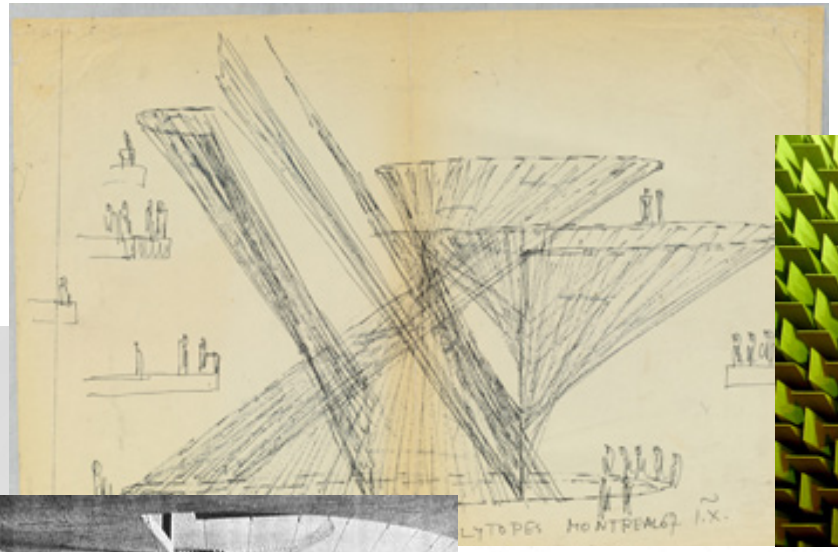
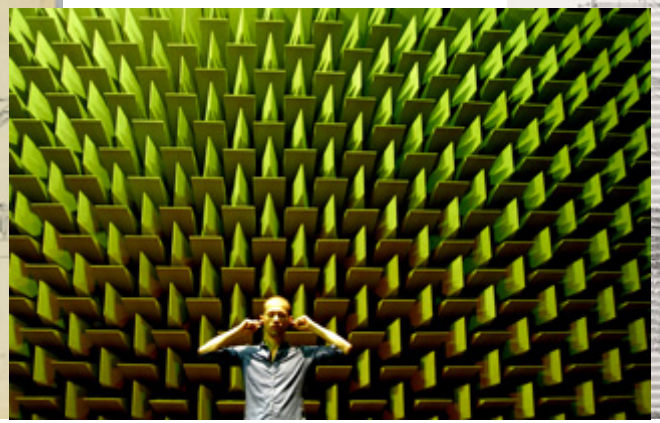
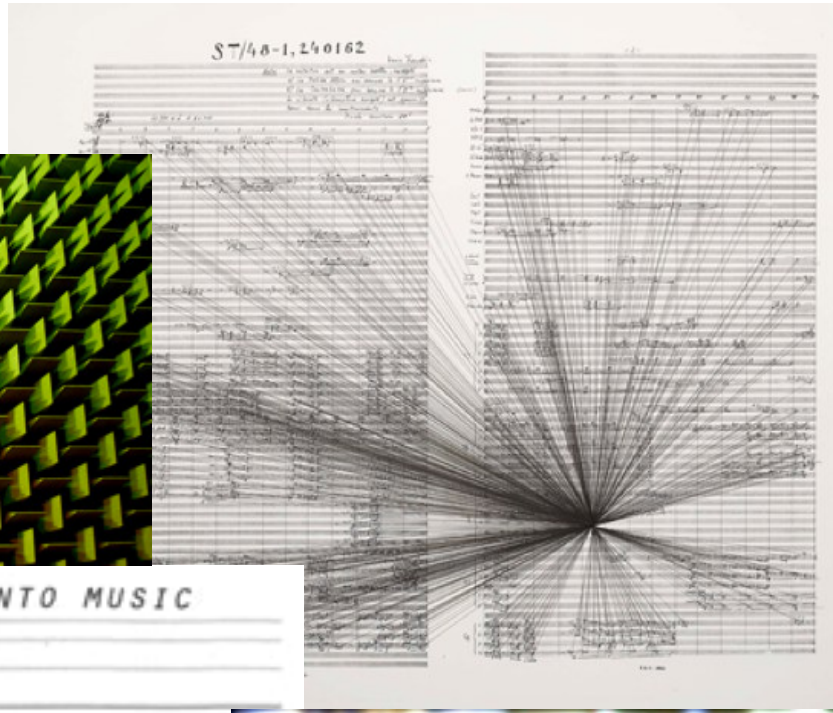
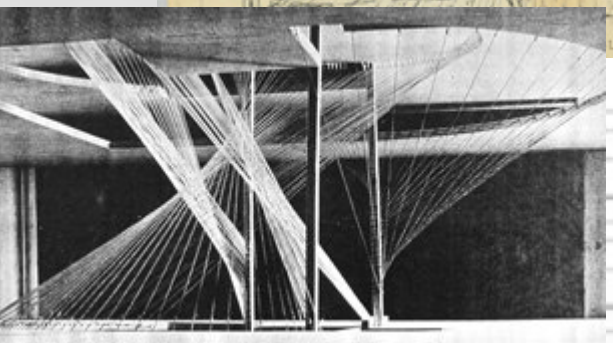
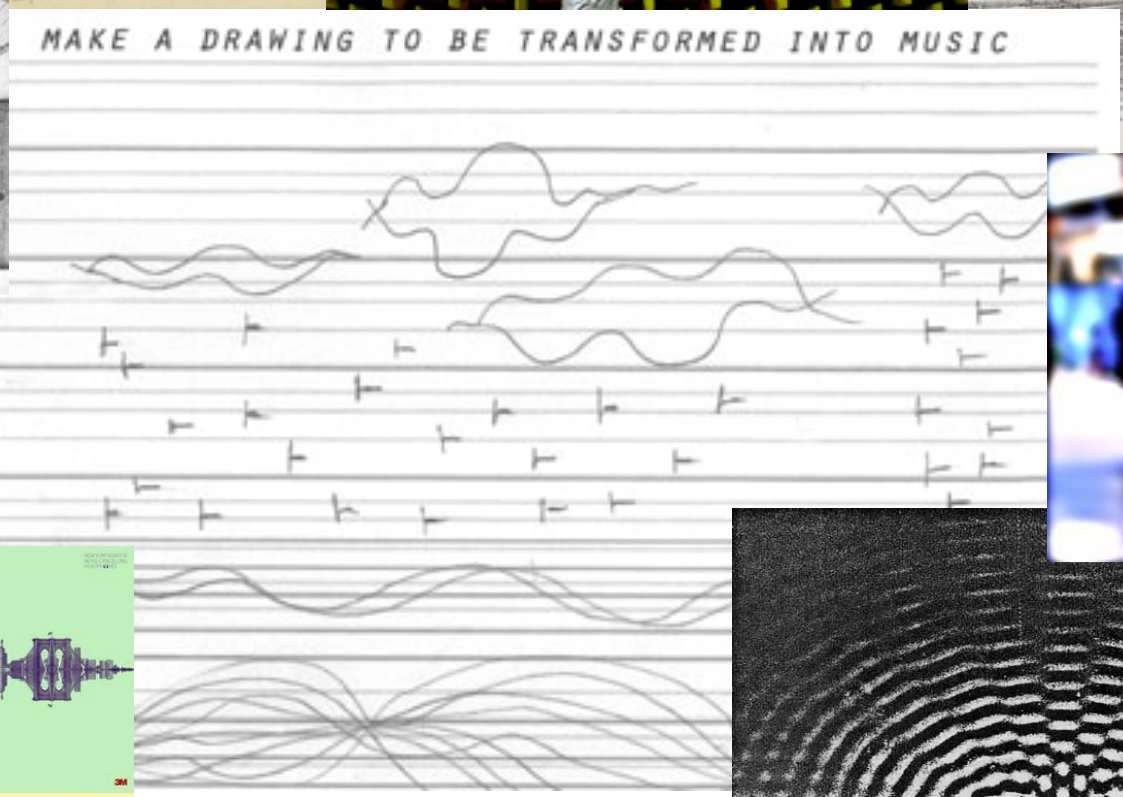
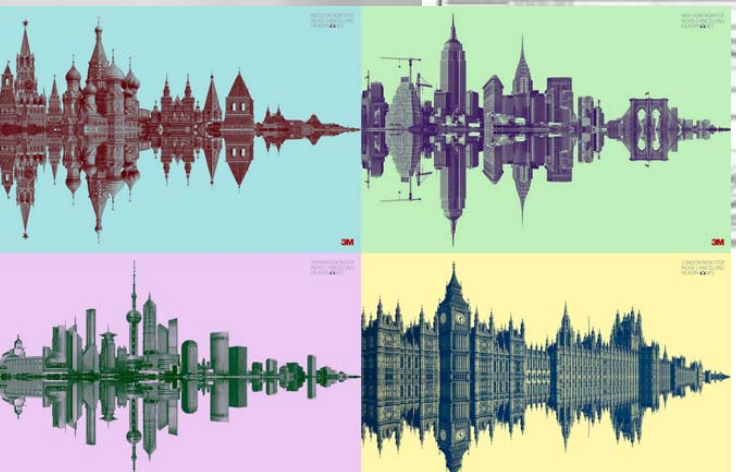


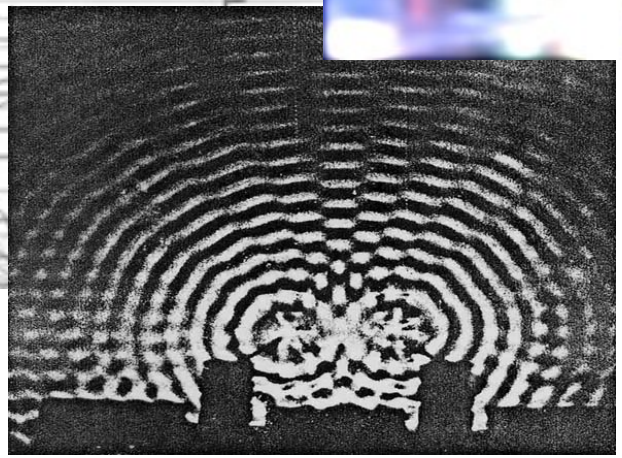



S7/48-1,240162




MAKE A DRAWING TO BE TRANSFORMED INTO MUSIC





POLITECNICO DI MILANO

Faculty of Architecture and Society

Master of Science in
Urban Planning and Policy Design

Where We Are: Discovery Journey on Nature of Urban Hybrid Space

Supervisor: Prof. Paola Savoldi

Master Graduation Thesis by: Olga LABETSKAYA

Student Id. number 721630

Academic Year 2010/2011

Abstract

This study investigates the area of urban experience under influence of emergent digital technologies and artifacts, with an attempt to observe and understand blending of digital and physical urban dimensions, and which social, spatial and temporal changes are already reshaping everyday life. The research addresses a newly emergent notion of hybridization of urban space, investigating the phenomena from different perspectives of everyday practices on basis of conducted ethnographic observations. Consequently, it goes through formulation of key characteristics representing conceptualized nature of hybrid urban space with challenges, existing and possible implications of concepts and patterns. Finally, the research invites to discuss the approach to urban design, introducing potentials of emergent technologies and visions, that could be researched and experimented by architects and urban planners for better lives in cities.

Abstract

La ricerca esamina la area della esperienza urbana sotto la influenza delle technolgie digitali emergenti e artefacti, con una tentazione di osservare e comprendere il (miscelazione/sfumato) tra le le dimensioni digitali e dimensioni urbane fisici, e con i cambiamenti sociali, spaziali e temporali che stanno gia trasformando la vita quotidiana. La ricerca si occupa con la nuova nozione della hibridizzazione dello spazion urbano, cercando di esaminare il fenomeno da diversi putni di vista della prassi quotidiana sulla base delle guidati oservazioni etnografici. In consequenza, si va tra le formulazioni delle caratteristiche chiavi che rapresentano la natura concetualista dello spazio urbano hybridizzato con sfide, esistenti le possibili implicazioni dei concetti e patterns. Alla fine, la ricerca invita a una discussione sul trattamento dello spazio urbano, introducendo potenzialita delle technologie emergenti e visioni, che potrebbero essere studiati e sperimentati da architetti e pianificatori per una livabilita migliore delle citta.

Architects in the past have tended to concentrate their attention on the building as a static object. I believe dynamics are more important: the dynamics of people, their interaction with spaces and environmental condition.
John Portman

No one, today, can know what the city of tomorrow will be. One part of the semantic wealth which belonged to it in the past...., it will lose that, certainly... The creative and formative role of the city will be taken charge of by other communications systems... their vocabulary and syntax, consciously and deliberately.
Juliette, from Godard's Two or Three Things I Know About Her (1967)

Acknowledgements

Thanks to the Prof. Paola Savoldi who has given me the opportunity to carry out this work.
I would like to thank Prof.Massimo Bricocoli for his openness, Prof. Lavinia Bifulco for her readyness to give some advice at special moment.
At this important moment of my life I want to thank those people who have contribuited in the different way to achieve this goal. First of all a thousand thanks to my family: my parents, sister , brother and grand mamma who always support me despite the great distance between us and never stop to "invest" in my future. My special thanks to close multicultural friends of milanese family here, that motivated me during all this time. I wish to thank sincerely all my friends who stood by me at this period.
Without your support I will never realize my dream…

Ringraziamenti

Un sentito grazie al Prof. Paola Savoldi e Prof. Massimo Bricocoli che mi hanno dato l'opportunità di portare a termine il lavoro.
Ringraziamenti di cuore al Prof.Massimo Bricocoli per la sua disponibilita a al Prof. Lavinia Bifulco per i consigli al momento giusto.
In questo momento importante della mia vita voglio ringraziare tutti coloro che hanno contribuito in diversi modi a raggiungere l'obiettivo.
Anzitutto grazie alla mia famiglia: miei genitori, mio fratello, mia sorella e mia nonna che mi hanno sempre supportato nonostante la grande distanza che ci separava e che non hanno mai smesso di credere in me. Un ringraziamento speciale ai miei cari amici multinternazionali della familia milanese chi mi hanno motivato durante questo periodo. Vorrei infine ringraziare sentitamente tutti i miei amici che mi hanno
seguito in questo cammino.
Senza il vostro supporto non sarei mai riuscita a realizzare il mio sogno…

Olga Labetskaya

Благодарность

Благодарю профессора Паулу Савольди за предоставленную мне возможность написания дипломной работы.
Хотела бы поблагодарить профессора Массимо Брикоколи за поддержку профессора Лавиниа Бифулько запредоставленные советы в нужный момент.
В этот важный момент моей жизни мне бы хотелось поблагодарить тех людей, которые внесли особый вклад в достижение этой цели. Прежде всего мою семью: моих родителей, брата, сестру и бабушку, которые всегда поддерживали меня несмотря на большое расстояние между нами и никогда не переставали «инвестировать» в мое будущее.
Особенная благодарность моим близким интернациональным друзьям моей миланской фамилии, которые мотивировали меня все это время.
И наконец, мне бы хотелось сказать искренне спасибо всем моим друзьям, кто был со мной в этот период.
Без вашей поддержки я бы никогда не смогла осуществить свою мечту…

Ольга Лабецкая

Table of contents

Part I

+ Introduction
+ Methodology

+ Motivation

People about Technologies

Part I

Introduction

The starting point was an assumption that now we are living in the age of networking and media, what has a strong impact as on our daily life as well it has a certain influence on urban environment and experience. Digital media and new technologies are infiltrating urban environment.

The fluidity of media systems has altered principal basics of urban spatial organization and its perception by inhabitants, reshuffled the basic condition with communication innovative technologies. The ready availability of media messages has expanded their application beyond any foreseeable intention, upsetting and reshuffling the usual hierarchies of space, introducing new practices and experiences, changing social and interactional pattern and moreover changing the role interplay between physical and real dimensions.

'When information lost its physical constraints, its physical burden, and acquired the ability to move from place to place unencumbered by time or space, a new phase in our civilization began in which all sorts of places and locations, freed from their mutual distances, are far apart yet objectively near to one another. If once we were able to recognize and identify the flow and direction of information (where it comes from, where it is headed), now we were no longer able to decipher such spatial co-ordinates. We are literally immersed in a layer of information that is available everywhere, some of it more restricted and protected, some less so; information that is still circulated without a set of rules capable of protecting the personal sphere of both individual and group privacy/intimacy. Messages, information, images and words permeate our experiences; through them we work, study and communicate with others. Sometimes we control, sometimes we are controlled, by takes which will be relayed elsewhere in real time, or stored, or used for other purposes.'

Conference Talk BEYOND MEDIA 03[1]

New digital technologies and information systems this have a certain impact on a way to experience architecture and cities, urban environment. A necessary commitment in order to start a debate on the city today and its inhabitants, on contradictions and ambitions, future and new coming tendencies.

Life in the city is busy. We travel from one place to another and meet people at different locations for social, business, or

[1] http://www.beyondmedia.it

entertainment purposes. Thereby, city dwellers cross streets, places, buildings, and other public and anonymous urban places using cars, public transport, or even just walk to their destination usually accompanied by mobile communication devices.

New technologies pervade every aspect of our lives. Weiser (1991) highlighted the move of digital technologies away from the desktop to become embedded in everyday items to make them truly ubiquitous. Greenfield (2006) describes it as 'everyware' in his book "Everyware: The dawining age of ubiquitous computing". Digital technologies are used for urban infrastructure, to enhance our understanding of the urban environment, in the development of our social relationships. They play an important role in shaping our urban environments. The advent of digital media technologies intersects with the development of urban form and experience the city in variety of ways, affecting flows and movements of people and information, changing patterns of social networks, introducing new kinds of practices in urban places.

These digital technologies have an active role in creating new patterns of urban experience due to pervasive communication, social network and instant access to the Internet. Blurring borders between physical and digital are formatting a new emergent phenomena in urban scape, where social, spatial and temporal order differs from traditional way people experience the city.

The basics of this research is an assumption that urban space become a hybrid space. This is refers to several papers of Adriana de Souza e Silva, who in several works has argued against the dichotomy between physical or real space on the one hand and virtual or mediated spaces on the other hand. In fact, it becomes more and more difficult to separate everyday urban practices from infiltrating digital dimension and its constant interactivity. The new media technologies such as mobile phones are constantly increasing the density of social interactions and informational flows, introducing the new practices and experiences, and more over adaptation of urban space as a result. Hybrid urban space is new formation that should be explored and taken into consideration as an inherent part of contemporary city.

Even though digital communication flows are reshuffling spatial hierarchies, physical dimension is a setting where urban situations and practices are happening. Urban morphology,

quality of public place play a leading role and often predetermine social exclusion and polarisation. The research focuses on discussion about processes evolving in urban settings under influence of new technologies, and investigates what characteristics are introduced in or drawn away from urban space.

The research examines urban practices and seek to highlight nature and processes of blending between digital and real dimensions in urban public settings, thereby illustrating the hybridization of urban space and arising concerns in some questions needed to be explored furtherely for more effective improvement of life in city. Process is still in ongoing state of its formation, though already now it is possible to distinguish basic understanding of this hybrid nature.

Methodology

During the discovery journey on nature of urban hybrid space the study focuses on people's everyday practices (de Certeau 1984) as the grounding point for the investigation, and how new digital technologies influence the urban experience in city.

French cultural theorist Michael de Certeau has drawn attention to relationship between practice and spatiality. De Certeau's concern is the ways in which , in everyday, unconscious practice, people alter, adapt, and appropriate cultural products and make their own. In the case of everyday space, he argues that we should distinguish between "strategic" and "tactical" spatial practices. Broadly, strategic spatial practices are those associated with centres of power and control. Strategic spatial practices are those by which large-scale narratives of space are constructed and achieved. In speaking of tactical spatial strategies, de Certeau draws attention to the ways in which people create their own meaning for spaces, individually and collectively, though the specific ways in which they move through those spaces and put them in use.

De Certeau described space as "a practiced place", but the practices to which refers are the spatial tactics:

“A space exists when one takes into consideration vectors of direction, velocities, and time variables. Thus space is composed of intersection of mobile elements”.
De Certeau describes the “tour” as an everyday narration of movement and opposes it on the “map”, a scientific representation that erases the itineraries that produced it, and whose history shows this process of disengagement. For de Certeau, who is interested in tactics of poaching and consumption, everyday stories are guides to spatial practices.

The study aims to collect and present, from a first look, a broad study cases to demonstrate the complexity of emergent phenomena. At the same time just examining the studies that are not directly interrelated, the general pattern will reveal by itself, as a puzzle of whole scenery. Some parts could be missing however the main idea will be formulated.

Coming to the point through theoretical basis, paper is constituted by pieces of selected urban ethnographic episodes, studies, researches and interviews.
It should be noticed, as far as the contemporary world due its increased informational dynamics has become more and more intertwined, therefore investigation of over determined specific field seems only could limit the research. In fact, more interdisciplinary approach could help to explore and unveil complex changes. That’s why this study goes beyond academic researches and studies across potentially dynamic sources like online blogs, conferences, discussions. Facebook[2] , interviews in life, questions on line through Experience Project [3] were used to collect personal stories. The research is supplemented with CD with collected photo material and video observations. In some cases video interview was recordered.

The first part of the work represents exploration of data, resources and blogs about new communication technologies and which vision and direction these artefacts are going to contribute to our lives. The term hybrid urban space is introduced as a general framework of the study.

Then there were chosen episodes that could be able to trigger the discussion and arise wide range concerns about changes, potentials and threats in urban experience and its social and spatial organization, physical settings, interactional pattern and people’s behaviour. It should be noted that from possible

[2] www.facebook.com
[3] www.expereinceproject.com

situations and practices there were captured those episodes and stories that could explicitly visualize the formation of hybridity in behaviour and practices, and reveal the nature of hybrid urban space.

Represented episodes try to observe and increase sensitivity of the emergent complexity and representing various situational practices in hybrid urban space.

Analysis of case studies tends to formulate questions and conceptualize emergent phenomena, therefore to represent possible instruments and directions in order to approach emerging complexity and changes, that urban planners and architects should turn their attention and take into consideration.

There is no aim to generalize, but there is a strong interest and curiosity to have a quick glance into nearest future, and try to model and suggest a possible evolution of urban experience and to question ourselves about innovative interventions.

Facebook was used for collecting opinions about technologies and new communication age, as a sort of motivational source.

Ethnographic study was an initial impulse to approach the theme, where before and after in order to draw up and reveal the nature of hybrid urban space, the deep surfing in informational flows has been needed in order to discover digital innovations, ideas and experiments.

Also taking into consideration a dissemination of digital and communication technologies, its implications and rising issues, the research will be mainly focus on use of personal mobile artefacts and its contribution and influence on urban experience.

Due to interdisciplinary interactive nature of phenomena during analysis of episodes and its outcomes it is impossible separate subthemes as, that's why there are always overlapped discussions representing various experiments and researches that use slightly familiar instruments and approaches however addressing various concerns and implications.

Additionally, it 's important to understand that discussion is shaped standing on positively directed approach, even so not moving aside concerns and challenges that easily emerging due to its complex essence.

Part II

+ New Technologies
    'Digital Decade': 2000-2010
    Why We Use Digital Technology in Our Lives

+ The Networked City

+ Urban Hybrid Space

Part II

New Technologies

'Digital Decade': 2000-2010

The first decade of the 21st century has been named ‘Digital Decade’, as it introduced a whole range of new mobile technologies that could capture the public imagination: the smart phone, the MP3 player, touch screens, Wi-Fi, 3G wireless, pocket camcorders and more. (Wired magazine, 2010) These technologies have easily entered to people’s daily life.

Nowadays, according to statistic of the International Communication Union (the United Nations specialized agency for information and communication technologies) there are 5.3 billion mobile subscriptors on the beginning of 2011, while the population of whole planet is likely 6.8 billion people. Newly introduced iPhone has stepped further, as it has been described by David Pogue[4], personal-tech columnist for The New York Times since 2000, “It's become a tiny pocket computer in a size and shape that no computer's ever been before - and mobile and connected to the Internet all the time” .

“Apple’s iPod, introduced in 2011, is among the most influential devices of the decade” .

In the years since the Internet has become world wide, giving birth to sites such as Wikipedia in 2001, MySpace in 2003, Facebook in 2004, YouTube in 2005 and Twitter in 2006.

From website Statistics of Mobithinking.com[5] :

Mobile social networking – the statistics are compelling

Submitted by Editor on 11 March, 2010 - 14:55.

Here are some fascinating facts and figures on mobile social networks. In summary:

- Mobile users spend more time (lots more) on social networking sites than PC users.
- In the US, Facebook and MySpace are top 10 mobile destinations (in terms of audience). AOL is also in the top 10, which includes Bebo.
- Facebook is the number one mobile destination in the UK (in terms of audience). When you consider time spent accessing the Web via a mobile in the UK, Flirtomatic and AOL/Bebo are also in the top 10.

“There are more than 200 million active users [40 percent] currently accessing Facebook through their mobile devices. People that use Facebook on their mobile devices are twice as active on Facebook as non-mobile users.” – **Facebook official statistics** (January, 2011).

[4] Link about him

[5] http://mobithinking.com/

Picture from Khalid Albaih [6]

”What it does that's really amazing is it connects people who have similar interests, even very narrow interests, who would never meet each other," Bill Gates [7] said. "They would never be able to connect any other way." In essay “Moving into the Digital Decade” in 2001 Bill Gate predicted:

"Wherever you are, you'll have the power to control who can contact you or access your information to live your life as openly or as privately as you wish,"

This research refers to new technology as Information and communication technologies (ITC) what includes all kinds of technologieswhich enable users to create, access and manipulate information, it is a combination of information technology and communications technology. It refers to mobile digital devices (MP3 players, mobile phones, smart phones, PDA, tablets), social media (social networking websites[8], like Facebook, Twitter, Linkedin ecc), Internet .

It is important to mention a new emergent developing field, named ubiquitous computing (ubicomp). It is a post-desktop model of human-computer interaction in which information processing has been thoroughly integrated into everyday objects and activities (this field is actively developed by a collaboration between various research institutions and labs like major contributors are MIT Media Lab (Laboratory of MIT School of Architecture and Planning[9]) MIT Project Oxygen [10] , Microsoft Research, Intel Research). First, “ubiquitous computing” was mentioned in 1988 by Chief Technologyst of Xerox. And Manuel Castells in his book *The Rise of Network* society suggests that there is an ongoing shift from already-

[6] http://www.flickr.com/photos/khalidalbaih/5653817859
[7] http://www.microsoft.com/presspass/ofnote/10-29digitaldecade.mspx
[8] http://en.wikipedia.org/wiki/List_of_social_networking_websites
[9] http://www.media.mit.edu/
[10] http://oxygen.csail.mit.edu/

decentralized, stand-alone microcomputers and mainframes towards entirely pervasive computing. In his model of a pervasive computing system, Castells uses the example of the Internet as the start of a pervasive computing system. The logical progression from that paradigm is a system where that networking logic becomes applicable in every realm of daily activity, in every location and every context. The Internet of Things is an emergent model, actively discussed nowadays could be a next step of digital revolution.

Already today it is possible to evaluate the impact of new technologies on certain processes in the world, which are witnessing that it is a strong, hyper dynamic communication tool that could be applied for better o worse.

For instance, new technologies in particular social media had a strong impact on recent uprisings in Arab world and North Africa, leading to revolutions. The exact role of social media and technology – as it pertains to the uprisings – has been debated, but it is indisputable that the tools accelerated and amplified voices that for decades had been silenced. In Libya these tools brought down leaders and forced the International community to intervene, and now being used to challenge the status quo and shape the future.

In Egypt Facebook helped to organize the activists inside the country, while Twitter functioned to help get the message out to the broader world:

"Did social media like Facebook and Twitter cause the revolution? No. But these tools did speed up the process by helping to organize the revolutionaries, transmit their message to the world and galvanize international support" (Wired Magazine)[11]

An example of China, where foreign websites and social media have restrictions or blocked (e.g. Facebook), or creation a Russian "Facebook clone" *vkontakte VK*[12] could give thoughts that these means could be influential manipulation instruments of control and power. (when VK was appeared, it had even the same interface to old Facebook page. It gained quickly popularity, and nowadays most of Russians are subscribed to this network, even though Facebook could be used freely, total amount is about 130 million people (Russia), it is the third most visited website in Russia).

[11] http://www.wired.com/epicenter/2011/02/egypts-revolutionary-fire/

[12] http://vkontakte.ru

Already now social networks and mobile internet are among leading strategic elements for marketing researches and studies about consumer behaviour. It is a “keyhole” to preferences, tastes and style life of everyone. Privacy concerns, surveillance are actively debated, social exclusion; fragmentation and polarisation of society are important issues to take into consideration.

In short, it is evident that new technology is a powerful instrument that is changing our life world, and it can be applied in variety of ways.

Additionally, it should be not left behind, the capability of new technology to exponential growth and ephemeralization. It is the ability of technological advancement to do “more and more with less and less until eventually you can do everything with nothing”. The term ephemeralization was mentioned first by Bukminster Fuller on example of Henry Ford’s assembly line. Later this term was popularized by Reihan Salam[13] applying to digital economy and Paul Graham[14], explaining the force of Apple tablets and its force for spreading worldwide.

Another theory by American inventor Ray Kurzweil[15].

[13] (http://www.forbes.com/2010/07/30/amazon-kindle-economy-environment-opinions-columnists-reihan-salam.html)
[14] (http://www.paulgraham.com/tablets.html)
[15] (http://www.kurzweilai.net/the-law-of-accelerating-returns)

declaires the exponential growth of new technologies and law of accelerated returns.

Published on KurzweilAI.net March 7, 2001.

An analysis of the history of technology shows that technological change is exponential, contrary to the common-sense "intuitive linear" view. So we won't experience 100 years of progress in the 21st century -- it will be more like 20,000 years of progress (at today's rate). The "returns," such as chip speed and cost-effectiveness, also increase exponentially. There's even exponential growth in the rate of exponential growth. Within a few decades, machine intelligence will surpass human intelligence, leading to The Singularity -- technological change so rapid and profound it represents a rupture in the fabric of human history. The implications include the merger of biological and nonbiological intelligence, immortal software-based humans, and ultra-high levels of intelligence that expand outward in the universe at the speed of light.

Due to ephemeralization of technologies it is a time to start to think exponentially because it starts to effect all technologies around us and the way we construct the lifeworld.

Starting to do so, it could be addressed to the major changes and challenges in urban environment, in order to improve live in cities and provide better sustainable living and liveability to places.

Nowadays, it is an epoch when most of people have an exponential technology in pocket. This is a dramatic improvement. The recent release of iPhone4 has been

discussed and actually presented by Apple's marketing as an "indispensable" object that "changes everything" [16]

During ethnographic study and interviews with participants, many declared, as soon they got iPhone, they cannot live without it:

> *It's a first object which I look at when I open my eyes in the morning" (David, 35 years old)*

This mentioned detail has no aim to discuss advances of Apple's products or marketing approaches of selling, but it invites to consider potentials of technological developments and its powerful forces, that could change everyday life.

Pervasive mobile devices, Internet connectivity and social networking are already changing everyday life and urban experience, and the way we communicate with each other.

These are potentials

This brief overview of technological advancement witnesses that new technology has powerful forces, and could be instruments for various fields.

[16] www.apple.com/iphone

Why We Use Digital Technology in Our Lives

There are many different ways where new technology is applied and used. In order to understand better new digital technologies and its influence on everyday life , it is useful to summarize why people use them and what their potentials and ambiguity nature that changing daily experience.

Information seeking

"*Only one click and you are could get all answers to your question*". Internet provides all kind of information in a very quick and easy way. It gives impression that everything you ever wanted seems to be online. However, the ease of accessing information may tempt us to think that all worthwhile information in online, leading us to neglect other information resources that are not digital in nature. It could give impression that all questions have easy-to-find answers, and if you are not aware about right sources, incurrence or outdated information will be a consequence.

Spare time and Entertainment Source

The internet is a great source, that could spice up our lives. There is always a new video to watch or game to play. Online people find emotional experiences that are thrilling and exciting. There are so many things to explore! It may help to forget daily worries and concerns of real life. But when it becomes main resource of excitement, it may also lead to avoiding responsibilities and duties.

Relationship matters

With the spread of social networks online, the internet has become a type of social club, where people could develop and maintain friendship online. It gives a good feeling to be socially connected to others. It gives possibility to interact with people that you never met in person who shares your interest. In some cases, interaction online is more relaxed then in real. However, online interaction should not become a substitute for existing real-world social relationships with family, colleagues, neighbours and friends.

Constant Connectedness

Without using the Internet , there is a desire to use it. If it is possible, people check Facebook or e-mail many times a day. Because of the immediacy of the Internet, it gives a sense of "missing out" when being not connected. The ability to multitask online may make us feel that we should multitasking all the time.

+ The Networked City

> *Once we have both a "real" three-dimensional world, and computer- constructed "virtual" ones, the distinctions between these worlds can get fuzzed or lost*
> *(Mitchell 1995)*

Cities have become spaces of flows, networks of information processes. Furthermore, to claim that digital information now shapes urban experience more than the physical environment does is to deny the always already complex relations between the two. In City of Bits, Mitchell (1995) argues that "computer networks become as fundamental to urban life as street systems" and social life necessarily comes to revolve around telepresence. Similarly, Manuel Castells (1996) claims that urban space has been transformed into a global "space of flows" characterised by people interacting in real-time without being spatially or physically co-present. Graham (2004) explains:

> *It is now startlingly clear that global urbanization trends, and the intensifying use of computers, internet, telephones and digital media in social, economic and cultural life, are actually closely interrelated processes of change … We are not experiencing some wholesale, discrete, break with the urban past that has been ushered in by the 'impacts' of new technology. Rather, we are experiencing a complex and infinitely diverse range of transformations where new and old practices*

and media technologies become mutually linked and fused in an ongoing blizzard of change.

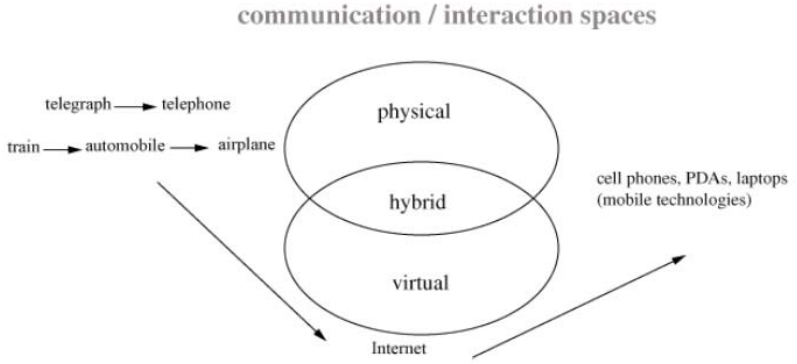
With current mobile communication devices, individuals can extend their presence beyond their immediate physical location. Indeed, mobile phone users exist in two places simultaneously: their physical location and a digital world of conversations and information. Meyrowitz (2005) states that even though experience is local, “the people and things that we sense are not exclusively local. . . . We may be mentally outside, even as we are physically inside”.

Because mobile phone users occupy two places simultaneously, de Souza e Silva (2006) argues that these technologies create hybrid spaces—a merging of physical and digital spaces through social practices. Indeed, de Souza e Silva “regards space as a concept produced and embedded by social practices, in which support infrastructure is composed of a network of mobile technologies” If a network of mobile technologies composes the infrastructure of urban space, then this infrastructure becomes how users experience city life Put simply, mobile technologies change the organization and experience of urban life; they change our ways of doing and being and, in particular, our ways of walking. Thus, we need to understand how people are using these technologies to move in and through the city as hybrid space.

+ Urban Hybrid Space

In Manuel Castells’ *Rise of the Network Society* (1996), he proposed a strict separation between space of place and space of flows. However, social and technological phenomenon these days indicates that these two spheres of logics are increasingly interweaving each other.

Adriana de Souza e Silva in her several articles has convincingly argued against the dichotomy between physical or real space on the one hand and virtual or mediated space on the other. The very fact that these two can no longer be separated: media spaces and virtual networks extend, broaden, filter or restrict the experience of physical spaces, and the other way around, changing the experience in city and social-spatial patterns.



De Souza e Silva, A. (2006). *From cyper to hybrid: Mobile technologies as interfaces of hybrid spaces*.

In the study “From cyper to hybrid: Mobile technologies as interfaces of hybrid spaces” she explains:

A hybrid space is defined by the merging or the blurring of borders between physical and virtual spaces. Hybrid spaces are nomadic spaces, created by the constant mobility of users who carry portable devices continuously connected to the Internet, and to other users.

The possibility of “always on” connection when one moves through the city transforms our experience of space. This connection is related both to social interactions, as well as to connections to the information space, that is, the Internet.

Finally, a hybrid space is produced when virtual “places” migrate to hybrid spaces. With advanced transportation and communication technologies, cities have become circulation spaces, and gathering places moved partially to the Internet, inside which multiuser environments have been regarded as utopian places of liberty. Now mobile devices bring these “multiuser environments” back to physical spaces, transforming the way we experiment with urban spaces.
(De Souza e Silva, 2006).

A hybrid dimension has appeared in urban space through the different digital technologies that have appeared in it: from mobile phones, to digital screens to wireless networks, and location based information. This hybrid dimension of urban space could be called urban hybrid space: physical urban space extended to the digital dimension and vice versa. The use of the term space also hints to its understanding beyond mere physicality but as a space of social practices. Urban hybrid space therefore includes the physical, digital and social dimensions, through interaction pattern and spatial practice.

Part III Episodes

Observational study and episodes
Episode #1“Mobile bubbles”
Episode #2: Be Connected
Episode #3: In-Between
Episode #4 : Place making
Episode #5: Geosocial networking
Episode #6: Mediated experience – On line Walk

Observational study and episodes

The survey aims to uncover the experience of urban places through the use of mobile communication devices.

The main intent of this ethnographic observation is to provide detailed, in-depth description of everyday life and practice of people using their mobile communication devices. Observations focus on detailed explorations in order to develop understanding which social patterns and different kinds of practices are formatting in urban settings with the use of mobile communication technologies.

It should be signalized that interpretation could be limited as observations is conducted only about real settings and immediate surrounding environment, and it could be only imagine in most of cases, the mediated environment , which the participant is experiencing being with his/her mobile device. This hidden invisible dimension will be partly explored through “targeted” interviews with asking open-ended questions or even casual talk with participants, and behavior patterns in social network give some considerations through online analysis.

Aims of observational study:

- observe and describe hybridization of urban environment and urban experience
- digital impact on formation of urban public places in order to improve urban experience.

The leading idea is to investigate conditions for more urban articulated experience where there is no dichotomy between virtual and physical space (virtual and physical), and where these two dimensions convergence into the synergy , even though temporally.

The central focus of observations will be an attempt to uncover situations of creation of formation of urban hybrid spaces through mobile communication technologies and how that affects experience of urban places from following perspectives

Italian context:

Actually Italian context represents an interesting case.

According to statistics Italy has the most largest number of mobile subscribers (about 90 million subscribers in total, what is a 150 % of penetration rate). Just to compare in Japan it is 90 % of population, in Germany 120%. In 2010 Italy has the highest number of smart phone subscribers, and in 2011 it has reached 20 million users of smartphone. Italian internet users are the most active in Facebook, superating France, Spain, USA and UK [17].

Figure 5.3

Smartphone subscribers: January 2009 vs. January 2010

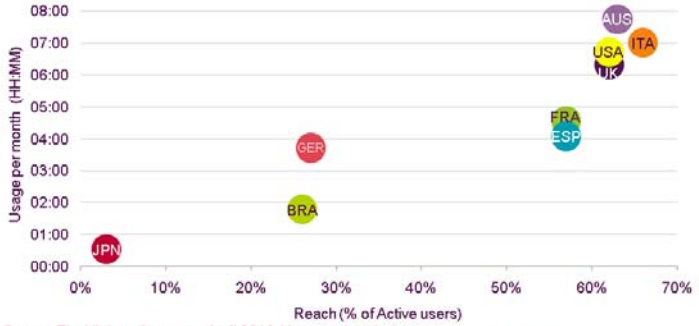
Source: comScore MobiLens / Ofcom calculations. Age 13+.
Note: Subscriber numbers based on 3-month average ending Jan 2010 vs. 3 month average ending Jan 2009. Population based on year-end figures for 2008 and 2009. EU 5 = UK, FRA, GER, ITA, ESP.

5

[17] Ofcom

Figure 5.35

Facebook reach and use, by country



Source: The Nielsen Company, April 2010. Home and work data.
Note: Figures do not include mobile phone use. Nielsen is investigating a decline in its internet use data around duration metrics and the potential impact of this on Unique Audience metrics. Consequently, until these investigations are concluded, Nielsen internet data for 2010 is likely to represent a lower bound and should be treated as indicative only.

At the same time, for example in Milan, it is difficult find free WiFi zones in public places, and generally cannot be said that digital technologies somehow are integrated in urbanscape.

Partially, it has been a reason to focus on personal mobile use and sequential practices and situation in order to explore urban hybrid space.

Most fields of observations were chosen according the following characteristics: urban public places that represent places of spare time. (in Milan: Corso Como, Corso Garibaldi, square of Duomo). These places are a kind of transit places of slow motion. Often on these streets it could be often seen people walking, looking front shop windows, hanging around.

Time of observation was also chosen during weekends, in order

to observe people's practices during spare time.

In this case it could be assumed that the mediated practices and hybridization are not specially forced by work pressure, though they still demonstrate a daily routine and practices. Supermarket queues, bus stops and public transport were also considered as fields for observation as inherent parts of city daily life.

Following episodes were chosen:

Episode #1Mobile bubbles
Episode #2: Be Connected
Episode #3: In-Between
Episode #4 : Place-making
Episode #5: Geosocial networking
Episode #6: Mediated experience – On line Walk
Episode #7: City User and City Producer

Episodes are divided in three structural parts:

[1 p a r t] Description of the study case

[2 p a r t] Theoretical discussion

[3 p a r t] Outcomes, experimental visions, and possible implications

Episode #1: Mobile bubbles

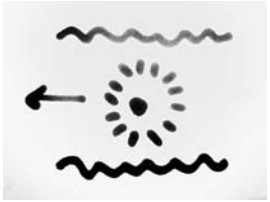
[1 p a r t]
Story 1: Going from A to B
Story 2: While waiting
Story 3: In Transport

[2 p a r t]
"Mobile bubble", "Time fillers", "Mood makers"

[3 p a r t]
Interactive mobile bubble

[1 p a r t]

Story 1: Going from A to B



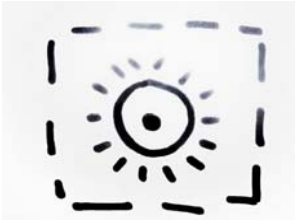
Nowadays there is nothing surprising, when you could observe on the streets people plugged to their MP3 player/or iPhone with headphones. Very often they wear dark shiny sunglasses. They could be silent, just heading from A to B destination. They don't want to be disturbed. They know where they go. They are interested to get on time from point A to point B. What is in-between, the surrounding environment is not so much attractive, often it is quite boring and well-known. Surrounding comes out as a visual, often blurred background with a special scenario accomplished by a favourite soundtrack via headphones.

> *With an iPod you can wear it and no one knows you are wearing it. I love to wear it when I go on a walk. You can dance with it on, but you will look funny to people when they see you dancing but they do not hear music.*
> *(Excerpt from interview: Elena 29 years Corso Garibaldi Milan)*

Walking from A to B, they could talk on phone too, and surrounding becomes a sort of blurred background o transit zone.

Between point A and B, their most attention is on the phone, somewhere there, with their friend, parent or colleague. They move from A to B , knowing exactly how to get there. Very often they look a little comical, sawing the air with their arms while explaining to imagined person in front. Or often their expressions are serious and reveal intense concentration, keeping going on the proper direction and do not loose a theme of the talk.

Story 2: While waiting



1

You love to live in the city. But it's not perfect. Your rushing daily routin is always sospended in various waiting zones, which probably you wish to skip or avoid, you would wish to be already there. After long working day instead of queueing in a grossery shop you would love to be at home with your family. But you are here, in grossery queue, your priceless time is going on, tik-tak, tik-tak, and only headphones with your carefully chosen music and Blackberry could help to escape you this neutral annoying environment. You are still there, in the same queue, but you feel a control of your environment, it is your music, you chat with your friend, make a comment on a friend's picture from the recent holiday in Facebook, you answer a ultimate email of your work (Thanks that you could leave your office earlier). Sometimes you "come back" to the queue, but only to make a step forward to cassier, and then you are again in your virtual saloon, writing back to your friend about a new organized birthday party on friday evening. You are already in front of cassier, (5 meters of quieu in supermarket /10 min = 2 lovely soundtrecks, and accomplished work mail, and birthday party is organized – invitations have been sent via Facebook). You take off your headphones, you pay your food, probably you exchange a few words with cascier, and then you are heading back to street with your favorite song that you were missing so much.

#2

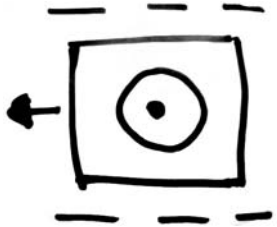
You love to live in the city. But you have to wait, wait and wait. Bus or tram stops are constant waiting zones of your daily routine. Possibly you know your bus schedule, and you could be lucky to arrive and happily jump to your bus. Unluckily, it happens often that bus gets stuck in a traffic jam, and time arrival has been recalculated for more 5 or 10 minutes (thanks to ATM electronic announcements you know that should not

wait it for eternity). And you have to wait. After days, months and years, you recognize your bus stop, sometimes it gets redone or renovated, sometimes you notice a new advertisement with a pretty woman /or man, or new glossy lipstick advertisement vs. new car model release. Do You really need this information?!... Suddenly, you get a phone call, your mother is calling you just to know how you are doing. And you are happy to hear her. The bus stop is not any more traffic jump's failure, it is an island for you and your mom, and story of a cake that she is going to cook for you on Sunday branch. You are still on bus stop, sitting on a bench. It is so funny how people moves under the rhythm of Ricky Martin! And then iPod shuffles to one of Depech Mode song, and it seems that cars start to move more dynamically.

From "Experience Project" interviews:

Posted by **mconcretegirl** Jul 2nd, 2011 at 1:31PM

I usually listen to music from my phone while using the internet on flickr or here or wherever.



Story 3: In Transport

It is very usual situation to see people busy with their mobile communication devices in public transport. People make phone calls, chat, check news, listen music or play games. This everyday practice – commuting equipped with digital device, become an inherent part of people's daily experience. Usually people are looking to screens of personal device, trying not to pay attention on their surroundings and people nearby. There is an impression that they immersed in their virtual dimension, but not completely. They still have a control of their environment, and have a clear idea when they a have to get out from transport.

From Expereince Project interviews:

Posted by **DowntownLAkid** Jul 2nd, 2011 at 1:21PM

Just cause its something to do.
Its not like im always talkin to a friend or whatever, I might be texting some girl i know. tryin to see wassup. addicted to nudie pics like a madman. But thats my thing. Thats me, I text cause ****, why not?
I could just stare out the window and think about my life again, but... nah, id rather text

Posted by **cupcake1992** Jul 2nd, 2011 at 2:30PM

i notice a lot of people pretending to be on their phone to look busy or because they don't want to interact with other people.

David Hasslehof did that once, he was pretending to be on the phone with someone and his phone rang!!! FAILLLLLLL xD

[2 p a r t]

“Mobile bubble”, “Time fillers”, “Mood makers”

Represented few previous stories are witnessing following phenomena. At first, it is so called iPod culture, which is caused in some cases by wish to isolate from surrounding people and environment. In other situations, mobile communication devices play a role of “time fillers” for commuting or waiting time, and in other cases , they become a “mood tuners” , giving a possibility to create a new type of spatial experience and new perception of urban scenery.

The iPod is not just a technological phenomenon but a cultural phenomenon as well. There is more to these digital music players than its amazing storage capabilities allowing us to carry our own entertainment library with us everywhere we go. The social impact it has made on society is just as fascinating as the technology itself. “The use of these mobile sound technologies informs us about how users attempt to ‘inhabit’ the spaces within which they move” (Bull, 2005).

Gergen (2002) espouses the theory of absent presence, whereby someone banishes another socially from an event – essentially ignoring them as if they were absent even though they are present.

The term has been used to describe many situations besides technological isolation but in regards to technology, “absent presence” indicates that while you are physically present in any certain place, your mind is absent from the people around you.

Gergen (2002) speaks of the cell phone user as one with the power to create a secure environment – a security bubble if you will – of friends and family accessible by cell phone that shield the individual from less desirable direct interpersonal contacts with new individuals and in new environments..

And in most cases iPod becomes a sort of buffer to block or readjust some urban failures, or personal perception about that, as noise in public transport, waiting time, coming out as an entertainment artefact.

> *I left my headphones and iPod at home, this way when I was on the bus, for the first time I realized the bus’ breaks squeaked, the other cars honk the horn a lot and how loud the people talked. I was used to listening to my music and disconnecting from the world that surrounded me. This bothered me; I wasn’t used to such loud acoustic contamination.* Cristina, 32 years old

Bull (2005) notes that ‘the ability of ‘sound’ to deliver what consumers want is increasingly wedded to the ability of consumers to create their own sound worlds. Privatised and mediated sound reproduction enables consumers to create

intimate, manageable and aestheticed spaces in which they are increasingly able, and desire, to live. ‘

Bulls overall point is that the culture of mobile listening is a reaction against the uncontrolled urban environment both aurally and visually. The mobile music listening is simply a search for control and a desire of self created imagined spaces inside the mind of the listeners.
Mobile bubbles could become “time filler” and “mood maker” of urban experience, creating a sort of hybrid urban environment. It is partly true that digital artefacts enhance individual’s isolation from urban physical environment and people nearby. The portable digital artefacts enable people to control their environment and personalise public place on move, creating personal scenarios of experience, where physical settings play a sort of scenery. Quality of surrounding is relevant and should be comfortable, but in case of transit zones and idle time of commuting in metropolitan city, hybrid formation seem a logical evolution. It could become a kind of game or exchanging informational platform of data, or sort of chat room between co-present people. However it is always a personal choice, to have an interest what is happening around, or to be in a silent dialogue with personal thoughts.

At the same time, it should be understand that this personalisation does not refuse physical dimension (what is difficult to imagine), but enhances creation and development of new urban scenario of urban experience and innovative sense of place.
Therefore the emergent question and challenge is that public place and urban experience is not anymore formed by common physical public dimension, but virtual personalized dimension plays an important role in formation of hybrid urban space.

[3 p a r t]

Interactive mobile bubble

Following this idea, that there is a need not only start to think about hybrid urban space, but this complexity calls for new instruments and innovative approach in order to create public domain in hybrid urban environment.
It could be easily imagine that in nearest future, that urban environment will become interactive enabling possible interaction physically but also virtually between so called “mobile bubbles” in immediate vicinity.
Interactive mobile bubbles able to share information and

interactive physical environment able to participate or signalize could form future hybrid urban environment. From first look, this could be understood as utopian idea, and sort of matrix, and its complexity is not immediately and easily comprehensible.

+ FlashMob

Eric Kluitenberg is a researcher studying the significance of new technologies. In his article, he "draws attention to a number of activist strategies to encourage public and private action in a hybrid space." (Kluitenberg, 2006).
Flash mobs are "semi-spontaneous public gatherings of groups of people...[not usually] known to one another, nondescript, with no determining characteristics [who] briefly perform some collective synchronous action, and then dissolve...back into 'the general public'..." who are alerted to "Directions and information about...[gatherings via]...text messages, or e-mails...with the aim of starting a chain reaction resulting in...an unpredictably large mob at a predetermined time and place"
Kluitenberg believes that Flash Mobs and other earlier examples of mass public gatherings, street parties, and demonstrations, all highlight the fact that "we are living in a space in which the public is reconfigured by a multitude of media and communication networks interwoven into the social and political functions of space to form a 'hybrid space.' This unique explanation of why and how Flash Mobs and other spontaneous public gatherings occur is based on the fact that the 'traditional' space found in cities has now been "overlaid by electronic networks...creating a highly unstable system, uneven and constantly changing" (Kluitenberg, 2006).

+ Subtlemob[18]

Performance “As if it were for the last time” is the work of sound artist Duncan Speakman is a subtlemob-project addressed several aspects of the hybridization of space through the advent of digital media technologies.
A Subtlemob is a collective urban audio-experience set in urban space. Participants download an mp-3 file, head to a location in the city, and at a particular time they all press play at the same time, thereby collectively experiencing the same soundtrack. The soundtrack does not only consist of music but also of spoken instructions that the participants have to carry out (And sometimes there is different instructions for different groups of participants). It is like a flash-mob, though Speakman calls this a “subtlemob”; in contrast to flash mobs, participants in subtlemobs are urged to “try to remain invisible” throughout the event by blending into the normal flow of a busy urban space.
This key idea of the performance lies in ability to make participants hyper-aware of their surroundings and their roles in the performance of everyday life. As one participant put it, “it was like you were given permission to *look* — at the people who *weren’t* doing it.”
From the project’s page:

> *When you put on the headphones you’ll find yourself immersed in the cinema of everyday life. As the soundtrack swells people in the crowd around you will begin to re-enact the England of today. Sometimes you’ll just be drifting and watching, but sometimes you’ll be following instructions or creating the scenes yourself. Don’t worry, there will be nothing illegal or embarrassing, sometimes you might be re-enacting moments you’ve seen in films, sometimes you’ll just be playing yourself. This is no requiem, this a celebratory slow dance, a chance to savour the world you live in, and to see it with fresh eyes.*

[18] subtlemob.com

Screenshorts from video of project:

+

Capital music : personal expression with a public display of song choice

Capital Music is an experimental application that enables urban dwellers to listen to their music on their mobile devices as usual but also visualises the artworks of songs currently being played and listened to by other users in ones' vicinity. The research studies the ways that this tool can change or even enhance people's experience of public urban spaces.

(Seeburger, Jan, Foth, Marcus, & Tjondronegoro, Dian W. 2010)

Sound Garden[19]
Tactical Sound Garden [TSG] Toolkit

The Tactical Sound Garden [TSG] Toolkit is an open source software platform for cultivating public "sound gardens" within contemporary cities. It draws on the culture of urban community gardening to posit a participatory environment where new spatial practices for social interaction within technologically mediated environments can be explored and evaluated.
Participants plant sounds within a positional audio environment using a WiFi-enabled mobile device (PDA, laptop or mobile phone), and wearing headphones connected to a WiFi-enabled device people can drift though these virtual sound gardens as they move throughout the city.

[19] http://www.tacticalsoundgarden.net/

+ Interactive bus stop

This bus stop advertisement represents an outdoor idea that embraces not only the media but also gives consumers a realistic world of advice to help tackle the current energy crisis in South Africa. The execution ensures that the consumer interacts with the message when a light is triggered by a sensor as they approach the bus stop - illuminating the shelter as well as the message, which reads: “Only use electricity when you need it”

Bus stop could be a interactive public/or personalized screen of personal representation or public participation and sharing.

+ The Mp3 Experiments

The Mp3 Experiment is participatory public event created by Improv Everywhere, organization based in New York and specialiazing on creating scenes of chaos and joy in public places. Mp3 Experiment in New York is conducted each year and also tour the project goes regularly to college campuses and international festivals.

The Mp3 Experiments work in the following way: organizators of Improv everywhere put an original mp3 file online (usually around 45 minutes long) that people download and transfer to their mobile devices. Participants then synchronize their watches to an atomic clock on our website, head out to the same public location, and blend in with others. At the predetermined time, everyone presses play. Hilarity ensues as participants carry out ridiculous, coordinated instructions delivered to their headphones via narrator “Steve” and everyone else tries to figure out what is going on.

Thousands in Bryant Park at the conclusion of the MP3 Experiment 6 and 7.
Photo from: Improv Everywhere

The Expirement Mp3 looks like something between a play and a game. But it is also a spectacle. It takes the MP3 player, which has emerged as a way of avoiding contact with other humans, and uses it to bring thousands of people together, instead.

Represented examples trigger an idea that new technologies in urban space with an articulated innovative approach enable new practices and experiences that are personal but at the same time collectively experienced.

ICT technologies may act on more profound level of life world because of its linguistic essence. This assumption may lead to cultural reconsiderations in general. Meaning of social interaction and practice, how people communicate to each other and how they experience the city may turn to a sort of gaming according to various scenario, being personalized or collectively motivated. ICT technologies empower people and environment with invisible codified force that could manage informational flows reproducing them in urban settings.

Episode #2: Be Connected

[1 p a r t]
Story: Un-connected

[2 p a r t]
Always connected

[3 p a r t]
Infrastructure: Smart cities and Internet of things
Be connected with co-located people
Disconnectivity

[1 p a r t]

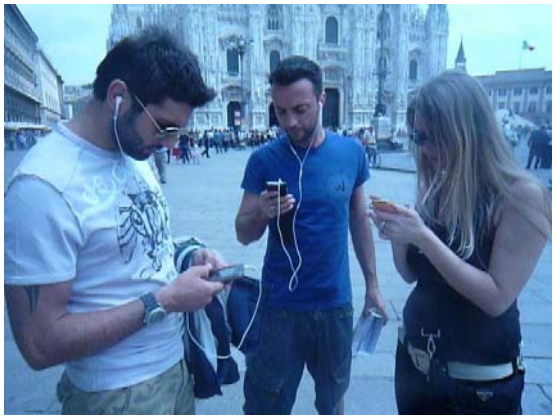
Story: Un-connected

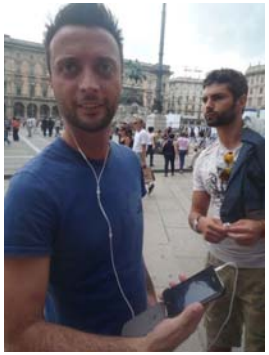
Piazza Duomo, Saturday afternoon.

Two young men are walking, wearing both headphones. How strange is that?

We are used to see people walking alone in isolated bubble of sound, but not together. Is that a new united experience to wear headphones and listen music while enjoying a Saturday walk?!

I could not refrain from stopping these guys and asking a few questions. Actually, there is a current opinion - do not approach people wearing headphones. Oppositely to that, these young men were more than welcome to participate in interview, and more than that they were also curious about the conducting research. Our conversation turned out to a long one-hour talk on the street , concluded with exchange of contacts.





The main reason why guys were wearing headphones was a desire to be always connected, in order to reply for incoming calls in any moment or hear message notifications.

> *It's very convenient for notifications, Facebook, emails, What's up, Skype , Messenger. I do everything with iPhone. I need to feel it when a new message arrives. Ooh, this is one who is looking for me.*

The guy points out at screen of iPhone with a new message

arrived, and his attention draws away to screen information. Other guy continues:

> *Wearing headphones seems very natural to us, we even do not notice that. We use it most of time like that when we are out in the city on the streets or in transport.*

It turns up that these young guys cannot imagine The state of "being always connected" an essential feature of everyday activities between them but also due to work:

> *For example we send messages to each other very often. We work with phone, so it should be always with me.*

During discussion metropolitan context came up as an additional characteristic , as a certain respond to chaotic urban environment by people to turn their attention to themselves and avoid contacts with co-present people:

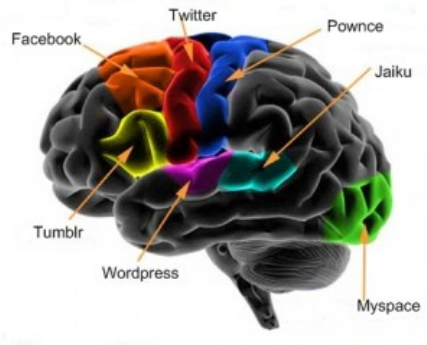
In Milan as a metropolitan city I think we are used to see people with headphones, listening music or making phone calls, or pretend to listen music in order not to be disturbed. Nobody even notice you. Milan is a dynamic and intense city. People take their headphones with ipod and go. ("iPod e via, iPod e via")

During our conversation one guy was wearing headphones all the time, another guy at a certain moment took them off. While we were chatting, they received a couple of message notifications, and didn't respond them immediately, though the received phone call made one guy to move away from us in order to answer the call, and he was temporaly out from our discussion.

[2 p a r t]

Next generation – Always connected

This case demonstrates a certain degree of priorities and an interesting urban and social interactional phenomena to explore. Contemporary tendencies are that everything is multi-layered, and people are always connected. People are expected to be connected all the time, but more over they want and have some necessity to be in connection with friends, news, works.



Social networking and our “need” for online relationship was interestingly explained through a study by neuro-economist Paul J. Zak (Claremont Graduate University). He has scientific evidence that social networking does trigger the “generosity-trust chemical” or Oxytocin inside the human brain. Zak contends the fabric or “social-glue” that connects families, communities and societies together (“economic lubricant”) enables humans to interact and engage in different types of transactions (online and offline). Zak's study of Oxytocin and social networking revolved around time spent on Blackberry use, Facebooking, MySpace and Twitter and the measurement of Oxytocin levels. These social networking tools simply facilitate and, in some cases, replace the now old-fashioned face-to-face conversation. Its content was built from the question, "What's new with you?" All of these new social media tools are simply a new way of "broadcasting" the answer to the age-old question of: what is new with you?

Here you are a brief excerpt from Facebook friend who has just switched back to Facebook network from Twitter with an interest to connect and to get some news from Facebook.

e.g. Excerpt from Faceboook

Some studies have established that more people engaged with Facebook by any measure the better they feel. Those positive feelings are direct products of social capital. The extensive study has established that the more social capital people believe they have, the greater sense of well-being they enjoy.

It’s interesting how people are living with constant sharing and invisible connection through virtual domain. This pervasive connectivity is accompanying people all the time, and its ubiquity don’t have any physical constraints. It is important to point out , that this virtual interaction does not substitute face-to-face encounters, but people carry it with them and feel a need to be presented in this virtual saloon of potential connectivity.

It is somehow overlaying habitual way of interactional pattern formatting an interactional hybridity in urban space: Real interaction (face-to-face), accompanying with remote interaction through messages , or disrupted by mediated communication (a phone call).

This sense of connectivity and potential interaction that we carry with us in our everyday life could be compared with a visit to a bar or saloon.

The excerpt below could demonstrates a perception of this pervasive connectivity comparing it with a western saloon, that was a particular kind of bar, being a sort of place for getting news, encounters with old mates, stories of American Old West society.

+ Saloon Excerpt from 1000Awesomethings:

Welcome to the saloon.

Jump off your tired horse, kick your cowboy boots together, and step through the swinging gates into your home away from home. Dusty sunbeams streak through dirty stained-glass windows and shadows fall on your closest friends laughing in a dank and dirty world away from it all. Tip your hat at

the girl across the room, slap your pals on the back, and slip onto a cozy stool to trade stories and jokes with the bartender and catch up on all the gossip you missed.

Welcome to the saloon.

Jump onto your cell phone, check your text messages, and log into your email to catch up on forwards from friends. Bleeps and bloops ring from plastic screens as you share laughs with faces in a secret digital world away from it all. Poke the boy across the room, catch up on blogs, and instant message all your friends while skimming all the comments and one-liners you missed.

Losing cell phone service is like temporarily leaving the saloon and heading into the chilly night air for a crisp midnight walk down the black roads of your hometown.

It's a refreshing feeling of clearing your head, finding your thoughts, and finally floating alone through our webby world of loose connections. It can feel great to walk away from it all. But it sure can feel great to pop back in.

Getting cell phone service back after not having it for a while is like stepping through the swinging doors and joining us all back in the saloon.

Welcome home.

++

This invisible saloon accompanies people everywhere, and becoming a part of social and spatial everyday practice.

Ubiquitous interaction enabled by new technologies such as smart phones, augmented environments and location-aware software suffers less and less from so called "disembodied conduct". Nowadays, potential of connection supported by mobile and ubiquitous technologies allow different forms of

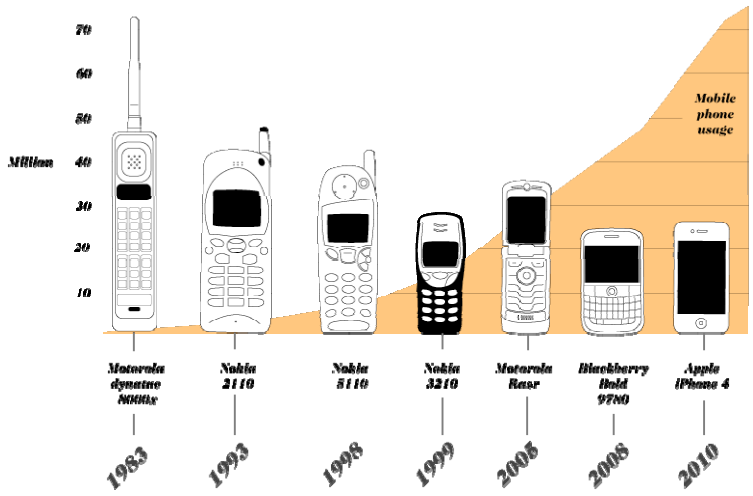
distant co-presence, making mediated communicative conduct more and more embodied. Notwithstanding this, face-to-face interaction continues to play a special role in ensuring connection and shared meaning across contexts (Urry, 2002).
At the same time, the point in question here is how to define co-presence going beyond the corporeal dimension of face-to-face interaction. As Urry (2002) puts it, “One should investigate not only physical and immediate presence, but also the socialites involved in occasional co-presence, imagined co-presence and virtual co-presence”

Mobile devices which travel with us and follow us while being (im)mobile, allow the emergence of what Urry defines ‘virtual proximities’, “multiple networks, where people can switch from one to the other (…) through the shift to a personalised wireless world (…)” (Urry, 2002).

The social interaction in public is not any more formed by face-to-face encounters, but it is enriched by virtual continues potential co-presence, what is for sure, is already reconfigurate social spatial organization of urban space.
This paper does not have an aim to explore in-deep which influence virtual co-presence has on face-to-face interactions, but it is more interested in witnessing of emergent phenomena of desire and certain need to be connected.

The demand of pervasive connectivity is a part of new process of hybridization of urban space, changing the way that social interaction in public takes place. It could be argued that being connected is harmonically, inherent and desirable feature for experience in contemporary urban environment.
Probably now the disruption is visible and exist a certain gap between physical and digital dimensions, it’s not completely comprehendible and there is a certain fragmentation of the whole experience, though the emergent urban hybridization is partly evident.
Growing use of virtual domain could be partly explained by development of next-generation devices such as the iPhone, Blackberry and Android, what has a dramatic change in consumer behaviour. Their technological advances enhance desire to access news, social networks, and entertainment sources.

Note: Statistics from three major UK airports (Bristol, Birmingham and Leeds) show that type of mobile devices influence the consumption of digital data.



Mobile devices and digital artefacts represent a certain limitation for this integration, and urban digital infrastructure is still in its embryonic state. Though it is already obvious, that the city has become hybrid, formatted according to Castells's space of flows by a "new spatial characteristic of social practices that dominate and shape the network society" (Castells, 1996).This phenomena simultaneously causes hybridity in interaction in urban space which already influence the way people communicate to each other.

[3 p a r t]

Infrastructure

"*More and more of technology infiltrate every aspect of our lives. It's become a life support system without which we can't survive. And yet, how much of it do we understand? Do I bother myself with the reality of what happens when I get into a big steel box, press a bottom and rise into the sky? Of course I don't. I take going up the world like that for granted, we all do. And the years of the XX century have gone by the things we take for granted have multiplied way beyond the ability of any individual to understand in a lifetime. The things around us, the man-made inventions we've provided ourselves with, are like a vast network, each part of which is interdependent with all the others. (…) All the things in that network has become so specialized that only the people involved in making them understand them."* James Burke, "The Trigger Effect" *Connections 1978* [20]

Nowadays, the city faces a triggering challenge, that it is inevitable for it. Informational and digital flows are already here, and people intuitively cannot refrain from using them. It became a part of life world and embedded everyday practice and as a inherent part of social interactional pattern.

Therefore, the evidence and the need of informational urban infrastructure call for introduction of new urban systems. Urban wireless networks, public data networks could improve urban spaces and enhance interactivity of its inhabitants.

[20] James Burke, "The Trigger Effect" *Connections 1978* [20]

In the book “Augmented urban spaces: articulating the physical and electronic city” editors write how enriched media environments, ubiquitous computing, mobile and wireless communication technologies, and the internet are modifying city living and the fruition of urban spaces, arguing against a clear boundary between the digital and the physical:

> *“in the augmented city, ‘virtual’ and ‘physical’ spaces are no longer two separate dimensions, but just parts of a continuum, of a whole. The physical and the digital environment have come to define each other and concepts such as public space and “third place”, identity and knowledge, citizenship and public participation are all inevitably affected by the shaping of the reconfigured, augmented urban space”*

Smart Cities and The Internet of Things

Urban infrastructure is an essential component of the city.

Nowadays there is a discussion about smart cities, where some forward-looking technology companies (Cisco, Sun Microsystems, Ericsson) are developing a so called the Internet of Things. This project is driven by an assumption that objects around us become smart and begin to embody the functionality of computers and mobile devices. The things will be able to talk to each other; transportation infrastructure will be synchronized and help us to connect.

Already now there are some experimental implications, like In San Francisco, Cisco is rigging public buses with Wi-Fi and in Amsterdam they are developing a GPS handheld that monitors all public transportation in the city. The idea is to offer attractive alternative transportation solutions in order to minimize carbon consumption.

Bill Ford, an executive chair of the Ford Motor Company, the grandson of Henry Ford, envisions the future of mobility , that includes "smart roads," smarter public transport thanks to new technology:

We are going to build smart cars, but we also need to build smart roads, smart parking, smart public transportation system and more.
We don’t want to waste our time sitting in traffic, sitting at toll booths or looking for parking spots. We need an integrated system that uses

real time data to optimize personal mobility on a massive scale without hassle or compromises for travellers. And frankly, that's the kind of system that's going to make the future of personal mobility sustainable. […]What really inspires me is what's going to be possible when our cars can being talking to each other. Very soon, the same systems what we use today to bring music and entertainment and GPS information into our vehicles are going to be used to create a smart vehicle network. So just imagine: one day very soon, you're going to be able to plan a trip downtown and your car will be connected to a smart parking system. So you get in your car, and as you get in your car, your car will reserve you a parking spot before you arrive – no more driving around looking for ne, which frankly is ne of the biggest users of fuel in today's cars in urban areas is looking for parking slots. […] This is the kind of technology that will merge millions of individual vehicles into a single system. […] I believe in a global network of interconnected solutions.
Bill Ford: A future beyond traffic gridlock *Talk from TED*[21]

Be-connected with co-located people.

It could be explored an opportunity for socialization among co-located people. Eagle and Pentland (2005) have explored the idea of serendipitous match-matching, by developing a system called *Serendipity* which alerts mobile phone users whenever they are in proximity of someone sharing particular, self-declared, interests.

A similar researcher project, *DigiDress* (Persson, Blom, and Jung 2005) has become a commercial application called Nokia Sensor, allowing proximal communication and match-making. Instead of relying on the explicit declaration of personal interests, other systems as *tunA* (Bassoli, Moore, and Agamanolis 2006) attempt to find more subtle ways to connect people in proximity, in this case using music. Finding other people with similar tastes in music is thought of as an opportunity for creating social links and new urban-sub-communities.

Creation of Public virtual street overlaying the physical one,or a kind of corridor of informational flow that could retell you an invisible/hidden story of the street.

As a part of an experiment called Flirt[22] , single mobile users in Helsinki were asked to leave messages about themselves behind when they wanders around the city. As other people encountered the data and began to respond, according to one reporter, the Flirt experiment "turned Helsinki into a citywide chat room"

Disconnectivity

[21] *http://www.ted.com/talks/bill_ford_a_future_beyond_traffic_gridlock.html*

[22] http://www.hookerandkitchen.com/flirt

Emphasis is always placed on the right and desire to be connected. However, in future it may be more important to have the right and power to be shut out, to have the option , for a longer or shorter time , to be disconnected from networks and informational flows.

The experimental project *Floatbles (2004) by Haque Design*[23] + *Research* addresses the question of disconnectivity.

Jellyfish-like vessels drift around cities, creating temporary, ephemeral zones of privacy: an absence from phone calls, emails, sound, and thermal patterns left behind by others. . Through various electrical systems they are also able to prevent access of GPS devices, television broadcasts, wireless networks and other microwave emissions. By creating a "blurry barrier" and a ground-plane camouflage pattern, they provide shielding from the unembarrassed gaze of security cameras and surveillance satellites.

Usman Haque, Floatables, 2004

[23] http://www.haque.co.uk/floatables.php

Episode #3: In-Between

[1 p a r t]
Story 1: In-between #1
Story 2: In-between #2
Story 3: In-between #3

[2 p a r t]
Urban experience between “Here” and “There”.
“There and Now”.

[3 p a r t]
Simultaneity, Instantaneity, Pervasivity

[1 p a r t]

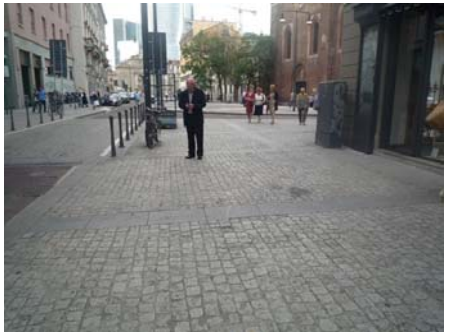
There are places where new virtual senses of place are created – places that are neither nor fiction, but somewhere in between.
Falkheimer, Jasper, Jansson *Geographies of Communication: The Spatial Turn in Media Studies 2006*

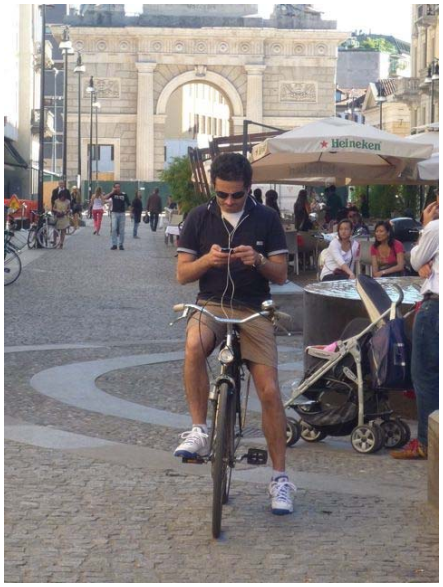
Story 1: In-between #1

Corso Garibaldi, Saturday afternoon.

Corso Garibaldi could be called a “slow” pedestrian street. The term “slow” here means, the street that favourites walking and enjoying the surrounding environment, it is a kind of transit street, at the same time it wideness and free-of traffic quality

permit people make temporal stop. Very often people stop to check new collections at front windows of shops, or stop to sit on benches to eat freshly made ice-cream and chat. Along this street there are many outdoor terraces of cafes or restaurants, where people are passing their afternoon spare time just chatting or taking a glass of “prosecco”. At this calm and relaxed setting, it is possible to observe quite many people that occasionally have been stopped by their mobile device. Usually their heads are turned down staring at screen of their mobile device, typing some message or checking information. This temporal presence usualy finds very unusual place destinated through suddenly incoming message and immidate response by user of mobile device. There is an impression that at this moment, the surrounding setting has been moved aside, creating a temporal static place, where a person is more





involved in digital dimension of communication. These places cannot be predetermined as they completely depend on interactive communication and comfortable position of person As far as the sms writing is finished, person comes back to real urban surrounding and continues the previous activity .

Story 2: In-between #2

Additional material : Video

Corso Como , Saturday afternoon.

Corso Como has similar characteristics of public urban place to Corso Garibaldi. Lady is walking down on the street, looking at screen of her mobile device and typing something. Her walking path is slightly different from the rhythm of people nearby people that outwalk her. She is moving slowly, constantly looking at her screen. She has a certain sense of the surrounding environment , as she manages to avoid bumping to other people on the street, simultaneously writing something. She is not completely away from urban setting, as she moves along the street. However, her rhythm is not determined by spatial setting. At a moment she stops, probably writing something important , then continuous walking slowly. Now she is on street for cars, standing on one side. A car is just passing by , and it seems she perceives its present, but she does not raise her head even to have a look. When the occupancy with mobile device is finished, the lady continues her walk down the street with a rhythm, fitting into the surrounding environment.

Story 3: In-between #3

Milan, 20.15, Tram 24 (going from south of Milan to city center)

The young boy is equipped with iPad and headphones (connected to iPod), listening his favourite music. On iPad screen Facebooks page is opened, and boy is browsing through photos and comments of his Facebook friends. In fact, his presence is formed by an invisible bubble of sound and visual array of photos on screen of iPad

The tram is on the move, and even on photo you could notice that environment outside of the window is blurred. It brings a symbolical meaning to this case. Indeed, the elaborated picture with slightly visible physical surrounding and informational flow visualizes a generalized representation of formed hybrid space at the moment. Then when the guy goes from one webpage to another page, it seems that internet connection is not very fast , as next page is downloading quite slowly. The boy partially “goes back” to real physical surrounding , looking outside from the window of the tram, though still plugged to sound from headphones surroundings, but sound is still personalized in headphones.

[2 p a r t]

Urban experience between “Here” and “There”.

Forty years ago, Berger and Luckmann (1966) published an influential book on the sociology of knowledge. The book provided a phenomenological account of the social construction of the reality of everyday life. Berger and Luckmann described the reality of everyday life as organized around the “here and now” of the individuals who interacted with each other in the face-to-face situation. However, since the beginning of the 1990s, the wide spread of Internet and digital technologies have changed the conditions of social interaction, and whether or not such changes have altered the ways in which individuals construct the reality of their everyday life. New media communication technologies have altered basic social-spatial and temporal structure of the everyday practice and concepts. The construction and understanding of life world has been changed.

Conditions of social interaction refer to the totality of the environment in which interpersonal contacts take place. From the perspective of phenomenology, such an environment consists of not only the “contact situations” that directly affect a

given social encounter but also the “zones of operation” that partition the life world into different time-space segments. In traditional framework urban experience of everyday practice was shaped by situations and encounters taken in specific place – “Here” . However, the advent of media communication technologies has brought about significant changes to this environment by creating a new spatiotemporal zone — the zone of the “There and Now”.

“There and Now” Zone

Berger and Luckmann regarded the lifeworld as consisting of “multiple realities.” Among these multiple realities is “the reality of everyday life” which presents itself to us as the “paramount reality”. The reality of everyday life is structured “both spatially and temporally.” The spatial structure of everyday is

“the combination of these two structural dimensions of the lifeworld produces two basic “zones of everyday life”: (1) the “here and now” zone that contains the “world within reach”—“the world in which I act so as to modify its reality, or the world in which I work”; and (2) the “there and then” zone that contains the “world beyond reach”—things “that are not accessible to me in this manner”. There are, of course, many “intermediate areas” that connect these two zones to form a spatiotemporal continuum of the lifeworld.

The reality of everyday life, according to Berger and Luckmann, “is organized around the ‘here’ of my body and the ‘now’ of my present,” and “this ‘here’ and ‘now’ is the focus of my attention to the reality of everyday life”.

Our interest “in the far zones is less intense and certainly less urgent” because the distant world is not immediately accessible to our manipulation.

However, Berger and Luckmann later found it necessary to modify this depiction for it was untrue even then that individuals were capable of influencing only what was physically nearby in everyday life. Through the telephone, for example, we can be in direct touch with people on the other side of the globe: although they are not here with us, we can reach them there almost instantly. In a later book co-authored with Schutz, Luckmann revised his earlier statement by extending the “world within reach” to the “world within mediated reach,” where we can, for instance, “telephone, pursue events on the television screen while they occur on other continents” (Schutz and Luckmann 1973).

This telephone-based contact space belongs to a new zone of everyday life—the “there and now” zone, which was not fully developed until the advent of the Internet.

The emergence of this “there and now” zone has altered the spatiotemporal structure of the reality of everyday life. Instead of centring on the “‘here’ of my body and ‘now’ of my present,” the reality of everyday life is now organized around both the “here” of my body and “there” of my mediated reach. Consequently, the focus of our attention to the reality of everyday life is substantially broadened to cover “social phenomena of massive time-space extension”. As Giddens remarks:

The advent of modernity increasingly tears space away from place by fostering relations between “absent” others, locationally distant from any given situation of face-to-face interaction. In conditions of modernity,. .. locales are thoroughly penetrated by and shaped in terms of social influences quite distant from them. What structures the locale is not simply that which is present on the scene; the “visible form” of the locale conceals the distanciated relations which determine its nature.

Today, more and more distant locales are being connected through the media communication technologies for instant contact, and the construction of everyday life is shrinking correspondingly. With progressive ephemerilazion of technologies and media, the zone of the “there and now” will continue to expand at an accelerated pace, thereby further altering the spatiotemporal structure of the reality of everyday life. Zone “There and Now ” is a key phenomena of mediated experience in urban environment, though in hybrid urban space it is possible to envision that this zone is going evolve into its new formation, blurring up into new hybrid zone “Here-There and Now” . In fact, this process is extremely favourite by specifies characteristics of ubiquitous media communication technologies.

[3 p a r t]

Simultaneity, Instantaneity, Pervasivity

New media communication especially affects the use of time and the role of place: it “modifies the presence and absence of individuals in social space, the social configuration of space and time, the implementation of the democratic process and the construction of the modal personality” (Fortunati,2000). Another important spatio - temporal effect is the distribution of presence in simultaneous interactions (Rettie, 2005). The term “instantaneous time” is appropriate to ubiquitous interaction: the

absence of delay increases the focus on what is immediate, so that “the future increasingly appears to dissolve into an extended present” (Urry, 2000). Simultaneity means competition but also co-occurrence between remote and co-present interaction, so that “when people are on the phone, there is a sense in which they are in two places at one time. This is particularly apparent for mobile phone communication, where mobility means that calls are likely to interrupt concurrent co-present interaction.” (Rettie, 2005) Of such an instantaneity/simultaneity, it is emblematic the slogan of a major player in the mobile phone industry. ‘Life is now’ is the synthesis of how an extended present becomes the measure of all things in the mobile of constantly connected world . In real-time, “neither time nor space seem to exist as distance between places and moments. Time as distance has become replaced by relationships, fundamental action, and the ‘trying out’ of all possibilities before actualisation” (Dennis, 2007).

In the case of augmented ubiquitous environments, the objective is to make mediated and communicative interaction possible anywhere anytime, or better everywhere every time, “everyware” in Greenfield’s words (Greenfield, 2006). This pervasivity, apparently so grounded into physical environments, is likely to have unforeseen and contradictory consequences, since interacting everywhere every time means blurred boundaries between what is considered appropriate to the public sphere and what is strictly felt as belonging to the private (Katz & Aakhus, 2002). instantaneity of time translates into “polychronicity of human activities” (Kakihara & Sorensen, 2001). Indeed, the change that mobile communication produces in place, space and time is more complex than making us independent from these dimensions:

“Mobile communication does not “free” us from places, spaces and practices, but makes them communicationally available to other mobile networked parties, leading to a new, enriched symbolic texture of everyday life” (Arminen,2005).

Episode #4: Place-making

[1 p a r t]
Story 1: On phone
Story 2: Wifi zones
Story 3: Stretching existing context of pubic place

[2 p a r t]
Long Here and Big Now

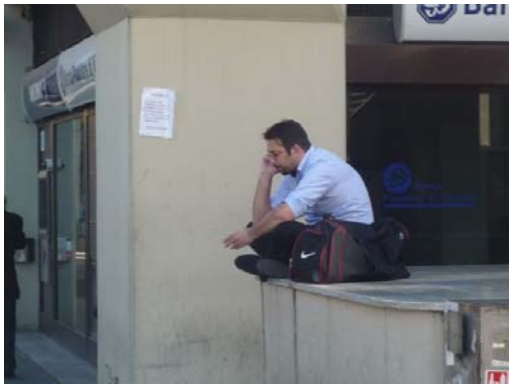
[3 p a r t]
Is my space makes my place?

[1 p a r t]

Story 1: On phone

Afternoon, initial not renovated part of Corso Como
(just in front of construction site)

Man is talking on the phone. The urban settings by its nature do not represent place for long permanence. It is not attributed by any urban furniture. It is more a transit area, a sort of mini urban void characterized by urban silence and passing by strangers that is adopted by a man on the phone to a kind of personal cabinet. This scenery does not disturb the eye; moreover it makes it more harmonically. In the air there is a perception of sort of discontinuity between the conversational dimension and physical setting.



Story 2: WiFi zones

Evening, about 8 pm. Isola quarter

A young man is standing and leaning his elbows on lighting column. He is wearing headphones and keeping laptop in his hands. In some visible vicinity there is his bag on a sidewalk. After some time, it seems not very comfortable to stand , he moves to sit on concrete step of front window of a bar. While he is busy with his laptop, people are passing. The urban setting does not seem very welcome for sitting on sidewalk. It is a kind of transitional zone, not adapted for long permanence. Though the man is calmly spending his time. The place seems a sort of living room for him, even if a not so pleasant comfortable one.
A lady from the bar nearby comes out to do a habitual evening closing procedure of the bar, and cleans of the areas near the bar, what makes the guy to change his location in order not to interference with cleaning procedure. During these movements the man is keeping conversation with somebody on the phone call through laptop, he just changes his position, and after the shutters of shop windows is closed, he moved back to the concrete step that substitute him a chair.






From an interview:

Why are you here?

I'm a model from Poland and I'm in Milan for a fashion week. I live here in apartment.(he points out to a building in front) In apartment there is no internet connection. Actually there is , but it is so expensive. About 10 euros a couple of hours. So, I cannot talk in Skype with my girlfriend and friends from Poland, from where I'm from. Here there is a WiFi that is possible to use .
I spend here few hours a day, talking to my friends, checking some mails, or surfing Internet.

Not very far from this place there is Mc' Donalds with a sign advertisement of free WiFi:

Unfortunately it's not working. If yes, for sure I will be sitting in some more comfortable place and not on sidewalk!!!

Coming here a week ago actually you could see in this place 10 models, over there another 5 persons, and far away another several persons sitting outside on sidewalk with there laptops.


Story 3:

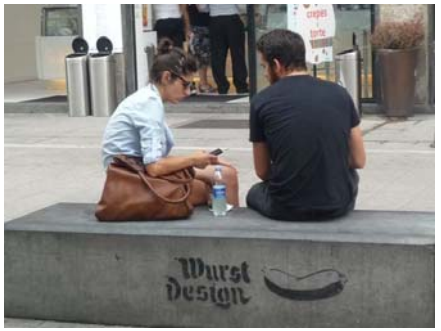
Stretching existing context of public places

Man and lady are sitting at cafe terrace. They are having some drinks together and pleasantly chatting. Sometimes they look to each other, or observe some people passing by them. On a certain point of their pastime, man takes his iPhone and shows something at the screen (it could be some image or video).

> *My friend from Paris, Jack and other couple friends of mine, we had a great dinner last night. Let me show you some photos. And here it is a video as well. Look!*

After this moments an excited talk evolves, accompanying from time to time some demonstrations of other content at the screen.

It more often could be seen in public or semi-public places people, either sitting on terrace, cafe or park benches and looking together to a one screen of mobile device. Their talk usually evolve with discussion from information from mobile device.



[2 p a r t]

"Long Here and Big Now"

More often it is possible to observe people using personal mobile communication devices in urban places. This digital artefact has become an extension of interpersonal communication in reality providing a possibility of immediate access to informational flows, favourite music or preferred event (navigating internet, see video, show an interesting article). This somehow empower its use in public.

Introduction of new communication devices as smart phones, like iPhone enabling not only to make phone calls and send messages but easily navigate internet, manage music, photos and videos libraries.

It has became a kind of artefact of performance and portable unlimited self-expression, and its narrative nature helps people to express themselves in interpersonal communication. It could be familiar to friend's visit if you invite your friend home and shows him a photo album of your family, or share a favourite song. Obviously it is not the same, and could not substitute established communication practices, at the same time it enriches interaction therefore bringing new dynamics to interpersonal communication and reshaping the meaning of public place beyond its envisaged dimensions.

On one hand, it is true that these new technologies favorite privatization of public space. Like scholars (Bull, 2005: Cooper, 2001) demonstrated that users of mobile communication technologies create their personal own private space in public settings.

On the other hand represented cases demonstrates that the new generation of mobile device have became artefacts of social interaction introducing new content to locality.

Moreover these digital artefacts posses the ability of stretch and enlarge the existent content of place.

Actually, under influence of communication technologies and considering that urban experience is constructed under conditions of ubiquitous informatics, there is a change how we actually perceive the things. The writer and designer, specializing in urban-systems design practice *Urbanscale* in New York, Adam Greenfield introduces "long here" and "big now":

> *The "long here" part is, I think, a little easier to make out; we've already seen how easily we can lay a persistently retrievable history of the things that are done and witnessed there over any*

> *place that can specified with lat/long coordinates. Whenever I've used the phrase "anchoring subjectivities," this is what I was thinking of: place now has* visible *depth in time.*
> *What about "the big now," though? It's shorthand for the enhanced and deepened sense of simultaneity – of the world's massive parallelism – that certain digital artifacts lend us. The most concrete example I can come up with is my experience of Twitter, which, like one of the great NYTE visualizations, though more subtly and expressively, quite clearly reveals the great waves of activity and slumber sweeping over the globe. A ten-minute interval may see reports of friends' experiencing rush-hour frustrations in the Bay Area, dining out in New York, and late night dancing in London, a notable lacuna in pings from Brussels or Torino or Helsinki, and then the first groggily pre-caffeinated dispatches from Seoul and Tokyo. For me, at least, it's been difficult to see my New York through quite the same eyes, when every time I get my phone out I feel the entire planet's deeper rhythms working themselves out.*
> *I'm willing to bet that these are among the factors which will do the most to bend and shape our experience of urban place in the next few years to come.* (Greenfield, 2008)

From this perspective from one point of view digital technologies undermine the existent meaning of place, from another it just introduces new experience, which invisibly overlays immediate environment and practices according to our preferences and interest, thereby creating a kind of informational cloud of flows drawing up our attention more or less and influencing our mood, thoughts, and even perception of physical settings. Under the on-going process of digital ephermalization, our perception of place could not be anymore rooted in local identity of this place, and it could be partially influenced by hybrid personalized environment which we carry in our pocket.

This changes the modality of place making which constitutes not only by visible social/spatial organization but as well it is reshaped by digital communication dimensions and personal desire to share this information with co-located people.

For example, coffee shop with WiFi could be used for all sorts of communication; there will be someone using the WiFi for work, reading the news, writing emails, chatting, updating a Facebook profile or Tweeting. All this can of course be done while you're sitting at a table drinking coffee and having a conversation with a friend or colleague. In that way the coffee shop becomes a place where "*people maintain social relationships and connections that go beyond the physical boundaries of those specific places, transforming places in permeable localities*" (Souza de Silva, 2006)

But the WiFi is not the only source of communication that's contributing to the hybrid space. All kind of mobile devices (cell phones, PDAs, smart phones, iPods, tablets) are source of music, audio books, podcasts, ability for instant access to communication spaces. These different devices make the spaces "*social practices, in which the support infrastructure is*

composed of a network of mobile technologies" . (Souza de Silva, 2006)

These clashes is turned into hybrid spaces, and are present in almost all the modes of communication that is going on there, largely made possible by mobile technologies: "*The logic of hybrid spaces mediates this set of relationships of mobile technologies. The connections do not occur solely in physical space but rather in a new type of space that merges physical and digital*" (Souza de Silva, 2006)

[3 p a r t]

Is my space makes my place?

Place remains essential. What is new?

According to Kellerman (2006): individuals "carry" with them their own territories. Some of this is becoming apparent through the growing use of mobile phones, laptops and mobile memories, which permit one to carry his / her whole personal library and to have immediate access and communications without any regard to location.

An interesting considerations are represented in "Portable Objects in Three Global Cities: The Personalization of Urban Places" by Ito, Okabe, and Anderson, where the authors explore how people use portable objects to 'interface' with urban space and locations. the dominant focus has been on conceptualizing the mobile phone as a personal communications technology. The emphasis in such studies has been on how interpersonal communication has been made possible "anytime, anyplace, anywhere". To a much lesser extend the mobile phone has been conceptualized as a device that is tied to local situations. In this approach the mobile phone is seen as an interface to urban space. Mobile communication infrastructure intersects with the physical infrastructure of the city, making up present-day "hybrid space"

The authors have done fieldwork research in three big cities: Tokyo, Los Angeles, and London. Interestingly, they conclude that behaviors vary only slightly between these cities.

Ito *et al* do not look at the mobile phone on its own. Instead, they take the phone as but one of the portable objects that are 'interfaces' to the city. These include media players, books, keys, credit and transit cards, identity and member cards. Together these comprise "the information-based 'mobile kits' of contemporary urbanites". So the mobile phone, instead of being studied in isolation, is part of a larger assembly of objects that

people use to navigate the city, as well as to sustain social relations with other people. Next they discuss three kinds of urban interfacing, which they have labelled *cocooning*, *camping*, and *footprinting*. *Cocooning* is the practice of people shielding themselves off in public settings. For instance by using portable media players, books, doing stuff on their mobile phones, etc. They create an invisible bubble of mobile private space around them. *Camping* is the practice of finding a nice spot in town – often in coffeehouses – and doing information related work there with laptops, mobile phones, etc. This can be both for work and private affairs (and often intermingle). Camping can co-exist with cocooning when people shield themselves off from physical social interactions through portable media objects. *Footprinting* describes the various customer transaction and loyalty schemes through which people leave traces in a particular location. It is “the process of integrating an individual’s trajectory into the transactional history of a particular establishment, and customer cards are the mediating devices”

Episode #5:
Geosocial networking

[1 p a r t]
Story 1: Apps Grinder

[2 p a r t]
Geosocial networking

[3 p a r t]
Social Serendipity

[1 p a r t]

Story 1: Apps Grindr

Observation material: Photos, Video

Saturday, late afternoon, in zona Tortona.

We are standing outside in front of showroom. Streets are calm and empty, as usually during summer weekends in Milan, and we are bored but nicely relaxed. A smart, attractive, chronically single friend of mine wanted to demonstrate me the most famous apps in gay circles. He showed me his iPhone screen: dozens of little thumbnail pictures of guys, with little blurbs about themselves, organized from top to bottom in order of proximity.

Navigating through numerous profiles and explaining me the principal features of this application, in several minutes he received a request of friendship from a guy who was not far from the place we were.

From interview:

> *The most devastating thing about this apps that you have a distance, age and very brief profile of person who is looking for you. And if you go to chat, unique possibility you have is to send your photo and exact place where you are. This application being so simple and very primitive in gay circles is very popular. Actually this little iPhone app could be every single gay man's dream: to be able to cruise anywhere, anytime! Specially during fashion week, you signalize: "Meet me here!". You are in a gym. Why not! and then you are reached by somebody who is interested in, or make an appointment in certain location of your proximity.*
> Marko, 35 years old

Let me introduce this apps of "wonderland":

Grindr is a geosocial networking application for smartphones. Grindr claims its app has more than 2 million users in more than 192 countries across the globe with some 45,000 users online at any given second. The app makes use of the device

geolocation, which allows users to access other gay and bisexual men within close proximity. In January 2011, Grindr won the award for "Best Mobile Dating Site" at the iDate Awards 2011.

Below I introduce you a brief instruction how it works:

Step 1: Create a profile.
Select your age, height, weight and ethnicity.
Enter your relationship status. Options for this include: single, partnered, or open relationship. Then you will be asked to say a little something about yourself and what interests you. The fourth step asks you to let potential Grindr buddies know what it is you're looking for. Options include: chat, dates, friends, networking, and finally, for all of those lonely hearts out there: relationship. Finally, you are asked to put a picture on your Grindr profile
Step 2: Find A One.
Grindr uses GPS navigation with a plus or minus accuracy rate of 500 meters
Then you goes through a simple user interface that displays a grid of representative pictures of men, arranged from nearest to farthest away. Tapping on a picture will display a brief profile for that user, as well as the option to chat, send pictures, and share one's location.
Step 3: Lock Down a Meeting
When you're talking to a potential Grindr date and you've decided that you are going to meet up.
Step 4: Meet Up
Usually the place of date is not far from the place you are. This is one of crucial features of this application. Grindr users claim that they prefer to meet in public, as you potential Grindr date could be very unrespectable and surprising, but the public place of appointment depends on vicinity of both individuals, and on their own preferences. Now it could be any place, not a gay bar, but ice-cream shop too.

[1 p a r t]

Geosocial networking[24]

Apps Grindr represents a new rapidly developed practice which has already a certain social and spatial impact on real-world gayborhood. It was called "the gay bar of the 21st Century", and being the world's most popular gay app has become the worst nightmare of gay community bars and clubs. Actually it has already drastically altered the way gay people meet each other. Grindr founder Joel Simkhai explains:

> *Users love our existing location-based mobile experience, and we recognize the demand for a mainstream app. We're thrilled to continue harnessing the power of location to deliver a compelling new global platform that fundamentally changes and improves the way we meet new people.*

[24] **Geosocial Networking** is a type of social networking in which geographic services and capabilities such as geocoding and geotagging are used to enable additional social dynamics User-submitted location data or geolocation techniques can allow social networks to connect and coordinate users with local people or events that match their interests.

Grindr is currently developing the straight version of the just-announced Project Amicus. The developers declare that they bring an innovative app that is all about meeting new people around you, as you can see other people in your area who are interested in new encounter, and chat with them.

In fact, any of mobile devices and service plans offered today include location-based services, which are very useful for parents like me who might want to monitor the movement of their children. Those same geo-location technologies can be used for other LBS purposes.

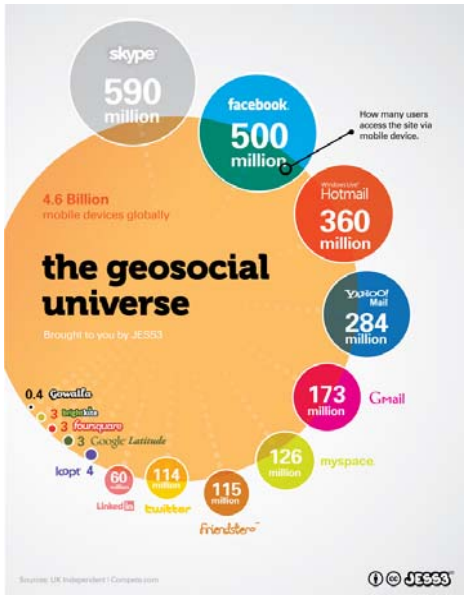
Geo-location technologies are now being married to social networking utilities to create an entirely new service and industry: “social mapping.” Social mapping allows subscribers to find their friends on a digital map and then instantly network with them.

What is the future of usual public places of encounters? How location aware technologies will influence the urban experience?

++

The infographic illustrates and compares the popularity between users on each network, and what portion of those users overlap with the huge mobile “sun.” For instance, Facebook has 500 million active users, with roughly one-third of them accessing their accounts via mobile devices. Services like Foursquare, Gowalla, and Loopt, being entirely dependent on mobile tech, have 100% of their users within the mobile sphere[25].

++



The popularity of geosocial networking is growing, and will be more embedded in a way we meet new people.

Actually location-aware technologies and its application in everyday life practice are going to have a significant impact on urban experience and the way we meet people. The fast growth of cell phone’s usage and their location-free nature have influenced on establishment of a new social order. This social order was described by Wellman as a shift from Place-to-Place communication to Person-to-Person communication (Wellman, 2001)

The benefits offered by these mobile technologies, such as flexibility , easiness and constant connectivity, and context awareness coupled with social networking, seem to inevitably

[25] http://jess3.com/geosocial-universe/

come to common and frequent use, reconfigurating and transformation social-spatial organization.

In fact, it is not the physical setting itself that determines the nature of the interaction, but the pattern of social informational flow. The usual place, as bar or cafe, being before a public spatial setting for unplanned encounters and situations, is transformed into place determined by virtual encounter and online already set up interaction. Communication media affects the boundaries of spatial notion of place modifying its role by passing the key role to virtual domain, and more over changing the behavioural pattern of social practice.

Moreover it should be understood that it is not substituting or abolishing the traditional spatial practices, but it is introducing new situations and social spatial organization. In this emergent phenomena it should pay attention that the spatial notion of place as a key element for defining situations is reduced in significance by advanced communication technologies and instead the social context of the interaction become an important characteristic of the setting.

This complexity of social spatial organization is a challenge of emergent urban hybrid space that should be taken into consideration, and studied more carefully which impact it will have on physical settings of public place, at the same time how urban interactional model could be changed.

From one hand these advance technologies could facilitate and enhance social interactivity in the city, and on the other hand it brings a challenge for urban social and spatial organization reshaping the traditional notion of place.

[3 p a r t]

Social Serendipity In Real Life

People have created a web of connections online through social networks. But a new wave of apps aim to help people create spontaneous connections when they arrive at specific locations, giving rise to temporary social networks that are built around a place and a time.

Nowadays apps are looking to build a momentary community out of people who just happen to be in one very specific place at the same time. By helping to see the people around you and giving you ways to communicate and connect, it’s taking social networking from online into instant offline relationships that can end at that location or can continue on in some form. It’s going

to rise a sort of social interactions that are based on interests or location.

With development of new advance smart phones it's a logical extension towards a proximity-based social networking, allowing people to share media between smart phone users within 100 meters. A new proximity-based media service called **LoKast** [26] out allows people to share media between smart phone users within a radius of 100 meters over 3G, Wi-Fi or Bluetooth.

The app not only enables real-time messaging between users within 300 meters of each other, but it also creates digital spaces where groups can connect publicly or users can chat one-to-one. And it allows users to continue their connections into the future if they choose.

According to Boris Bogatin, the chief executive officer of LoKast maker NearVerse, users get the ability to discover each other and communicate safely in real-time with others in one location, it's fueling what he called the proximity Internet, which complements the way people interact and share in the real world.

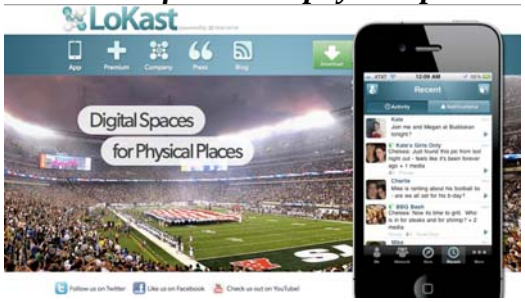
++

From website LoKast

LoKast is a mobile app for digitally enabling your physical life — to better connect with the people there with you, to better experience the physical settings, and to help you accomplish the stuff that you do there better.

Instantly discover and connect with others, right where you are

Get more from each physical place

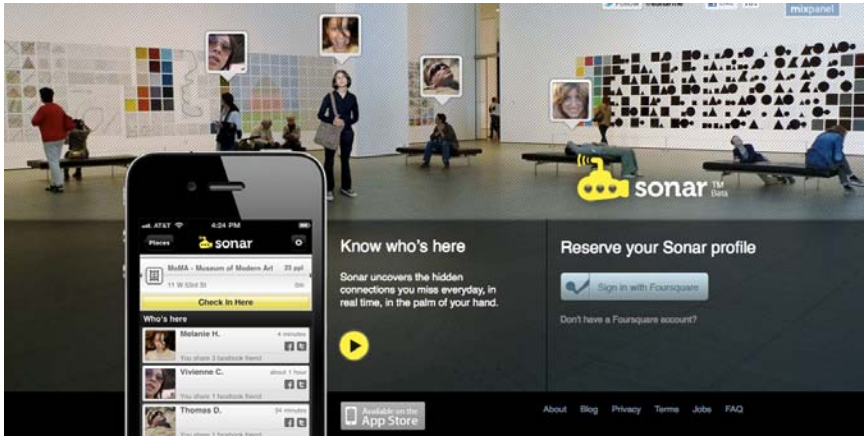


Connect your physical life,

++

[26] www.lokast.com

Sonar[27] , is an app that lets you figure out how you might be connected to the people around you at a specific place. According to their mission statement: “Sonar ia a mobile application that helps you learn about and connect with likeminded people nearby”. When users check in at a location, Sonar helps them find people they’re connected to through Facebook, Twitter or Foursquare friends.



Karizma[28]**,** another app, is a location-aware video messenger that allows users to strike up video chats with people around them. The app, which is set to go live on iOS devices soon, allows people to see profiles of people around them, how they might be connected to another user, so they can start up a video conversation.

These new technologies are entering to everyday life and are allowing to discover the world around and create connections that are hyper local and real-time.

[27] www.sonar.me
[28] karizma.im

Episode #6: Online Walk

[1 p a r t]
Story 1: Online Walk

[2 p a r t]
Mediated experience
Hybrid nature of urban practice and experience

[3 p a r t]
Augmented reality

[1 p a r t]

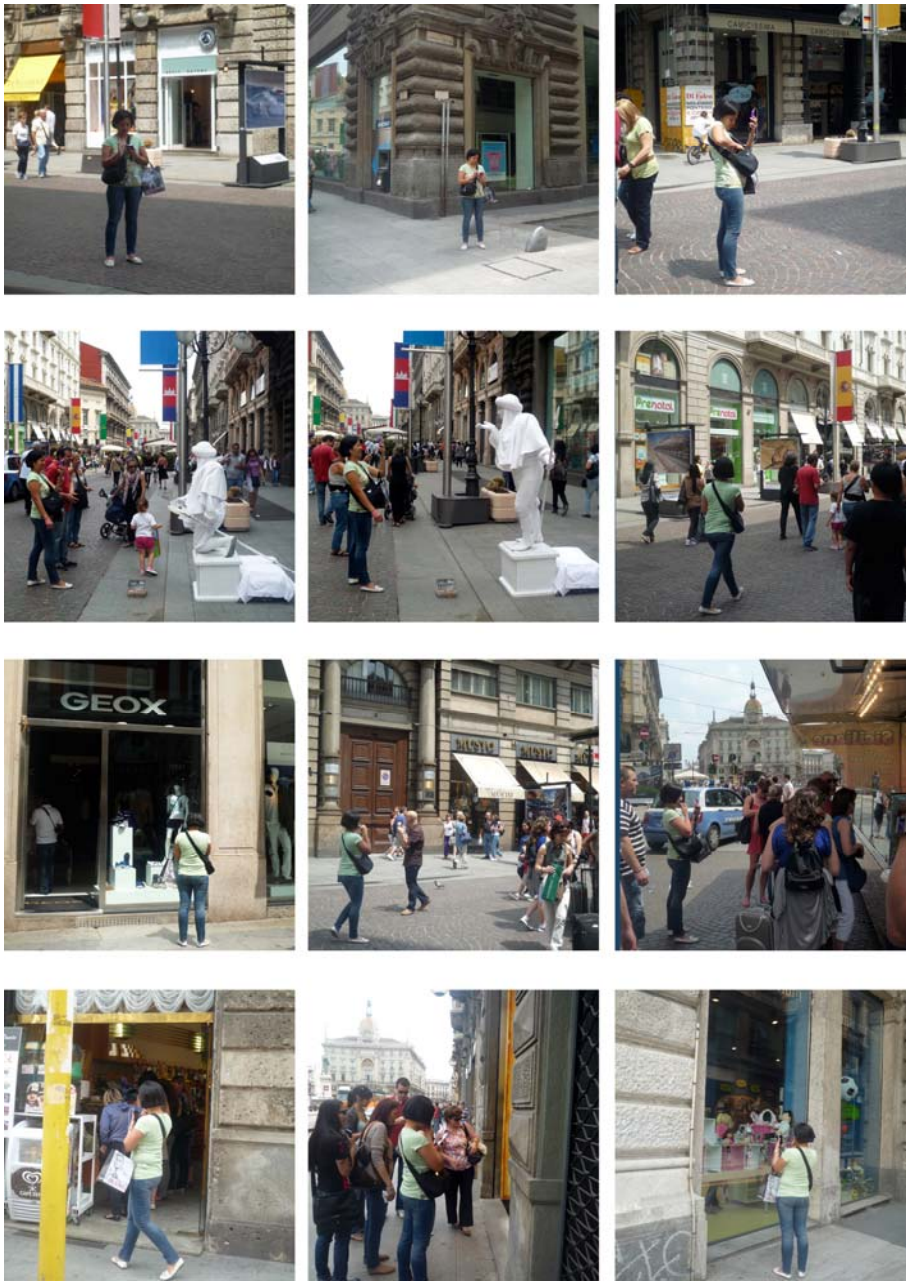
Story 1: Online Walk

Saturday afternoon. Via Dante, city center of Milan.

A lady is walking on street, constantly talking via her handset, and looking on screen of her iPhone and simultaneously showing surrounding settings. She stops to near comic man, it seems she makes photos. But not, she is on video call with somebody over There. She smiles, laughs, discusses something with somebody who is not Here.

It's impossible to understand what she is talking about, the language seems somewhere from Asian part of the world. Then she stops, it seems she lost her connection, she moves aside on the street corner, trying to get her connection back.

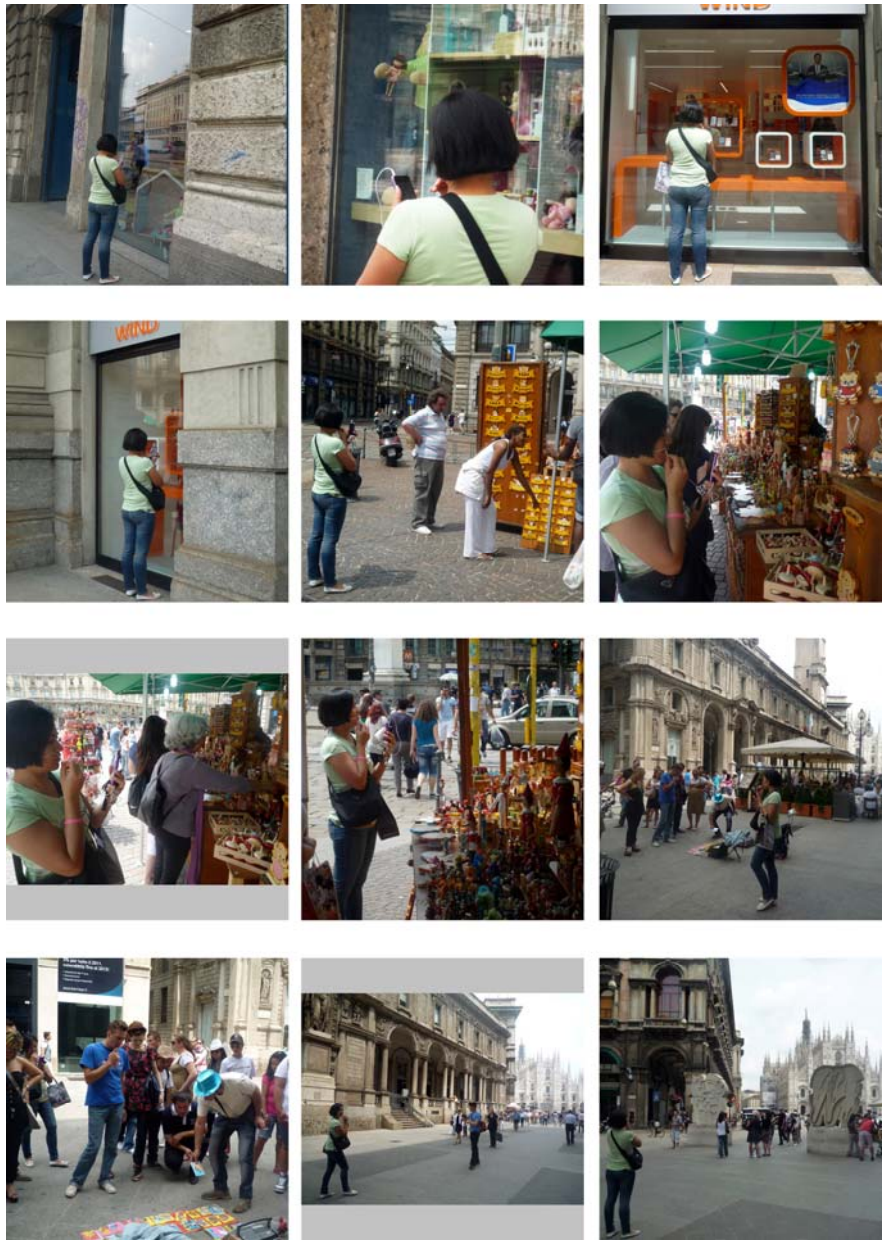
Yes, that's all right, and the videophone call is adjusted and she comes back to her Online Walk. This walk was about 40 min, from the beginning of via Dante near Sforzesco Castle towards Duomo square. Along the street she stops at front shop windows discussing what is there, the shop with toys for children, then front windows of Wind with exposed new models of digital devices, then she arrives to stand with wood artifacts on Cordusio Square. Street artists attract her attention as well,

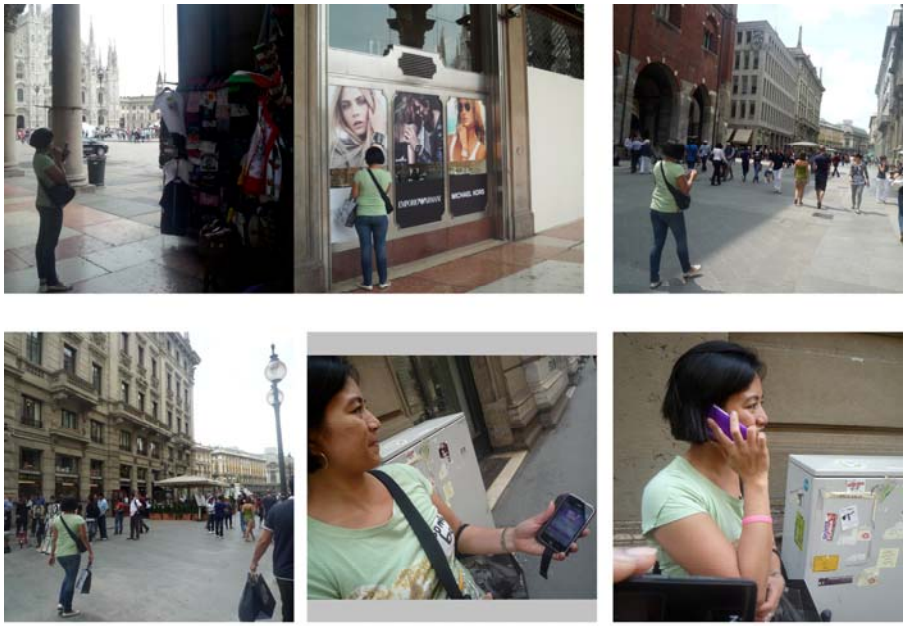


and she stands with her “friend from There” discussing and making jokes. It gave an impression of that like that.

After an observation of this interesting urban practice I couldn’t refrain from stopping her and asking few questions, why, what and how. (She was not very talkative, and first moment she seems to be afraid) After brief talk , it turned up that she is from Philippines, moved to Milan 4 years ago to work with old people, and her Online Walk companion was her daughter, that lives in Philippines.

> *This was my daughter. She lives in Philippines. I use this (she is pointing to her screen of iPhone3) Yahoo messenger.*
>
> *My daughter comes to Milan, but not so often. And actually this on-line walks around the city, we do quite often. It is familiar if you walk together. It is not the same. But we could chat, discuss what we see together, some interesting actions on street, shops. It is fun and I miss my daughter so much!!! Like this we can stay in touch and we feel close to each other. It gives you impression that you have seen something together and it was real, and in real time. Thanks to this new technology we can do this. This is great!*





This case with its new urban practice calls to discussion about infiltration of technologies in our daily practices, which introduce new situations and experience. Distance compression, and convergence of two localities, introducing new urban situation explicitly demonstrates enormous potentials of emergent technologies.

Actually, this mediated interaction coupled with urban walk through video call recalls for discussion about more complex domain.

[2 p a r t]

Mediated experience

Nowadays, our experience of the world is increasingly mediated by digital media and communications technologies. One critical characteristic of these technologies is that the technology itself ceases to be the focus of the activity and instead vanishes into the background so that the focus is on the activity itself and the environment in which it is occurring. This form of computing is referred to as notion ‘ubiquitous.’ The emergence of such ubiquitous technologies has enabled communications

technologies to escape from the traditional physical confines of built space, since they can be easily both embedded and mobile. Consequently ubiquitous computers reside in the human world and they weave themselves into the fabric of everyday life (Weiser, 1994).

Mobile and wireless technologies are a form of ubiquitous computing that create numerous opportunities for communicating in multiple and varied locations without the requirement for a wired connection. Such technologies include mobile phones, smart phones and portable PDA's, short-range transmission technologies such as Bluetooth, and RFID, positioning information delivered via satellite to GPS devices and last but by no means least WiFi enabling wireless internet access. All of these have been proliferating and have over the last decade become common means of enabling communication. As such technologies move out of structured and enclosed physical environments, their interaction with the physical world reconfigure established structures of spatial identification in physical environments and urban experience. Physically bounded spaces become less significant when information is able to pass through walls and simultaneously travel great distances. As a result, where one is has less and less to do with what one knows and experiences. (Meyrowitz, 1986)

Urban experience, including perception of place and spatial practice is no longer refers only to physical boundaries. It becomes overlaid within the framework of informational flow, generated by digital artefacts, and it could include mediated interaction. Therefore urban experience is going to be augmented and multi-generated by information flow of unlimited data.

[3 p a r t]

Augmented reality

Manovich (2006) suggests that " the end result of development in all these areas is the same: ' Overlaying the physical space with the dynamic data'. In varying degrees this additional data layers is changing relationship between people and the spaces they inhabit and this will in turn impact on the shape and development of urban form, but as well what kind of urban experience could be practiced.

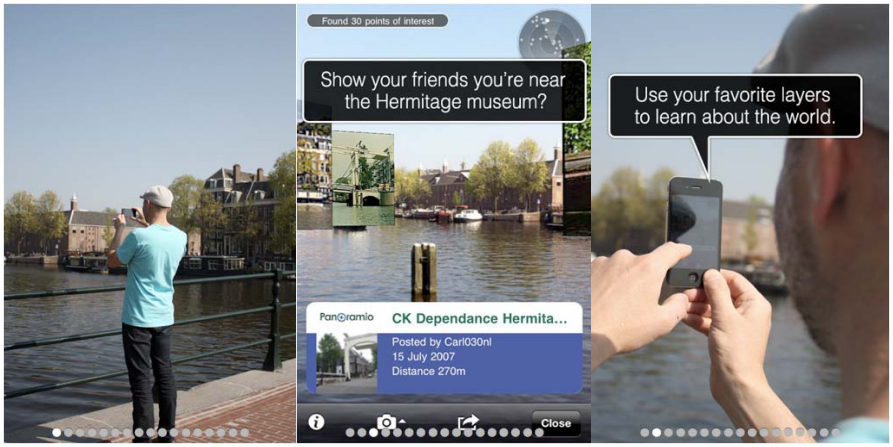
'Augmented spaces have been defined as the physical space overlaid with dynamically changing information, multimedia in form and localized for each user' (Manovich 2006).

The recent iPhone application released by the Museum of London [29] is one example of how mobile media has been used to overlay information about the physical environment. The application called Museum of London Street Museum allows you to view historic images of the city which co-ordinate with your physical location. The images include everyday situations as well as major events like the Great Fire of 1666. This new layer of historic information across the City provides a 'unique perspective' of old in a new London.

There have also been similar applications developed for tourism in various cities across the world, introducing new generation of interactive guides that are able to unveil hidden information about place while you are visiting.

Applications like Layar, Wikitude, and others are capable to generate the information flows like pictures, videos with location-based data and represent information of street directions, monuments, information about shopping, rebuilt 3-dimensional models, and discover and visualize information on screen of digital mobile device. Here you are some interesting applications that are already on market.

1. Layar[30]



This is an augmented reality application that shows you information that you can't see. It's actually a specialized

[29] http://www.museumoflondon.org.uk/Explore-online/Apps/

[30] www.layar.com

browser that other developers make AR applications (layars) to run on. New applications for the layer framework are constantly being developed.

2. Wikitude World Browser[31]

This is one of the must have applications for your Android device. You can browse the world around you and get up to-date information about locations, places, and other objects. Since it syncs with Wikipedia you can easily browse their database and locate specific information about your surroundings.

[31] http://www.wikitude.com/en/wikitude-world-browser-augmented-reality

3.Wikitude Drive [32]

Wikitude Drive takes similar technology from Wikitude and applies it to navigation. Simply put this is Android navigation using AR technology. The phones camera takes the road in front of you and displays directions on top of it.

4.Tweeps Around [33]

This app is built on the Layar Application (covered first in this list) and requires it to work. You can scan your local surrounding to quickly see users tweeting in Full Augmented Reality around you. Very impressive application!

[32] http://www.wikitude.com/en/drive

[33] http://www.androidzoom.com/android_applications/media_and_video/tweeps around_gmgz.html?nav=recategorized

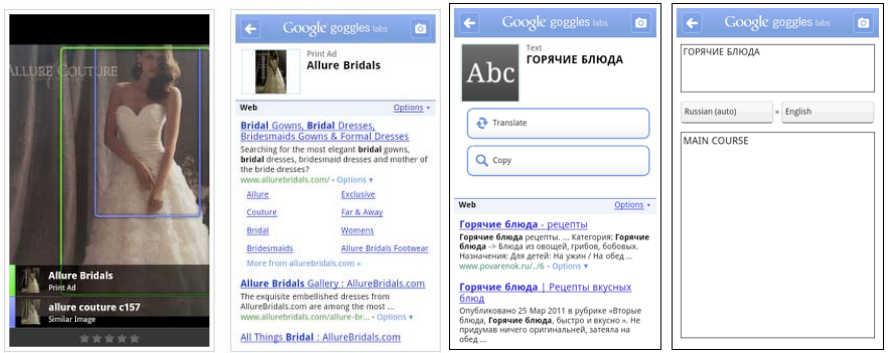
5. New York Nearest Places[34]

This app helps New Yorkers find their way around the city. Find local sub way stations, restaurants and more. Explore New York like never before.

Google Goggles

Google Goggles introduced other generation of augmented reality, which is a innovative feature is an image recognition. It is used for searches based on pictures taken by handheld devices. For example, taking a picture of a famous landmark would search for information about it, or taking a picture of a product's barcode will search for information on the product.

Recently, Goggles has introduces optical character recognition for Russian, it is now able to read Cyrillic characters, recognizes a picture of Russian text and allows you to translate the text into one of over 40 other languages.



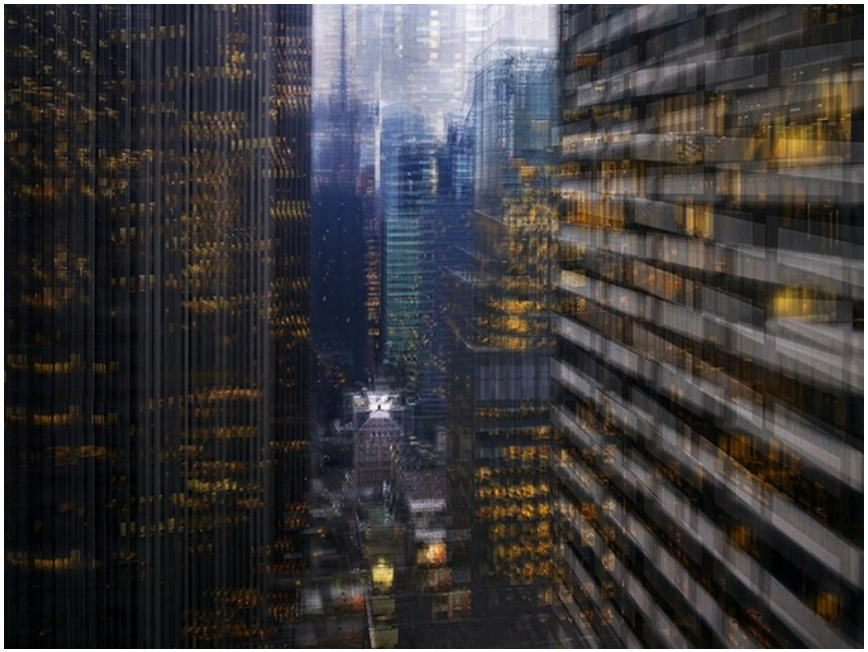
Some of these applications could even reconstruct geometrical forms and visualize them on screen of your mobile devices. Another domain where augmented reality has great potentials is a mobile social gaming.

This kind of applications have the capacity and potentials to further augment spaces and places, architecture and urban experience, through collaborative development of layers by informational flows. That means an introduction multiplicit mediated practices in urban space, that change the way people use the city and experience it.

[34] http://itunes.apple.com/us/app/new-york-nearest-subway/id323100520?mt=8

++++++++++++++++
++++++++++++++++++
+++++++++
++++
++++++++++++++++++++++
++++++++++++++++
++++
++++++++++
+
++++++++++++++++++++

Nature of Hybrid Urban Space



Zooming In and Out of New York" photo by Alfonso Zubiaga

The story telling about "Episode" gives an insight to emergent phenomena in urban space. New technology infiltrate city and become a part of urban experience; Therefore digital logic starts to influence and modify spatial and social practices. Traditional understanding of approach to urban space seems to be not enough to approach investigate complexity. The notion of hybrid urban space could be discussed though new logic of space under influence of new technologies could give the food for thoughts and inputs to understand the complexity of contemporary city and role of new technology on experience, practices and interactions:

Discontinuity

Urban experience become influenced by interrupted logics, including time on phone calls, or location-based services when the walking through the city is guided by objectively existing locations of application

Multiplicity

Urban experiences become more subjective experience .

The experience of same place is not anymore only predetermined by physical surrounding settings, but could be enhanced by other aspects

Interconnectivity

Social interaction matrix is a challenge to study interaction and behavior pattern.

Simultaneity

Possibility of being in two different places, virtually and physically, diminish significantly the role of traditional urban space.

Instantaneity

Temporal factor is significant in order to understand interaction patterns.

Flexibility

Urban place become more flexible as far as people carry mobile digital device which give access to whole world.

Inclusion/Exclusion

Possessing of artifacts of digital advances predetermine degree of inclusion or exclusion

The information and communication technology is changing the life world. In the essence of it there is a change of paradigm about information and communication.

The structure is changing how we understand what information is, how we can and where we can get it, how we communicate with each other and how we construct the world around us.

Where experience in urban space acquiring features of invisible logic of informational flows.

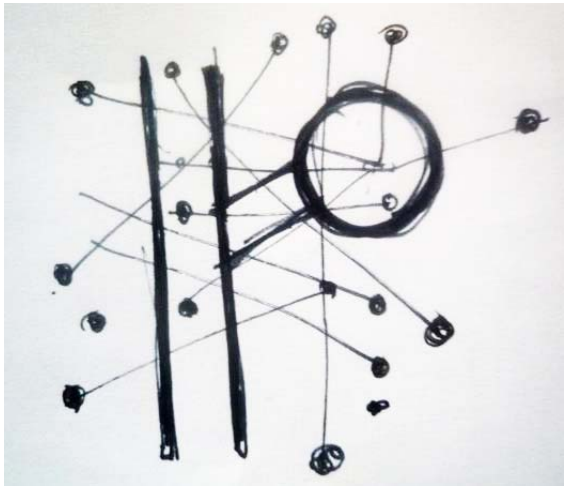
The role of public place as a notion of gatherings and encounters and acquaintance is changing, as online public domain and social networking is drawing away some essential features.

From this perspective, recently proposed notion of public place by Luigi Crosta, as “the part of users”, according to which he territory is “the use made of it “ could be mentioned.

Urban public place is not only a way to encounter new people, Online blogs, websites with the possibility of chat and remote discussions, invites people to chat online with unacquainted people , but it is less probable that you could meet them in real.

With developing applications on basis geosocial networking the possibility to meet people online in physical proximity according

to your interests, is a challenge for spatial organization. Following this idea, the role of urban place is shifting, where the proximity and quality of physical surrounding are key elements.
From social interaction perspective, hypothetical question comes to mind, what the meaning of urban place is
, if you could know/ see people on parallel street through the walls of brick and cement, who they are, what they do, which are their interests.



Then, the immediacy of hyperlinking of new technology encourages users to look *through* rather than *to look* at city space. These mobile technologies interpolate users not as walkers, but rather as linkers. The linking of one location with the next devalues the path between locations.

In contemporary framework in order to discuss **urban public space** it is important to take into consideration that it could be, even temporally, an **urban hybrid space.** (where hybrid is a formation by physical and virtual dimensions)
Hybrid space is more complex, where the roles of physical and virtual dimensions could be reshuffled according to urban vision and sources. Taking into consideration accelerated development and dynamic of ICT, it could be a “servant” in cases when physical urban settings are not able immediately to respond needs.
In urban hybrid space, physical urban public place linked/connected/overlayered with/ by virtual public domain.
Its dynamic is complex and instantaneous, introducing immediate and new experience in city.
Urban hybrid space is socially exclusive, as it is only enabled by access to digital mobile artifact, and more it is technological advanced, more this formation is user-friendly.
New technology offers great possibilities, its easiness, immediacy attracts, at the same time its excessive use could bring distortion of reality and change of values. Probably in feature, some education will be needed as a sort of guidelines as an influential aspect for use of urban hybrid space.
Cultural context plays a significant role. For instance, in Japan

phone calls are forbidden in trains, while in Italy people often talk in public transport, at the same time in Germany people don’t prefer to talk in mobile phones.

Next chapter addresses in detail to a discussion about designing urban hybrid space.

Part IV
Designing Urban Hybrid Space

+ Digital technologies in the design
+ Digital technologies and design of the city
+ The design of urban experience
+ Towards a new way of thinking about urban design.

Designing Hybrid Urban Space

An experiment:
one half of all architects and urbanists in the entire world should, as of now, stop designing new buildings and new developments altogether. Instead they should invest the historical depth and intellectual nuance of their architectural imaginations into the design and programming of new software that provides for the better use of structures and systems we already have. It is a simple matter of good content management. The other half, the control group, may continue as before.
Benamin Bratton, *iPhone City by, Digital Cities AD: Architectural Design*

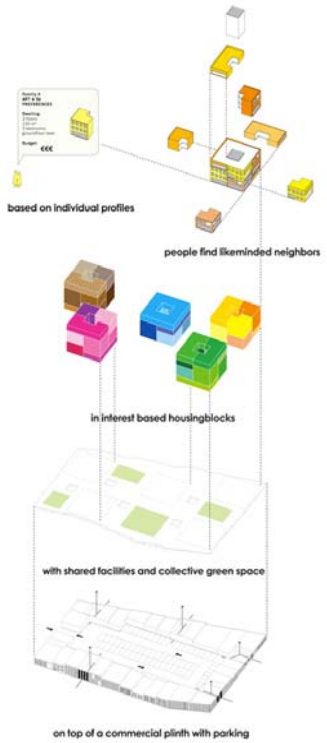
As it was discussed before that urban hybrid space is an emergent phenomena, and its complex nature is should be further explored. New advance technologies like mobile phones, smart phones, WiFi, GPS navigation, mobile internet and various sensor technologies play an important role in everyday life, reshaping urban experience and social, spatial, temporal and interaction patterns. There's even a new discipline emerging - Urban Informatics - dealing with the interaction between urban, software and digital networks. Major technology companies have research and consulting divisions in this area with interaction designers, interface designers and telecom companies that are involved in collaborative process. Remarkably, architects and planners show yet sparsely interest. Indeed, the consensus among a large group of architects - though this will change slowly, is that digital media and spatial design do little to each other. Architects take care about brick and cement, urban planner work for policy development and social cohesion, other disciplines are engaged with software and information flows. To some point, it could make sense, as usually the spatial design process take years before the result is achieved. A planner or an architect could take into account, for instance how city dwellers use Twitter, and by the time a building or plaza will be ready for use, Twitter probably will not exist anymore. Digital technologies have an accelerated path, instead a square needs years to become a livable place for inhabitants. Different velocity of digital and physical domains is a challenge.

Simultaneously, it is undeniable that digital technologies play a continuing important role in everyday urban life. Therefore the emergent phenomena of hybrid space could be designed integrating certain key component, that could improve urban environment and experience in city.

Urban design and rise of digital media and new technologies could intertwine in three principal ways. First, it is a changing the design process itself. Second, new media technologies

could be integrated in design of urban physical dimension. Third, it is important to look at urban experience design and changes that new media applications introduce for use in urban environment.

Digital technologies in the design.



The use of design software by architects known as Computer Aided design & Manufacturing (CAD/CAM) permit to draw and calculate varied complex shapes. Introduction of this computer based system led to a new way of working, drawing and exchange the information, but also to a new architectural language, which is partially designed due to complex calculation of parameters of computer algorithms. Varied geometric shapes in buildings of Frank Gehry, or mystic forms of Santiago Calatrava could be hardly designed and realized without digital assistance.

Digital media also play an increasing role in the collection of data that can be used in the design. Cell phones and GPS receivers could easily assist in researches about behavior and fluxes of people in city. Anyone with a cell phone is a certain provider instantly leaving a trail of places where person was (or at least his phone). Counting the data of all users together gives to planners a revolutionary insight into how people move through the city.

Already now several research centers keep working applying this tool. In the Netherlands, for example, the project *Currentcity*[35] explores by partnering with mobile operators how different places in Amsterdam are used in different times (public gatherings and traffic jams, travelling patterns, crowds in neighborhoods)

Furthermore, there are some recent projects in which digital media and social networks are used for public involvement, like Dutch architectural office *Space and Matter*[36] . They did a survey in Munich and Eindhoven including Facebook study of

[35] http://currentcity.org/

[36] www.spaceandmatter.nl

local groups of specific interests. In Munich they discovered an audience of about 2,000 skaters organized themselves on Facebook to promote the building of an indoor skatehall .

In another project, combining the architects of social networking space and matter with construction projects.
Potential buyers can determine each other via social networks know or even modify the design of their home. Marthijn Pool from architectural office *Space and Matters* in concept project explores different possibilities to create user specific architecture, using interactivity of social media [37].

Digital technologies and design of the city

Hybrid nature of urban space calls for revision the approach to urban design.
How can urban design professionals respond to the rise of digital media that changes spatial practice and spatial use?
There could be answered through two approaches. First, the rise of WiFi, GPS and cell phones change already the way how urban space is inhabited, what calls for more flexibility in spatial design. Second, designers can integrate digital technologies into the design of urban space and objects (like smart buildings, digital screens and media facades, sensors to access the building or not)

1. Architectural approach towards flexibility has been discussed, enabling self-expression and enhance introduction of new social practices in public places. “Over-determined” urban places usually come up with emptiness and misunderstanding by its inhabitants. More flexible design approach that permit to use urban place in different ways. One example could be the Japanese design, where most modern Japanese homes are mainly shaped by tatami rooms, which are decorated with furniture and can be used in different ways. The same room can be used as family gathering, or just as private place.

Such approach to urban design creates a particular challenge, as an urban public place where is anything is possible could

[37] www.themobilecity.nl Session 1.1 –YouDesign and WeBuild

turn out to emptiness and no use as well.
An example of this approach could be the Stata Center in university camopus of MIT in Cambridge, designed by Frank Gehry. Throughout the whole building there WiFi. In addition, wide designed corridors are equipped with comfortable chairs and tables . As a result, the corridors are not only a transit rout, but also a meeting place. Some students could work with their laptops, other make chat, other just passing by.

The exact use of the space is not required, but the presence of WiFi married with comfortable furniture and wide designed space, and the context of the university allows those spaces to be used in different ways.
Another example could be already recognized, that freelancer workers (mainly informational ones) prefer to work outdoor instead being enclosed into office workplace. This practice has been called ‘camping’ . Informational workers prefer to stay temporally in a pleasant and beautiful place, where they could work as well.
The approach to urban design has to take into consideration how the urban space will be used by inhabitants, and which type of devices they are going to use. Establishment of WiFi coverage for city could not immediately improve void urban areas or enhance public participation. Most probably it could remain only a technological device. The synergy of spatial components and digital media could respond to emergent complexity of hybrid urban space.

2. The approach above is more inclined towards digital media as a key player for experience in urban space, competing with built environment. The second possible approach goes towards more visible interventions, where the urban space is enriched by integrated digital media. The most obvious applications in this area are urban screens or media facades. The explicit example of this media urban scape are the district Shibuya in Tokyo or New York’s Time Square.
The more intrigue feature of digital media technologies is its interactive dynamic and capability to generate enormous data.
An example of media based sculpture D-Town opens a new way to look at architecture, as a ‘mood indicator’ A Dutch architect created an installation in Doetinchem , which is based on data generation. The idea of the sculpture is to reflect the mood of inhabitants in the city. The population is invited to an

online questionnaire about their state of mind to fill in, and the outcome is reflected in the lighting program of the D-Tower[38].

The D-Tower performs in the following way: *On the website there is a questionnaire, where the inhabitants can respond to respectively love, hate, happiness and fear, determining the intensities of their feelings. Each evening the tower transmits the colours as "the State of the Town" assuming the most intensely emotions as a large interactive system of relationships.Personal messages can be placed in a capsule underneath the tower as well as the tower will present a prize to the address in the city that scores the highest level of emotions. Personal messages can be placed in a capsule underneath the tower as well as the tower will present a prize to the address in the city that scores the highest level of emotions.*

[38] www.d-toren.nl

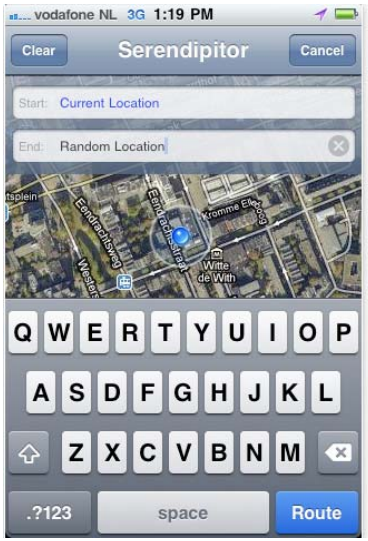
The design of urban experience

Urban experience is not only shaped by physical environment , but social processes are playing a significant role. New media communication technologies and digital devices inherently contribute on the way people experience the city and which social and interaction patterns are emerging. Urban hybrid space is no longer only about spatial design, but collaborative insights to design of software and interfaces are needed. The design of applications does not influence so much the urban environment itself , but it changes the way people inhabit the city and how they could use it.

GPS, Google Maps and emergent geosocial-based applications could show a right direction, most nearest restaurant in unknown city according to your taste preferences, or that facebook friends could find you being at the same entertainment event with you.

More advance application is as city-sense[39] . City sense is app for the mobile phone that on your move through the city it records and analyze personal preferences, what is able to guess new places in a way similar how www.amazon.com recommends books.

The discussion about personalized used urban space and specially designed software application has been already started. For example, artist and architect Mark Shepard developed an apps called GPS Serendipitor[40] . This isan alternative navigation program for the iPhone that demonstrates the way from A to B, through looking for something else. Instead of “turn left” the program indicate the command like “ask a person in kiosk nearby” or “walk on the sunny side of the street”. It could ask you for example: “Walk toward the heart of the city. If the city has no heart, give it one”.



[39] http://sensenetworks.com/citysense.php

[40] http://itunes.apple.com/us/app/serendipitor/id382597390?mt=8

The last example shows that expert considerations in application design could play a role. Involvement in service development and combination of key parameters could affect the urban experience and practices.

+ Towards a new way of thinking about urban design.

Previously discussion with demonstrated above examples are leading to conclusion that urban design process goes through a transition due a hybridization of urban environment. Architect and urban planners, traditionally shaping cities mainly through spatial approaches and design, are recalled to re-considerate the realm, as it is becoming more interdisciplinary: including software development, interface designs, user experience expertise ecc .

Nowadays, digital media technologies play a role in urban design on three levels: the design itself, the design of physical space and the shaping of urban experience. It should be noted that collaboration of multi-disciplinary teams for urban design will increase understanding emergent phenomena of urban hybridity and will help to create better urban space for sustainable living in cities.

In the sixties Kevin Lynch with the famous book “The Image of the City” invited to explore new places and social relationships, what had change to a certain way an approach to urban design. Digital media technologies influence from different perspective the city and urban experience what means that urban design is becoming more complex discipline, or even inter-discipline.

Conclusion:

An urban hybrid space is a recent phenomena and its nature has to be understood and explored further. Blurring borders between physical and digital dimensions accumulate a complexity that could be hardly probable grasped by professionals. Changes in social/spatial practice of everyday life in city are evident. Transformations of urban space towards multiplicity, discontinuity, simultaneity through infiltrating digital media call for a new thinking about urban space and its design.

In fact, intuitively more rapid understanding and acceptance by architects and urban planners the emergent transformations of lifeword and its hybridity, will help to design vivid urban space.

As mobile technologies have become absorbed into the texture of our everyday lives, we need to understand how these additional textural layers change the ways in which we practice our everyday lives.

From urban planning perspective , it is important to understand temporal factor and divergence of project development and reality, as a hybrid urban space. New technology is a strong factor influencing the everyday life, and its ability to develop exponentially , calls for urban planner to take into consideration this phenomena.

References:

Arminen, I. (2005). Social Functions of Location in Mobile Telephony. Personal and Ubiquitous Computing. Retrieved November 10, 2005, from http://www.personal-ubicomp.com/.

Bassoli, A., J.Brewer, and A. Taylor. 2008. Automated Journeys. In *Adjunct Proceedings of the Tenth International Conference on Ubiquitous Computing*. Seoul.

Bull, M. (2005). *No dead air!: The iPod and the culture of mobile listening.* Leisure Studies, 24(4). Retrieved November 23, 2007, from Communication & Mass Media Complete database.

Castells, M. (1996). *The Rise of the Network Society*. Oxford and New York: Blackwell

Crosta, P.L., (2003) *"Reti translocali. Le pratiche d'uso del territorio come politiche e come politica",* in Foedus, 7

De Certeau, M. (1984). *The practice of everyday life* (S. Rendall, Trans.). Berkeley: University of California Press.

De Souza e Silva, A. (2006). *From cyper to hybrid: Mobile technologies as interfaces of hybrid spaces*. Space and Culture, 9(3), 261-278.

Dennis, K. (2007). Real-time and the politics of presence. Re-Public. Retrieved March 5, 2007, from http://www.re-public.gr/en/?p=117.

De Souza e Silva, A. (2006). From Cyber to Hybrid: Mobile Technologies as Interfaces of Hybrid Spaces. Space and culture, 9(3), 261-278. Retrieved from http://www.lib.ncsu.edu/resolver/1840.2/80

Eagle, N., and A.Pentland. 2005. Social Serendipity: Mobilizing Social Software. *IEEE Pervasive Computing 4*.

Falkheimer, Jasper, Jansson Geographies of Communication: The Spatial Turn in Media Studies. Nordicom: Goteborg, 2006

Fortunati, L. (2000). The Mobile Phone: New Social Categories and Relations.

Gergen, K. The challenge of the absent presence. In J. Katz & M. Aakhus (Eds.), Perpetual contact: Mobile communication, private talk, public performance. Cambridge University Press (2002), 227-241.Absent Presence

Hannerz, U. (1992). Cultural Complexity. Studies in the Social Organization of Meaning. New York: Columbia University Press.

Greenfield, A. (2006). Everyware. The Dawning Age of Ubiquitous Computing. Berkeley, CA: New Riders.

Mimi Ito, Daisuke Okabe, and Ken Anderson"Portable Objects in Three Global Cities: The Personalization of Urban Places"

Katz, J. E., & Aakhus, M. (2002) (Eds.). Perpetual Contact. Mobile Communication, Private Talk, Public Performance. Cambridge: Cambridge University Press.

Kakihara, M., & Sàrensen, C. (2001). Expanding the 'Mobility' Concept. SIGGROUP Bulletin, 22(3), 33-38.

Kellerman A. (2006). Personal mobilities (London: Loutledge)

Kluitenberg, E. (2006). The Network of Waves: Living and Acting in a Hybrid Space.

Manovich, Lev (2006). 'The Poetics of Augmented Space' in Visual Communication, Vol. 5 (2): 219-240.

Meyrowitz, J. (1986), No Sense of Place: The Impact of the Electronic Media on Social Behaviour (USA: Oxford University Press Inc).

Meyrowitz, J. (2005). *The rise of glocality: New senses of place and identity in the global village*.

Mitchell, William (1995) *City of Bits: Space, Place and the Infobahn*, MIT Press, Cambridge

Graham, Stephen (2004) *The Cybercities Reader*. Ed. New York: Routledge.

Urry J. 2002. *Mobility and Proximity*, Sociology, volume 36, number 2, pp 255-274

Persson, P., J.Blom, and Y.Jung. 2005. DigiDress: A Field Trial of an Expressive Social Proximity Application. In *Proceedings of the Seventh International Conference on Ubiquitous Computing*. Tokyo.

Rettie, R. M. (2005). Presence and Embodiment in Mobile Phone Communication. PsychNology Journal, 3(1), 16-34.

Seeburger, Jan, Foth, Marcus, & Tjondronegoro, Dian W. 2010 Capital music : personal expression with a public display of song choice. In Proceedings of the 6th Nordic Conference on Human-Computer Interaction (http://eprints.qut.edu.au/34423/)

Urry J. 2002. *Mobility and Proximity*, Sociology, volume 36, number 2, pp 255-274

Weiser, M. (1994), 'The Computer for the Twenty First Century', Scientific American 265:3, 94-104.

Wellman, 2001 Physical Place and Cyberspace: The Rise of Personalized Networks