

Mobile Music:

*Creating New Musical Forms
for New Infrastructures*

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Music on Mobile Devices & Wireless Networks

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Music on Mobile Devices

- iPod ?

Music on Wireless Networks

- **Mobilephones ?**

Music on Mobile Devices & Wireless Networks

- iPod +
- Mobilephone =
- ...

Music on Mobile Devices & Wireless Networks

- iPod +
- Mobilephone =
- ...Motorola iTunes phone?



Music on Mobile Devices & Wireless Networks

- iPod +
- Mobilephone =
- ...Motorola iTunes phone?
- NO
 - Commercial failure
 - No mobile operators want to play
 - This is not a *vision* for mobile music



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Music on Mobile Devices & Wireless Networks

- Could it be.... the Podcast???



Music on Mobile Devices & Wireless Networks

- Could it be.... the Podcast???



- **NO**
 - Pre-fetch shows to computer, sent down to iPod
 - *No network on the mobile...*
 - RSS2.0+ Enclosures - all that tech just to recreate offline radio?

Music on Mobile Devices & Wireless Networks

- Viewpoints from interaction research
- Viewpoints from artistic practice
- Creating new works for new infrastructures

Mobility: personal or social?

- **1970's: Walkman**
 - Personal music listening device
 - Create a private sonic universe
 - Block out the outside world
- **2000's: Mobile phone**
 - Communications device
 - Network capable
 - Be in connection with your social sphere

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- **What stands between the two?**

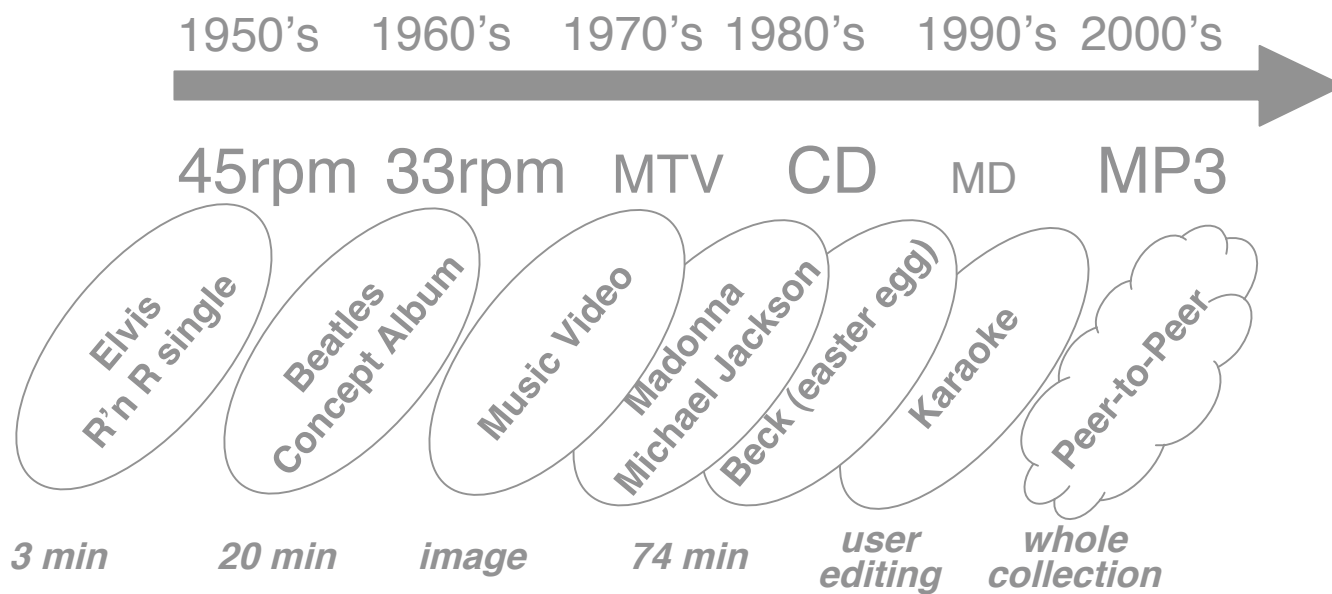
Mobility: personal or social?

- **Human Computer Interaction (HCI)**
 - Creating dynamic relationships between user and system
- **Mixed Reality techniques**
 - Creating a media environment in relation to one's surroundings
- **Social Software**
 - Creating a social environment in relation to one's community

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- **How to use this to make a New Music for mobile systems?**

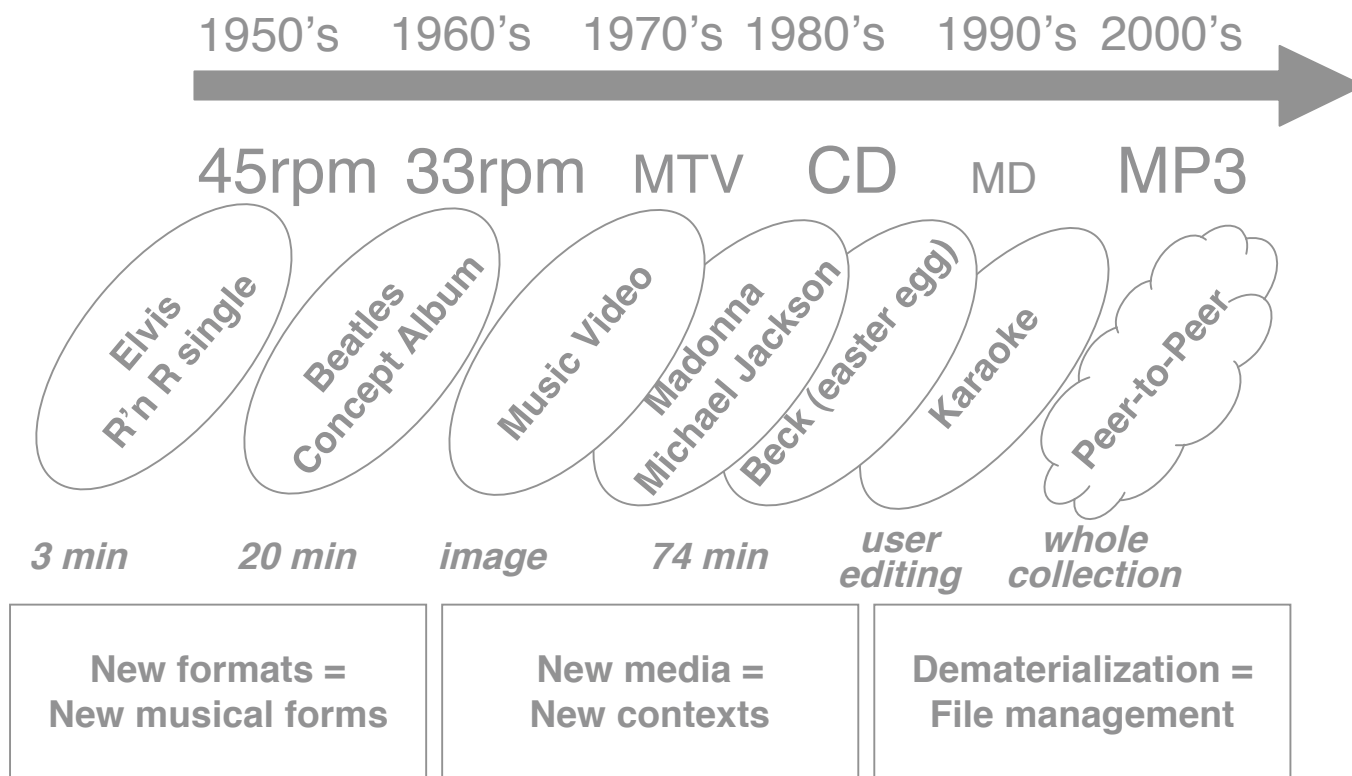
New mediums led to new musics



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New mediums led to new musics



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New means -> New music

- **Composing for mobility-**
 - Musical activities: from **stationary to mobile**
 - Technology: portable devices that
 - *can be used **anywhere** and **on the move***
 - *dynamically follow users and **take advantage of the mobile setting**: changes of location, social & environmental context, etc*
 - **Make, share, locate** or **hear** mobile music:
 - *from mobile soundscape recording /manipulation, to ringtones, to local area ad hoc networked performances or sound art with mobile phones...*

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- **Creating music,**
 - Specific to the means available
 - Finding the **voice** of the medium

Musical mobility

- **Interaction**
- **Connectivity**

Musical mobility

- **Interaction**
- **Connectivity**
- **Music inherently exhibits these characteristics**
 - Before Digital
 - Before HCI research
 - Before Social software

Music as a participative creative activity

- We play musical instruments in groups
- People go to concerts together
- We share favorite music with friends

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- *Music is a social activity*
- *Interaction dynamics exist*
 - *between musician/instrument*
 - *among musician/musician*
 - *from musician/audience*

*Music is a living form of cultural expression and
not a commodity to be sold and copied in a
file system*

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Musicking - the activity of living out music

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Musical Research

- **Interaction**
 - Sensor instruments
- **Connectivity**
 - Network Music

Interactive Music

- **Sensor instruments**
 - Capturing performer gesture
 - *Not dance...*
 - Musical articulation



BioMuse:
electromyogram (EMG) biosignal sensing
1990-

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Interactive Music

- **Sensor instruments**
 - Capturing performer gesture
 - *Not dance...*
 - Musical articulation
- **Ensembles**
 - Group dynamic
 - Instrument family



Sensorband

Paradiso, Amsterdam 1993

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Interactive Music

- **Sensor instruments**
 - Capturing performer gesture
 - Musical articulation
- **Ensembles**
 - Group dynamic
 - Instrument families
- **Sound/Image**
 - Interaction w
visual media



S.S.S

Musique Action, 2004

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Network music

- **Distributed performance**
 - Time latency
 - *Acoustic of the Network*



Network concerts:
1996-2002

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Network music

- **Distributed performance**
 - Time latency
 - *Acoustic of the Network*
- **Installations**
 - spatial+net mixing

Constellations
Webbar, Paris 1999



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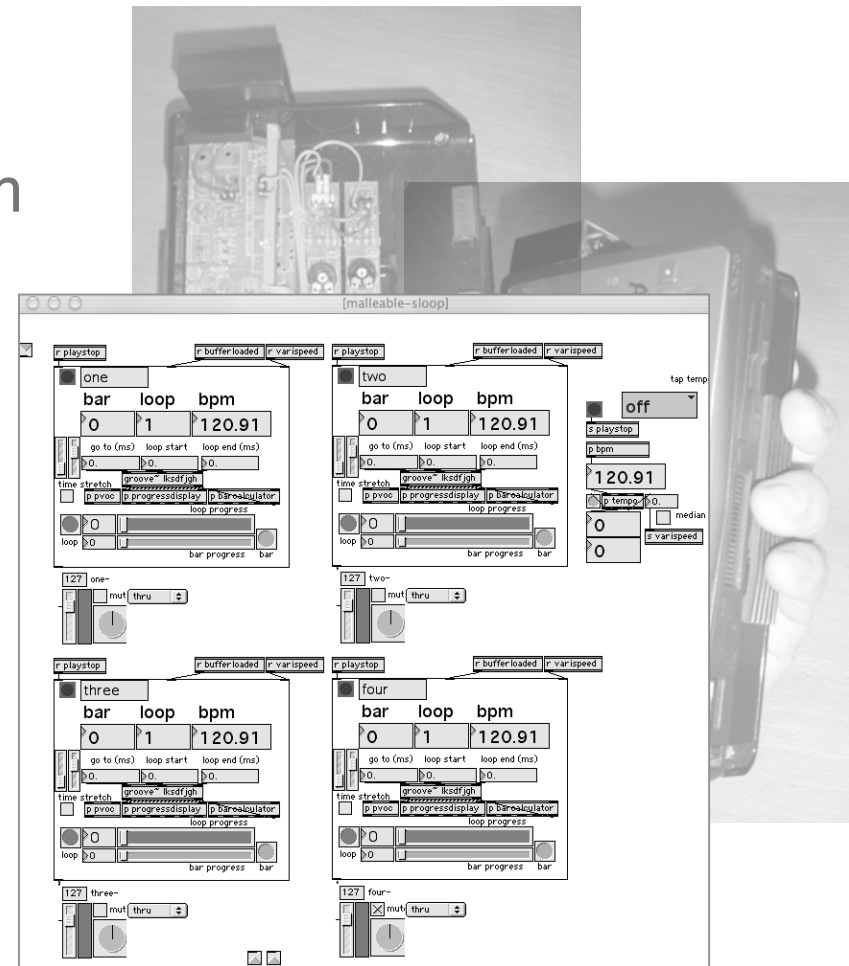
A musician's take on mobile music

- **Interaction**
 - Transposing sensors from the body to the device



A musician's take on mobile music

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- **Music engine**
 - Studio on a server



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A musician's take on mobile music

- **Interaction**
 - Transposing sensors from the body to the device
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- **Communities**
 - Location based *Social Remixes*



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Creating an artwork and not a technology demo nor a business plan

- **Locative media, a field of artistic practice:**
 - Mobile
 - Location aware
 - Social networking

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- **Mapping**

(Blast Theory, Janet Cardiff)

Creating an artwork and not a technology demo nor a business plan

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- **Mapping** - *Cartesian coordinates or Dimensional transformations*

Creating an artwork and not a technology demo nor a business plan

- **Locative media, a field of artistic practice:**
 - Mobile
 - Location aware
 - Social networking (Blast Theory, Janet Cardiff)
- **Mapping** - *Cartesian coordinates or Dimensional transformations*
 - Locative Media
 - *society, political, demographic*
 - *memory, collective narrative*
 - Sensor instruments
 - *gesture*
 - *articulating musical sound synthesis*

Creating an artwork

Net_Dérive

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Geography as Musical Interface

- Extending interactive music beyond the stage and concert hall
- **Connecting spaces**
 - Gallery space
 - *White box*
 - *Controlled environment*
 - *Minimizing distraction*
 - Urban space
 - *Rapid permanent change*
 - *Chaotic environment*
 - *Multiple demands soliciting attention*



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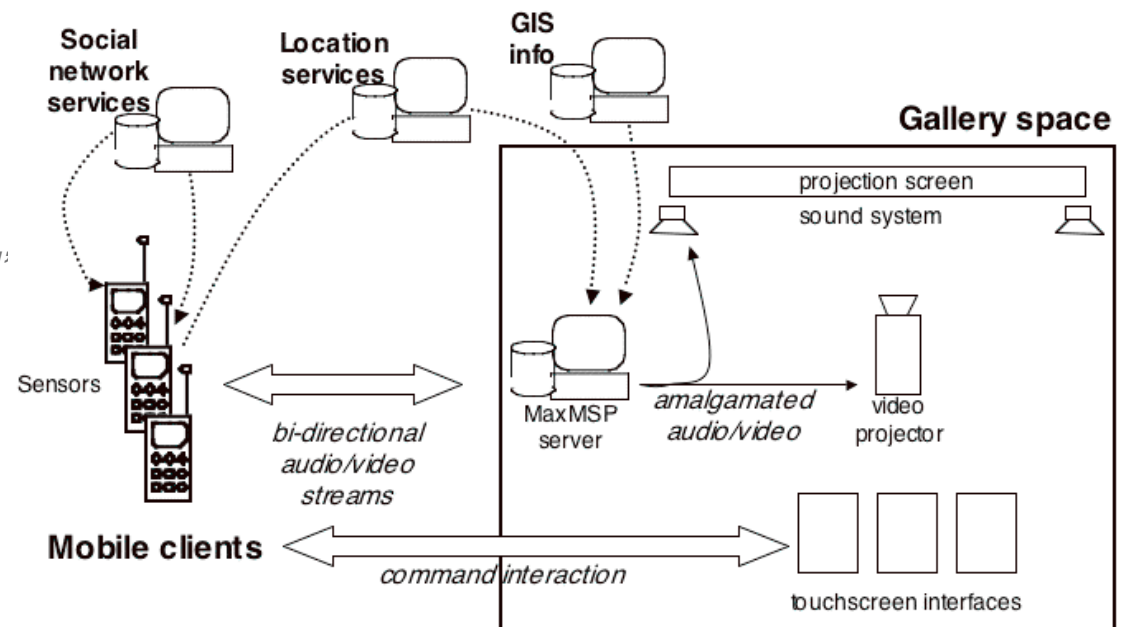
Scenario/architecture

– Mobile

- *Outdoors, mobile phone*
- *Sound/image upstream*
- *Task: game-like “mission”*

– Gallery

- *Indoors*
- *Media amalgam*
- *Surveillance: “command central”*



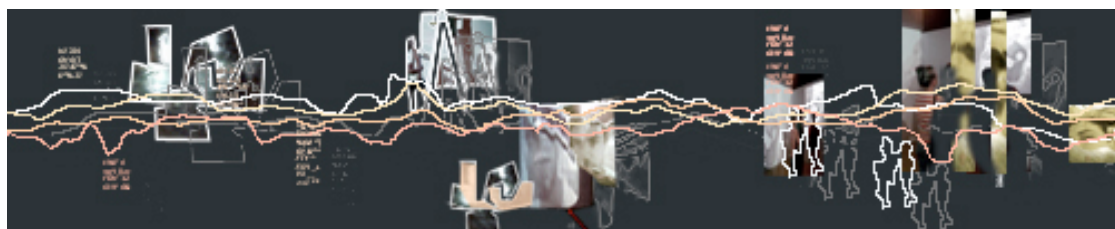
Conceptual abstractions

- **Situationist Dérive**

- Adding interaction, multi-user
- Adding Memory
- Creating collective process

- ***Horizontal and Vertical***

- *Archaeology of the instant*
- Representation->Reproduction->Composition (Attali)

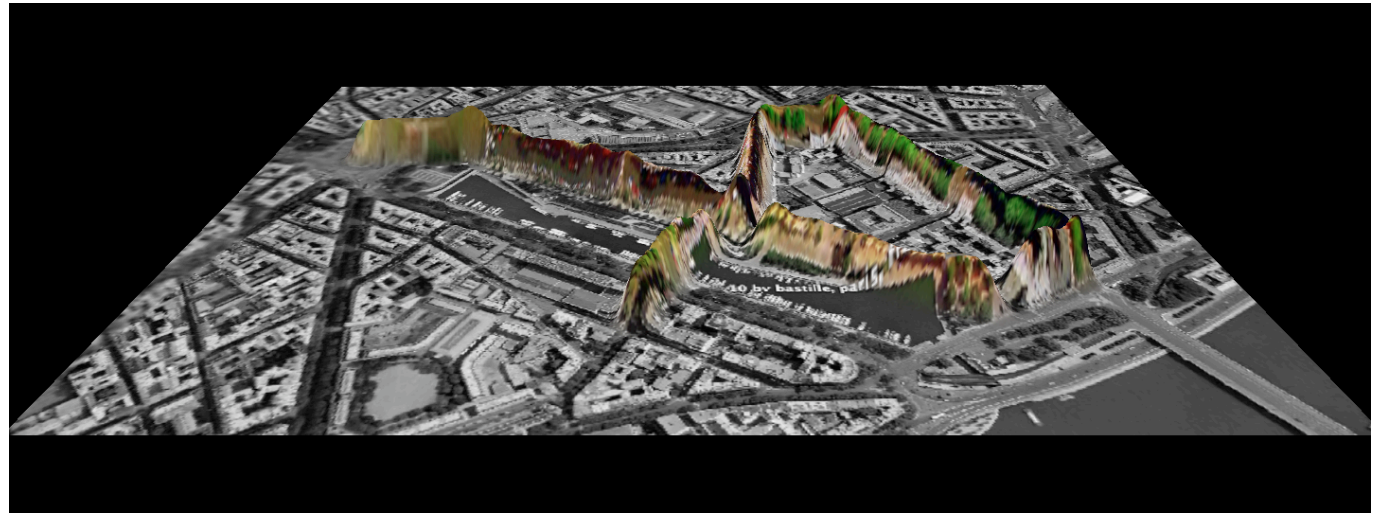


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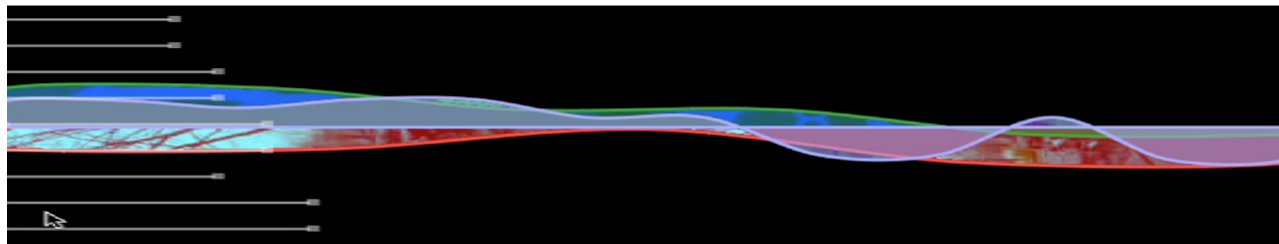
Composing for such a framework

- Not the original, not the copy, but a *model*
(Baudrillard)
- Composing as creation of a support structure for the potential of multi-user interventions



Net_Dérive

- **October 6/7, 2006 Maison Rouge Paris**
<http://www.csl.sony.fr/Events/IntensiveScience/>
<http://www.we-make-money-not-art.com/archives/009042.php>
- **Fluid audio and graphical response to geographic and social dynamic**
- **Drawing on musical interaction to create a live mobile media environment:**



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