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# interaction with multimedia facades

Medieninformatik Hauptseminar Sommersemester 2009 Interactive Surfaces







### terms

#### facade

from lat.: facies = face the visible parts of a building often deliberately designed to fulfill a representative function

The architecture and the facades of a city tell us something about its social structure, its inhabitants and their ways of living.

#### multimedia facades

The idea of designing or modifying the architecture of buildings with the objective of using their facades as kind of gigantic public screens.

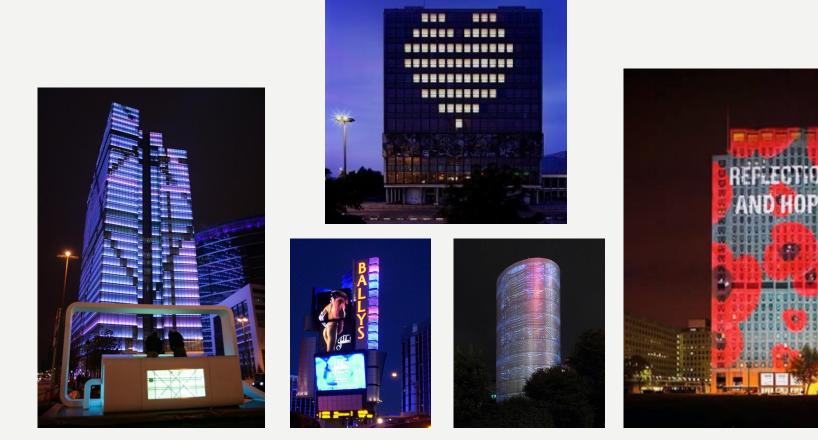
#### interactive multimedia facades

A multimedia facade that offers the participants the possibility to enter a mutual dialog with the facade influencing the displayed content in various ways.



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### multimedia facades some impressions











### technical classification

window animations	[1]	
mechanical facades	[2][3]	
projection facades		[5]
back projection facades		
display facades		
illuminant or light- emitting facades	[4][6]	
passive media facades		
sound emitting facades	5	







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### **Blinkenlights & Arcade**

# Video not available!







### intentions and benefits

#### utilizing people s attentiveness

for commercial interests for drawing people s attention towards something

#### art projects

fascinating and surprising the passerby brighten up and enliven the cityscape changing conventional habits of perception

#### social functions

multimedia facades as a bridge between the virtual and the real world giving people a chance to impress themselves through interactive facades





Project TXTual Healing





# interaction and states (1)

#### different states

A media facade can be in different states, distinguished by the manner of allocating the displayed content and the degree of interaction it provides.

autoactive displaying prefabricated content

**reactive** the facade reacts to actions in its environment

**interactive** participants are able to enter a mutual dialogue with the facade





# interaction and states (2)

**various types of interfaces and user input** The different projects offer various types of interfaces to change their appearance or to play with their facades.

It is possible to send in or alter the displayed content via a **net-interface** via **mobile phones** via **public touchscreens** [? see right ] via **sensors or cameras** reacting on people s movement or pure presence

The interaction can take place between the facade and a **single person** between the facade and **multiple persons** or can be **triggered by social algorithms** 



LAb[au]: project touch Dexia Tower, Brussels





### critical points, unanswered questions

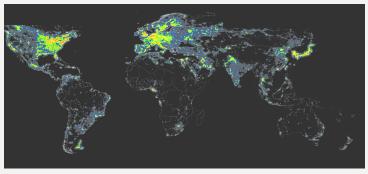
#### enticing people to interact

considerations concerning the motivation of the passerby to interact with the facade

#### multimedia facades as a medium of mass communication

who should control the content? abuse by the user ? filtering input? abuse by hackers

high energy consumption and light pollution [? map]



map of artificial night brightness

of multimedia facades into the existing architecture of the cityscape





### future work

very few academic papers covering the subject multimedia facades and hardly any usability studies concerning interactive multimedia facades
? solid scientific fundament and user studies would support the lookout for meaningful applications that tap the full potential of interactive multimedia facades

the topic of **multimedia facades considered as a mass medium** and the prevention of abuse **deserve further investigation** 

the search for **well integrated, meaningful applications** that serve a purpose of public or mutual benefit which overbalances the disadvantages to cope with their opponents. critique

**suitable integration** of multimedia facades into the existing architecture of a cityscape