

# The Role of Visualizations in Urban Planning

---

Burcu Akinci

## Outline

---

What?

Why?

How?

Case Study: Urban Change in Time-Vienna

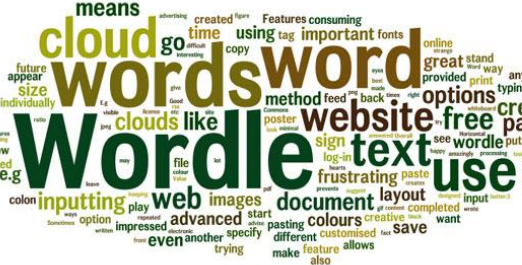
What?

# Visualization

To convey information through graphical representations



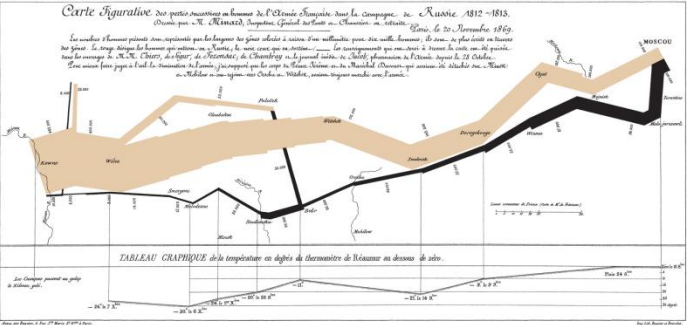
Catalhöyük map, Turkey, c. 6200 BC



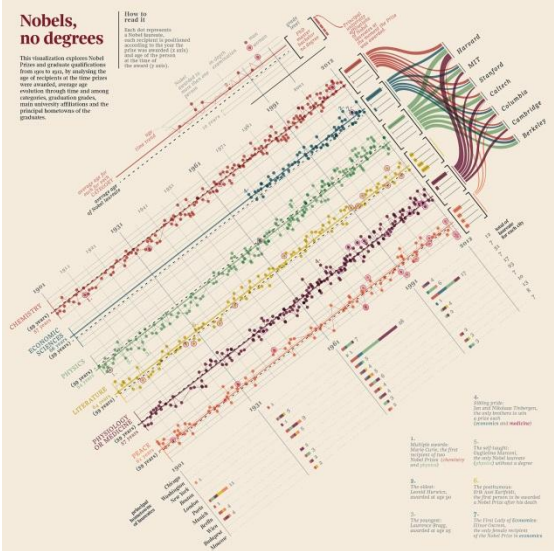
a Wordle tag cloud



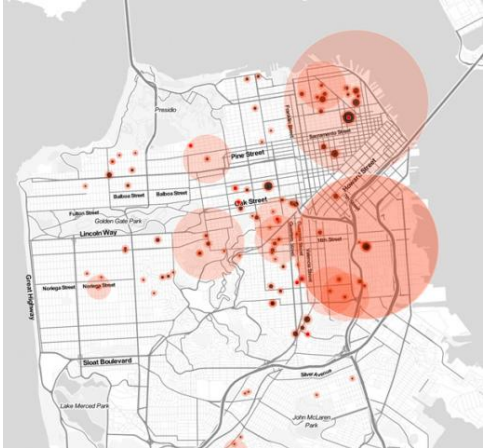
windmap by Martin Wattenberg  
<http://hint.fm/wind/>



Minard's map of Napoleon's disastrous Russian campaign of 1812



Data Visualization: Nobels, no degrees  
 by ACCURAT



Anti-Eviction Mapping Project  
<http://www.antievictionmappingproject.net/ellis.html>



# Visuals as Representations of Cities

---

*cartographic representation*

*image*

*visual mediation*

*visual*

*drawing*

*photo*

*map*

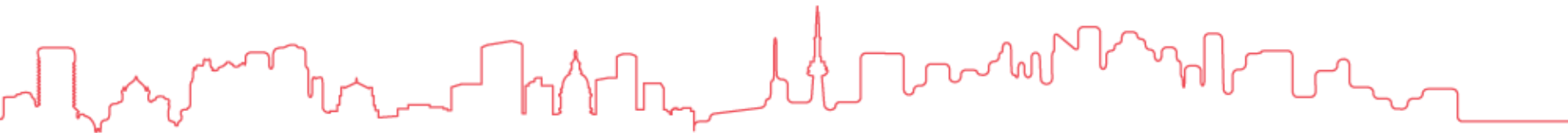
*sketch*

*diagram*

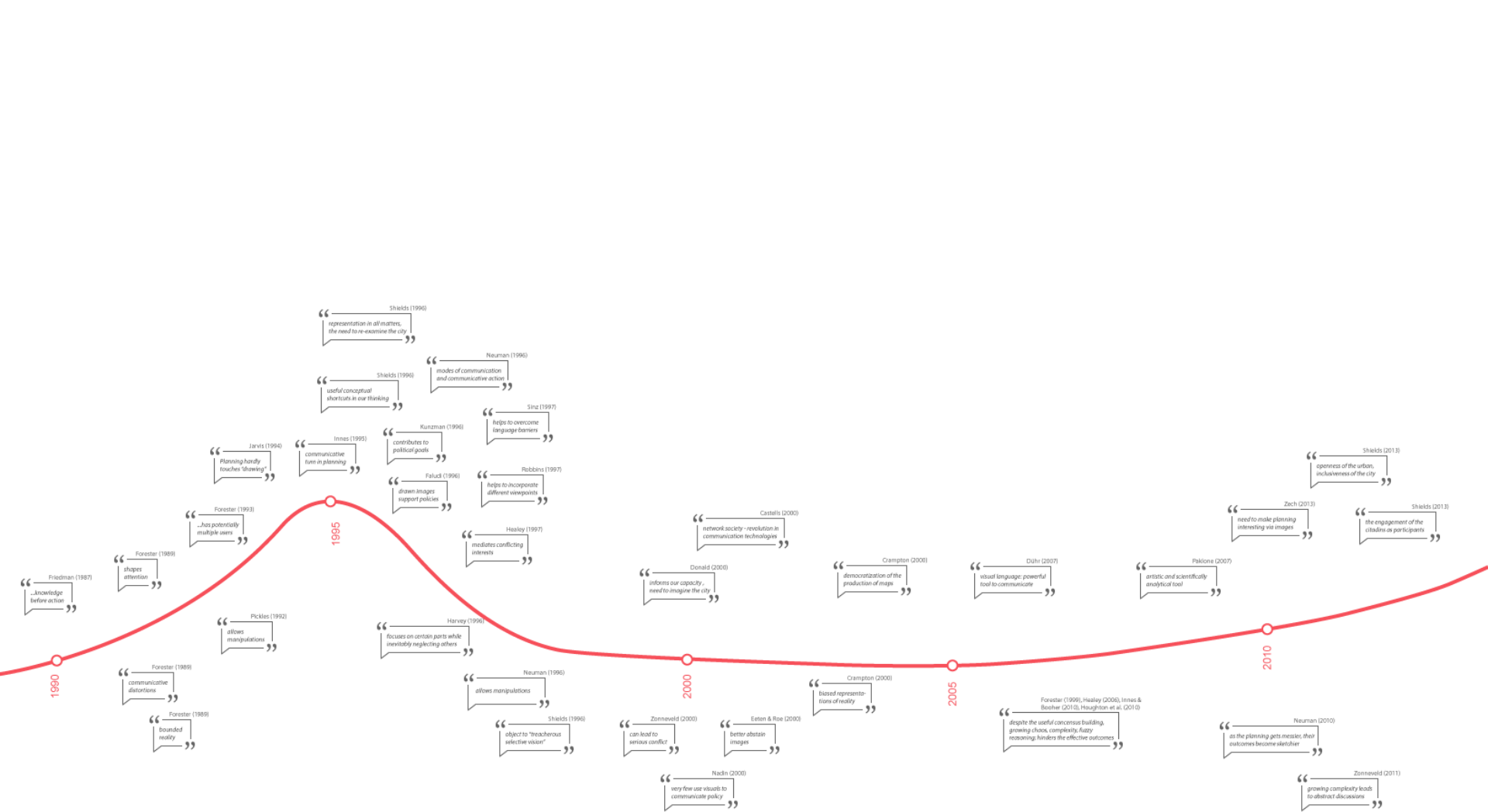
*spatial metaphor*

*icon*

*cartographic illustration*



Why?



# The role of visuals

How?



## What is that draws our attention?

---



### Perception

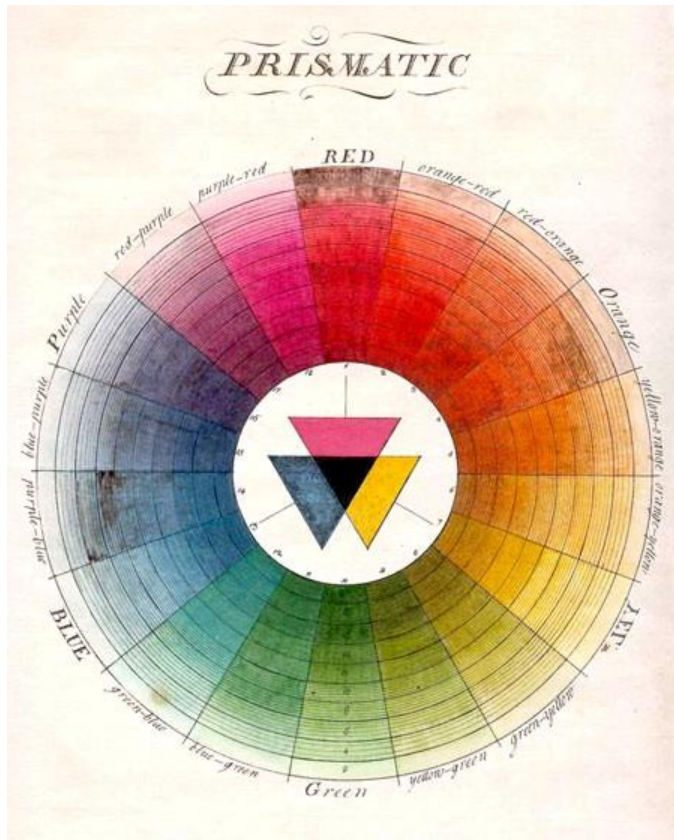
Identification and interpretation of information, shaped by learning, memory and expectation



### Cognition

The processing of information, applying knowledge

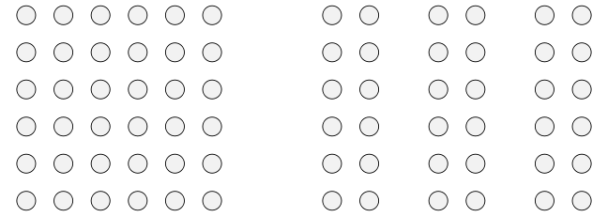
# Colors



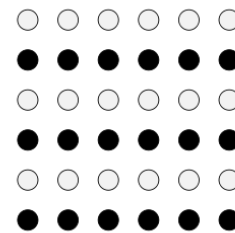
Moses Harris, c.1785

# Gestalt Principles

## Law of proximity



## Law of similarity



## Law of closure



## Law of symmetry



Tools: Adobe Kuler, Colors, Color Brewer, awwwards

## Change blindness



Flicker paradigm

Change blindness is a failure to detect that an object has moved or disappeared. The phenomenon of change blindness can be demonstrated even when the change in question is very large.

# Change blindness

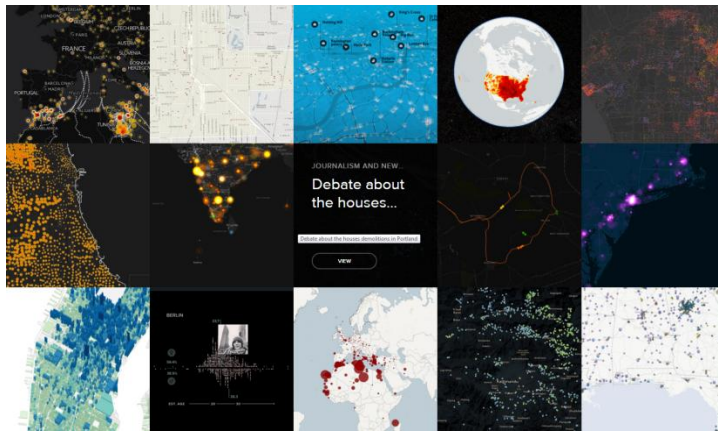
Flicker paradigm

# Visualization Tools

## Data-Driven Documents

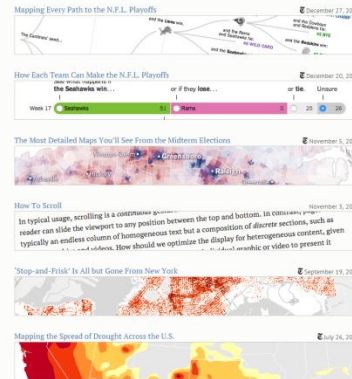


<http://d3js.org/>

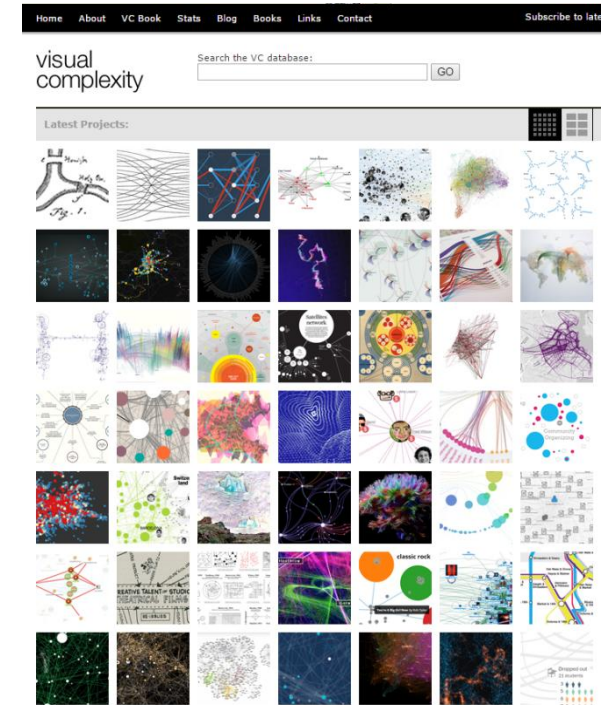


<https://cartodb.com/gallery>

### Mike Bostock



<http://bost.ocks.org/mike/>

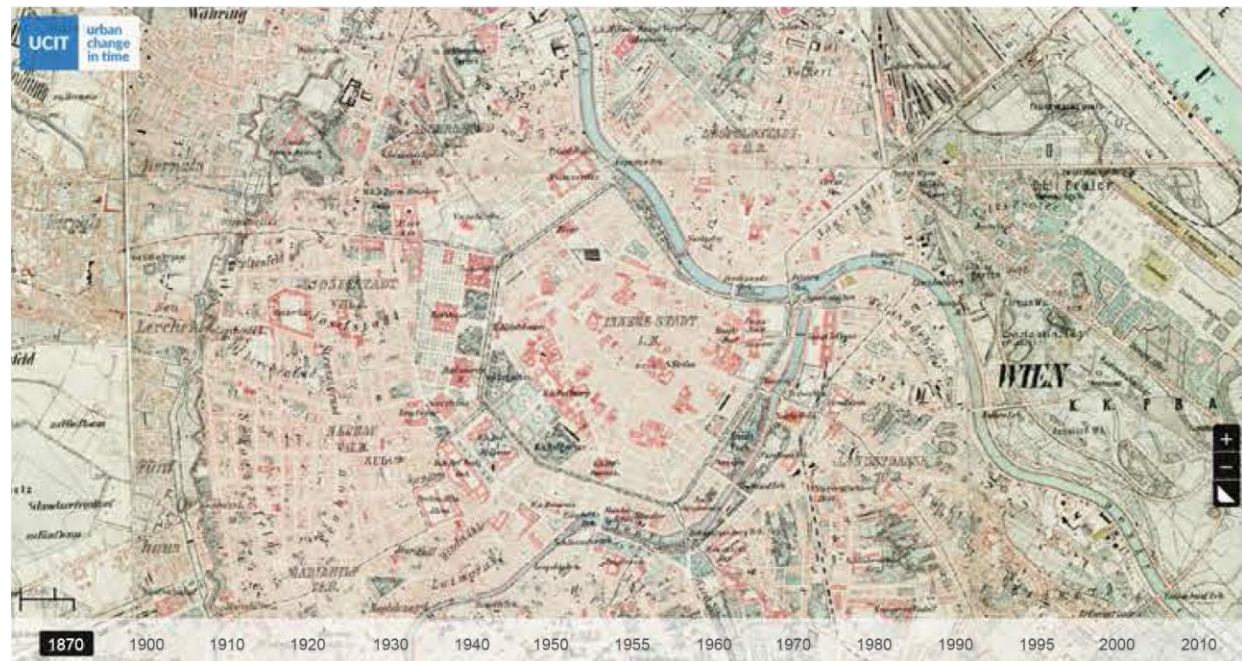


<http://www.visualcomplexity.com/vc/>

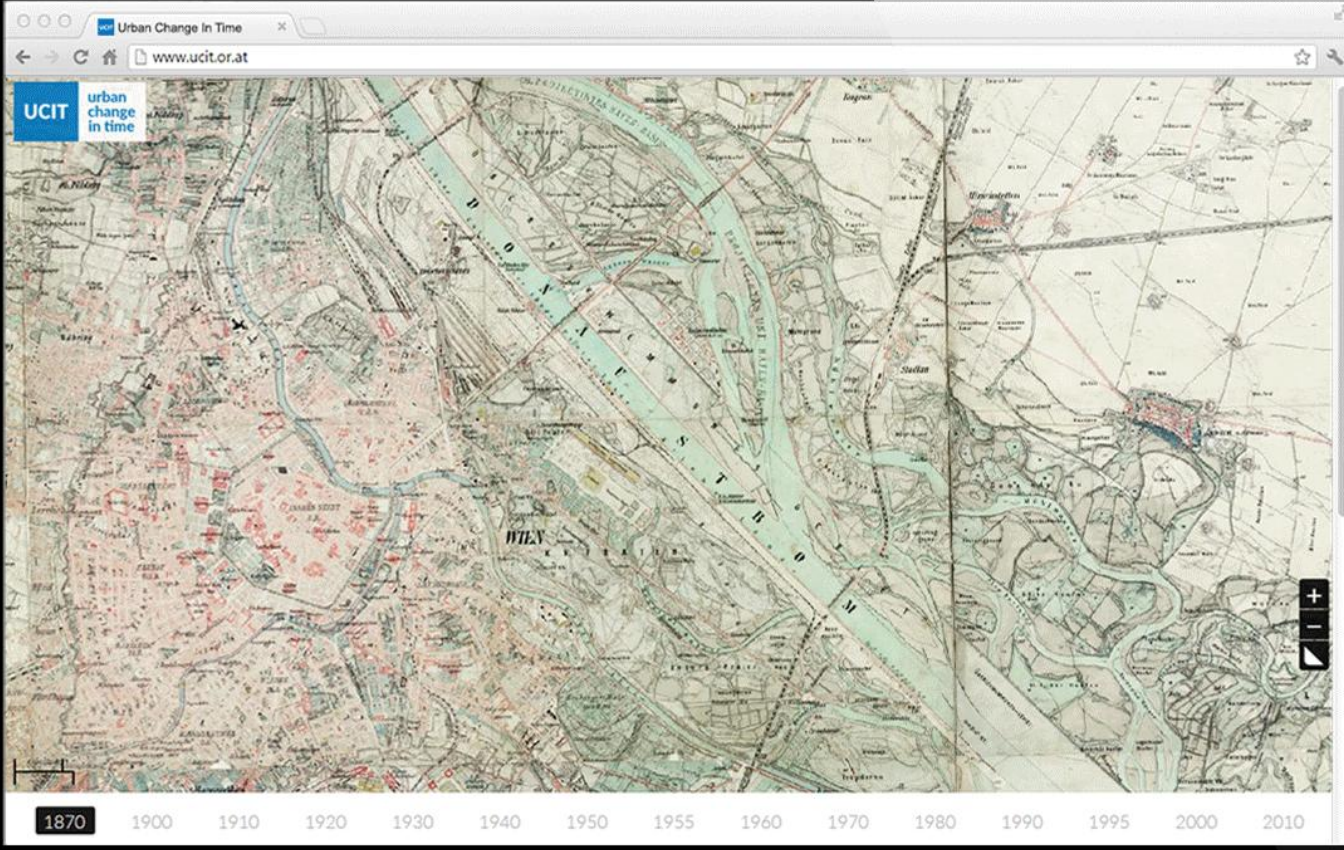


## Urban Change in Time (UCIT)

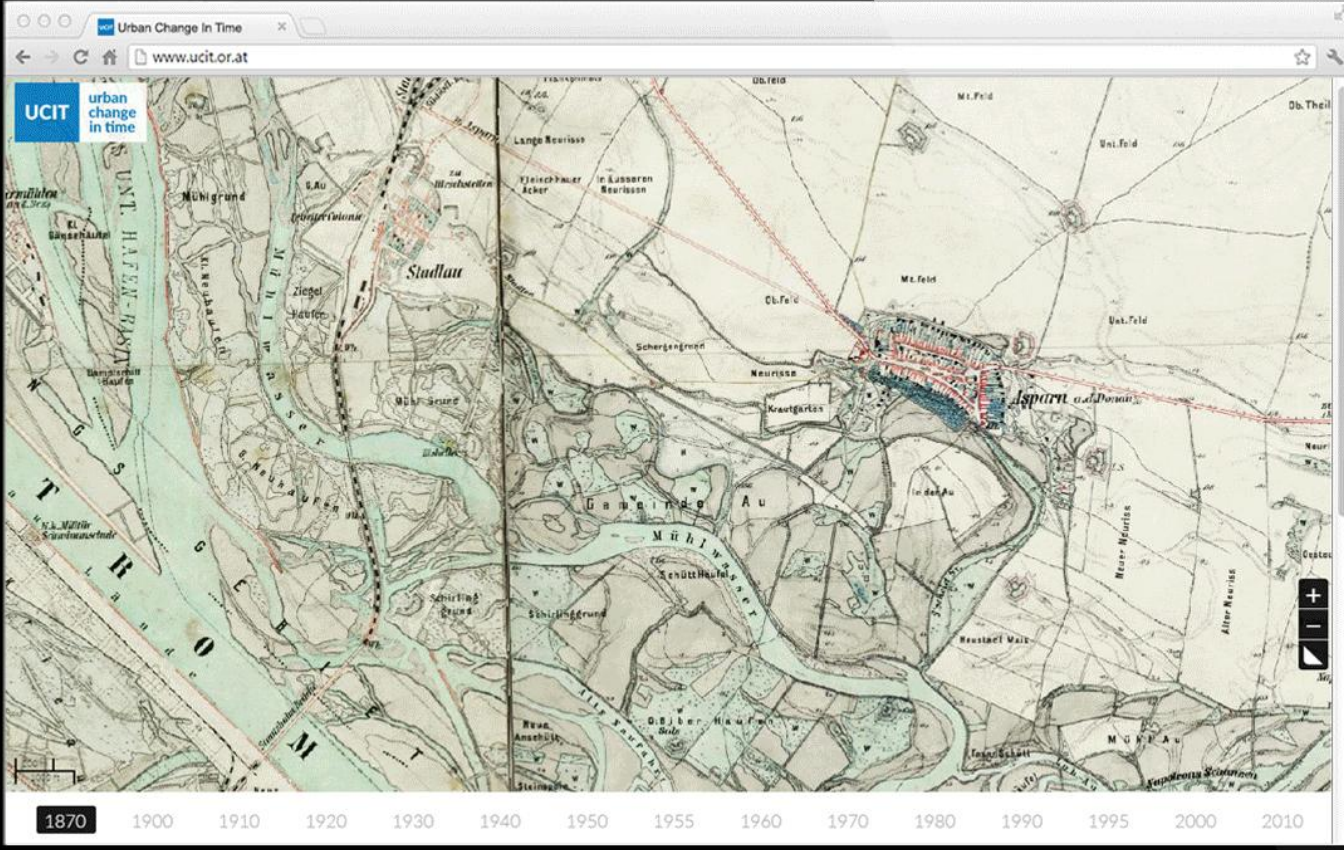
[www.ucit.or.at](http://www.ucit.or.at)



The application lets you navigate through historical maps of Vienna from different times and different scales.









**Thank You**

---

