

# De Nationale Atlas: GOEDE KAARTEN in de Nationale GeoData Infrastructuur



Barend Köbben  
ITC – Universiteit Twente  
<http://kartoweb.itc.nl/kobben>  
[b.j.kobben@utwente.nl](mailto:b.j.kobben@utwente.nl) – [@barendkobben](https://twitter.com/@barendkobben)

# A change in my world

My tools once were these:



# A change in my world

...but now look like this:

The screenshot shows a code editor interface with a project structure on the left and a code editor on the right. The project structure includes folders like D3tests, Masterarbeit, and files like Napoleon.html and style\_napoleon.css. The code editor displays a portion of a JavaScript file with line numbers 54 to 87. The code defines a timeline and creates an SVG canvas for a map. The right side of the screen shows three instances of a timeline visualization. The top instance has red dots and is labeled 's fixed'. The middle instance has blue dots and is also labeled 's fixed'. The bottom instance has blue dots and is labeled 's fixed'.

```
d3.selectAll("#Timeline").append("chart");

// define variables
var margin = {top: 0, right: 0, bottom: 0, left: 0};
width = 510;
height = 330;

var centered;

// define projection parameters
var projection = d3.geo.mercator()
    .center([28.88034, 54.260112])
    .rotate([0,0])
    .scale(39000);

// create svg canvas to draw map on
var svg = d3.select("#Map").append("svg")
    .attr("width", width)
    .attr("height", height)
    .attr("border", 3)
    .attr("class", "canvas");

// create path object
var path = d3.geo.path().projection(projection);

// create group object g
var g = svg.append("g");

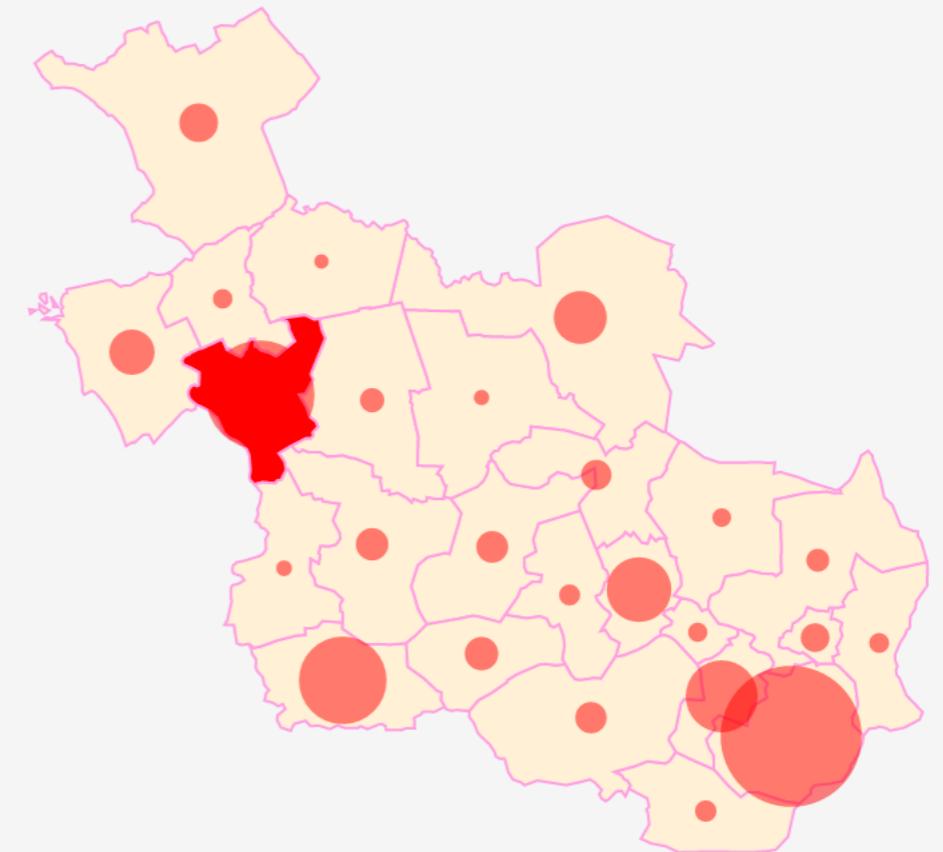
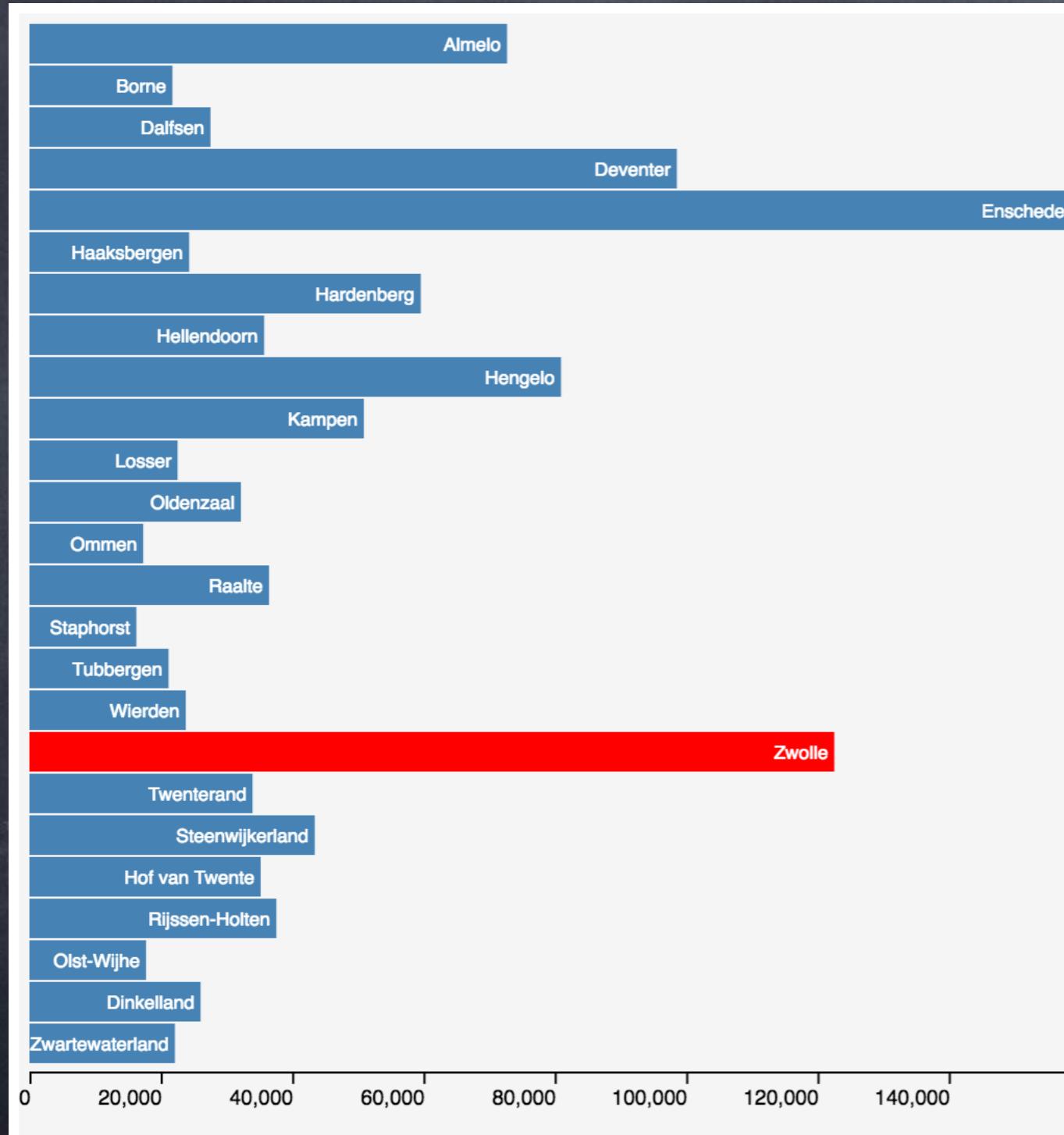
// create div object to use for dynamic tooltip
var div = d3.select("body")
    .append("div")
    .attr("class", "tooltip")
    .style("opacity", 0);
```

But my task is still the same:  
“show the story *in* the data”

But my task is still the same:  
“show the story in the data”

*the  
cartographic intent*

# in simple ways...

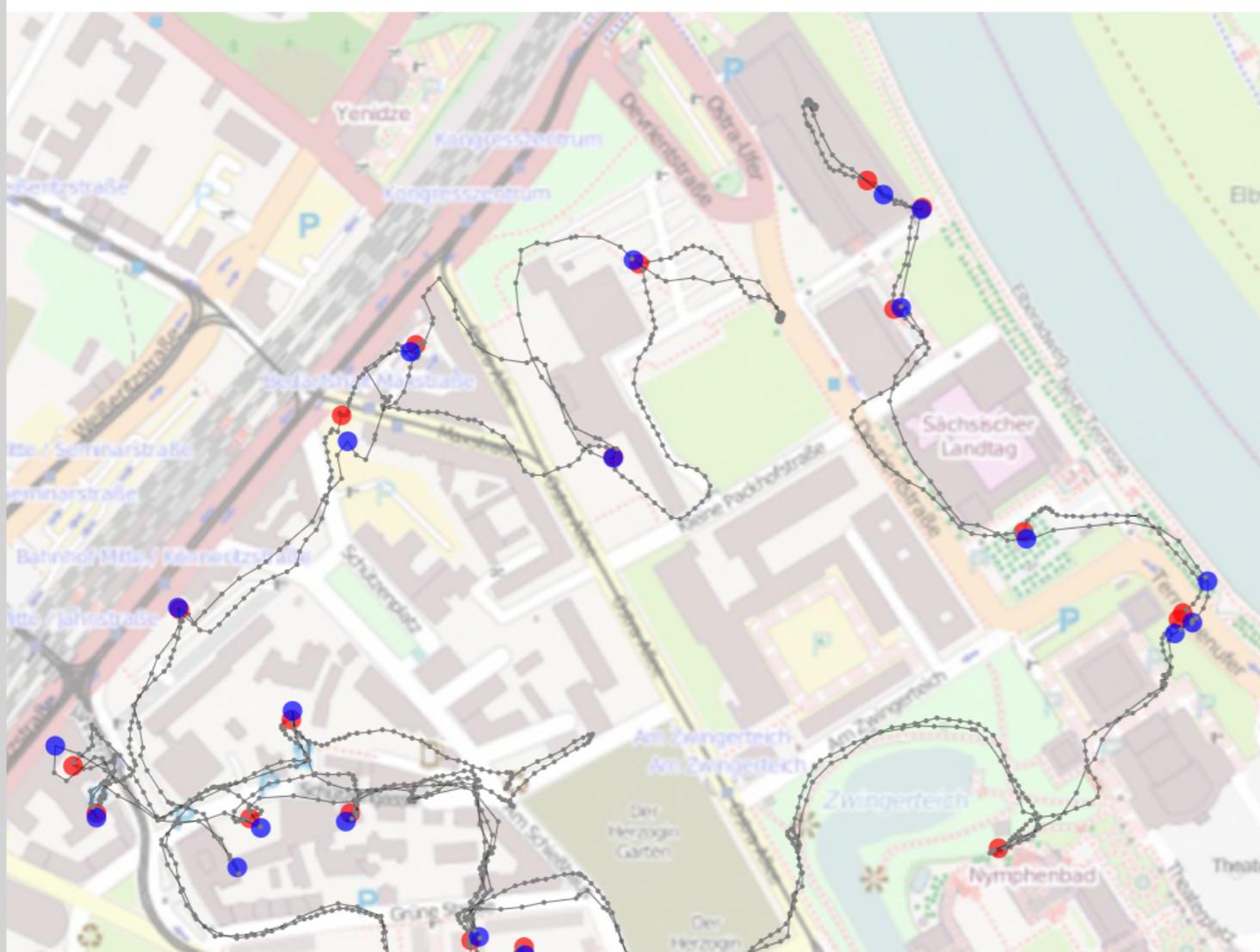


GM0193: Zwolle  
122560 inhabitants.

# ...or less simple ways

## GEOGRAPHY (click & hold to separate)

- Runner Menno-Jan
- Runner Laszlo



## FROM TIME TO GEOGRAPHY

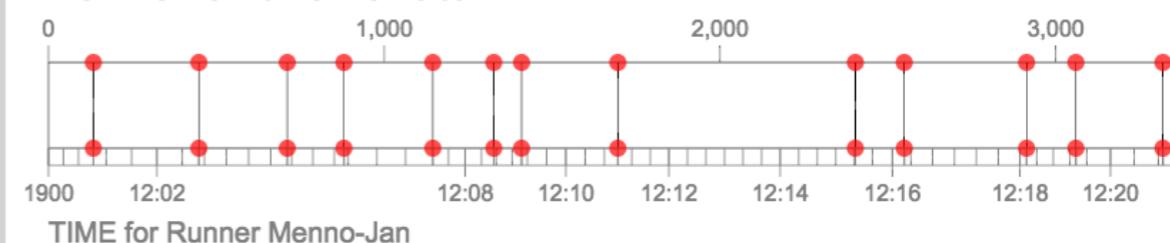
Runner Menno-Jan

Runner Laszlo



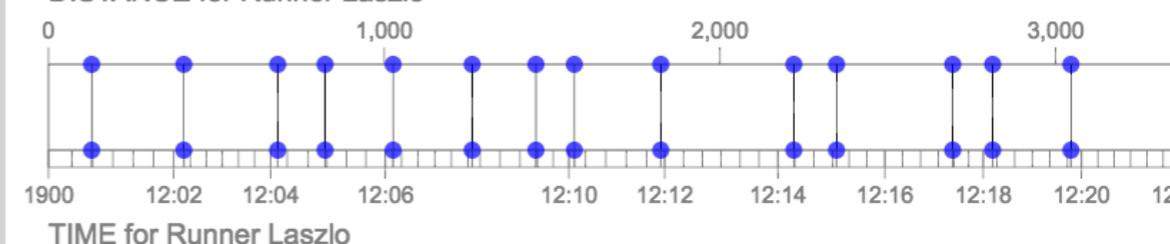
## FROM GEOGRAPHY TO TIME for Runner Menno-Jan

DISTANCE for Runner Menno-Jan

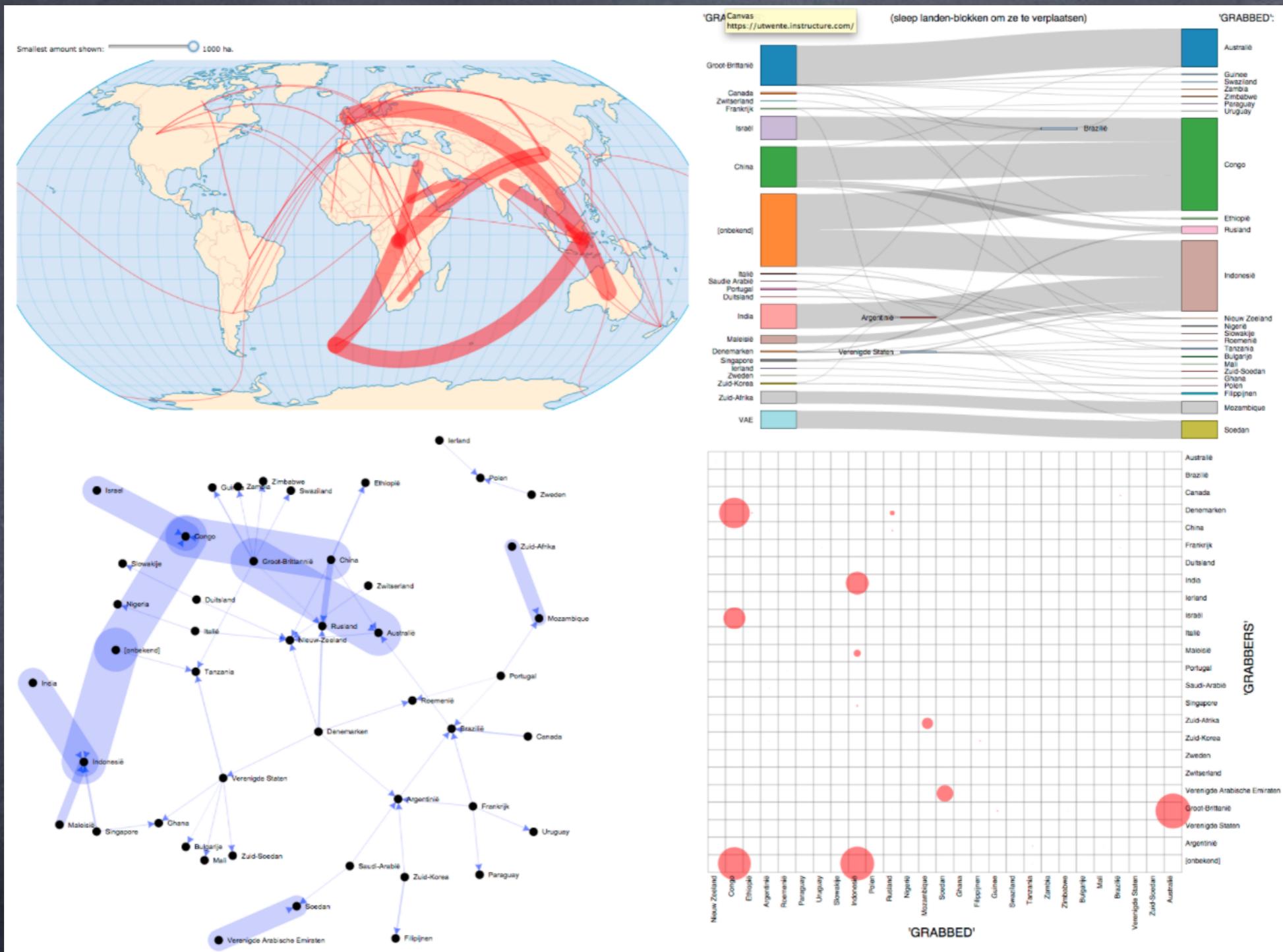


## FROM GEOGRAPHY TO TIME for Runner Laszlo

DISTANCE for Runner Laszlo



# comparing spatial phenomena



[kartoweb.itc.nl/D3tests/LandGrabbing/](http://kartoweb.itc.nl/D3tests/LandGrabbing/)

# comparing spatial phenomena

...is often the way people get “the story”

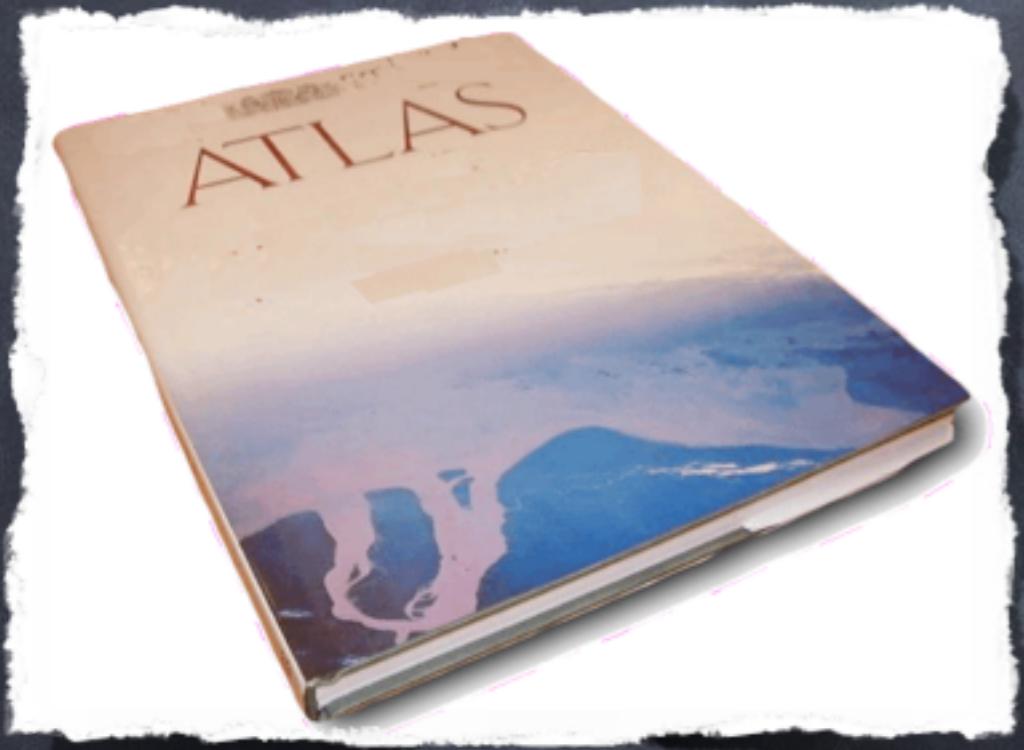
# The new role of the cartographer

providing  
(cartographic knowledge for)  
tools that implement cartographic intent:

*“code that thinks like a  
cartographer”*

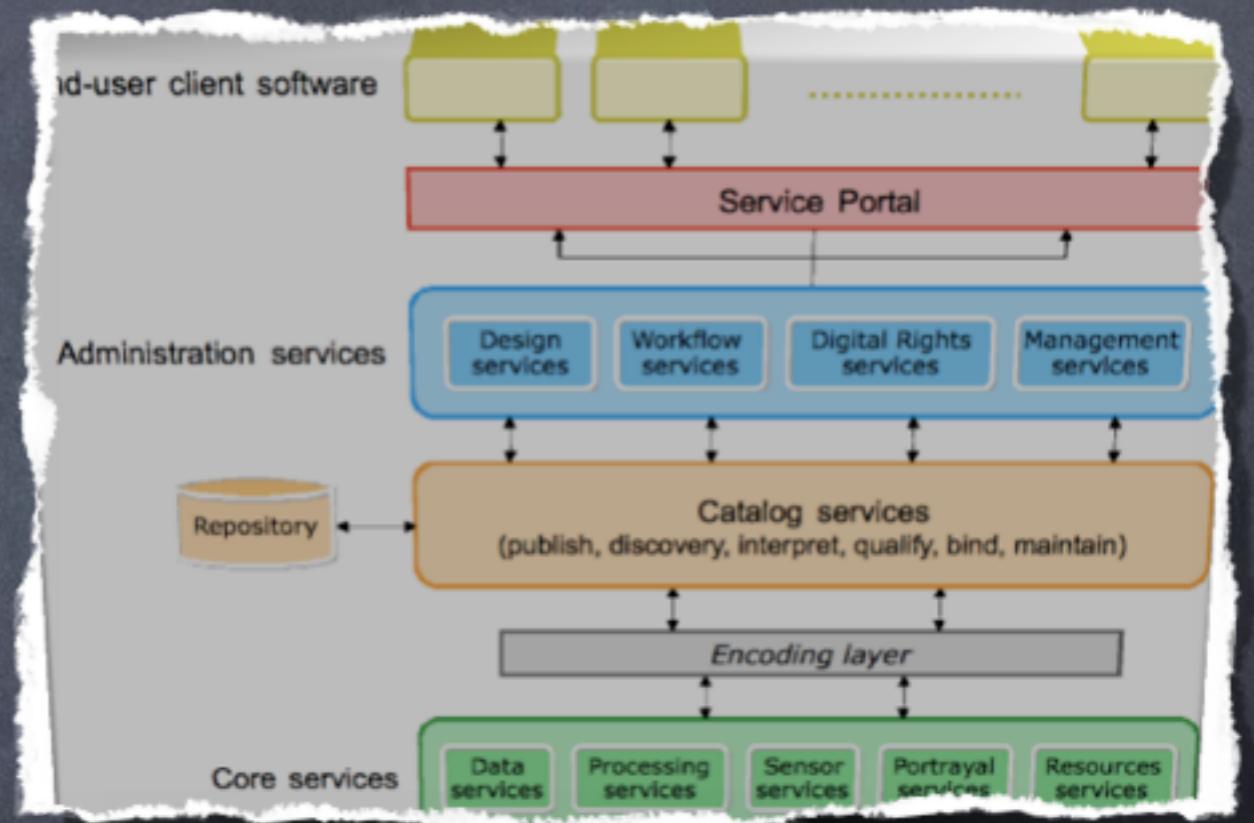
# Maps as part of a Spatial Data Infrastructure

# Maps as part of a Spatial Data Infrastructure



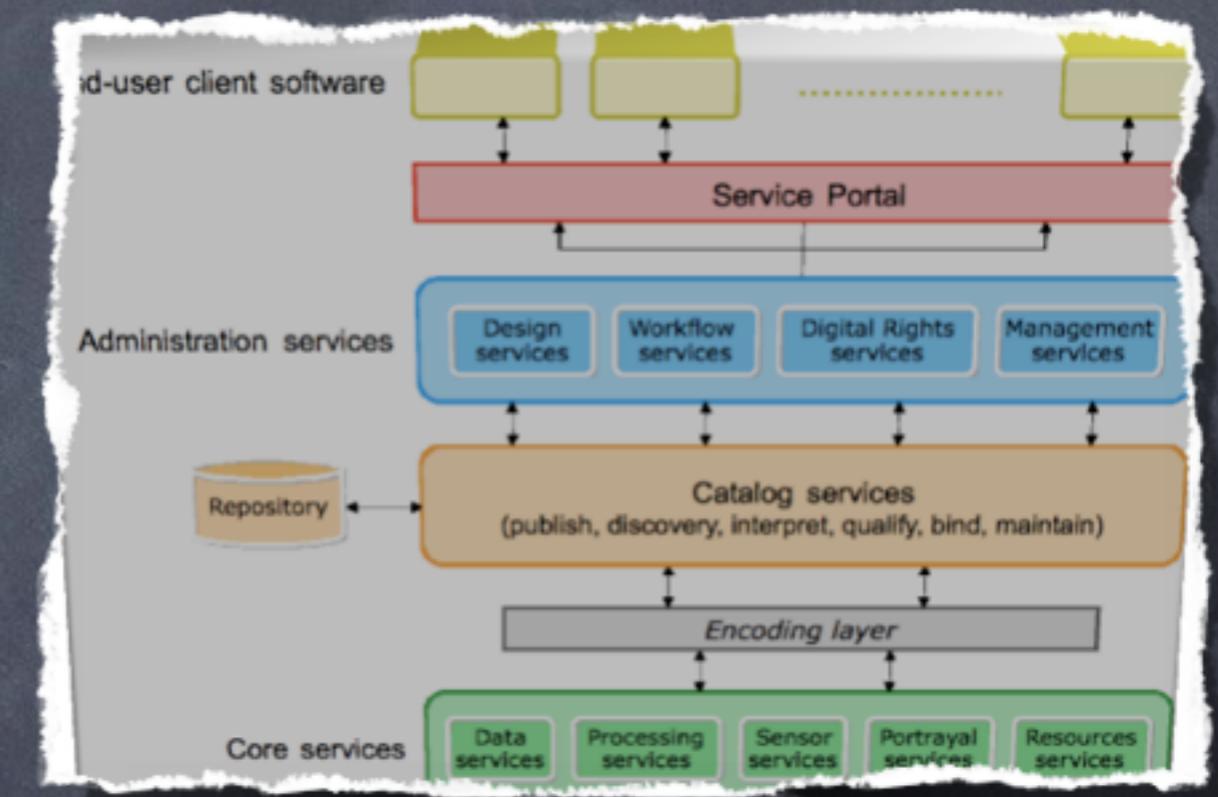
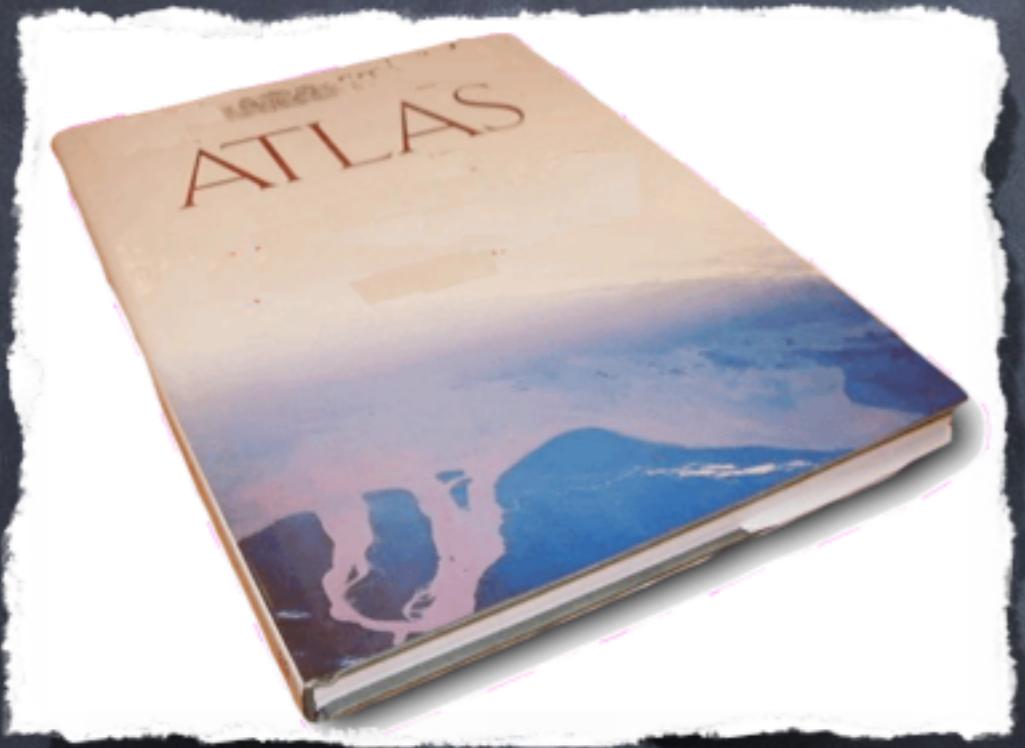
presents a synthesis  
optimised for visualisation

# Maps as part of a Spatial Data Infrastructure



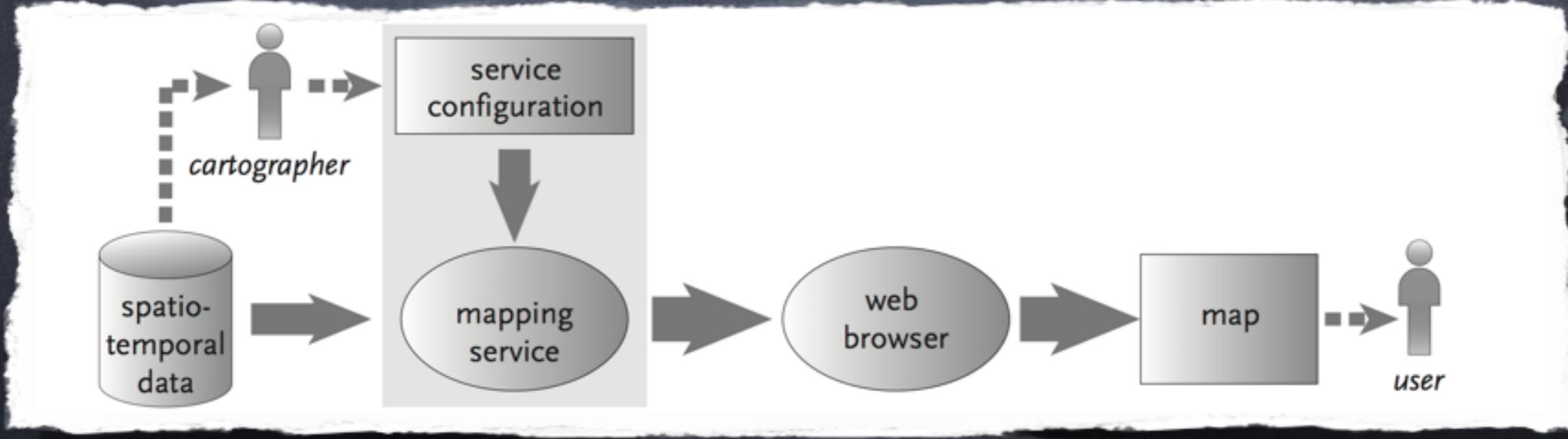
visualisation of separate data, not  
optimised for combinations (synergy)

# Maps as part of a Spatial Data Infrastructure

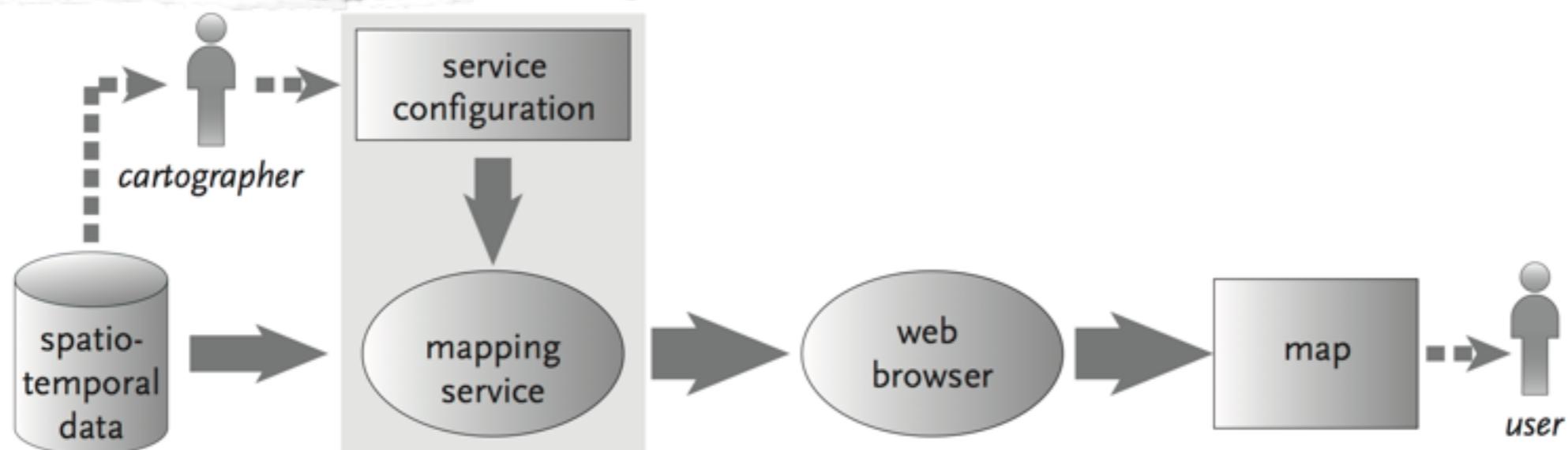


a combination of  
two different worlds

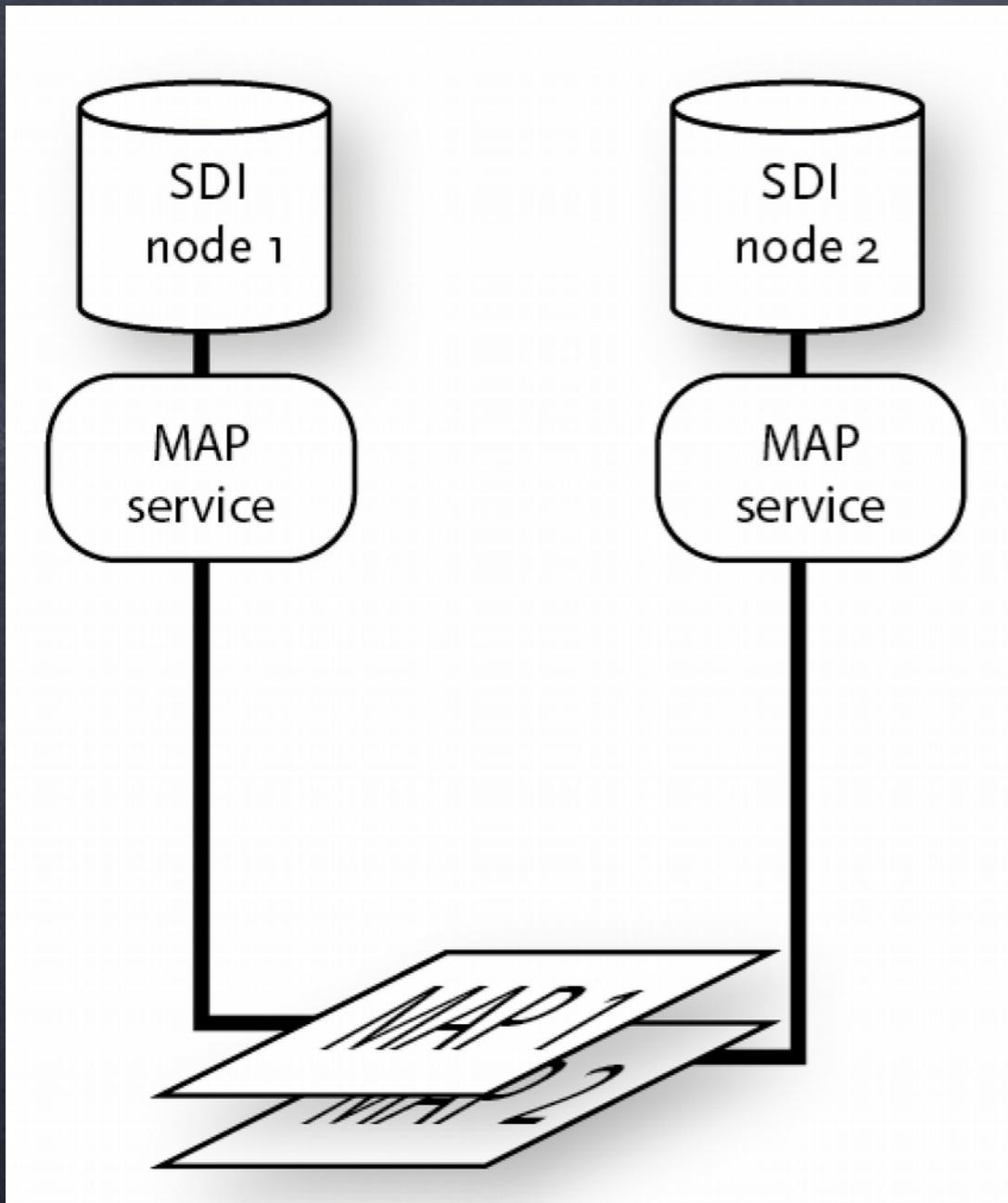
# Mapping in a webservices environment



# Mapping ~~in~~<sup>a</sup> webservices environment as part of

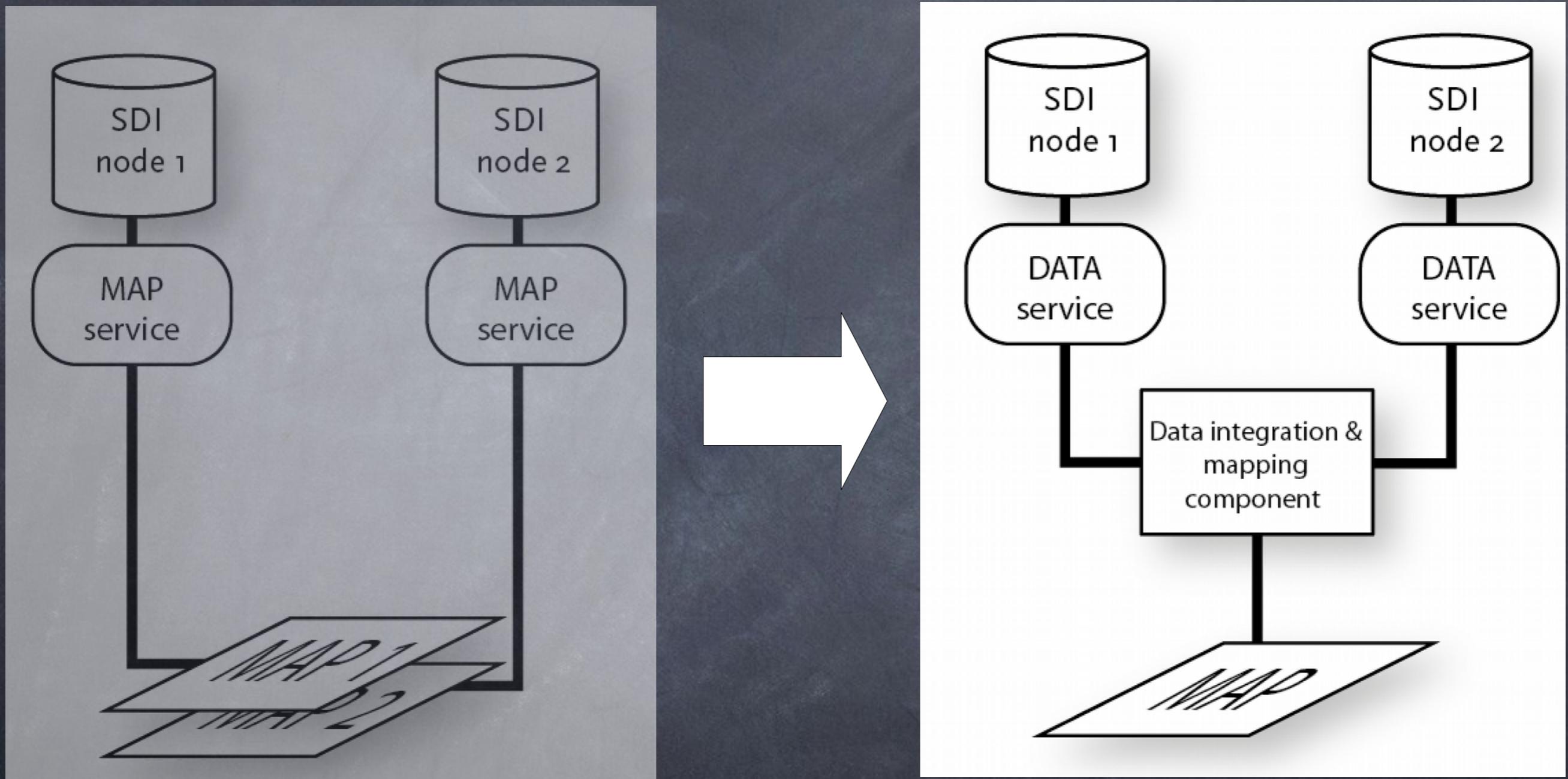


# conceptual change needed



sub-optimal combination  
of arbitrary map layers

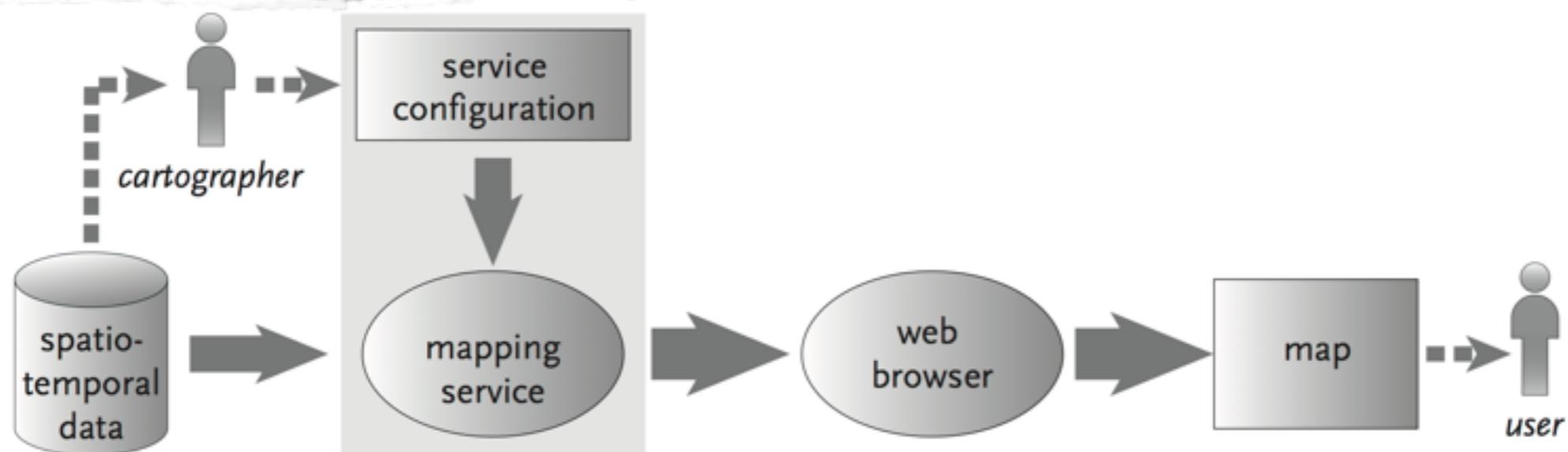
# conceptual change needed



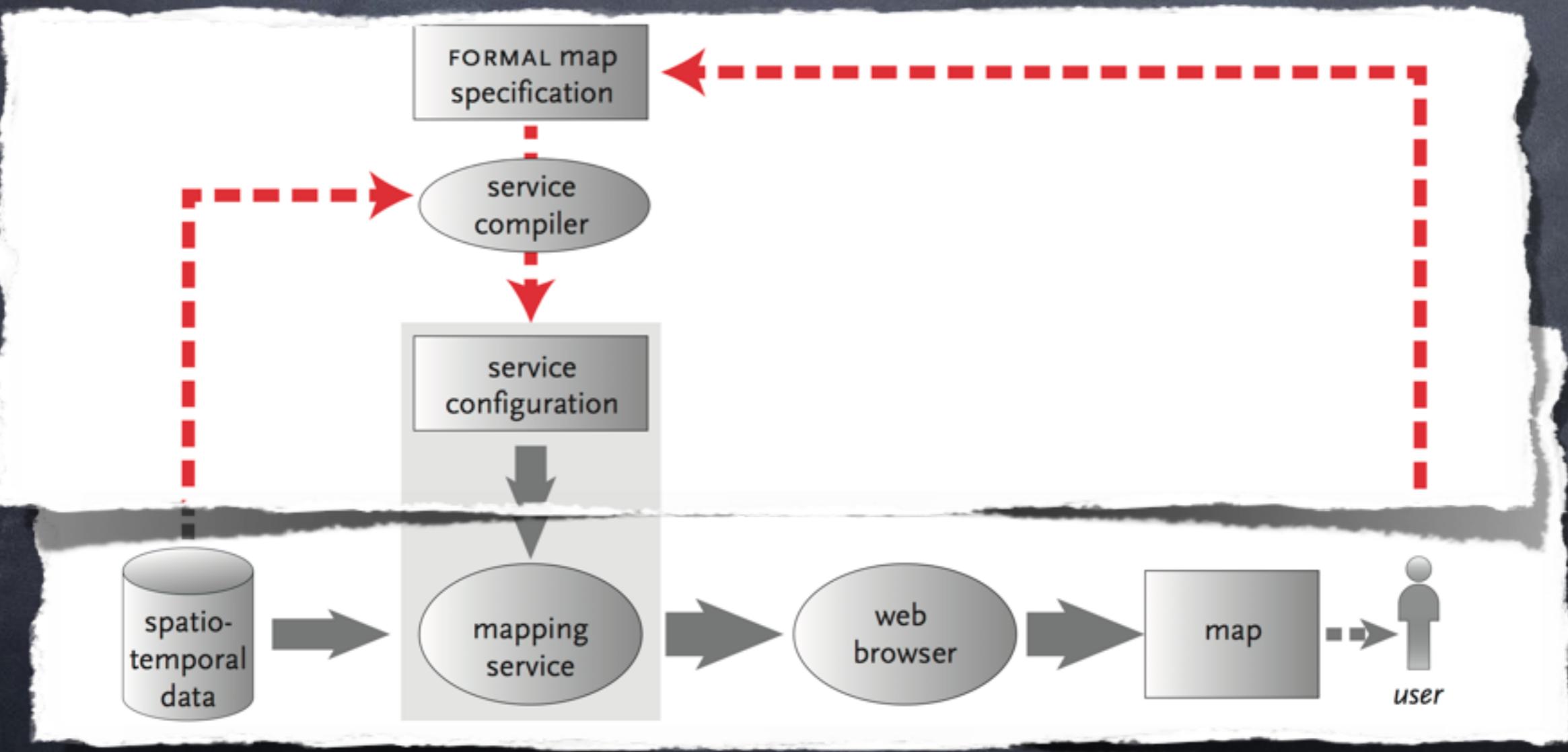
sub-optimal combination  
of arbitrary map layers

integrated mapping of  
data layers

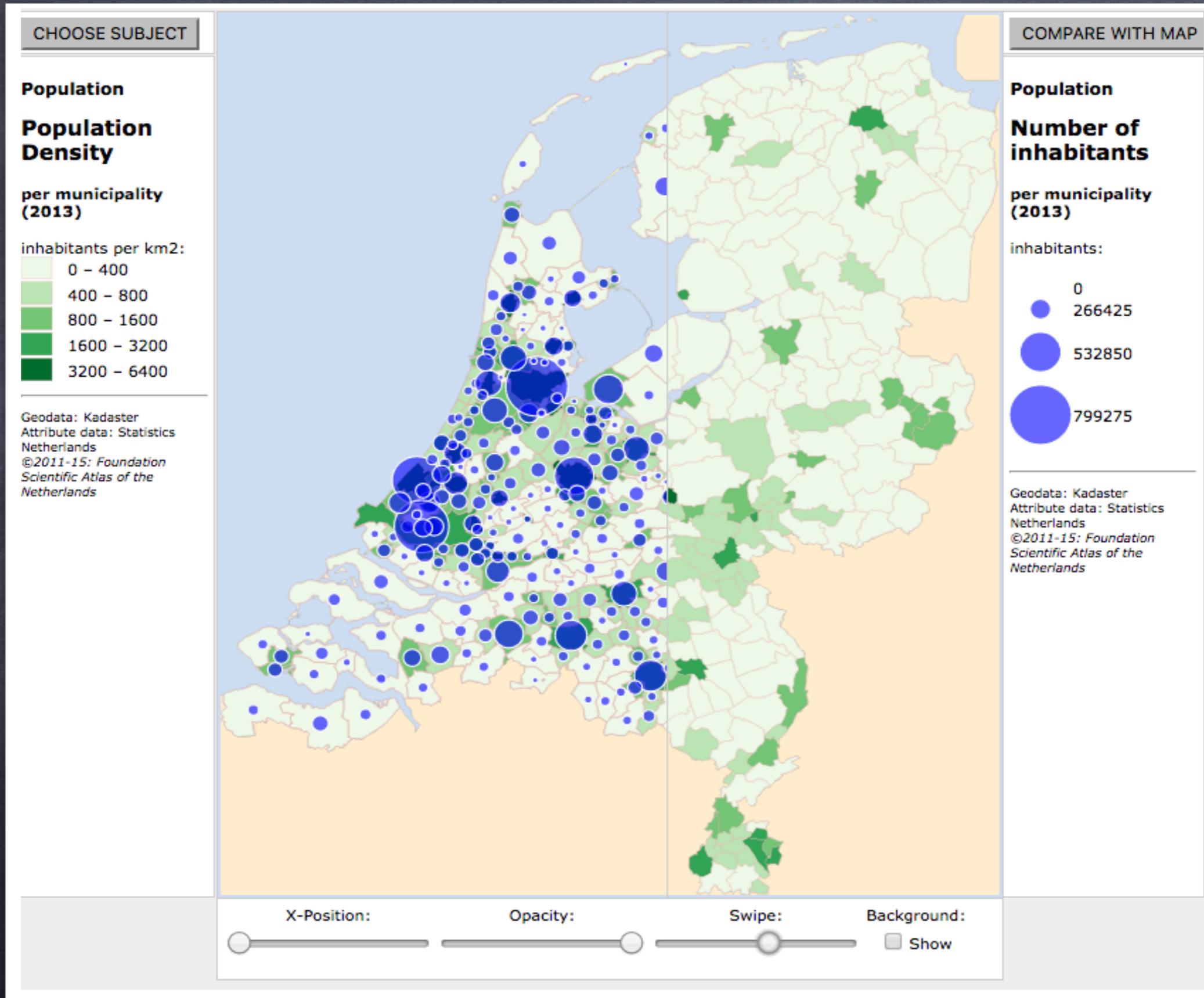
# Mapping ~~in~~<sup>a</sup> webservices environment as part of



# Mapping in a webservices environment as part of



# The Dutch National Atlas



# comparing spatial phenomena

in *theme*:

- same place and time – different variables

# comparing spatial phenomena

in *theme*:

- same place and time – different variables

in *space*:

- same variable – different places
- or same variable – different aggregation

# comparing spatial phenomena

in *theme*:

- same place and time – different variables

in *space*:

- same variable – different places
- or same variable – different aggregation

in *time*:

- same variable and place – different times

# comparing spatial phenomena

in *theme*:

- same place and time – different variables

in *space*:

- same variable – different places
- or same variable – different aggregation

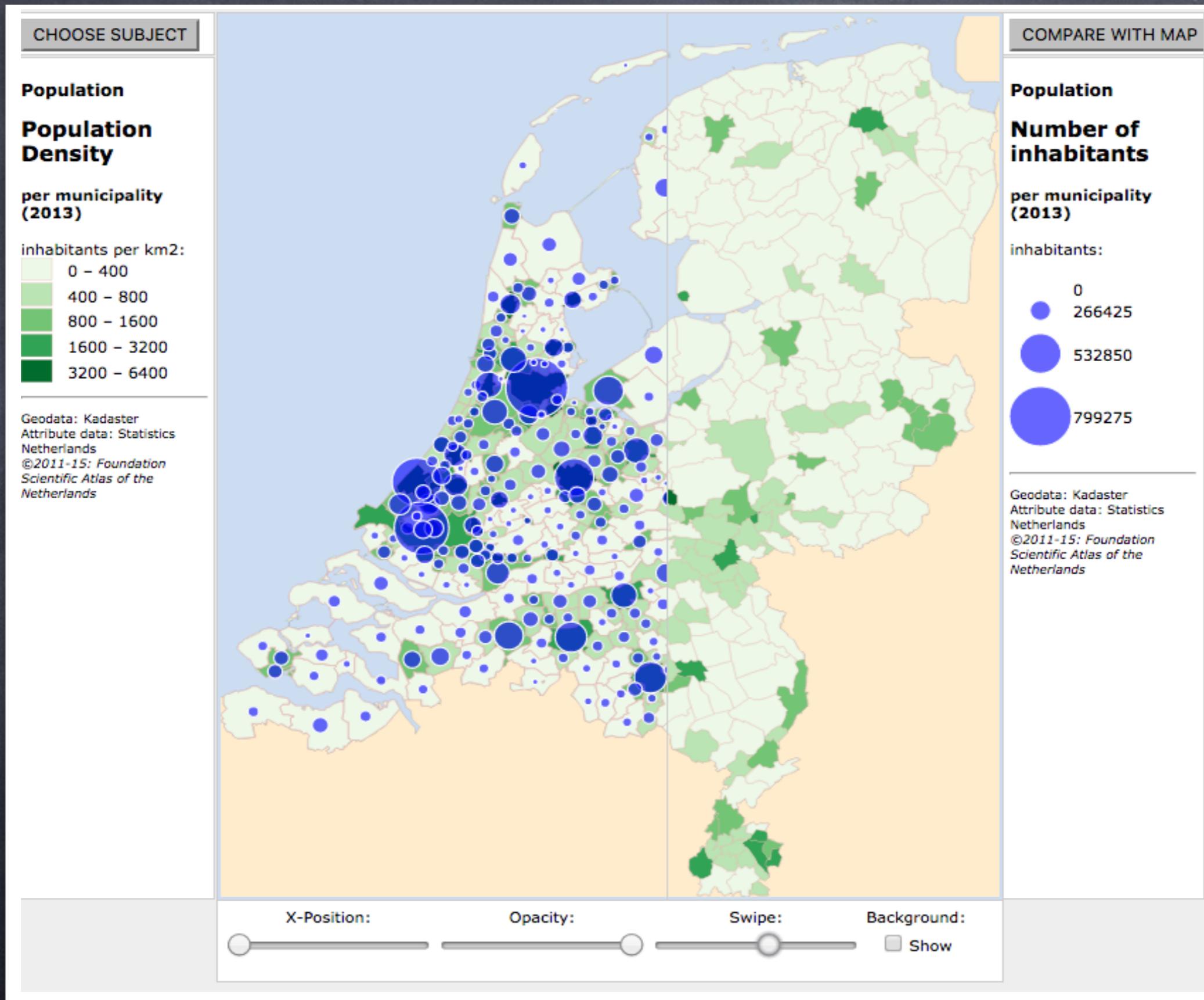
in *time*:

- same variable and place – different times

in *expression*:

- same place, time and variables – different visual expressions

# The Dutch National Atlas



# Thank you for your attention...

Barend Köbben  
ITC – Universiteit Twente

<http://kartoweb.itc.nl/kobben>

b.j.kobben@utwente.nl – @barendkobben