore and discuss how recent whole-body interaction technologies can enhance the process of dance learning and support creativity.

On **Wednesday 6th of July** participants will have the chance to experiment with specific demos and reflect on of the state-of-the art technologies in various contexts, in a joint demo-session with the MOCO16 symposium.

The main day of the workshop **Thursday 7th of July** will start with presentations of the state-of-the art advancements on the intersection of embodied cognition, neuroscience, movement computing and human computer interaction and dance learning and making. In the afternoon, through interactive activities, hands-on sessions, panels and open discussion, the participants will have the chance to exchange reflections with each other on the material given during the previous sessions.

The WhoLoDancE workshop is organised by the WhoLoDancE EU funded project under H2020 and is a satellite event of the 3rd International Symposium on Movement Computing (MOCO16).

Target Group: Dance Education-Learning Experts, Dance Practitioners, Dance Teachers, Choreographers, Information and Communication Technologies Researchers, Movement Enthusiasts, Digital Artists

12.3 Agenda

Wednesday 6th of July

17:00-22:00 Posters, demos and artistic installations (joint event with MOCO)

For details please refer to <http://moco16.movementcomputing.org/index.php/2016-02-08-11-48-28/day-2>

Thursday 7th of July agenda

9:00-9:30	REGISTRATION	
9:30-10:00	Welcome and Project Overview	Katerina El Raheb Edwin Morley-Fletcher
10:00-11:00	Decoding the process of dance making, providing tools for the thinking body	Key-note speaker Philip Barnard
11:00-11:30	Coffee break	
11:30-12:00	Choreographic tools for technology design and Technology for artistic development	Jean-Marc Matos K.Danse
12:00-12:30	From Imagery and Skinner Realising Technique to VR	Ruth Gibson C-Dare Coventry University
12:30-13:00	Can the expressiveness of movement be measured?	Antonio Camurri University of Genova
13:00-13:15	Questions	
13:15-14:30	Lunch break	
14:30 -15:00	Dance Learning through digital interaction: what are the challenges?	Katerina El Raheb Vivi Katifori Athena-RC
15:00-17:00	Hands on-working session	
17:00-17:45	Panel discussion	

12.4 Speakers bios

Key-Note Invited Speaker



Philip Barnard, cognitive psychologist

Philip Barnard is a cognitive psychologist whose scientific studies were focused on real-world problems associated with mental health issues and technology design. He currently concentrates on Sci-Art collaborations. He worked for the UK Medical Research Council's Cognition and Brain Sciences Unit (CBSU) in Cambridge from 1972 to 2011, where he carried out basic research on how memory, attention, language, body states and emotion work together. He has published over 200 articles three books. He is now retired but remains a visiting researcher with the CBSU. Since 2003, he has been collaborating with Wayne McGregor | Random Dance (now re-named Studio Wayne McGregor) to develop productive synergies between choreographic processes and our knowledge of cognitive neuroscience.

WhoLoDancE workshop speakers



Jean-Marc MATOS, choreographer.

Dancer, choreographer and artistic director of the **Compagnie K. Danse**. Trained at the Cunningham Studio in New-York, he has performed with David Gordon (Judson Church). He is interested in the impact of digital technology on society, in order to develop a meaningful relationship between dance and new media. He has choreographed more than 45 pieces which have been presented extensively in France (Avignon Festival, the Pompidou Center, etc.) and in many countries (Europe, Central and South America, USA, Canada, North Africa, India, Pakistan). The choreographic approach of the **K. Danse** develops a contemporary movement language by the dialectic confrontation between the physical body (lived, experienced) and the visual body (seen, virtual). The performances question the borders between fiction and reality, the social construction of the body, and the psychological structures in human relationships. They investigate various digital technologies for the making of interactive immersive installations, performances integrating visual design and digital scenography, interactive real time image-sound environments, reactive costumes and augmented tactility, physiological sensors, semi-autonomous

objects and interactive tracking, body sensors, interactive 3D and motion capture, telepresence via internet. The company develops four main areas of activity: **performance making, pedagogical activities, art-science research, and organization of events.** www.k-danse.net



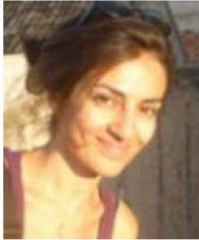
Ruth Gibson, visual artist and choreographer

Ruth Gibson works across disciplines to produce objects, software and installations in partnership with artist Bruno Martelli. She exhibits in galleries and museums internationally creating award-winning projects using computer games, virtual reality, print and video. A Senior Research Fellow in the Centre for Dance Research, Ruth investigates and creates new performance spaces using digital technology. Her commitment to the field of interdisciplinary and collaborative research was recognised in 2010 when she was awarded a three year Arts and Humanities Research Council (AHRC) Creative Fellowship to examine image interpretation through motion capture, dance and computer visualisation. She has received numerous awards including a National Endowment for Technology and the Arts (NESTA) Innovation Award for SwanQuake and a Henry Moore Foundation New Commission forVISITOR. Her first work with Martelli Windowsninetyeight won a British Academy of Film and Television Award (BAFTA) nomination for Interactive Art. More recently she won the Lumen Prize for MAN A, an augmented reality project. Ruth has worked as a motion capture performer, supervisor and advisor for Vicon, Motek, Animazoo, Televirtual and for the BBC. Skinner Releasing Technique underpins her practice, she is a certified SRT teacher and combines the technique with her performance technology research.



Antonio Camurri, HCI researcher

Antonio holds a PhD in Computer Engineering, full professor at University of Genova where he teaches human computer interaction. His research interests include multimodal interfaces and interactive systems, kansei information processing, computational models of non-verbal multimodal expressive gesture, emotion, and social signals, and multimodal systems for theatre, music, dance, museums, therapy and rehabilitation. Founder and scientific director of InfoMus Lab and of Casa Paganini - InfoMus Research Centre (www.infomus.org) at University of Genoa, member of the Executive Committee of the IEEE CS TC on Computer Generated Music, founding member of the Italian Association for Artificial Intelligence, Associate Editor of Journal of New Music Research (Taylor & Francis); author of more than 150 publications in international scientific journals and conferences. Coordinator and principal investigator in EU projects (IST FP5 and FP6, ICT FP7, H2020, Culture, Erasmus Intensive programs, Cost Action, CRAFT), co-owner of patents on software systems, and responsible for University of Genoa of industry contracts. He is currently Coordinator of the EU Horizon 2020 ICT Project DANCE (dance.dibris.unige.it). Web: www.casapaganini.org.



Katerina El Raheb, ICT researcher, dancer.

Katerina is a member of the Research and Development staff of MADgIK group at Athena-Research and Innovation Center in Information, Communication and Knowledge Technologies. As a research member of the team she has worked for several EU-funded interdisciplinary projects related to Digital Libraries, Data Research Infrastructures, and ICT for Cultural Heritage. She completes her PhD on Semantic Representation Analysis and Search for Dance and assists in teaching Human Computer Interaction at the Department of Informatics and Telecommunications, University of Athens. She holds a MSc. in Advanced Information Systems the same department, a BSc. in Ch. Engineering from the National Technical University of Athens. As a dance practitioner she is trained in different forms of dance, holds a Diploma from N. Kontaxaki Higher Professional Dance School for classic and contemporary dance, and has collaborated with various dance-theater companies in Greece.



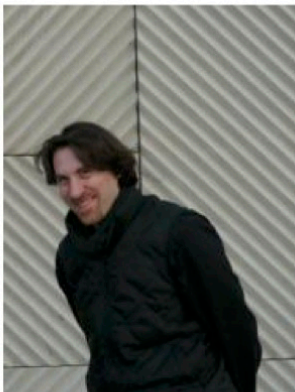
ViviKatifori: ICT researcher

Vivi Katifori is a researcher in information visualization, profiling and personalization, interactive digital storytelling, and human-computer interaction. She holds a PhD degree (her dissertation titled “An intelligent system for managing historical archive documents”), an M.Sc. in Signal Processing for Telecommunications and Multimedia (2003), and a B.Sc. in Informatics and Telecommunications (2000), all from the University of Athens. She works as a researcher in the Management of Data, Information, and Knowledge Group, in Athena Research Center. Dr Katifori has participated in several EU and national RTD projects since 1999, mostly in the areas of virtual museums and digital libraries, working initially as a programmer and later as an analyst and designer as well as a project manager. She has authored several papers in different research areas of computer science. Recently (2011-2014), Dr. Katifori worked on the user interface and interaction design, authoring, and usability and user experience evaluation of the CHESSE project (<http://www.chessexperience.eu/>) and she is currently a member of the Wholodance project team.



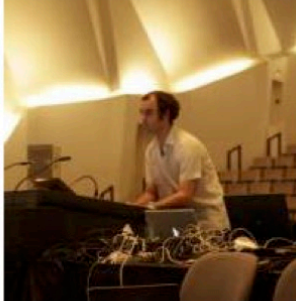
Edwin Morley-Fletcher is the founder of Lynkeus, an independent strategy consultancy, which works to identify and promote cutting-edge technological solutions to complex socio-economic problems in a variety of areas. He has been former Professor of Administration Science and of Public Policy at the Faculty of Politics, University of Rome “La Sapienza”, and was chairman of the Welfare Market Committee within the Italian National Council for Economy and Labour (CNEL). Edwin was also Senior Fellow at the School of Public Policy at the UCLA and former Jean Monnet Fellow at the EUI. He has coordinated and managed a number of EU Funded Projects such as Health-e-Child (2006-2010), Sim-e-Child (2010-2012), MD-Paedigree (2013-2017), Cardioproof (2013-2016). Edwin has additionally played a key role in Avicenna (2013-2015), and most recently he is coordinator of WhoLoDancE (2016-2018), a research and innovation action funded under H2020, which aims to make use of Motion Capture Technology and advanced visualization tools such as Holographic Projections, to preserve the European cultural heritage while providing innovative solutions for Dance teaching and choreographing.

Workshop Demos



Daniel Bisig, researcher and artist

Daniel Bisig holds a Master's and PhD degree in Natural Sciences. He is active as a researcher and artist in the fields of artificial intelligence and generative art. He has worked as a researcher at the Institute for Biochemistry at the Swiss Federal Institute of Technology and the the Artificial Intelligence Laboratory of the University of Zurich. He is currently employed as a senior research associate at the Institute for Computer Music and Sound Technology ICST of the Zurich University of the Arts. As part of his artistic activities, he has realized algorithmic films, interactive installations and audiovisual performances, some of them in collaboration with musicians and choreographers. The derivation of generative algorithms and interaction techniques from biomimetic simulations forms a central

**Pablo Palacio, independent composer**

His work has been focused on the transformation and perceptual connections of sonic images. He created with Muriel Romero Instituto Stocos, a project focused on the analysis and development of the interaction between body gesture and sonic gesture, integrate in a performative context abstractions taken from other disciplines such as artificial intelligence, biology, mathematics or experimental psychology. He has held residences in Spain, Switzerland, Germany and Lebanon. His pieces have been performed in many countries from Europe and United States to China, India, Brazil, or North Africa, and edited by the label Sub Rosa in Anthology of Noise and Electronic Music. He is also an active composer for dance and performing arts receiving designing interactive musical instruments for people with disabilities. He also divulges new perspectives and technologies in sound composition through publications, workshops, and talks in several conservatories, universities and institutions and he is currently co-organising the European project Metabody.

**Muriel Romero, dancer and choreographer**

Her work is currently focused on the investigation of generative choreographic structures and the incorporation of abstractions taken from other disciplines such as music or mathematics. With her company Instituto Stocos, she has created several choreographies blending interactive sonic extensions and visual imagery with body movement. Some of these works are Acusmatrix, Catexis, Stocos, Neural Narratives1: Phantom Limb and Neural Narratives2: Polytopya. She has won several international prizes such as Moscow International Ballet Competition, Prix de la Fondation de Paris-Prix de Laussane and Premio Nacional de Danza. She's been first soloist in some the most prestigious companies around the world including Deutsche Oper Berlin, Dresden Semper Oper Ballet, Bayerisches Staatsballet Munchen, Gran Théâtre de Genève o Compañia Nacional de Danza. During her trayectory she's worked with some choreographers of our time like W. Forsythe, J. Kylian, Ohad Naharin or Saburo Teshigawara. She teaches at the Professional Conservatory of Madrid.

12.5 Hands-On Material

12.5.1 Dance Genres

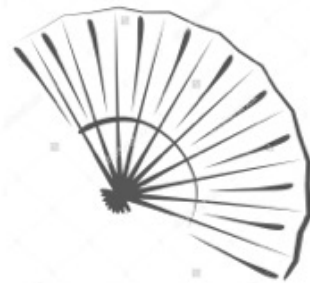
ballet

DANCE GENRE



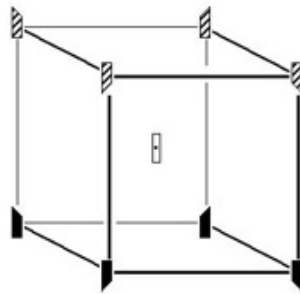
flamenco

DANCE GENRE



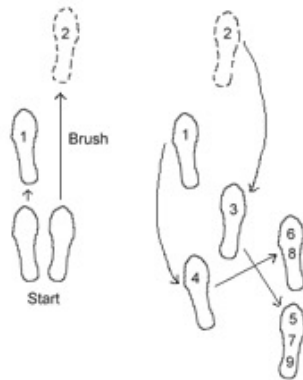
contemporary

DANCE GENRE



Greek folk

DANCE GENRE



12.5.2 Movement Principles

Symmetry

MOVEMENT PRINCIPLE

The use of the two sides of the body (right vs. left side, arm, leg) etc., both in position and while moving.

The ability to do the same thing simultaneously or sequentially using both sides.

Each Movement Principle includes also the opposite.

Playing with asymmetry and isometry is included in this principle.



Directionality

MOVEMENT PRINCIPLE

The awareness of body orientation in space.

Usually this is derived from the position of hips and torso, but interesting postures might derive from the various directions of each body part in relation to a space, e.g., the audience, the camera, the studio.



Balance

MOVEMENT PRINCIPLE

The ability to stand and move in balance, but also off balance, depending on whether the line of gravity falls within the line of your supporting limb(s) or not.

The awareness of the different vector forces on your body.



Alignment – posture stability

MOVEMENT PRINCIPLE

The awareness of the geometry of the body (e.g., the axes (sagittal, horizontal, vertical) and planes, and how the relations of different body parts and joint create “lines” in the body shape.



Weight bearing vs. gesturing

MOVEMENT PRINCIPLE

This principle is about the difference between movement that is concerned with bearing weight (weight transference, stepping, hand stands, etc.) and movement (gesture) that is not bearing weight but which has intention/expression



Gross vs. Fine Motorics/Isolation/Articulation

MOVEMENT PRINCIPLE

The ability to distinguish small movements done by specific body parts e.g., hand or one hip, or one shoulder, without moving the rest of the body, vs. moving larger parts of the body as a whole.



Motion through space

MOVEMENT PRINCIPLE

Progressing through space or towards particular directions, paths etc. "Moving through space vs. dancing on the spot. Also the body as moving point in space, or as continuously changing moving volume.



Coordination

MOVEMENT PRINCIPLE

One of the most important skills practiced in every kind of dancing, which is about the ability to synchronize or not different parts of the body that can move in the same or separate tempos.



Rhythm and phrasing

MOVEMENT PRINCIPLE

The ability to move in particular (predefined or improvised) rhythms. This principle is also about how the dancer's movement is related or not to the music and its rhythmical aspects (tempo, time signature, rhythmic patterns etc.).



Stillness

MOVEMENT PRINCIPLE

While movement seems to be the essence of dance, a dancer needs to improve her/his ability to remain still, whether this is a part of a choreography or interpretation of rhythmical pauses, and exercise for balance and isolation of body parts.

Stillness is usually connected to the notion of being present and has been investigated in previous interdisciplinary work.



12.5.3 Learning Principles

Mimesis

LEARNING PRINCIPLE

Imitation/copying - the teacher is teaching the student a specific movement or sequence of movements



Generative

LEARNING PRINCIPLE

The teacher gives the student an exercise/phrase/sequence as a starting point to achieve technical and creative goals



Reflexive

LEARNING PRINCIPLE

The student is given a movement task/image/to work with, improvising without trying to achieve a specific phrase/sequence and the teacher provides feedback.



Traditional method

LEARNING PRINCIPLE

Command style teaching where the teacher gives direct and precise commands.

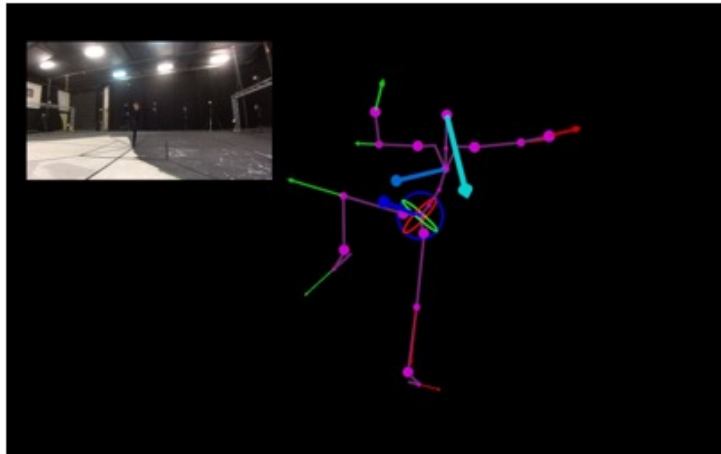
The teacher makes all the decisions and the learner follows these decisions. The method requires precision and accuracy of performance



12.5.4 Visualizations and Avatars

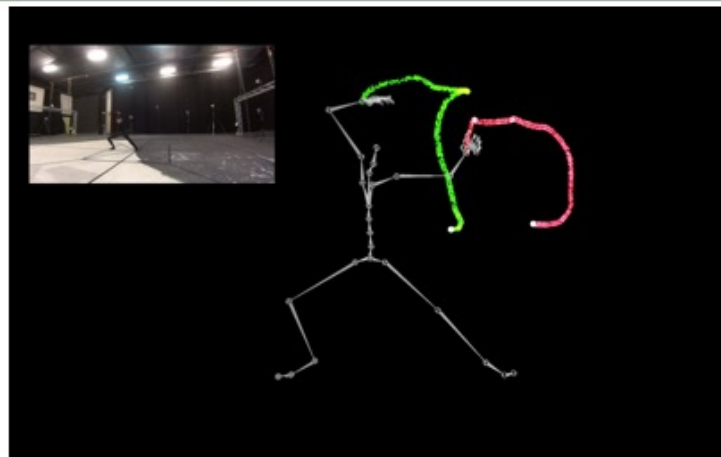
Arrows model

VISUALIZATION



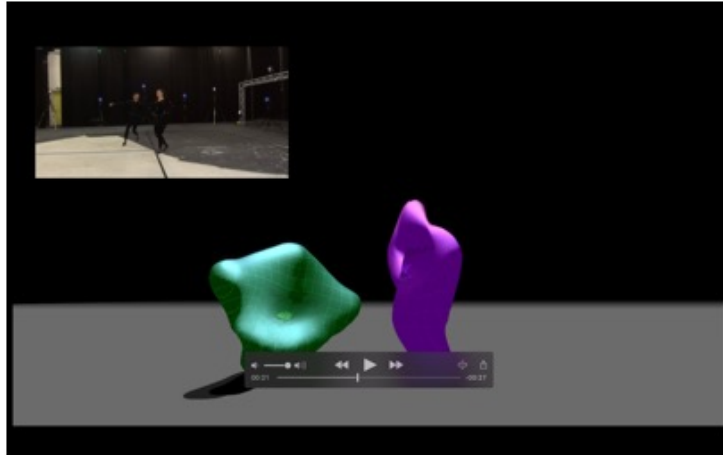
Motion trails

VISUALIZATION



Volume envelope


VISUALIZATION



12.6 Hands on Scenarios

12.6.1 Description Forms

WhoLoDance Workshop, Thessaloniki 6-7 July 2016

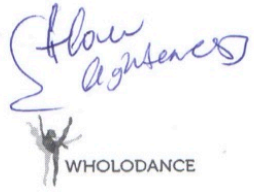


WhoLoDance Workshop scenario description form

+


Participants group:
Learning principle:
Movement principle:
Dance genre:
Scenario description:

12.6.2 Screenshots of the scenarios



WhoLoDancE Workshop, Thessaloniki 6-7 July 2016

WhoLoDance Workshop scenario description form

Participants group:	Katerina @ Raheb / Pablo Palacios / Katerina's Aristotelis Dimitra Stavropoulou / Maria Christa
Learning principle:	Reflexive
Movement principle:	Alignment / Symmetry / Balance / Directionality
Dance genre:	Ballet
Scenario description:	<p><u>task</u> → pirouette with the alignment augmented mirror (during and after.)</p> <p>planes / work with eg 3 points in space sonification? (Arrows model)</p> <p>biomechanical / record to see after less is more! audio is more reflexive</p> <p>Being in balance /  in balance <u>plans</u></p> <p>Directionality → intention → towards kneet / → challenging to capture turns requires more 2 dimensional moments</p> <p>points of resist as a resistance →</p>

WhoLoDancE Workshop, Thessaloniki 6-7 July 2016



WhoLoDancE Workshop scenario description form

D	Participants group: Muriel, Daniel, George, Paolo, Stella, Xanthippi
	Learning principle: Traditional Generative / Reflexive.
	Movement principle: Weight / Coord / Gross vs fine / Rhythm / Directionality
	Dance genre: Flamenco
Scenario description:	
<p>Weight: Height of Line & Stability & Low (Vis) Learning Scenario: Traditional</p>	
<p>Coordination: Continuous color code of joints/trails indicate amount of coordination between joints Learning Scenario: traditional</p>	
<p>Directionality & Alignment: main directions (ie. ^{to} feet & spine) as arrows & deviations between arrows as fans Learning Scenario: traditional & generative</p>	
<p>Large vs Fine: ^{Multiple} Traces of Motion (for example for the fingers) - Directionality: Bands whose tilting is dependent on direction - Weight: with of Motion Traces Learning Scenario: Traditional & generative</p>	
<p>Rhythm: piano roll notation that shows rhythms of feet & voice & guitar & castagniettas Learning Scenario: Traditional</p>	

WhoLoDancE Workshop, Thessaloniki 6-7 July 2016



WhoLoDance Workshop scenario description form

Participants group:	Amalia, Antonio, Stefano, Karen, Phil, Massimo Iano
Learning principle:	Amnesia Generative
Movement principle:	Directionality, Rhythm + Phrasing
Dance genre:	Greek/Folk

Scenario description:

Complete Beginner

- danced in a semi-circle, as a group
- hold hands, balance
- walk in room/space, follow first dancer
- teacher claps hands to help student with rhythm of walking.

Phil

- error signature is crucial, helps learner know how they are off. Like biofeedback.

Sound as feedback mechanism. Each dancer has individual feedback as well as group feedback.

Could use accelerometers - rhythm and lightness in order to get quality of steps.

WhoLoDancE Workshop, Thessaloniki 6-7 July 2016



WhoLoDancE Workshop scenario description form

Participants group:	Antonio, Amalia, Stefano, Karen, Massimiliano
Learning principle:	Mimesis
Movement principle:	Directionality
Dance genre:	Greek folk

Scenario description:

Expert / Leader Dancer

- Born dancer
- Teaches in private.
- Obligated to watch videos to understand cultural context.
- Avatar could be used, with music, Arrows Model

12.7 MOCO-dissemination material

12.7.1 English version poster

THESSALONIKI

MOCO'16

**3RD INTERNATIONAL SYMPOSIUM
ON MOVEMENT AND COMPUTING**
5 - 6 July 2016 - "Megaron"
Thessaloniki, Greece

5 - 6 July
*Registration
required*
**Plenary
sessions**
Unlocking
hidden components
in human creativity

6 July
7 PM
Free entrance

STOCOS
Contemporary dance
performance enhanced by
computer-mediated interaction

**Artistic demonstrations
and installations**

Ideasmos
A musical piece for string quartet, intangible
musical instruments and percussion performance

7 July - Satellite event
Free entrance

WhoLoDancE Workshop
Dancing with technologies : interact to learn, analyse to create

ORGANIZING INSTITUTIONS

moco16.movementcomputing.org
Follow us on Facebook: MOCO'16 @MOCO_2016

GOLDEN SPONSORS:

SPONSORS:

SUPPORTED BY:

SUPPORTING EU-FUNDED PROJECTS:

12.7.2 Greek version

THESSALONIKI

**ΚΑΛΙΤΕΧΝΙΚΟ ΠΡΟΓΡΑΜΜΑ
στο πλαίσιο του
3RD INTERNATIONAL SYMPOSIUM
ON MOVEMENT AND COMPUTING**

6 Ιουλίου
7μμ
ΕΙΣΟΔΟΣ ΕΛΕΥΘΕΡΗ
ΜΕΓΑΡΟ ΜΟΥΣΙΚΗΣ- Κτίριο Μ2

Κίνηση

Νέες Τεχνολογίες

**Αλληλεπιδραστικά
Installations**

Καινοτομία

Εικονική Πραγματικότητα

STOCOS
Παράσταση σύγχρονου χορού βασισμένη σε αλληλεπίδραση μέσω υπολογιστή

15 PAIRS OF MOUTH
Sculptural installation, by Esmeralda Kosmatopoulou

**ARTISTIC DEMONSTRATIONS
AND INSTALLATIONS**

IDEASMOS
Μουσικό έργο για κουαρτέτο εγχόρδων, άυλα μουσικά όργανα και κρουστά, της Βασιλικής Τσεκουραπούλου

COMMUNICATION SPONSORS

Follow us on facebook: MOCO'16

@MOCO_2016

moco16.movementcomputing.org

ORGANIZING INSTITUTIONS

ARISTOTLE UNIVERSITY OF THESSALONIKI
UNIVERSITE PARIS8
UNIVERSITY OF MACEDONIA

GOLDEN SPONSORS

SPONSORS

SUPPORTED BY

SUPPORTING EU-FUNDED PROJECTS

12.8 Wholodance Poster presented in MOCO16



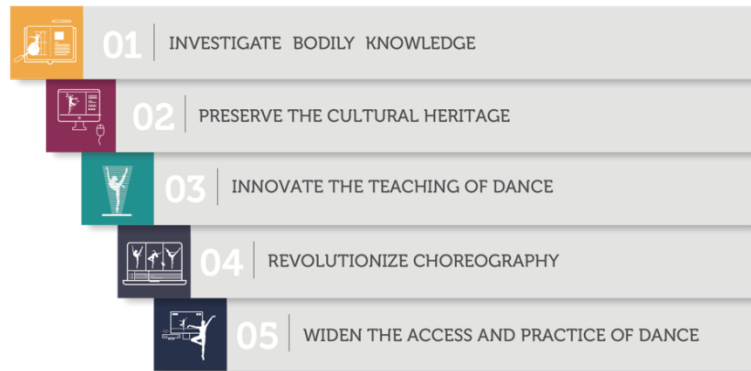

Starting Date: January 1st, 2016
Duration: 36 months
Total EU Contribution: € 3.332.585,00

WHOLODANCE: TOWARDS A METHODOLOGY FOR SELECTING MOTION CAPTURE DATA ACROSS DIFFERENT DANCE LEARNING PRACTICES

Wholodance's Partners¹

WhoLoDancE is a three years (January 2016-December 2018) Research and Innovation Action funded under European Union H2020's Program aiming at designing and developing whole body interaction tools to support dance learning attracting from four use cases:

- 1 **Classical ballet**
- 2 **Contemporary dance**
- 3 **Flamenco**
- 4 **Greek folk dance**



LEARNING PRACTICES LEARNING PRINCIPLES MOVEMENT PRINCIPLES

Aside from the specifics of the numerous dance teaching techniques available, there are teaching methods that connect all studio based teaching of dance and whilst these methods are moderated according to context (whether within a professional/vocational teaching context, or a recreational context, etc.) and according to genre, there are underlying principles that pertain to all good teaching of dance. The WhoLoDancE multimodal repository will enable the usage of data analytics supporting the identification of effective teaching methods and practices showing commonalities and differences between them to support the future teaching of dance within a variety of contexts.

We aim for a systematic way of selecting shots beyond the differences of the kinetic material. A focus group, with the participation of dance teachers of all genres, agreed that the following **Learning Principles** summarize the different teaching styles applied in different practices:



Following the approach of the interdisciplinary focus group, we proposed ten essential **Movement Principles** that can summarize the embodied skills which are to be improved in each dance learning process, independent of the dance genre and style. From our preliminary investigations, we defined a first list of movement principles

1. Symmetry
2. Directionality
3. Balance
4. Alignment – Posture Stability
5. Weight bearing vs. Gesturing
6. Gross vs. Fine Motorics/Isolation/Articulation
7. Coordination
8. Motion Through Space
9. Rhythm and phrasing
10. Stillness

AUTHORS Antonio Camurri | Katerina El Raheb | Oshri Even-Zohar | Yannis Ioannidis | Amalia Markatzi | Jean-Marc Matos | Edwin Morley- Fletcher | Pablo Palacio Muriel Romero | Augusto Sarti | Stefano Di Pietro | Vladimir Viro | Sarah Whatley

CONSORTIUM



12.9 Evaluation Questionnaire



WhoLoDancE Workshop Evaluation Questionnaire

1. Your profile

Please indicate your professional category

- | | |
|--|--|
| <input type="checkbox"/> Dancer/Dance practitioner | <input type="checkbox"/> Technology Industry Professional |
| <input type="checkbox"/> Dance Educator | <input type="checkbox"/> Human Computer Interaction Researcher |
| <input type="checkbox"/> Dance Researcher | <input type="checkbox"/> Information Technology Researcher |
| <input type="checkbox"/> Choreographer | <input type="checkbox"/> Visual/New Media Artist |
| <input type="checkbox"/> Other (please specify) | |

(more than 1 answer is possible)

2. General logistical organisation

	Strongly Disagree	Disagree	No comments	Agree	Strongly Agree
2.1 The registration process was satisfying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2 Logistical information provided was useful and comprehensive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.3 The venue facilities were suitable for the WhoLoDancE Workshop activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4 Overall, the Workshop was well organised	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2.5 Do you have any other comments?



3. Presentations, Discussion, Demos and Hands on

	Strongly Disagree	Disagree	No comments	Agree	Strongly Agree
3.1 Initial presentations delivered valuable information and knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2 Discussions were interesting and constructive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3 Demos on the 6th of July were inspiring and useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.4 Hands on sessions offered concrete knowledge and training opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3.5 Do you have any other comments?

4. How did you know about WhoLoDancE

Please indicate

- MOCO2016
- Facebook, twitter
- Press Release
- Other (please specify)

(more than 1 answer is possible)

12.10 Press Release in Greek



ΔΕΛΤΙΟ ΤΥΠΟΥ

Εργαστήριο

Χορός και Τεχνολογία: Μαθαίνουμε διαδρώντας, δημιουργούμε αναλύοντας

6-7 Ιουλίου 2016, Μέγαρο Μουσικής Θεσσαλονίκης

Πώς συνδέονται οι σύγχρονες τεχνολογίες ενσώματης διάδρασης με την εκμάθηση χορού και την ανθρώπινη δημιουργικότητα;

Στις **6 και 7 Ιουλίου 2016** ένα διαφορετικό εργαστήριο διοργανώνεται στο Μέγαρο Μουσικής Θεσσαλονίκης: **‘Χορός και Τεχνολογία: Μαθαίνουμε διαδρώντας, δημιουργούμε αναλύοντας’**.

Το Εργαστήριο απευθύνεται σε δασκάλους χορού, χορευτές, χορογράφους, επαγγελματίες της κίνησης, ειδικούς στις τεχνολογίες πληροφορίας και δεδομένων, καθώς και ερευνητές. Οι συμμετέχοντες θα εξερευνήσουν τον τρόπο με τον οποίο νέες τεχνολογίες πληροφορικής μπορούν να υποστηρίξουν τη διαδικασία διδασκαλίας και εκμάθησης χορευτικής κίνησης.

Καθώς το Εργαστήριο είναι δορυφορική εκδήλωση του συνεδρίου [MOCO16 \(3rd International Symposium on Movement Computing, 5-6 Ιουλίου, Θεσσαλονίκη\)](#), οι συμμετέχοντες θα έχουν την ευκαιρία να πειραματιστούν με συστήματα επίδειξης τεχνολογιών και να λάβουν μέρος σε ανοικτή συζήτηση από κοινού με τους συνέδρους του MOCO16. Στις 7 Ιουλίου, οι παρουσιάσεις θα επικεντρωθούν σε σύγχρονες καλλιτεχνικές εξελίξεις που πηγάζουν στο σταυροδρόμι της εκμάθησης χορού και της χορευτικής έκφρασης με τις τεχνολογίες ενσώματης νόησης, τη νευροεπιστήμη, την επικοινωνία ανθρώπου-μηχανής. Το απόγευμα ωστόσο, σε μία σειρά από δραστηριότητες, οι συμμετέχοντες θα έχουν την ευκαιρία να ανταλλάξουν μεταξύ τους ιδέες και απόψεις σχετικά με το υλικό που θα έχουν λάβει στις προηγούμενες συνεδρίες.

Το Εργαστήριο διοργανώνεται από το [Ερευνητικό Κέντρο “Αθηνά”](#) στο πλαίσιο του Ευρωπαϊκού έργου WhoLoDancE/HORIZON2020.

Για να εγγραφείτε στο Εργαστήριο, δηλώστε το όνομά σας, τον τίτλο σας και την ιδιότητα σας στο kelraheb@imis.athena-innovation.gr. Η εγγραφή είναι δωρεάν. Περισσότερες πληροφορίες θα βρείτε στο δικτυακό τόπο <http://www.wholodance.eu/events/wholodances-workshop/>

Ακολουθείστε το WhoLoDance



Το Ερευνητικό Κέντρο «Αθηνά»

Το Ερευνητικό Κέντρο Αθηνά διεξάγει υψηλής ποιότητας Έρευνα, αναπτύσσει Τεχνολογίες και συμβάλλει στην παραγωγή Καινοτομίας στα πεδία της Πληροφορικής, των Επικοινωνιών και των Υπολογιστικών Επιστημών. Ιδρύθηκε το 2003 με τη συνένωση τριών ανεξάρτητων Ινστιτούτων. Ένα ευρύ φάσμα τομέων ορίζει το πλαίσιο δράσης του: μεγάλα δίκτυα και βάσεις δεδομένων, ενσωματωμένα συστήματα, επεξεργασία δεδομένων/πληροφορίας/γνώσης, αυτοματισμοί, ρομποτική, τεχνητή νοημοσύνη, τεκμηρίωση και επιμέλεια ψηφιακού περιεχομένου.

info@athena-innovation.gr ♦ +30 2106875300 ♦ <http://www.athena-innovation.gr/>



12.11 Dissemination Statistics

Table 1-List of webpages and social media where the workshop has been disseminated

Title and link	
1	Aristotelian University of Thessaloniki http://auth.gr/news/conferences/20570
2	Athena RC website (English) www.athena-innovation.gr/en/announce/pressreleases/253-2016-06-16-10-21-47.html
3	Athena RC website (Greek) https://www.athena-innovation.gr/el/announce/pressreleases/253-2016-06-16-10-21-47.html
4	Athena RC twitter https://twitter.com/athenaRICinfo
5	Athena RC facebook https://www.facebook.com/athenaRIC
6	AthenaRIC LinkedIn https://www.linkedin.com/company/2796521?trk=v srp_companies_cluster_name&trkInfo=VSRPsearchId%3A671156531470249335922%2CVSRPtargetId%3A2796521%2CVSRPcmpt%3Acompanies_cluster
7	http://www.cityportal.gr/ http://www.cityportal.gr/articles_det1.asp?subcat_id=188&article_id=81794
8	Dora Stratou http://www.grdance.org/gr/index.php?option=com_content&view=article&id=86&Itemid=82
9	http://www.e-paideia.org/ http://www.e-paideia.org/aggregator/sources/43
10	International Council of Dance (CID) http://panorama.cid-portal.org/index.php/greece/113-thessaloniki/108-thessaloniki
11	Lyceum Club of Greek Women Website http://www.lykeionellinidon.gr/
12	MADgIK group twitter https://twitter.com/MADgIKlab

13	MOCO16 facebook https://www.facebook.com/Moco16-201467573532719
14	MOCO16 twitter https://twitter.com/MOCO_2016
15	MOCO16 website http://moco16.movementcomputing.org/index.php/2016-06-07-07-05-20/workshop
16	Thessaloniki Concert Hall http://www.tch.gr/default.aspx?lang=el-GR&page=3&tcheid=1730
17	Thessaloniki Press http://thesspress.gr/ http://thesspress.gr/index.php/politismos/item/81069-choros-kai-tech.html?tmpl=component&print=1
18	https://www.facebook.com/wholodance
19	https://twitter.com/hashtag/wholodance
20	Wholodance website http://www.wholodance.eu/

12.11.1 Social Media Statistics (ATHENA RC)

Table 2 -Dissemination on social media by ATHENA RC channels

Social Network	Post N.	Post	People reached/Videos	Like	Retweet	Other	Date
Facebook	1	Post	46	4			9/6/16
Facebook	2	Post	1784	10			17/6/16
Facebook	3	Post	727	5		Share: 1	27/6/16
Facebook	4	Post	171	4			1/7/16
Facebook	5	Post	119	5		Share: 1	5/7/16
Facebook	6	Post Share	138	2			5/7/16
Facebook	7	Post	926	4			5/7/16
Facebook	8	Post Share	711	20			6/7/16
Facebook	9	Post	180	2			7/7/16
FB Totals	9		4802	56			
Twitter Totals	26			74	88		
LinkedIn	4		1978	8		10 clicks	
TOTALS	35		6780	138	88		

12.11.2 Social Media Statistics (WhoLoDancE)

Table 3-Dissemination in social media by Wholodance Channels

Social Network	Post N.	Post	People reached/Videos	Like	Retweet	Other	Date
Facebook	1	Post Share	36	3			12/6/16
Facebook	2	Link Shared	131	5			17/6/16
Facebook	3	Event Created				Going: 9 Interested: 14	23/6/16
Facebook	4	Event Shared	56	4			23/6/16
Facebook	5	Post share	19				27/6/16
Facebook	6	Post share	40	3			28/6/16
Facebook	7	Post share	29				29/6/16
Facebook	8	Post	181	5		Share: 1	30/6/16
Facebook	9	Post share	24				1/7/16
Facebook	10	Post	58	5			3/7/16
Facebook	11	Post Share	4	1			5/7/16
Facebook	12	Post	847	5		Share: 1	6/7/16
Facebook	13	Post	217	5		Share: 1	6/7/16
Facebook	14	Post	100	10			6/7/16
Facebook	15	Post	57	4			7/7/16
Facebook	16	Post	85	6			9/7/16
FB Totals	16		1884	56			
Vimeo	1	Interview Uploaded	1904				6/7/16

Social Network	Post N.	Post	People reached/Videos	Like	Retweet	Other	Date
Vimeo	2	Interview Uploaded	170				6/7/16
Vimeo Totals	2		2074				
Twitter	1	Retweet		4	5		3/6/16
Twitter	2	Retweet		2	6		8/6/16
Twitter	3	Tweet		3	1		8/6/16
Twitter	4	Retweet		4	4		10/6/16
Twitter	5	Retweet		1	2		15/6/16
Twitter	6	Retweet		5	9		17/6/16
Twitter	7	Retweet		6	8		22/6/16
Twitter	8	Retweet		3	4		27/6/16
Twitter	9	Retweet		1	6		28/6/16
Twitter	10	Tweet		2	1		30/6/16
Twitter	11	Retweet		2	8		3/7/16
Twitter	12	Tweet		6	5		5/7/16
Twitter	13	Tweet		6	6		6/7/16
Twitter	14	Tweet		4	2		6/7/16
Twitter	15	Retweet		1	1		7/7/16
Twitter	16	Tweet		4	2		7/7/16
Twitter	17	Tweet		4	4		7/7/16

Social Network	Post N.	Post	People reached/Views	Like	Retweet	Other	Date
Twitter	18	Retweet		1	2		7/7/16
Twitter Totals	18			59	76		
TOTALS	36		3958	115	76		

