

Hydro status of now

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update of goals & expected results

- > original goal too ambitious: sustainable point requires more reliable data and depends a lot on many other factors
- > new goal: show availability and use of water by population to show comparison between countries and changes over time in European countries, and more frequent changes to water availability and use in Barcelona.

Global/ European/ Local (Barcelona) view

data set

Global: data from World Water on freshwater availability & use
(values show average available every year)
data from UN on population size

Europe: data from Eurostat on availability & use of water within
European countries (updated each year)

Local: data from Catalan Water Agency on availability & use
of water in Barcelona (updated each week, for some data
every 5 minutes)

data model

WORLD

Availability (average each year)
country
volume

Source: Total Renewable Freshwater Supply, by Country (Table 1)

Withdrawal (average each year)
country
volume
sector

Source: Freshwater Withdrawal, by Country and Sector (Table 2)

Population
country
size

Source: Population by sex and urban/rural residence

EUROPE

Availability (per year)
country
volume
year

Source: Eurostat

Withdrawal (per year)
country
volume
sector
year

Source: Eurostat

Population
country
size

Source: Population by sex and urban/rural residence

LOCAL: Barcelona (metro)

Availability (per day)
volume (sum of volume in 5 dams) hm³
date

Source: Catalan Water Agency
File: 01 Dams_Volums_Ter_Llobregat_2005.txt

Withdrawal (per week)
flow (m³/s)
volume (can be calculated from flow)
date
average for reference period (period of normal rainfall
– ie. not draught)

Source: Catalan Water Agency
File: 02 abstraction.xls

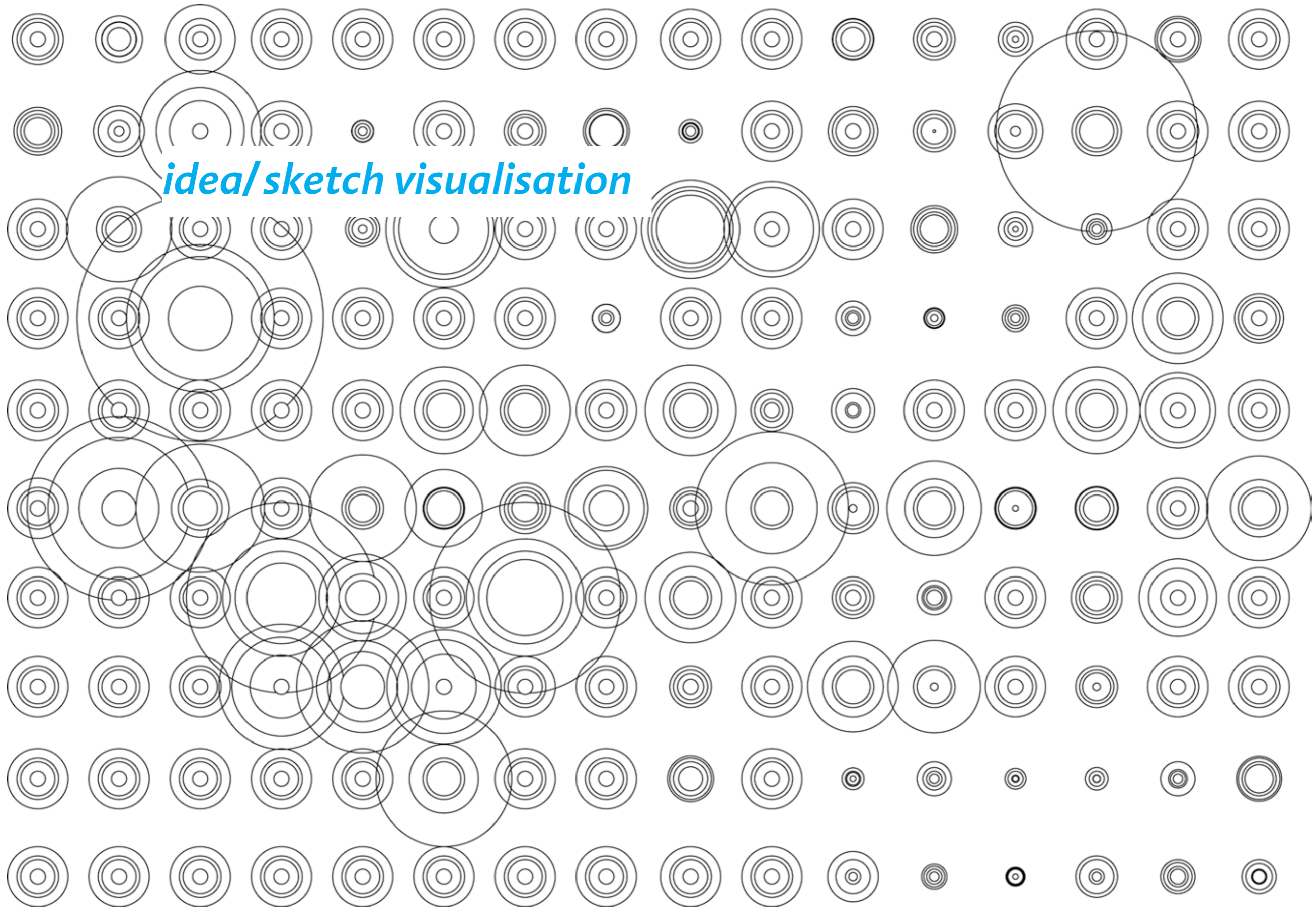
River flow (every 5 minutes)
flow (m³/s)
date
name of station

Source: Catalan Water Agency
File: 03 River Cabal 5min_Castellbell.txt
File: 03 River Cabal 5min_SantJoanDespi.txt

Population
size: 4,865,753

Source: Idescat

idea/sketch visualisation

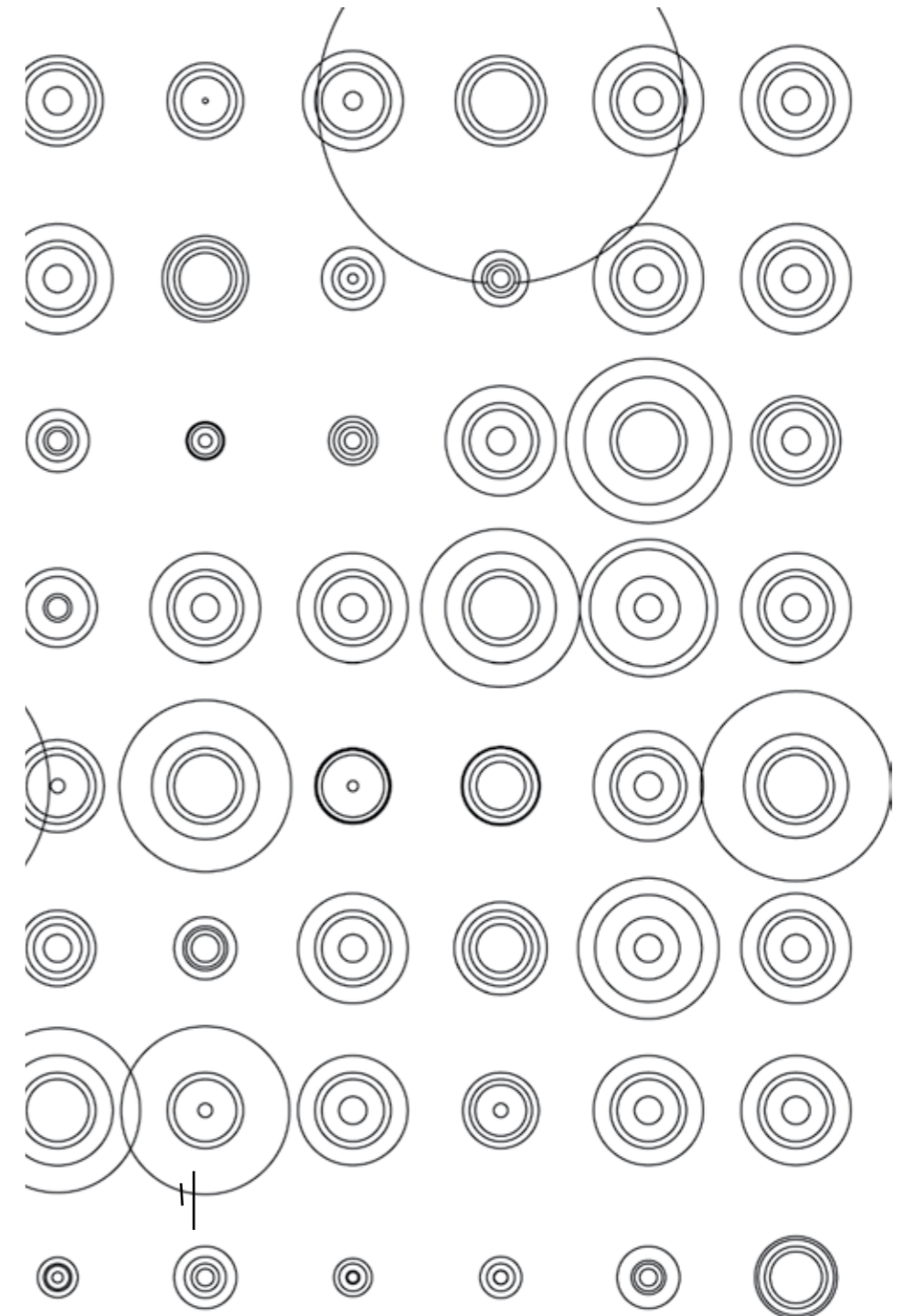


Metaphor: Cells & organic system

Representation of space/ country:
as one cell/ circle

2 View Display:
total view: information about
availibility/consumption

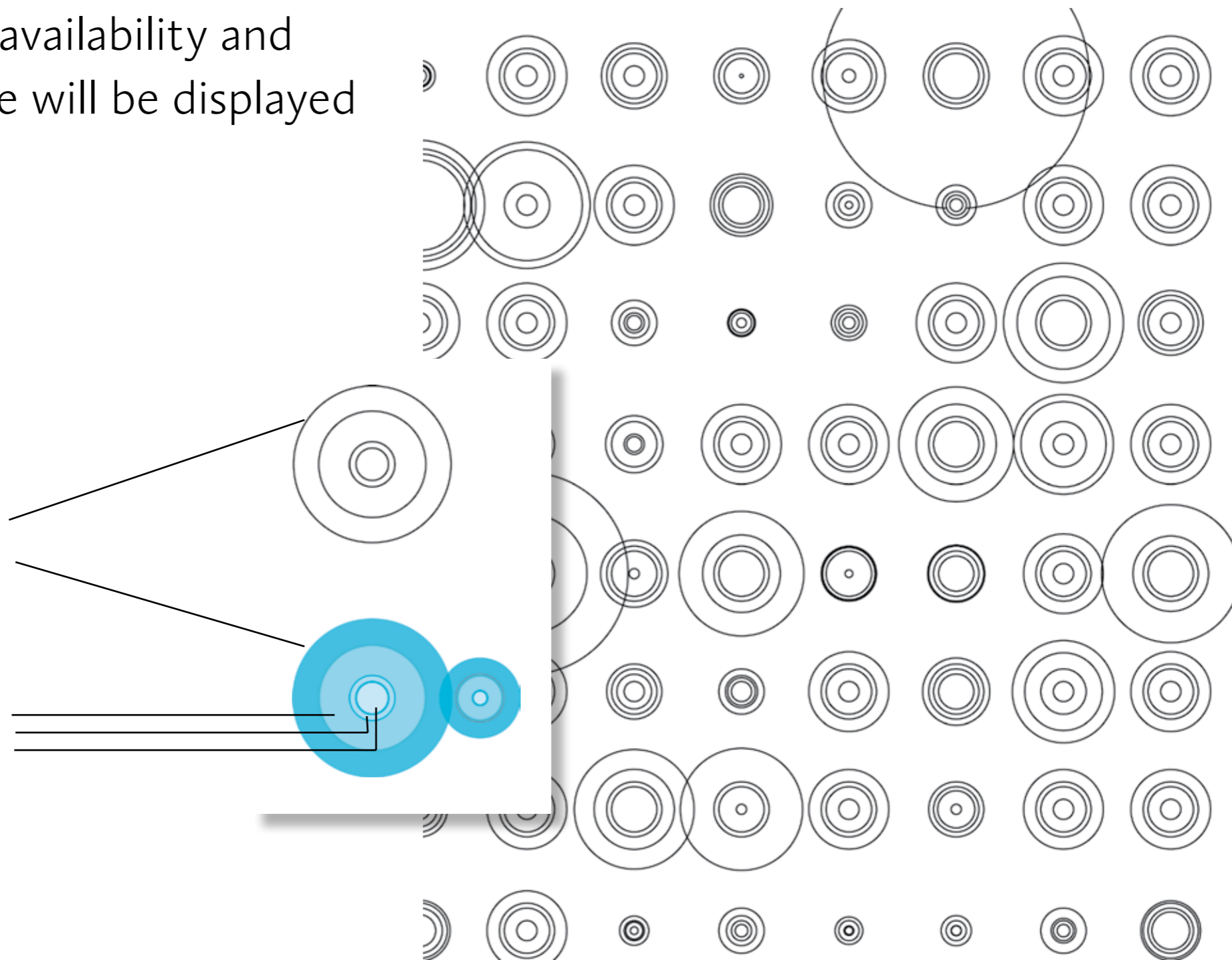
detailed view: information about
availibility/ consumption/ person



total view: availability and detailed use will be displayed as rings

availability

usage

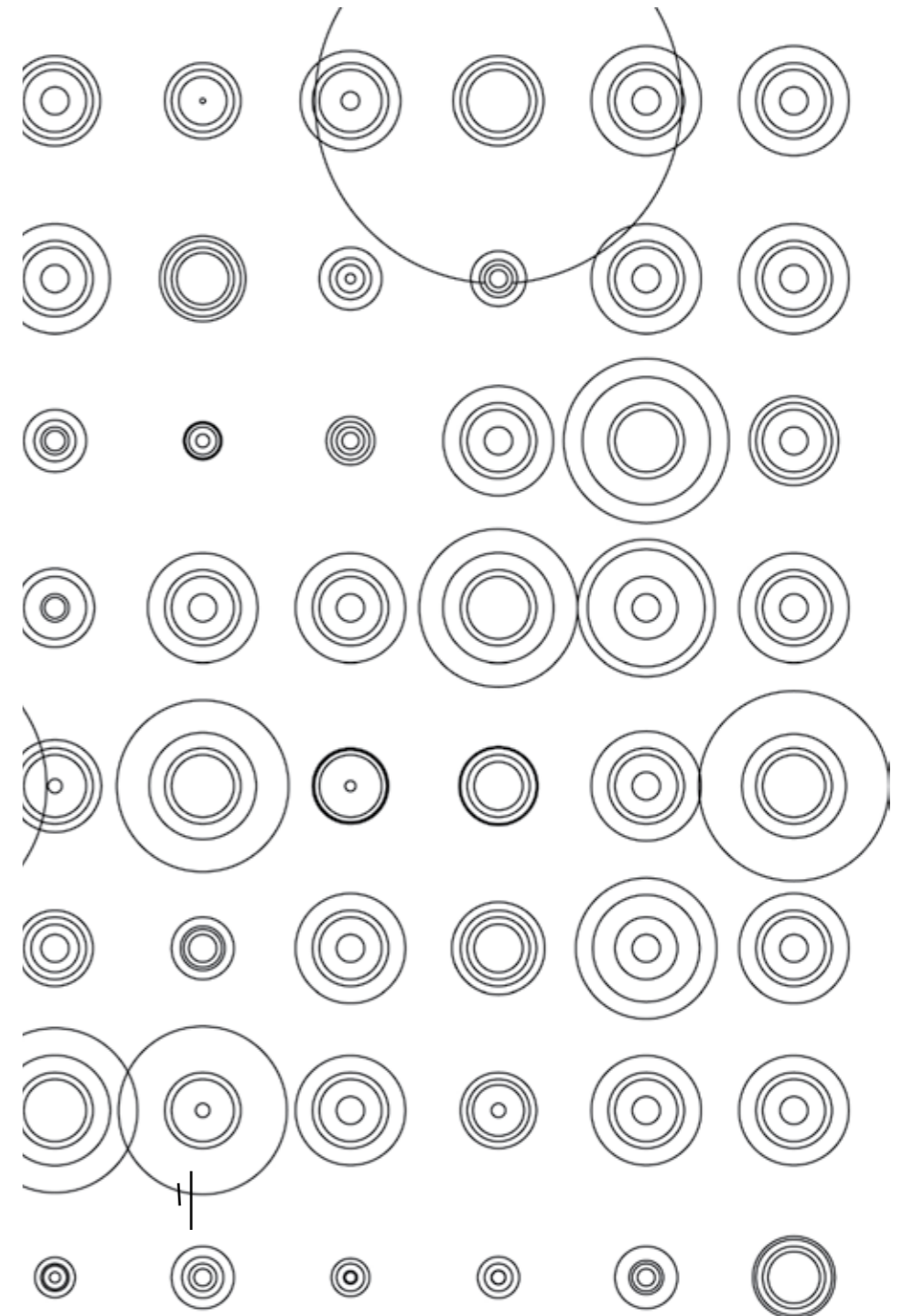


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schedule for next week

- > detail design & graphics
- > implementing idea for global (and European) data using Processing.
- > developing visualisation ideas for the more complex Barcelona view
- > installation?

***problems you have identified and need to solve,
needed skills/collaborators?***

(optional) in order to work on more than 1 view more
programming skills/ capacities needed.