increasing the understanding of synergies between public spaces, people & technology

the COST Action TU1306 CyberParks
Fostering knowledge about the relationship between Information and Communication Technologies and Public Spaces supported by strategies to improve their use and attractiveness

www.cyberparks-project.eu
www.cost.eu/domains_actions/tud/Actions/TU1306
A **cyberpark** is a new type of urban landscape where nature and cybertechnologies blend together to generate hybrid experiences and enhance quality of life.

advance knowledge to be used in policies, research, design and space production in order to respond with sustainable and inclusive urban places.
82 participants ■ 29 countries

Urban management and development
Landscape design and planning
Sociology/anthropology/behaviour research and public health
Education/psychology/minority research
Marketing/communication sciences
Creative/cultural industries/economic promotion
GIS / planning / geography
ICT / computer sciences / development
Participatory planning
Urban gaming / cyber art
Engineering / mobility
Environmental sciences

Lisbon – Portugal
CeiED Interdisciplinary Research Centre for Education and Development
WG 1 - Digital methods
How can we use ICT and new media technology to enhance our understanding of the uses and users of public spaces? What can we learn about public spaces through the use of tracking technologies or scraping public data that users of public space have produced?

WG 2 - Urban ethnography
What is known about the relationship between new media use and spatial practices? What do people want from public space? How this differ by socioeconomic status, gender, age? What technological developments are most likely to enhance current user behaviour or develop new user behaviours?

WG 3 - Conceptual reflection
What can we learn from links between digital media in public spaces? Are new media practices changing the character, meaning, significance and functions of public spaces? What new possibilities new media offer for public spaces future development and design, and what are the problems and obstacles they are bringing?
WG 4 – Creating CyberPark
How do ICT challenges the design of public spaces?
What could be the added value of the new technologies for inclusive public spaces?
How can designers operate on these conclusions in the production of public spaces? What is the contribution of various disciplines and how should they work together in the process of spaces production?

WG 5 – Networking & dissemination is in charge with the dissemination strategy for tailoring and transferring knowledge, contacting interested persons and organisations (policy makers, internet service providers, legal experts) and the legacy plan with research perspectives and follow ups.
Examples of intersection ICT & Public Spaces
public solar-powered charging station created by the Serbian start-up strawberry
> charge the phones on the go
http://senergy.rs/
Does yours fly?
### Contribution to structuring relationships between man/space/ICT

<table>
<thead>
<tr>
<th>Framework</th>
<th>Level of Interaction Needed</th>
<th>Cognitive Value</th>
<th>Data value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position Informatics</td>
<td>Data are automatically registered by GIS-enabled machine mediation. No further interaction is needed.</td>
<td>No cognitive-based learning.</td>
<td>Archival data value</td>
</tr>
<tr>
<td>Sensory Informatics</td>
<td>Data are selected through preference-based inner mechanisms. Individualized interaction with portable machines is needed.</td>
<td>Basic learning mechanisms are facilitated.</td>
<td>Indexing data value for further retrieval.</td>
</tr>
<tr>
<td>Synergistic Interface</td>
<td>At any time, the generation of new data is determined by the interaction of the user with sets of already pre-structured datasheets and the decisions made by others to similar datasheets.</td>
<td>Correlations are gradually developed through understanding the role of the Other’s presence. The development of cognitive critical arguments are highly encouraged.</td>
<td>A network of correlations is facilitated to foster awareness of interaction patterns as a value-added means for technologically mediated public spaces.</td>
</tr>
</tbody>
</table>

Just as guidance these are five main questions to be addressed:

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>USERS</td>
<td>WHO</td>
</tr>
<tr>
<td>TIMES AND TEMPORALITIES</td>
<td>WHEN</td>
</tr>
<tr>
<td>SPACES AND SPATIALITIES</td>
<td>WHAT &amp; WHERE</td>
</tr>
<tr>
<td>ARTEFACTS</td>
<td>WITH WHAT</td>
</tr>
</tbody>
</table>

Menezes, Smaniotto (2016/in print) People, public space, digital technology and social practice: an ethnographic approach. ICiTy - Enhancing Places through Technology
**TABLE 2: User technologically mediated activity**

<table>
<thead>
<tr>
<th>Cyberspace</th>
<th>Hybrid space activities</th>
<th>Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaming / playing</td>
<td>Location-based play, playable city</td>
<td>Play devices, urban games that are using (at least partly) the real space – tasks linked to special places of elements or</td>
</tr>
<tr>
<td>Meeting and communication</td>
<td>Meet in space, not necessarily synchronous</td>
<td>Post office infrastructure/benches (read only within a perimeter)</td>
</tr>
<tr>
<td>Creating, artistic expression</td>
<td>Virtual graffiti, online sound and music interaction with the user Co-creation of place</td>
<td>ICT functions embedded in furniture, trees, lamp posts, touch screen painting displays (uploadable and local chalking), post office infrastructure as part of Internet of Things (IoT)</td>
</tr>
<tr>
<td>Learning and information</td>
<td>Gaining new knowledge, raising awareness, raising responsibility Helping to recognize the place, to orient, to read its functions Learning about the environment you are in at the moment and its history</td>
<td>Audiovisual displays - multifunctional elements, part of paving, walls, buildings… focusing the user’s attention on particular elements Artistic interventions</td>
</tr>
<tr>
<td>Legibility - orientation</td>
<td>Navigation of both space and information</td>
<td>Way-marking, physical and conceptual structuring, GPS, etc.</td>
</tr>
<tr>
<td>Exercise, health, mental restoration</td>
<td>Group activity, individual activity</td>
<td>IoT, exercise infrastructure Support with measurement opportunities, competition possibilities, (bio-) monitoring for individual to be attracted to do exercise</td>
</tr>
<tr>
<td>Buying, acquire material goods, sharing Commercial opportunities</td>
<td>Delivery points, commons</td>
<td>IoT supporting pop up markets, local trade, yard sales – in space we may provide suitable locations – urban design guidelines</td>
</tr>
</tbody>
</table>
WG1 > App WAY CyberParks

Mobile app + Web + Cloud application > to track and display how people use public open spaces >> WAY CyberPark

Case Studies

- Lisbon.pt  Parque da Quinta das Conchas & Mouraria
- Barcelona.es  Fòrum de Les Cultures & Carrer d’Enric Granados
- Bristol.uk  open spaces in the city centre
- Antwerp.be & Ghent.be
- Thessaloniki.gr  Training School Enhancements - New Waterfront Garden
- Malta  Valletta & Msida

WG 1 - Digital methods
How can we use ICT and new media technology to enhance our understanding of the uses and users of public spaces

Deusto University, Bilbao.es
A typical representation of itineraries with path and points. For each point the coordinates and the time it was reached are recorded.

BOOK OF ESSAYS
“CYBERPARK – BETWEEN PEOPLE, PUBLIC OPEN SPACES and TECHNOLOGY”
Workshop Lisbon

Co-creating of inclusive & mediated Public Spaces

The production of PUBLIC SPACES

- with *co-creation* approach
- towards achieving inclusiveness
- through digital *media*
No one is "willing to give up the use of machines" (Thomas 2013) ▶ the question is how to integrate these in a healthier life style.

The quality of spaces play a decisive role, since nobody will expend leisure time outdoors if the environment is not attractive, accessible and safe.

Louv (2005): The more high-tech our lives become, the more nature we need ▶ we should also call for right to access the nature in a healthy urban environment.

Better to make use of attractiveness of new technologies - the love to "wired way of life" (Thomas 2013) and transform cities in more liveable places rather than just more high tech.

Challenge ▶ how to make use of ICT to make urban open spaces even more public - inclusive - interactive and to attract more people to live a healthier way of life.
Fact is > real & digital are blurring > changing social behaviour and interactions, crises, social polarisation ...

Urban sedentary lifestyle, worldwide connected from home > long journeys indoors > negative aspects to health and wellbeing - and for development of social skills

To build a theory and to study the impact (social, political, economic, and cultural) of the ICT is not an easy task because ICT and their use are in a constant and accelerated development, transformation, resulting in turn in new interrelations.

Technology-driven visions > smart cities, smart mobility > ICT is influencing use of public open space, opening new opportunities for increasing vitality, appropriation, quality and safety:

People-driven visions > people friendly, liveable, playful > use of new technology to improve the interaction, accessibility, participation, co-creation, legibility, liveability and playfulness of the cities
the central challenge remains how to make use of digital technologies to transform our cities into interactive landscapes and urban places, encouraging involvement and better social environments, supporting sustainability, responsibility and knowledge about nature, people and the city.
Objectives

1. to critically discuss and define „10 principles“ for the central topics of the workshop

- inclusiveness
- co-creation
- technological approach.

= 3x 10 principles

These "principles" should reflect all relevant/fundamental aspects when the goal is to develop an inclusive mediated public space.
The 3x 10 principles should be specific to reflect the topics but also incorporate a general character to enact the same principles to be used in different situations (by different people across Europe and beyond).
These principles should be referenced and based on evidences and examples
Objectives

1. Critically discuss and define "10 principles" for the central topics of the workshop
   ➔ inclusiveness
   ➔ co-creation
   ➔ technological approach.

> Deliver ideas to guide the production of better public spaces, or to design recommendations in the sense of policy, strategies and practices advises
> Setting the stage for long-term success!

THE POWER OF PRINCIPLES
Objectives

1. Critically discuss and define "10 principles" for the central topics of the workshop:
   - Inclusiveness
   - Co-creation
   - Technology approaches.

   > Deliver ideas (rules) to guide the production of spaces or to design recommendations in the sense of policy, strategies and practices advises
   > Setting the stage for long-term success!
Objectives

1. critically discuss and define "10 principles" for the central topics of the workshop
   - inclusiveness
   - co-creation
   - technological approach

= 3 x 10 principles
Objectives

1. to present and discuss the 10 principles
   - inclusiveness
   - co-creation
   - technology approaches.

= 3x 10 principles

THE POWER OF PRINCIPLES
Objectives

2. Provide contributions to the CyberParks POOL OF EXAMPLES ON THE INTERACTIONS BETWEEN PEOPLE, PLACES AND TECHNOLOGY.

CyberParks is collecting different examples on the interaction between people - places and enhanced technology. Do you know a good example to enrich the POOL?

http://cyberparks-project.eu/examples. At a later point the POOL will be widely made public.
Programme (subject of changes)

Venue: Campus of Universidade Lusófona
Campo Grande 375
Room F.3.4 (Building F / 3rd floor, Room 4)

MON 13.02.17

08:30  Registration
Welcome  Antonio Teodoro/ Director of CoiED

09:00 - 10:00  Introduction to the workshop
Introduction to CyberParks Projects
Carlos Smanioto, ULHT (PT)
Ina Šuklík Erjavec, IUSS (SLO)
Diogo Mateus, ULHT (PT)
Marluci Menezes, LNEC (PT)
Monica Bacci/ Anacone (IT)
Tatiana Ruchinskaya, Cambridge (UK)

10:00 - 10:30  Coffee break
10:30 - 12:00  Introduction of participants
All participants

12:00 - 13:00  Crowdfunding as a collaborative creation
Pedro Domingos, PPL/OrangeBird, Lisbon (PT)

13:00 - 14:30  Lunch break

14:30 - 15:30  Walk to plan / plan to walk: Walking as a tactile method in urban planning
Diogo Mateus, Universidade Lusófona (PT) & Marluci Menezes, LNEC (PT)

15:30 - 16:00  Coffee break
16:00 - 17:30  Site visit Mouraria
Walking Tour
Diogo Mateus & Marluci Menezes

TUE 14.02.17 Safety & Inclusiveness and Co-creation of Public spaces

09:00 - 10:30  Introduction to the topics and preparation of working groups
Safety and inclusiveness
Tatiana Ruchinskaya, TVR Design Consultancy, Cambridge (UK)
Creative landscapes
Monica Bacci, Università Politecnica delle Marche, Ancona (IT)
Challenges of co-creation of public spaces
Ina Šuklík Erjavec, Urban Planning Institute of the Republic of Slovenia (SLO)

10:30 - 11:00  Coffee break
11:00 - 13:00  Working groups part I
13:00 - 14:30  Lunch break
14:30 - 15:00  Working groups part II
15:00 - 15:30  Smart cities without people - Foucault, Deleuze and the subjectivation process
Catarina Patricio, ULHT, Lisbon (PT)
15:30 - 16:00  Coffee break
16:00 - 17:30  Conclusions and outcomes 10 key principles
Plenary

WED 15.02.17 Co-creation and mediated public spaces

09:00 - 10:30  Introduction to the topics and preparation of working groups
Empowered by data - citizens and public spaces
Kai Dolata, Flussbad Berlin (DE)
Technologies of Anthropogenic Spaces: co-creation aspects in the co-mediated landscape
Konstantinos Ioannidis, zaiko arkitekter, Oslo (NO)
Playful Publics - The production of public space through play
Martijn de Waal, Lectorate of Play & Civic Media, Amsterdam University of Applied Sciences (NL)

10:30 - 11:00  Coffee break

11:00 - 13:00  Technological pillars to enable Smarter (Collaborative + Inclusive) Environments: Internet of Things, Web of Data and Citizen Participation
Diego Lopez-de-Ipina, University of Deusto, Bilbao (ES)
Working groups part III
13:00 - 14:30  Lunch break
14:30 - 15:30  Working groups part IV
15:30 - 16:00  Coffee break
16:00 - 17:30  Working groups part V
17:30 - 18:00  Conclusions and outcomes 10 key principles
Plenary

THU 16.02.17

09:00 - 11:00  Educational dimension of CyberParks: technology enhance outdoor learning as a concept of learning in CyberParks
Michał Klichowski, Faculty of Educational Studies, Adam Mickiewicz University, Poznan (PL)

11:00 - 11:30  Coffee break

11:30 - 13:00  Final Session
Discussion on the outcomes - 10 principles for each topic
Preparation for the presentation in the colloquium
Tutors

13:00 - 14:00  Lunch break

14:00 - 19:00  COLLOQUIUM
see programme at http://cyberparks-project.eu/colloquium
Topic: "Content and layout design for a mobile application, paired with sensors installed in the Cardeto Park/Ancona (IT)". The design should be oriented towards the exploration of a urban park (Parco del Cardeto) with botanic and historic POIs

Host Organisation & Contact Person
Universitá Politecnica delle Marche - Engineering Faculty,
Prof Eva Savina Malinverni – Associate Professor in Geomatics
e-mail: e.s.malinverni@univpm.it

The tasks should encompass:
- Layout design of the application;
- Contents creation;
- Testing the application;
- Data Analysis collected from the beacon..

Candidate profile recommended:
- Content designer (possible also a Planner)
- Data Scientist/app developer

Duration of 15 days: from 27th March to 7th April.
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Thank you for your attention