

Reviving Jeddah's Heart

Regeneration in Virtual Worlds



Dr. Amr Abdalla A. Attia
Associate Professor of Urban Planning, Ain Shams University, Cairo
Senior Project Manager, AECOM Arabia.

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Learning Objectives

At the end of this program, participants will be able to:

1. Understand the opportunities of utilizing the virtual world in the regeneration of **Jeddah's Heart**
2. Learn new technological solutions to document historical buildings and regenerate historic cores
3. Participate in the regeneration efforts of the historic core
4. Learn about the opportunities offered by the integration of the **physical and social networks with the virtual networks**
5. Involve in a **global network** for the revival of Jeddah's historic core
6. Identify online examples to draw lessons and **learn from experiences**

Regeneration

ICT

Examples

The Future

The Concept!

- ✓ Growth anew of lost tissue or destroyed parts or organs
- ✓ The activity of spiritual or physical renewal
- ✓ Forming again (especially with improvements or removal of defects); renewing and reconstituting



The philological restoration of Palazzo Doria Pamphili
1988 - Valmontone, Municipality of Valmontone, Italy
Arch: Benedetti, Docci, Gavarini, Miarelli ed Arch.tti Andreotti e Pascalino

Regeneration

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The Concept!

- ✓ **Decay and regeneration** is a natural and spontaneous process... We just intervene to **slow or stop** decay... and **hasten and enhance** regeneration..... the key issue here is the **"function"** of this **organ** (area) in the whole **"body"** (city)... and how vital this role
- ✓ Cities decay and become derelict ... or die... when they lose their local/regional/national/international roles

Regeneration is.. Simply.. **Assigning NEW/OLD-MODERNIZED role** to the dilapidated area

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BEFORE



AFTER

(façade development and public realm) - Example in China

Regeneration

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Examples

The Future

The Concept!

- ✓ Realistically... and historically...
Organ/organic roles of parts of the urban fabric is dynamic and sophisticated..
- ✓ That may entail a main/apparent role (economic – socio-cultural ...), however, this role is inter-meshed and interlinked with other sub-systems and niches of the urban "eco-system"



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Examples

The Future

The Issue and Philosophy of Intervention

Interplay between “internal assets” and “external demand”

Approaches :

- ✓ Historical Areas/Internal Assets: preserve the heritage and rehabilitate for economic and life activities ... Dealing with **the social fabric** is a must ...
- ✓ Slum Areas/External Demand: remove/evacuate/resettle – reuse as a green park or grand mall... destruction of the **social fabric**
- ✓ Deteriorated Areas/Social-political Responsibility: physical upgrading ... provide a social leverage to supplement the initiative (vocational training/work opportunities/education and health services...) ... **maintain and restore the social fabric**

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Examples

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The Issue and Philosophy of Intervention

- ✓ Maintaining the physical fabric – maintaining the traditional economic activities – Rigid Approach (**diminished interest in social fabric – one-dimensional preservation fabric**)
- ✓ Maintaining the physical fabric (selectively) – reviving existing and relevant economic activities – **focused and integrated interest in the social fabric**
- ✓ Maintaining the physical fabric (very selectively) – **influx of economic activities, indiscriminately to the sensitivities of the physical fabric and heritage...IT and Media Companies?**

How can the physical & social fabrics be compatible with economic regeneration?

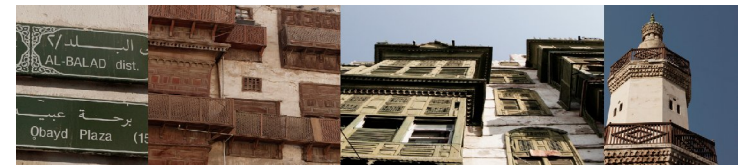
ICT - Digital Possibilities?

- ✓ Can ICT provide for economic opportunities & not negatively impact the **social** and **physical** fabric?
- ✓ ICT is changing the whole world, big cities and small cities, even **slum** areas.
- ✓ The impacted population is growing exponentially
- ✓ **Network society** through digital possibilities - How to interact with **historic** spaces?



Network Society - Digital Possibilities?

- ✓ Smooth infiltration – trickle down to local communities – and induce modernization/**cultural changes** and **economic revitalization**
- ✓ Critical **factor/agent of change** - how fast and effective / Is it relevant to the receptive community & its absorptive capacity?



ICT as a Participatory Planning & Decision Making Tool

- ✓ Better communication and understanding between planners, stakeholders, interest groups...etc.
- ✓ Community and youth groups mobilization
- ✓ **Participation** - Public spaces design workshops



PARTICIPATION



on in agency rule making, including public during trial-like hearings (adjudications), hearings, and holding public hearings (at the

the poor in decisions about community action rage involvement of "target" populations. ie affected by its program grants.

government agencies.

ility (CEQ), required intergovernmental n groups. CEQ implementing regulations (10 established many of the public participation for public participation in environmental

by federal agencies when creating and

red by states implementing programs under subsequent laws affect environment, transportation, and social services.

1977	Government in the Sunshine Act	Required many government agencies, particularly regulatory agencies and advisory committees, to open most of their meetings to the public.
1986	Emergency Planning and Community Right-to-Know Act	Required many public utilities to inform about pollutant emissions from factories, energy plants, and industrial operations (including privately owned enterprises) in their community.
1996	Executive Order 12868 - Civil Justice Reform	Encouraged and authorized the use of alternative dispute resolution (ADR) techniques, and required agencies to designate an ADR official and provide training in ADR.
1998	Environmental Policy and Conflict Resolution Act	Created the U.S. Institute for Environmental Conflict Resolution, a new federal agency to conflict prevention and resolution when a federal agency is involved.

PUBLIC PARTICIPATION

*the general term by which **public concerns, needs, and values** are incorporated in governmental decisions*

SOURCE: James L. Gaglian, ...



Regeneration

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Examples

The Future

புது தலைமுறை



The Notion of Participation

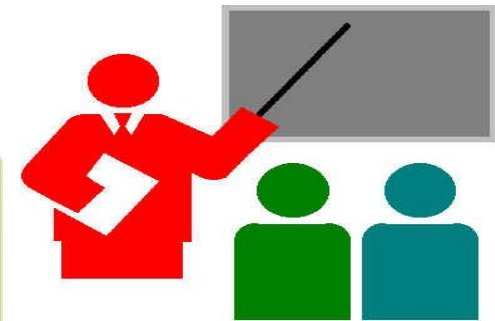
- **TOP-DOWN DECISION-MAKING PROCESS.**



- **MIDDLE / BOTTOM -UP DECISION-MAKING PROCESS.**



Mechanisms of Involving People



Social Networking Websites

- ✓ Engage large numbers of citizens
- ✓ Create sources of information about very local issues.
- ✓ Allow groups to communicate and collaborate online

These websites share a common dedication to Simplicity, Usability, and Interactivity.



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A menu of tools well suited for planners' goals of sharing information, interacting with the public, and fostering community participation.

Technologies Used in Planning

EXISTING TECHNOLOGIES IN URBAN PLANNING	TECHNOLOGY TYPE				TECHNOLOGY APPLICATION		
	HARDWARE	SOFTWARE	INFORMATION SYSTEM	SYSTEM	PREPARATION	ANALYSIS FACILITATION	DISSEMINATION
1. BENEFIT-COST ANALYSIS OF BICYCLING FACILITIES		✓			✓	✓	
2. BIG BOX EVALUATOR			✓		✓	✓	
3. CAVE	✓					✓	
4. COMMUNITY IMAGE SURVEY			✓			✓	✓
5. COMMUNITYVIZ		✓			✓	✓	✓
6. DECISION THEATER				✓		✓	
7. ELECTRONIC VISUALIZATION LABORATORY				✓	✓	✓	
8. ELECTRONIC INTERACTIVE CHARRETTE			✓			✓	
9- ENVIRONMENTAL SIMULATION CENTER				✓	✓	✓	
10. GEOWALL	✓				✓	✓	

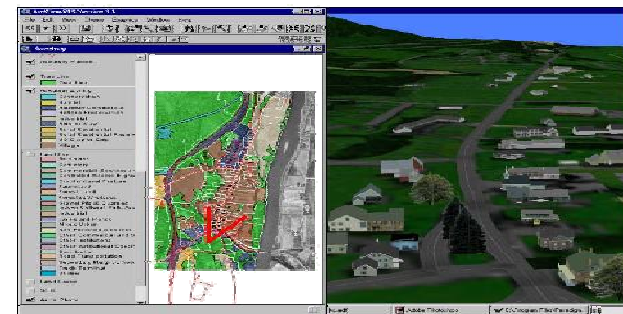
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A Cave for virtual reality



GEOWALL



Community Viz

Technologies Used in Planning

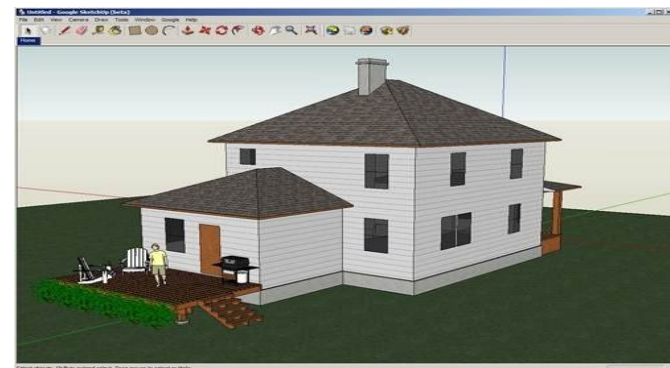
EXISTING TECHNOLOGIES IN URBAN PLANNING	TECHNOLOGY TYPE				TECHNOLOGY APPLICATION		
	HARDWARE	SOFTWARE	INFORMATION SYSTEM	SYSTEM	PREPARATION	ANALYSIS FACILITATION	DISSEMINATION
11. GIS/MAP PLANNING TABLE	✓				✓	✓	
12. GOOGLE EARTH		✓	✓		✓	✓	
13. GOOGLE MAPS		✓	✓		✓	✓	
14. GOOGLE SKETCHUP		✓			✓	✓	✓
15. GROUPMIND EXPRESS		✓				✓	✓
16. INDEX		✓			✓	✓	✓
17. KEYPAD VOTING	✓					✓	✓
18. LONDON PROFILER			✓		✓	✓	
19. M3D (MINNESOTA 3-D)			✓		✓		
20. MICROSOFT SURFACE	✓					✓	
21. PATHMAKER			✓			✓	✓
22. PICTOMETRY				✓	✓	✓	
23. PLACE3S		✓				✓	



Keypad voting



Google Earth



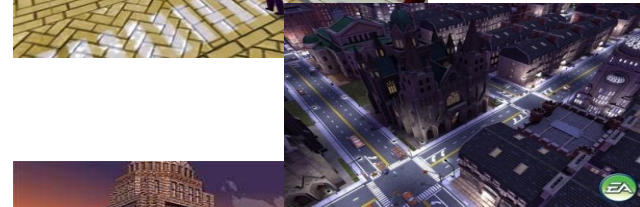
Google sketch up

Technologies Used in Planning

EXISTING TECHNOLOGIES IN URBAN PLANNING	TECHNOLOGY TYPE				TECHNOLOGY APPLICATION		
	HARDWARE	SOFTWARE	INFORMATION SYSTEM	SYSTEM	PREPARATION	ANALYSIS FACILITATION	DISSEMINATION
24. SHAPING DANE			✓			✓	✓
25. SIMCITY		✓				✓	
26. TELUS		✓				✓	
27. THINKTANK			✓			✓	
28. TOWNSQUARE		✓				✓	
29. UNIVERSITY COLLEGE LONDON CENTRE FOR ADVANCED SPATIAL ANALYSIS (CASA)				✓	✓		
30. URBAN SIMULATION TEAM				✓	✓	✓	
31. URBANSIM		✓			✓	✓	✓
32. WHAT IF?		✓			✓	✓	✓
33. METROQUEST		✓			✓	✓	



Urban Simulation Team



SimCity

The Virtual World

- ✓ Why interact through Virtual spaces:
 - Participation
 - Interaction
 - Collaboration
 - Design
 - Bridge Cultures
 - Education
 - Virtual Hajj



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Examples

The Future

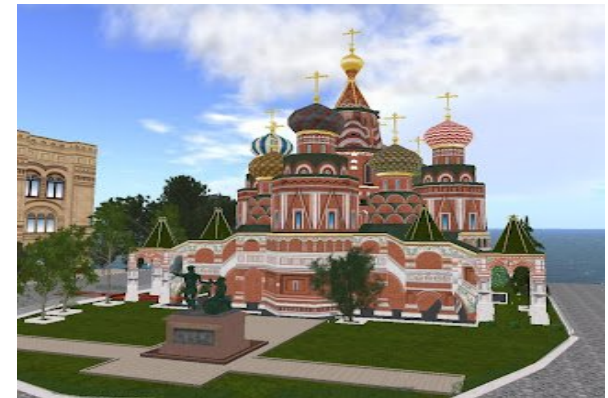
The Virtual World



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The Virtual World

- ✓ Network society Through Digital Possibilities
- ✓ How can we capitalize on the space of flow offered by the network society
- ✓ Could the interaction between the virtual space of flows (SL, facebook) and the real space (Jeddah) revive the historic core (Jeddah's heart)



The Virtual World

- ✓ How could we utilize the digital possibilities in the reconstruction of lost space + other possibilities to connect with the physical / local place
- ✓ Education through the recreation of the historic areas: the reconstructing the past will bring back the past to **learn** and **understand** and acquire a sense of pride



Is ICT a solution for Planning & Regeneration?

- ✓ It is not “the” Solution
- ✓ Its feasibility and effectiveness will depend upon the characteristics of the social and physical fabrics
- ✓ It is a “**critical component**” in any integrated intervention (set of solutions), as an effective agent of change



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Examples

The Future

Reflections Project, Cairo



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Examples

The Future

Reflections Project, Cairo



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Examples

The Future

US State Department Conference in SL



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Examples

The Future

US State Department Conference in SL



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Examples

The Future

US State Department Conference in SL



Virtual Tour in Reflections Project



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Regeneration

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Examples

The Future

Virtual Tour in Reflections Project



Regeneration

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Examples

The Future

Virtual Tour in Reflections Project



Regeneration

ICT

Examples

The Future

Virtual Tour in Reflections Project



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Connecting Cultures



K2C - Kansas to Cairo

- A Second Life—based class was launched at the USC in Los Angeles alongside Ain Shams University in Cairo, comprising 8 American students and 40 Egyptians,
- The group has master planned a site nestled between the Giza pyramids and the forthcoming Grand Egyptian Museum.
- Students have eschewed the classroom, their avatars swapping knowledge of New Urbanism and historic public spaces.
- With funding from the U.S. Department of State, Ain Shams participants traveled overseas to show off their work to live audiences.



K2C - Kansas to Cairo

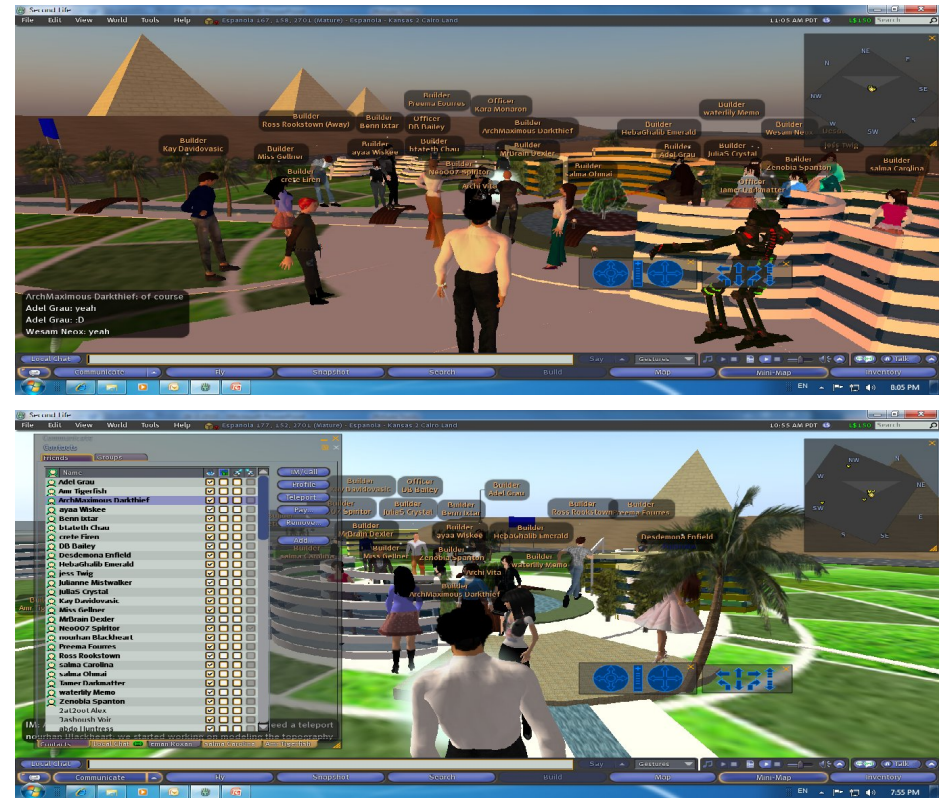
- The course, called 'Kansas to Cairo,' was originally inspired by a speech given by President Obama's during a speech at Cairo University in Egypt in June 2010, where he described a vision for an online learning environment where teachers and students from around the world – such that “a young person in Kansas can communicate instantly with a young person in Cairo.”



K2C - Kansas to Cairo

Obama's Speech in Cairo

- "We will match promising Muslim students with internships in America; invest in on-line learning for teachers and children around the world; and create a new online network, so a teenager in Kansas can communicate instantly with a teenager in Cairo."

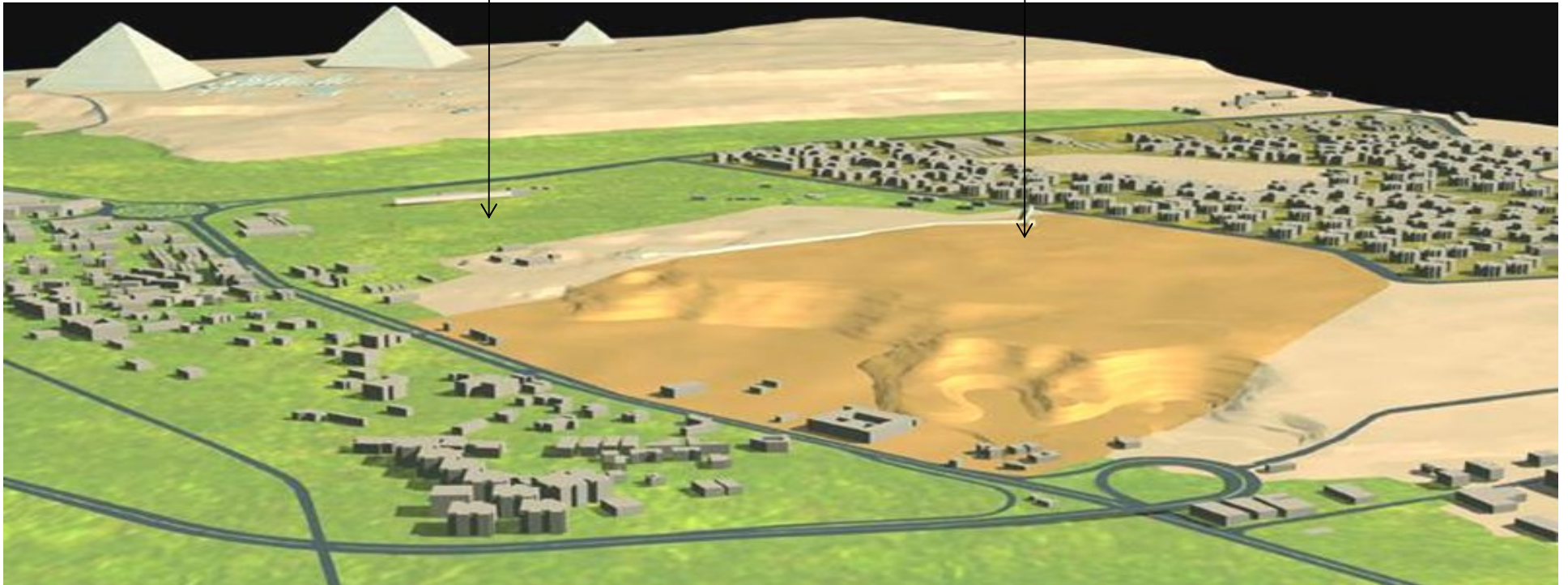


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K2C - Kansas to Cairo

Proposed project site

GEM site



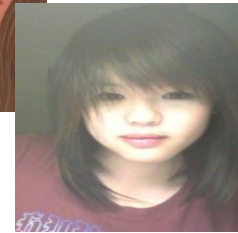
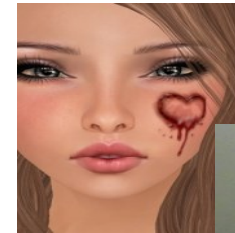
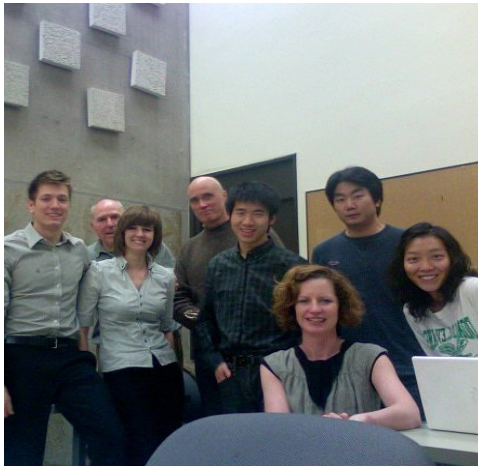
Regeneration

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Examples

The Future

K2C - Kansas to Cairo



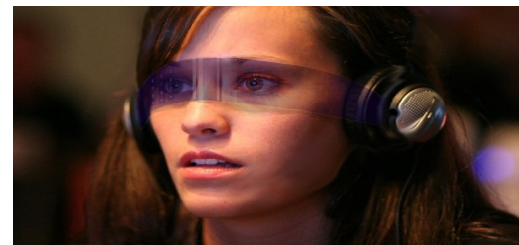
"Imagine you can feel your urban space, observe the progress, fix your errors, live the experience and see your fantasies come true in a virtual world...."

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Augmented Reality

Today we can...

- Click on a restaurant's QR code to see its menu, specials, etc.
- Click on a building's QR Code to see buildings as we designed it to be.
- Use Smart Phones & Eye Glasses (a computer screen on its inside lens) to be able to see proposed designs laid over reality.



Augmented Reality

Today we can...

- Examine the impact of new building on the historic building..
- Test Streetscape options through smart phones..



Augmented Reality

Tomorrow..

- A GPS window screen will give driving instructions –follow the red arrow to see directions
- Allowing people to see in 3D the new designed spaces.. our movement in the space will adjust the perspective due to the GPS



Augmented Reality

Tomorrow..

- We will live in a world of combined reality and augmented reality..
- We will see real things as well as un real..
- People who prefer traditional architecture will see traditional architecture , and people who prefer contemporary architecture will see contemporary architecture



Augmented Reality

Tomorrow..

- Art will be enjoyed on Billboards
- New building facades will be tested.
- New condos could be advertised and tested from different angles, our movement in the space will adjust the perspective due to the GPS
- Historic buildings will be built in the computer – then use Google glasses or smart phones to see the way they were 2000 years ago.



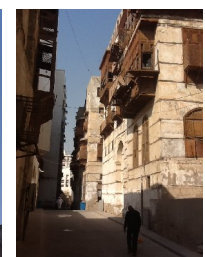
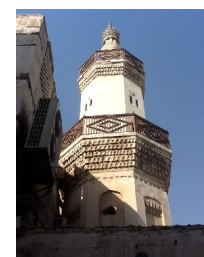
Regeneration

ICT

Examples

The Future

<http://archvirtual.com/2010/06/22/architectural-record-features-kansas-to-cairo-second-life-project/>
http://archrecord.construction.com/archrecord2/work/2010/June/Kansas_to_Cairo.asp
<http://www.america.gov/st/educ-english/2010/September/20100827080146kcsniggih0.6081964.html>
<http://www.america.gov/st/scitech-english/2009/November/20091123164215kcsniggih0.1622431.html>
http://www.youtube.com/watch?v=j_CrD9MsapQ&feature=related
<http://www.youtube.com/watch?v=SP1vr3zSVCE&noredirect=1>
http://www.youtube.com/watch?v=_GPcW2Q-b24&feature=relmfu
<http://www.youtube.com/watch?v=2JfiykRM3mc&feature=relmfu>
<http://www.youtube.com/watch?v=AI29TN8Dx10&feature=relmfu>
<http://www.youtube.com/watch?v=YECTK69yIWE&feature=relmfu>
<http://www.youtube.com/watch?v=mbU-lgm4b8s&feature=relmfu>
<http://www.youtube.com/watch?v=fZbx-YQqBug&feature=relmfu>



Reviving Jeddah's Heart

Regeneration in Virtual Worlds

Network society Through Digital Possibilities

Trans-Border



Connecting: Jeddah

From a world of silos >> A world of cities, regions and networks