

Discussion about the festival of lights

(Toulouse the 10th of June in 2022)

Scenarios we want to study (see fig. 1)

- pedestrians start moving and stop moving: they arrive in place des Terreaux to see the animation, and leave when the animation is over. There will be a camera placed on the roof of the city hall.
- queue + corner: The camera will be placed on the roof of the museum of fine arts at the right-hand corner.
- global dynamic of the pedestrians on the place des Terreaux. A camera put on the city hall will record the whole place.

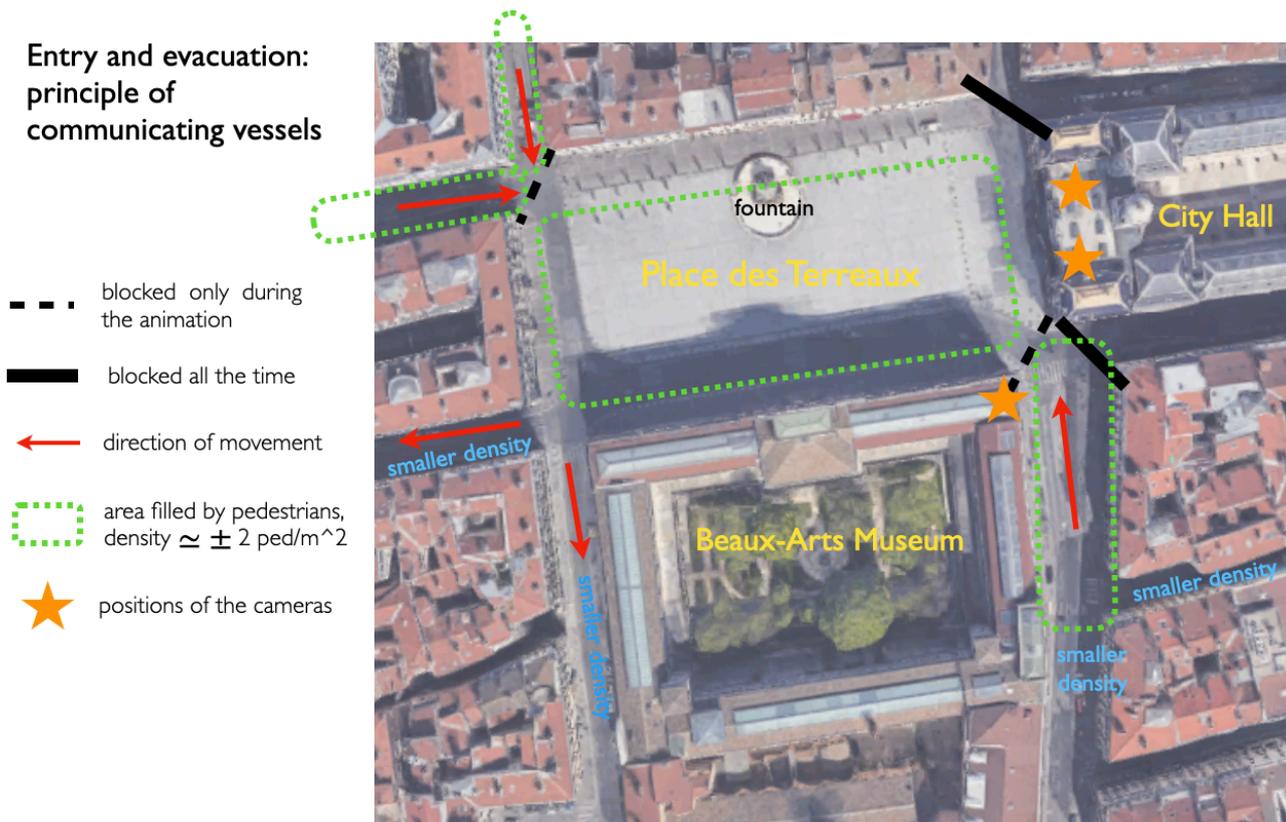


Figure 1: The pedestrians already present on the place leave through the bottom left streets, those in the top left streets and bottom right street take the place of those who leave, it is the principle of communicating vessel. During the whole animation, no one can enter the place.

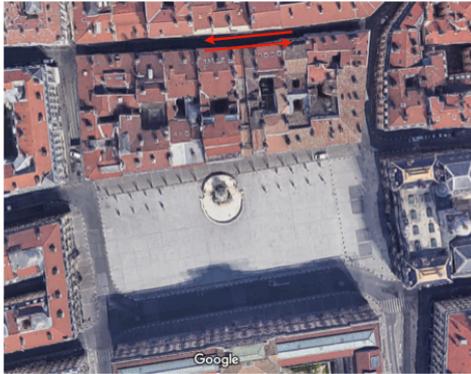
Practical points for the festival of lights

- to measure travel time and record the associated trajectory over long distances, we can use a mobile geolocation app such as « Geo Tracker ». To recruit people, we can simply post an ad on the Facebook groups of the universities and schools in Lyon => we can easily get a lot of people. This is very common for cognitive science experiments.
- Mohcine is going to speak with Mike about the project we have on the Place des Terreaux. Mike may indeed find it relevant to give us specific advices on data collection.
- recruit a Master intern to extract trajectories and analyse the data
- find a flat from which to record in Rue du Président Edouard Hériot.
 - make a flyer presenting our project and put it in the mailboxes.
 - keep an eye on the airbnb website
 - join the Facebook group of the law school of Lyon (jean moulin Lyon 3) where students who know people living near the place des Terreaux are likely to be.

Problems that already happened during the festival of lights

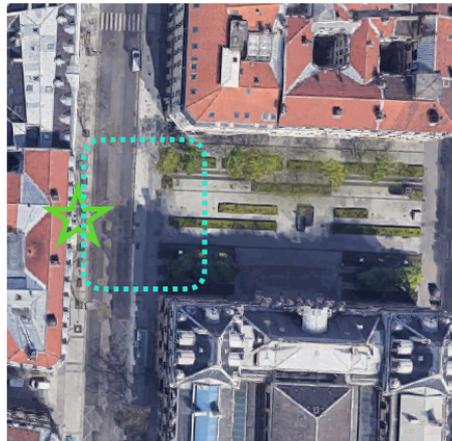
- in 2005 for the Jean Luc Hervé concert, there were no restrictions on the street density. Very quickly, the place became filled with the potential risk of a panic movement which did not occur.
- three other problems already happened (see fig. 2)

Street Sainte Catherine



People were walking in both directions, at some point no one could move. The authorities therefore blocked the access to the street and evacuated it.

Place de la Bourse



An animation was projected on this wall, so people started to crowd around it blocking the whole street!



Part of the place was full. Although the rest of the was empty, people did not try to bypass the crowd

Place des Célestins



The place suddenly filled with people. Fortunately, no dangerous crowd movement happened.

Figure 2: Three other places where problems happened.

Discussion with the technical director of the festival of lights

- Tu is going to illustrate the scenarios we want to study during the festival with a simulation made on the Gamma platform.
- the X-sensor pressure jackets will be used during the Hellfest festival (17-19 June 2022). It will be necessary to ask if the data collected are interesting and exploitable. If so, this experiment can be used to convince the authorities responsible for the festival of lights to let us use the pressure jacket.
- we can ask the technical director if the city hall would be interested in a more important collaboration with the university to elaborate an easy-to-use software allowing to simulate crowd movements and thus to test such configuration, geometry, arrangement of barriers.