

Noah Jurcin :: Tour de l'Horloge

Overview

Aix is the historic capital of Provence, a southeastern region of France which enjoys a reputation for luxury. Since the 1500's, the city's inhabitants have set their clocks to a giant bell tower in the center of town. Clock towers during these times served as a central reference to the living routines and rituals taking place everyday. In fact, the rhythm of the town still seems to be in sync with the signals broadcast by the clock tower. Aix's main square, Place de l'Hotel de Ville, contains the 16th century belfry housing bells that are still active today, and they ring in the hour every sixty minutes with the number of chimes of that particular hour. On the front of the tower is an astronomical clock face. I am building a clock patch in Max/MSP using the sounds of this clock tower.

Concept

The general idea involves the construction of a clock with an hourly chime system that represents the space of the Aix-en-Provence city center. I begin by overlaying an image of a clock face over a satellite image of the old city center. Overlapping these two images produces a spatial map with twelve distinct locations, plus the sound source represented by a point in the center of the clock face. The twelve enumerated locations are the sites at which I made my binaural field recordings. Recordings were made while facing north so that the perceived location of the bells changes each hour. Although it may be impossible to deduce the location of the clock tower by sound alone, each space enjoys its own flavor of ambience and sound signature.

Content

I used a pair of Core Sound binaural microphones to capture audio for this project. Binaural recordings preserve the delicate cues our hearing system uses to determine sound source location, such as interaural time delays¹ and interaural level differences². Despite the fact that each location is roughly equidistant from the bell tower in the city center, each recording will maintain its own 'flavor' of spatialized bell sound and city ambience due to the time of day, the differing orientations of buildings, people, and other objects in the immediate surrounding area. As with any inhabited space, the day and night ambience of the town are drastically different. I also filled the hour of time in between the chimes with the sounds of the city ambience in between the various locations, much like an auditory slide show featuring clips of incidental sounds around town.



Tour de l'Horloge

The Clock Tower. Former belfry of the town and symbol of local government power, the tower spans the street on Roman foundations. Erected in 1510, it houses an astronomic clock built in 1661, containing four wooden statues. The Four Seasons fountain by the sculptor Chastel in the 17th century is surmounted by a Roman column in its core.

1 - An interaural time delay represents the finite time duration a sound requires to travel the distance between the two ears. A sound source in the center of the field of vision produces no interaural time delays and is perceived at the two ears at the same moment.

2 - An interaural level difference is the difference in loudness a given sound source produces when perceived beyond the midline. Therefore, a source producing sound in the center of the perceptual field produces no interaural level differences and produces equal loudness at the two ears.