

## EXERCICE N°4 : « TREES IN MY CITY: TRANSFORMATIONS »

« The smallest Sugar-Maples in our streets make a great show as early as the fifth of October, more than any other trees there. As I look up the Main Street, they appear like painted screens standing before the houses; yet many are green. But now, or generally by the seventeenth of October, when almost all Red Maples, and some White Maples, are bare, the large Sugar-Maples also are in their glory, glowing with yellow and red, and show unexpectedly bright and delicate tints. They are remarkable for the contrast they often afford of deep blushing red on one half and green on the other. They become at length dense masses of rich yellow with a deep scarlet blush, or more than blush, on the exposed surfaces. They are the brightest trees now in the street. »

[...]

« Let us have a good many Maples and Hickories and Scarlet Oaks, then, I say. Blaze away! Shall that dirty roll of bunting in the gun-house be all the colors a village can display? A village is not complete, unless it have these trees to mark the season in it. They are important, like the town-clock. A village that has them not will not be found to work well. It has a screw loose, an essential part is wanting. Let us have Willows for spring, Elms for summer, Maples and Walnuts and Tupeloes for autumn, Evergreens for winter, and Oaks for all seasons. »

Henry David Thoreau, *Autumnal Tints*, October 1862<sup>1</sup>

Both autumn and spring are marked by rapid and sometimes spectacular climate variations and changes: day length, temperatures, precipitation, etc. That directly affect vegetation and transforms natural landscapes. In the city, the trees are the major sign of these seasonal changes. With them, through them, the city is also transformed and its spaces become different.

Through this exercise, each student observes and testifies to the transformations of an urban site in relation to the plant's metamorphosis over the course of the seasons.

### Select a site

In its first step, the exercise consists in identifying and choosing an urban site planted with one or more trees that strongly contribute to its identity. This site will be very regularly visited and studied until January: its weekly accessibility is essential, and the easiest way is to choose a site close to home or school.

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<sup>1</sup> Copyright © 2002 by The Atlantic Monthly Group. All rights reserved. *The Atlantic Monthly*; Oct 1862; Vol. X, No. LX; pages 385-402. <http://www.theatlantic.com/past/docs/issues/1862oct/thoreau.htm>  
Site consulté le 15 octobre 2013.

### Do a photographic report

Once the site has been chosen, you will produce a photographic report of it: that is to say global views, particularly interesting points of view, details related to plant presence, details of plants, etc.

In all the images produced, you select at least 4 that synthesize the report and show the characteristics of this urban place. These photographs will be redone every week, on the same day, at about the same time, always respecting the same point of view, the same framing, with the same camera. That is the condition for you to be able to compare the photos and show how the vegetation is changing and the consequences on the space and on the atmosphere.

The first photo will be taken during the first week of October, and the last one at the beginning of January 2019.

At end, for each selected view, you have at least 12 images (14 if the photos can be taken during the holidays).

► **The photographic report and the choice of the four photos must be sent by e-mail no later than 07 October 2018.**

### Draw the chosen site

Plans and sections are the architect's usual tools for representing space. They provide additional information to that offered by photographs.

A general plan of the studied site will therefore be drawn up, as well as one or two significant sections of the articulation of the plant and the building (see "Additional information" below). Particular attention will be devoted to the representation of the plant.

► **These documents must be sent by e-mail no later than 21 October 2018.**

### Identify trees

**What are the species present on this site?** in the city, trees belong to a traditionally limited species palette. But today it is tending to diversify in response to the greening of new areas, but also to problems of ageing, decline and disease. Not all species are adapted to all spaces, not all are conducted in the same way. The quality of a space and the atmosphere that characterizes it are closely linked to the choice of the species planted. Therefore it is important to recognize them.

► **The identification of the trees should be proposed and sent by e-mail no later than 4 November 2018.**

### Analyse the transformation of the site

The documents you previously produced (photos, plans, sections) show the organization of the space, and underlined the relationship between buildings and plants. They also probably show the variation of life and

occupation of the site. Your comment will provide additional information to the images: moods, smells, noises, climatic data (wind, temperature, etc.), animal presence, etc.

To conclude that work, you write a text that analyse the role of trees in the transformation of urban space and you identify the key moments of that metamorphosis.

► CALENDRIER DES ETAPES DE L'EXERCICE

2018/10/07	the photographic report and the 3 or 4 views selected to be repeated
2018/10/21	Plans and schematic sections characterizing the built / vegetal relationship of the studied site
2018/11/04	Identification of trees on the site
2019/01/14	RENDU FINAL

**ADDITIONAL INFORMATIONS****Draw the selected site**

Plans and sections are the architect's usual tools for representing space. They provide additional information to that offered by photographs.

A general plan of the studied site will therefore be drawn up, and one or two significant sections showing the articulation of the plant and the building. Particular attention will be paid to the representation of the plant.

The plan will be drawn up on the 1/500, or on the 1/200 if the site is small.

**The most important thing is the representation of trees**, by hand, with a graphic design that evokes the tree and tries to distinguish the different species.

The plan will be copied from the cadastral map, as is or quickly drawn by hand. There is no need to redesign it using software.

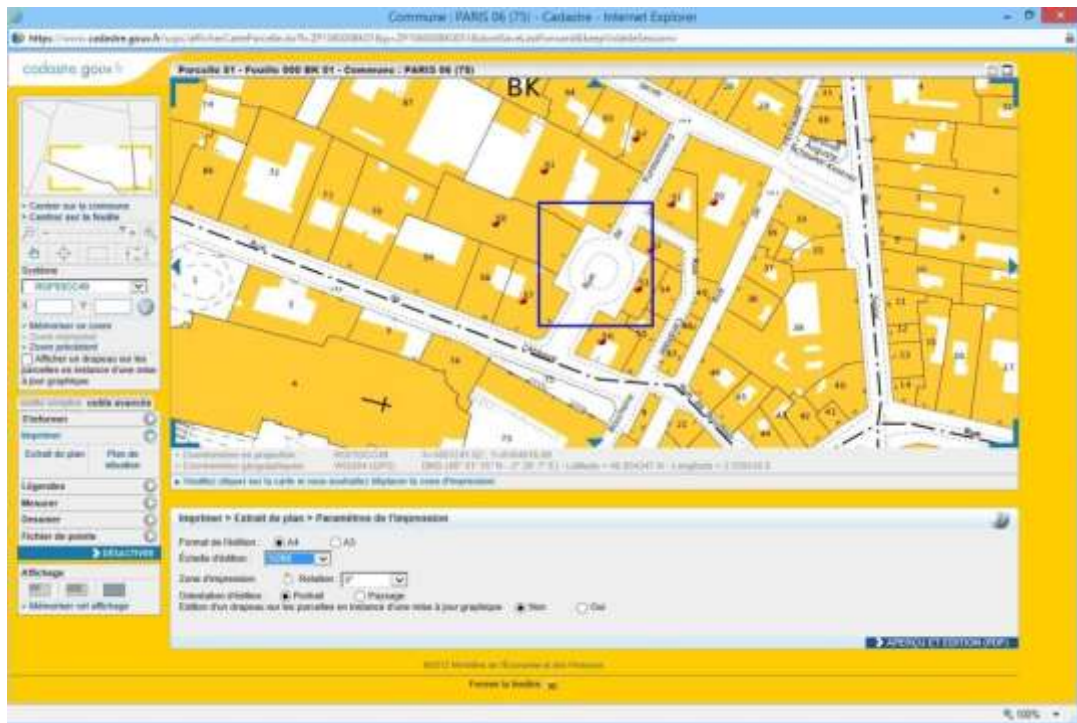
It can be downloaded from the websites listed on the following pages.

Similarly, on the cut(s), the design of the trees will be done by hand and will try to evoke the particularity of the trees present on the site studied.

Examples are given in the following pages.

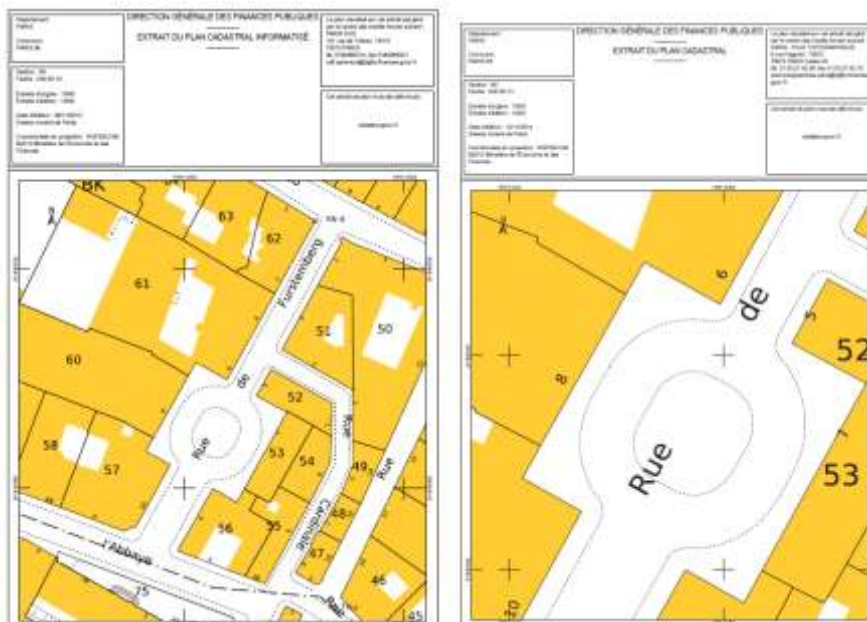
## POUR OBTENIR LE PLAN CADASTRAL :

Pour toute la France, vous pouvez vous procurer les extraits des plans cadastraux sur le site Internet : <https://www.cadastre.gouv.fr>



Pour imprimer un extrait de plan, choisir "outils avancés" :

Vous pouvez choisir l'échelle d'impression, par exemple au 1/500e ou au 1/200e



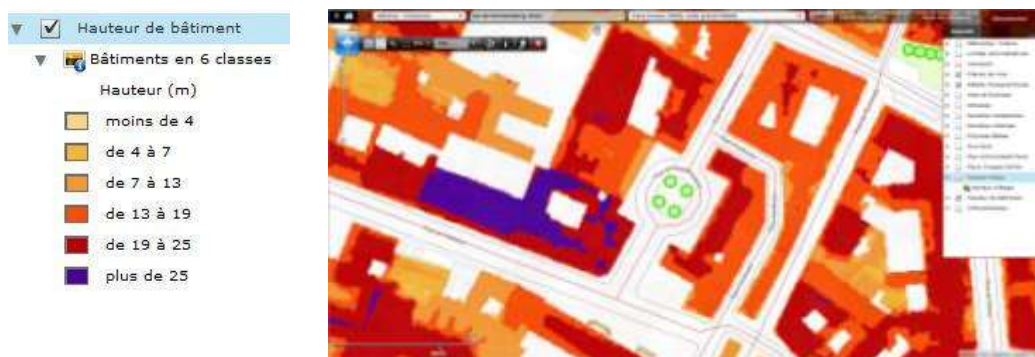
Pour un site à Paris, vous pouvez consulter le portail CASSINI sur le site de l'APUR :



[http://carto.apur.org:8080/page\\_accueil/](http://carto.apur.org:8080/page_accueil/)

A la rubrique "**Données références de la métropole parisienne**", vous pouvez afficher des informations supplémentaires comme les emprises bâties, le nombre d'étages, la hauteur des bâtiments, les trottoirs et la localisation des arbres (dans "détails topographiques").

Le plan ci-dessous permet de visualiser les hauteurs des bâtiments du site :



A la rubrique "**Données environnementales**", vous pouvez afficher la hauteur de végétation :

Le plan ci-dessous permet de visualiser les emprises des bâtiments, les trottoirs, l'emplacement des arbres, le volume de la végétation (emprise, importance du houppier des arbres, hauteurs) :



Plan avec "Emprises bâties", "Détails topographiques" et "Hauteur de végétation"

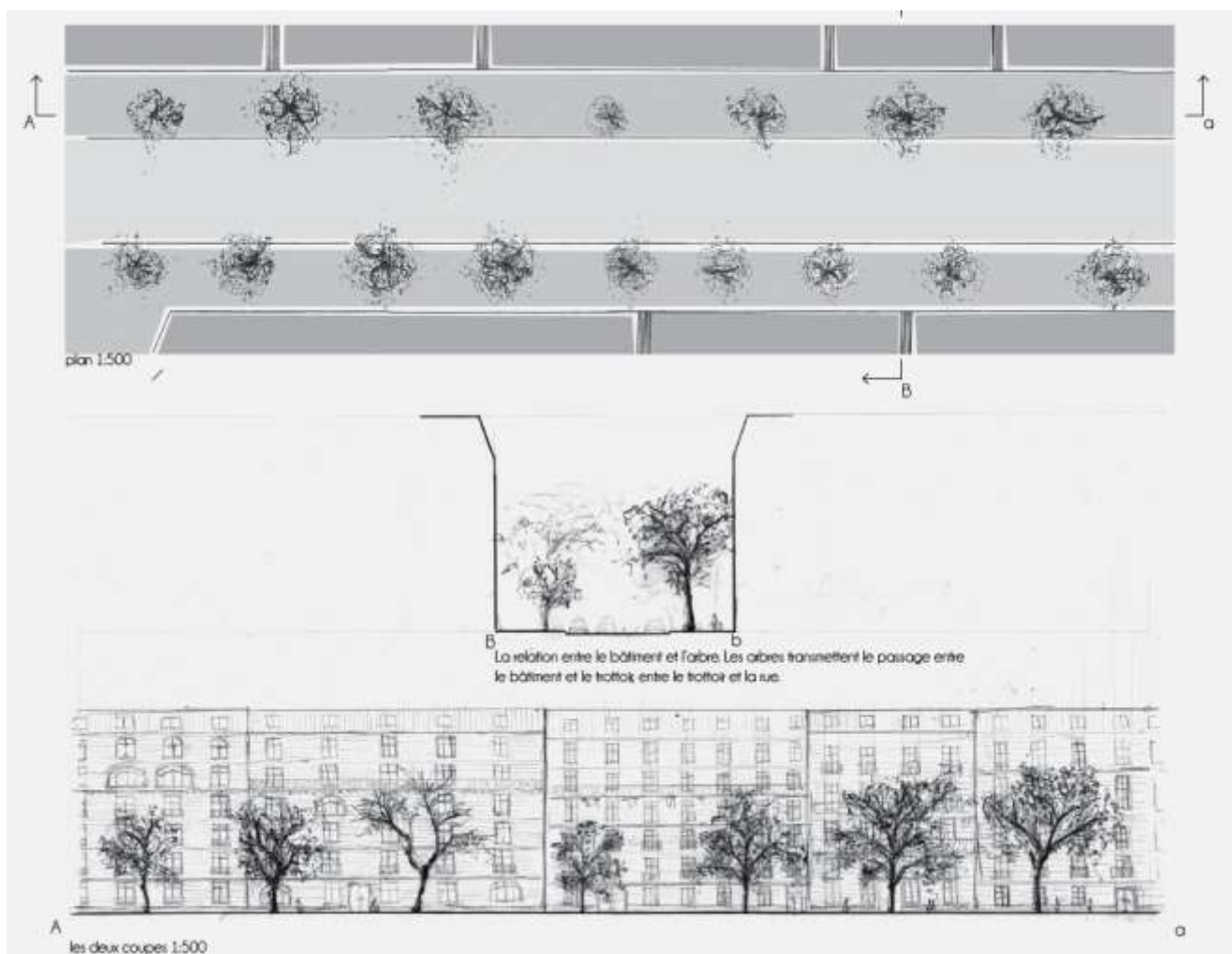


"Orthophotoplan"



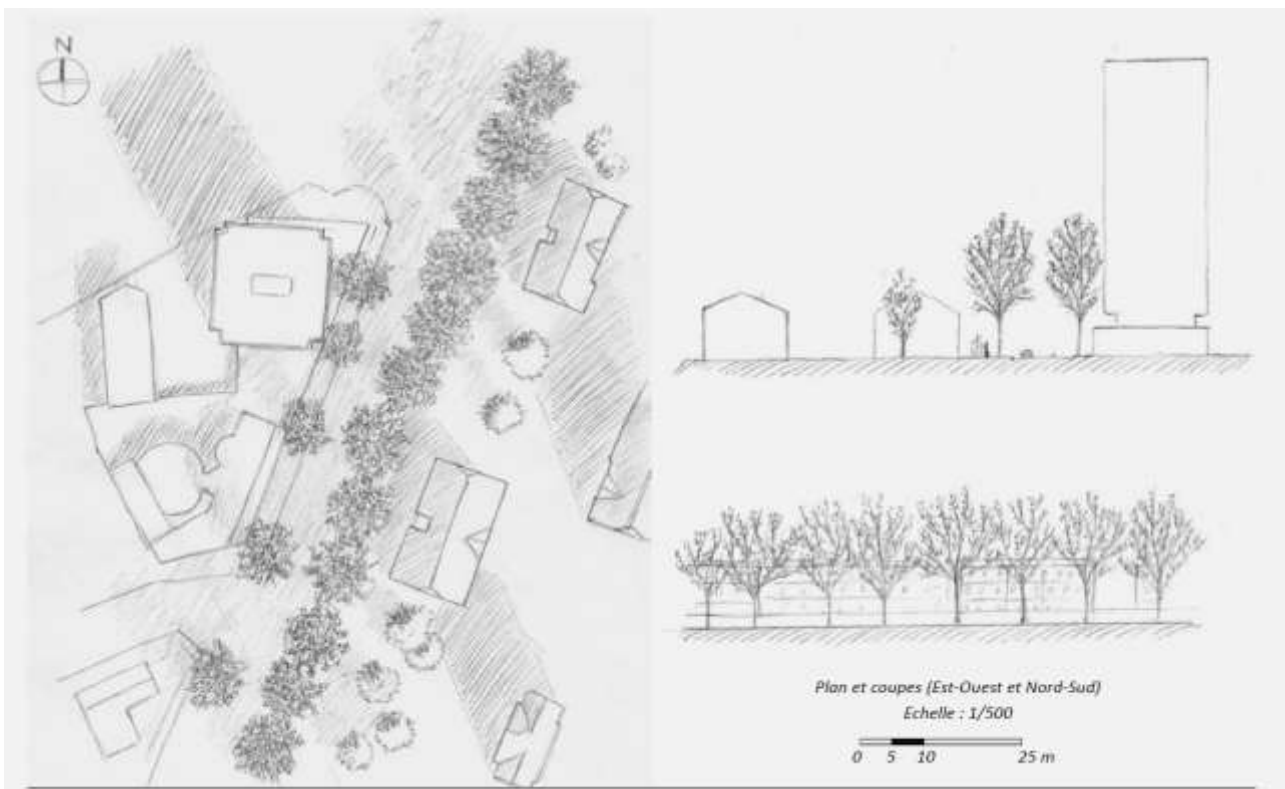
Vue satellite sur Google Map

## EXEMPLES DE PLANS ET COUPES DE SITES ARBORES

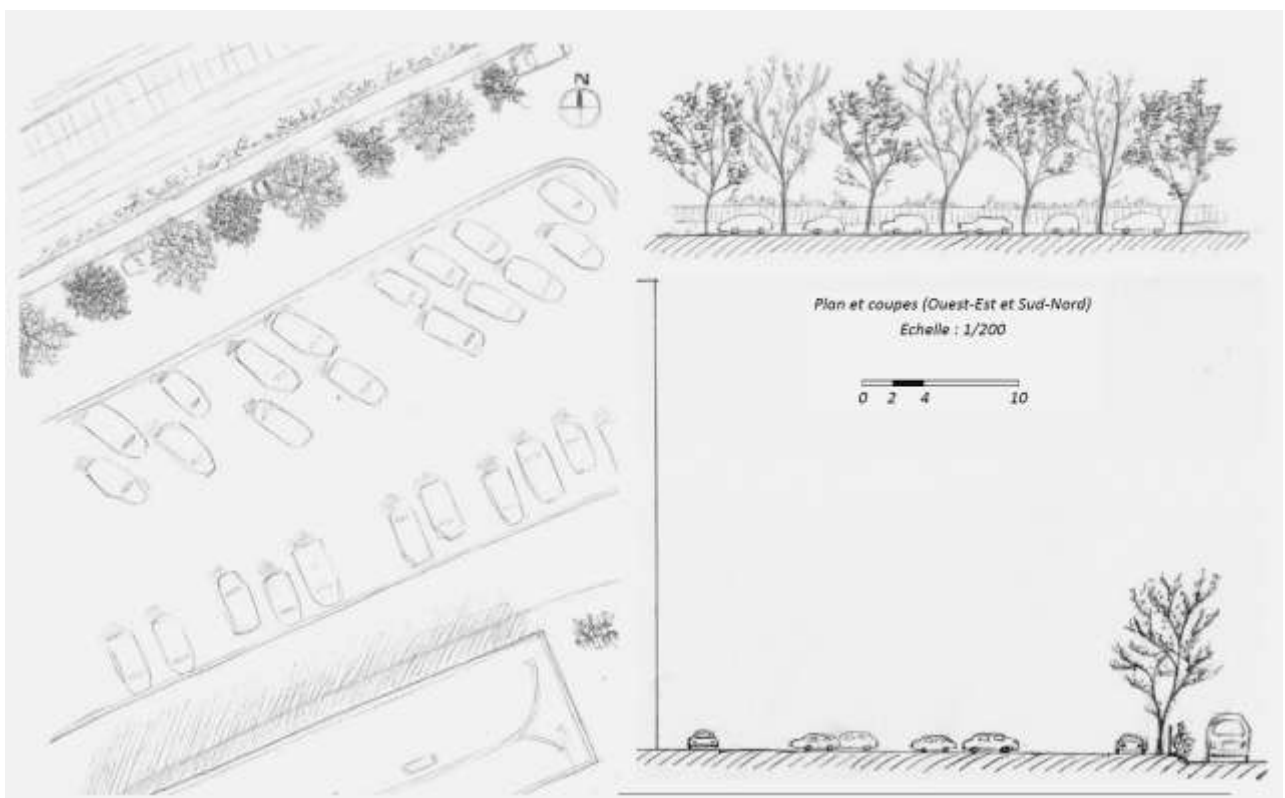


Dessins de Merete Jorgensen -Rue Georges Berger, Paris 17e arr. - Janvier 2014

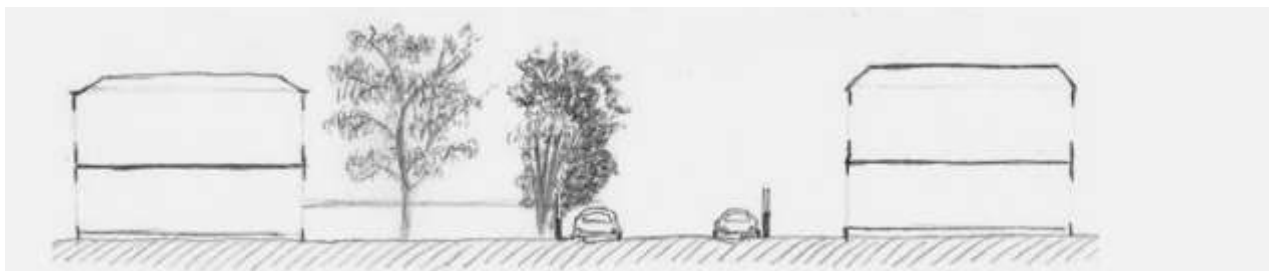
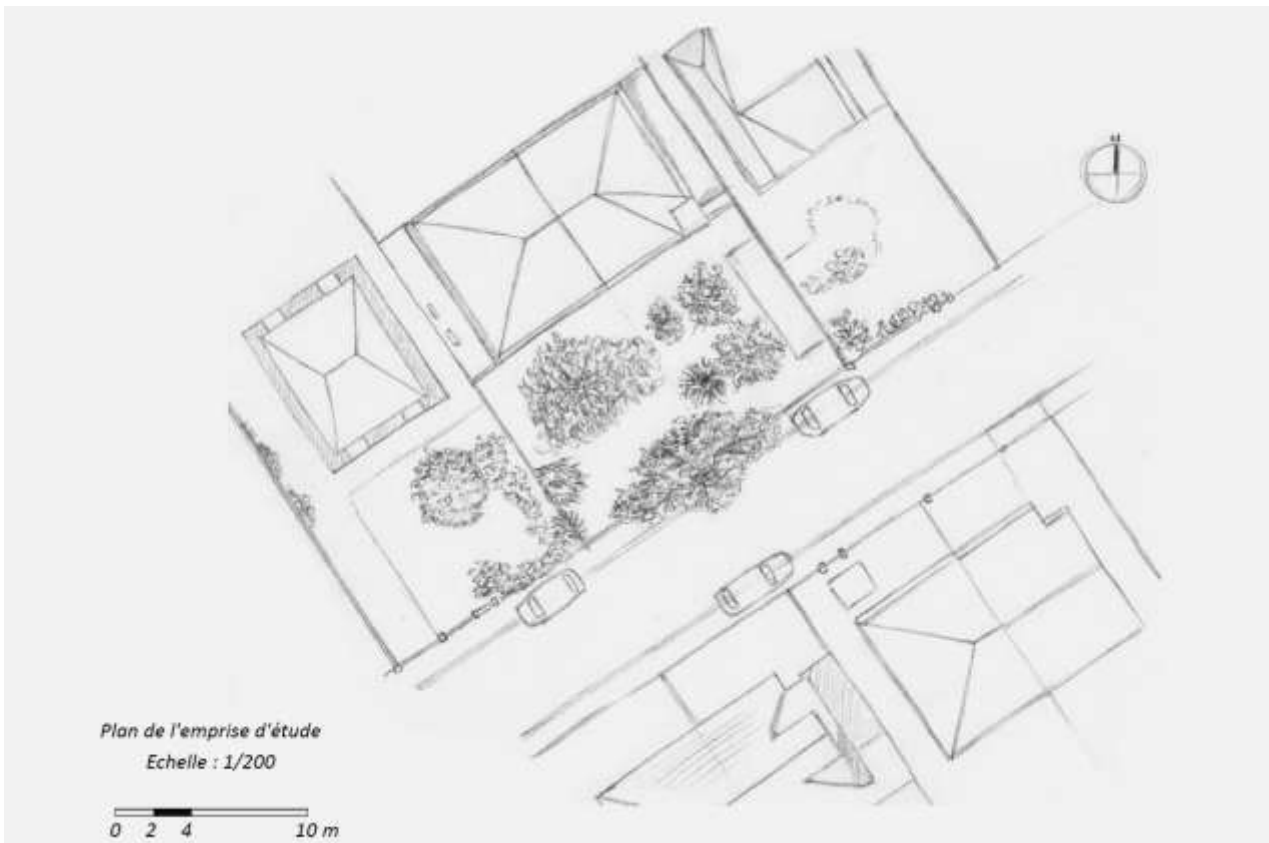




Dessins de Benjamin Bennequin - Boulevard Henri Barbusse, Malakoff - Janvier 2014



Dessins de Benjamin Bennequin - Sentier des Nouveaux, Malakoff - Janvier 2014



Coupe Nord-Sud  
Echelle : 1/200



ILLUSTRATION DE L'EVOLUTION DANS LE TEMPS

Transformation du végétal



INRAE - BRUNO NEUBER - DES ARBRES DANS LA VILLE, DES ARBRES POUR LA VILLE

DES ARBRES DANS LA VILLE - ANTHROPOMORPHES - 042 - FANNY DEVOIZE - 16 012

Transformation du végétal



INRAE - BRUNO NEUBER - DES ARBRES DANS LA VILLE, DES ARBRES POUR LA VILLE

DES ARBRES DANS LA VILLE - ANTHROPOMORPHES - 042 - FANNY DEVOIZE - 16 012



Octobre 10 | 15h24

Octobre 17 | 15h01

Octobre 24 | 16h42

Octobre 27 | 16h35

Octobre 28 | 16h35



Octobre 29 | 10h04

Octobre 31 | 16h40

Novembre 2 | 14h22

Novembre 7 | 15h59

Novembre 22 | 15h16

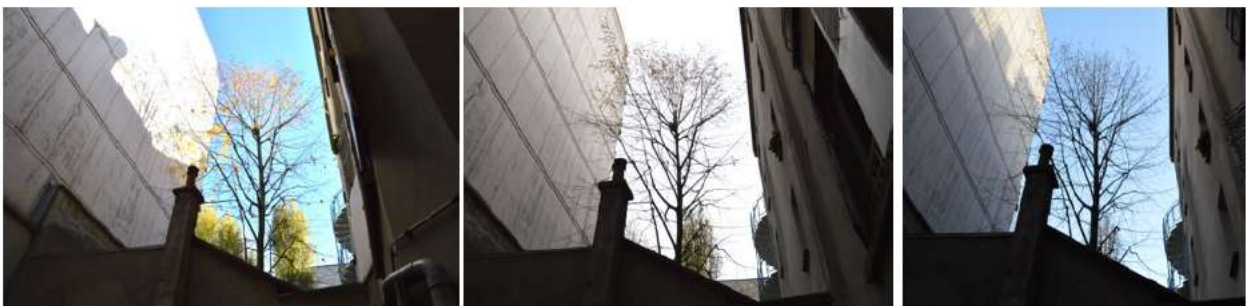
*l'evolution | premiere vue*



October 10 | 15h40

October 19 | 14h25

October 24 | 16h50



October 31 | 16h44

Novembre 7 | 16h07

Novembre 22 | 16h14

*l'evolution | deuxième vue*

Il est parfois indispensable de réduire le temps qui sépare deux prises de vues.

Ces quatre photos révèlent l'évolution de l'arbre sur quatre jours consécutifs :



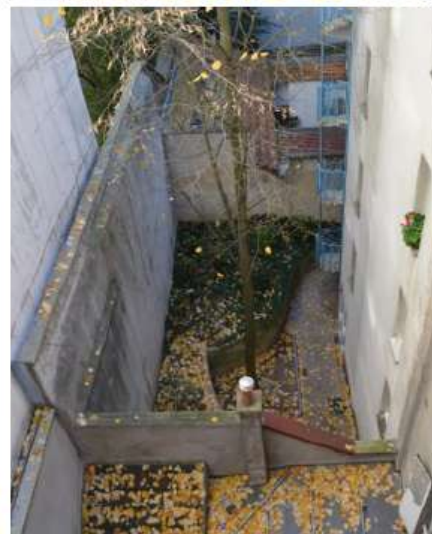
Octobre 27



Octobre 28



Octobre 29



Octobre 30

Etude de John Stenzel en 2015-2016