Net_Dérive

Participative Locative Media work

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It was presented in October 2006 in Paris France as part of Sony CSL Paris' Intensive Science (http://www.csl.sony.fr/Events/IntensiveScience/) exhibition at the Maison Rouge gallery in Paris.

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Clicmobile SA
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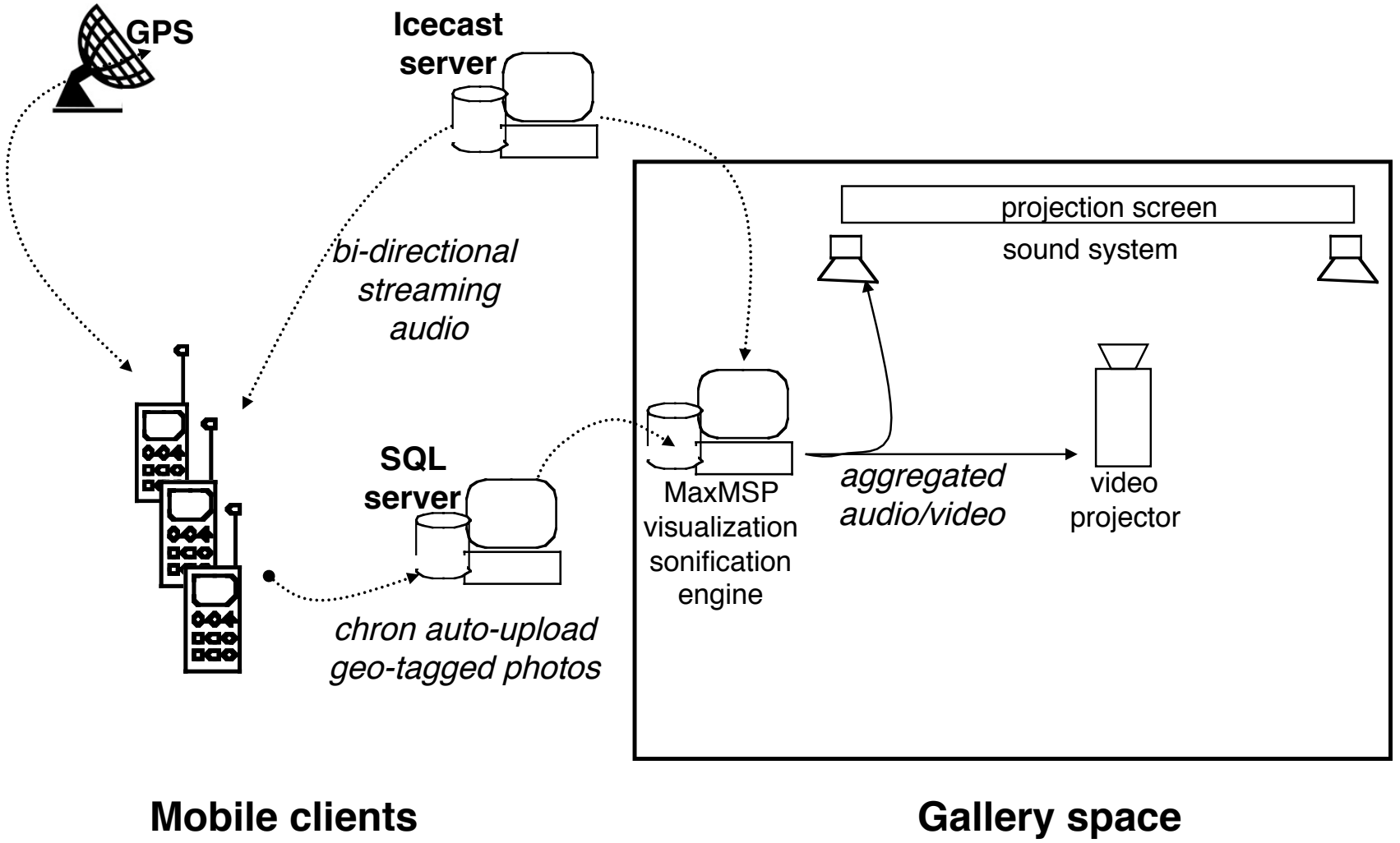
Net_Dérive is a location sensitive mobile media work that calls for an exchange between spectators in a gallery and three (3) participants in the streets of a city. Deployed on advanced mobile phones, the work seeks to create a kind of musical instrument based around the idea of the the city-as-instrument.

To perform the work, participants are given a wearable computing scarf with a mobile phone in each end and GPS unit on the back. They then go out on foot to explore the neighborhood surrounding the gallery. One of the phones is an acquisition device and takes photographs every 30 seconds and also collects sounds continuously. This media data is geo-tagged (associated with GPS coordinates) and uploaded to the server inside the gallery space over a 3G network connection. The second phone is a display device, and gives visual feedback onscreen and sonic output over headphones. The performers can see themselves pictured on the phone's screen as dots on a radar screen or by switching modes, they can view images taken by the cameras mapped along the trajectories walked by the participants.

The sounds and pictures collected in the streets become the information and materials for visualization and sonification of the participants locations and movements. They are mapped on to a 3D satellite map projected on a wall in the gallery. A soundscape is generated from the GPS coordinates: Participants' relative proximity giving a pulse of polyrhythmic blips, certain latitude/ longitude combinations triggering voice commands directing the walkers to stop, continue, or turn, and absolute distance to command central (the gallery) modulating resonators shaping the audio feeds from the streets. This audiovisual amalgam is seen and heard in the gallery and streamed back out over 3G to the participants' mobile clients.

As users walk around and explore the citiy, they hear the voice instructions (to be heeded or not...), shifting rhythmic blips, and processed street sounds. The voice instructions -as well as the concept of the piece- are inspired by Situationist games and theory of the Dérive brought into the digital and mobile spheres. The soundscape becomes a context-sensitive music that is an abstraction of the collective experience, at once a representation of the situation, and an aesthetic orchestration giving the participant a sense of floating above the city streets - at once in a bubble yet more aware of their surroundings.

The simultaneity, history, and memory of the various users' paths and images become an collective narrative that is knitted together in the projection in the gallery space. This creates an archaeology of the instant, into which we carve grooves to develop alternative modes of reading and forms of representation that produce liminal, hybrid spaces, from which relations, yet unknown, can emerge.



System diagram

GPS

Bluetooth

Acquisition Phone (1)

camera | mic

Java ME

Bluetooth interface

3G network interface

Geo-tagged media upload

Display Phone (2)

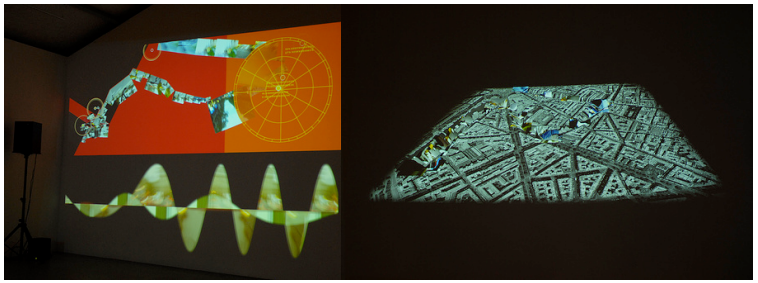
head-phones | LCD display

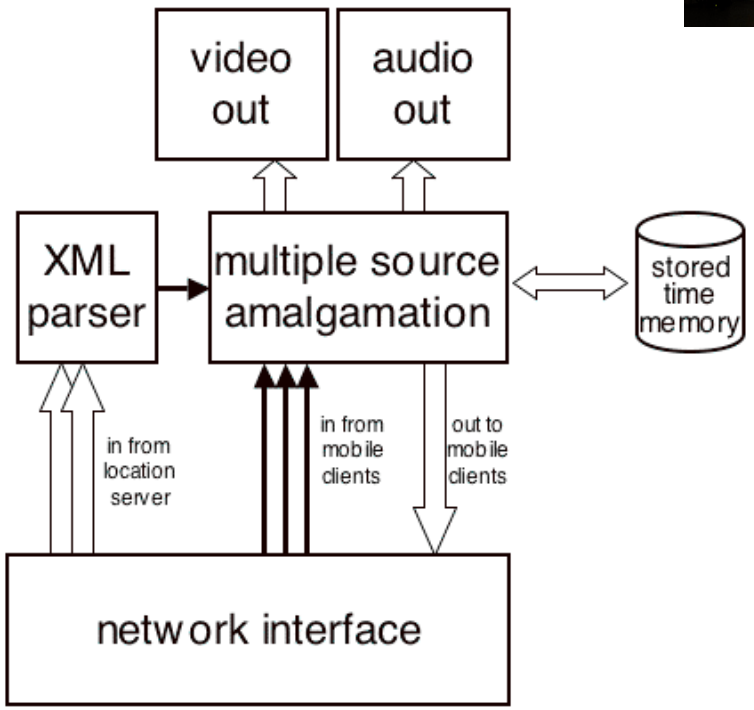
Streaming renderer

3G network interface

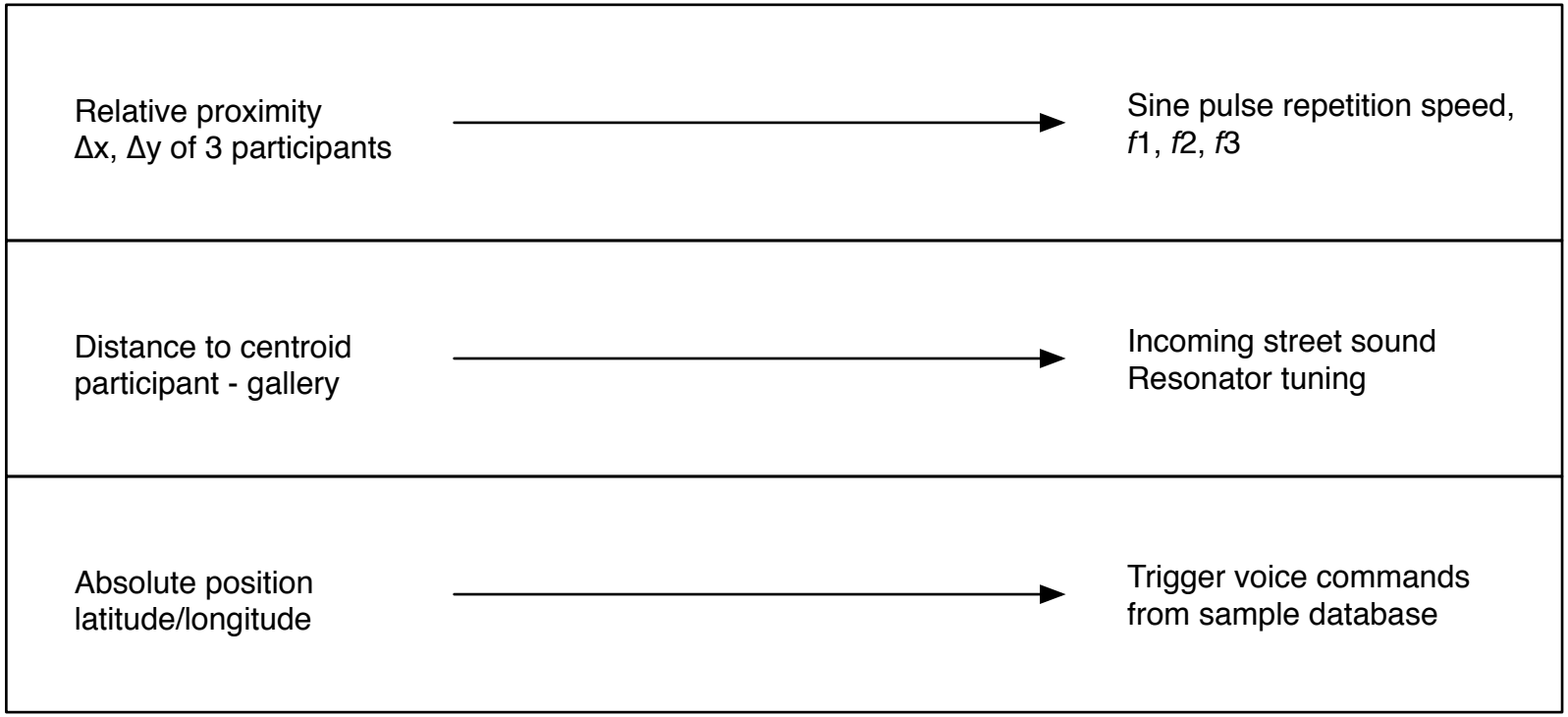
Streaming audiovisual media

Wearable mobile client



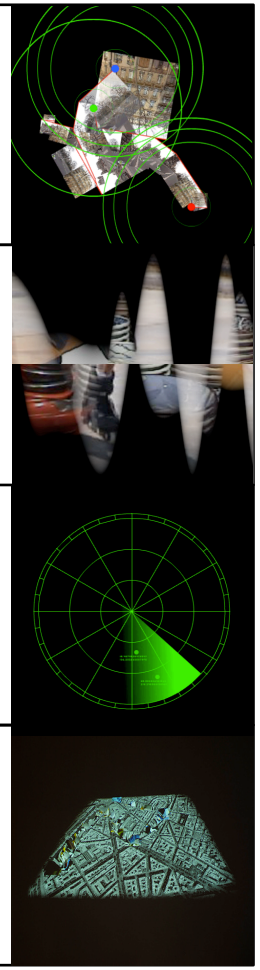


Gallery server



Sonification mappings

Relative trajectory	→	photo thumbnail trace
Walking speed	→	X-axis image stretching Waveform frequency
Absolute position latitude/longitude	→	Radar display points
Repeated passing	→	Depth of groove in satellite map



Visualization mappings

Directions
Go left
Go left now
Turn left
Turn left here
Turn around and go left
You should take a left here
It is recommended that you take a left here
It'd be better if you took a left here
Please take a left here
It'd be better if you took a left here

Go right
Go right now
Turn right
Turn right here
Turn around and go right
You should take a right here
It is recommended that you take a right here
It'd be better if you took a right here
Please take a right here
It'd be better if you took a right here

Go west
Go east
Go north
Go south
Go for three minutes to the west
Go for two minutes to the north
Go for four minutes to the east
Go for one minute to the south

Follow the street
Cross the street
Cross the street and turn around
Cross the street and turn left
Cross the street and turn right
You cannot turn left here
You cannot turn right here

Other ways of walking
Go faster
Slow down
Vite – vite!
Stop here!
Don't stop here!

Questions
Did you take a left?
Why didn't you take a left there?
Did you take a right?
Did you turn around before you took a right?
Did you see the guy in the window?
Do you see the woman in the window?
Do you see the red car?

Location specific directions
Cross rue de Lyon here
Cross both rue de Lyon and avenue Daumesnil
Turn into rue Cremieux

(av Daumesnil/rue Rollin) turn left here
(av Rollin/rue de Charenton) turn right here
(rue Charenton/Traversiere) take a left (here)
Place d'Aligre is straight ahead
(pl d'Aligre) turn left
This is where Charles Baudelaire meets Theophil Roussel

Cross rue de Faubourg Saint Antoine
and follow the passage de la Main d'Or

Go down left at rue charonne
Vite-vite – pass avenue Rollin and proceed to Café Pause
Don't go down avenue Rollin –
take Le Passage de la Bonne Graine instead

Location specific questions
Did you see rue cremieux?
Did you miss the passage de la Bonne Graine?
Did you miss the passage de l'homme?

Event specific directions
You have a possible rendezvous with another participant
You are about to leave the Net_Dérive zone
You have left the Net_Dérive zone
Turn around – you are about to leave the Net_Dérive zone

Event specific questions
Would you like a rendezvous with another participant?
Are you ready for a rendezvous with another participant?
Do you see the other participant?

Voice command database