

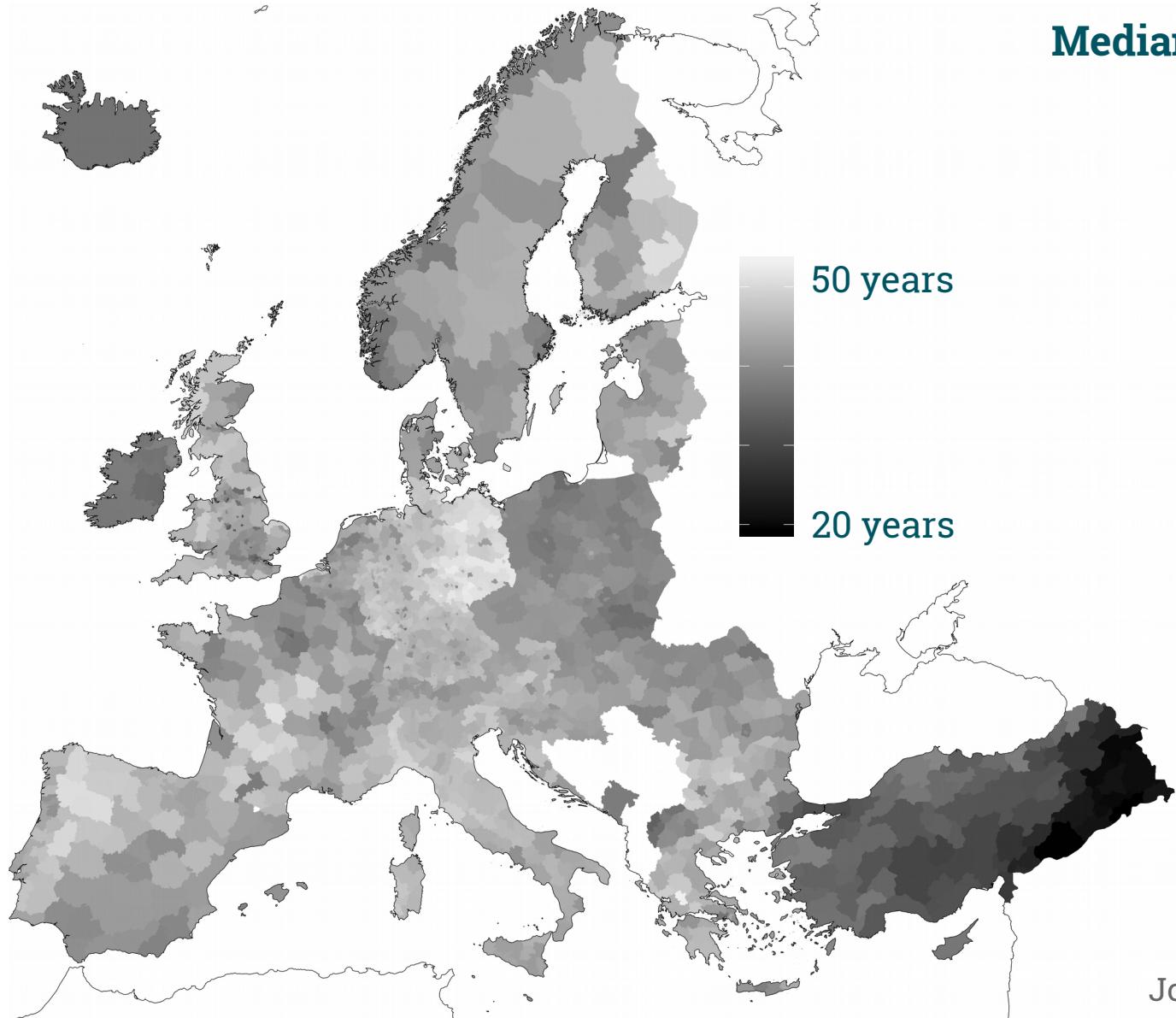
Mapping Europe's demographic diversity with multi-dimensional color scales



Jonas Schöley
@jschoeley

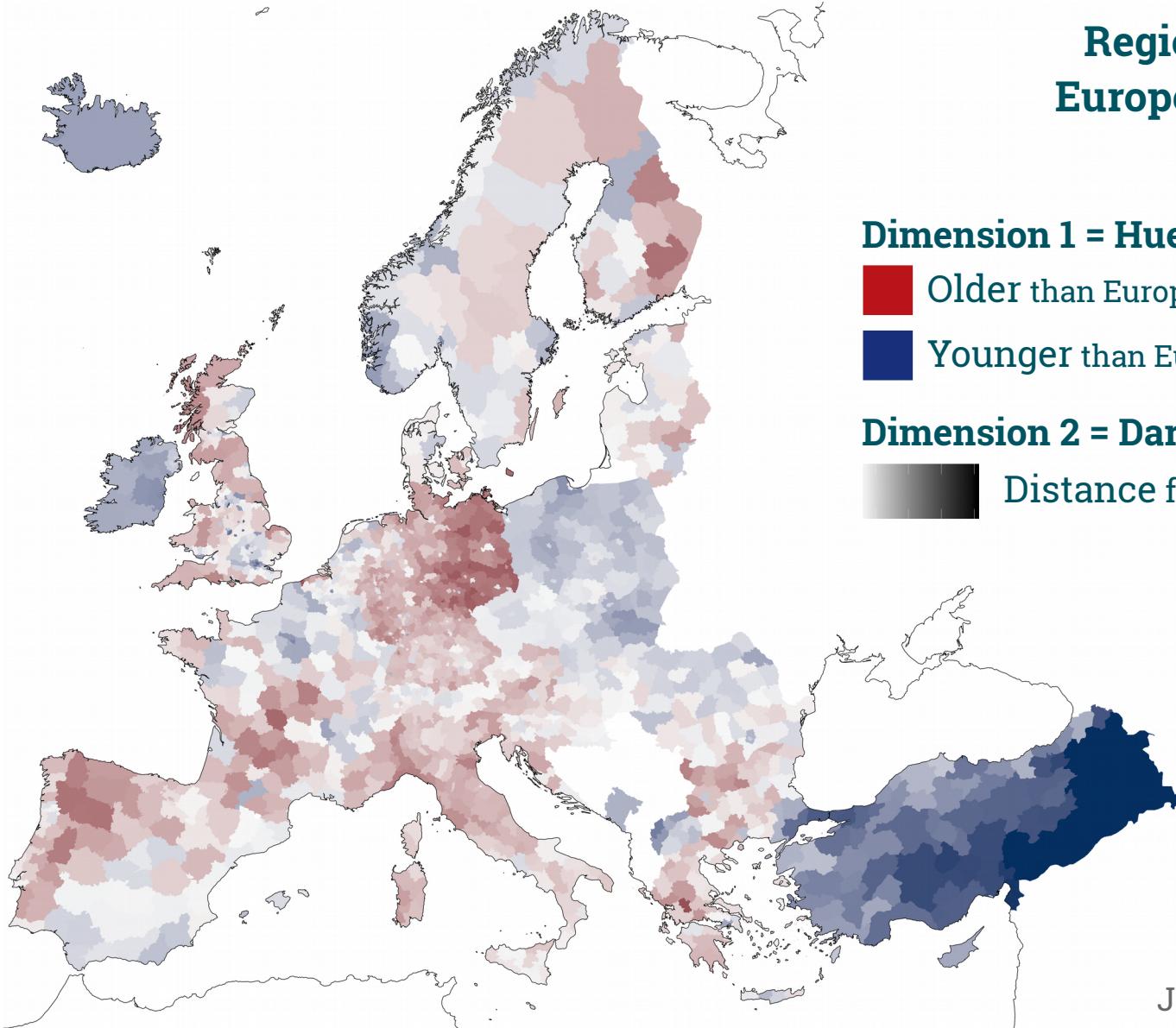
Median age by region 2015

Data by Eurostat



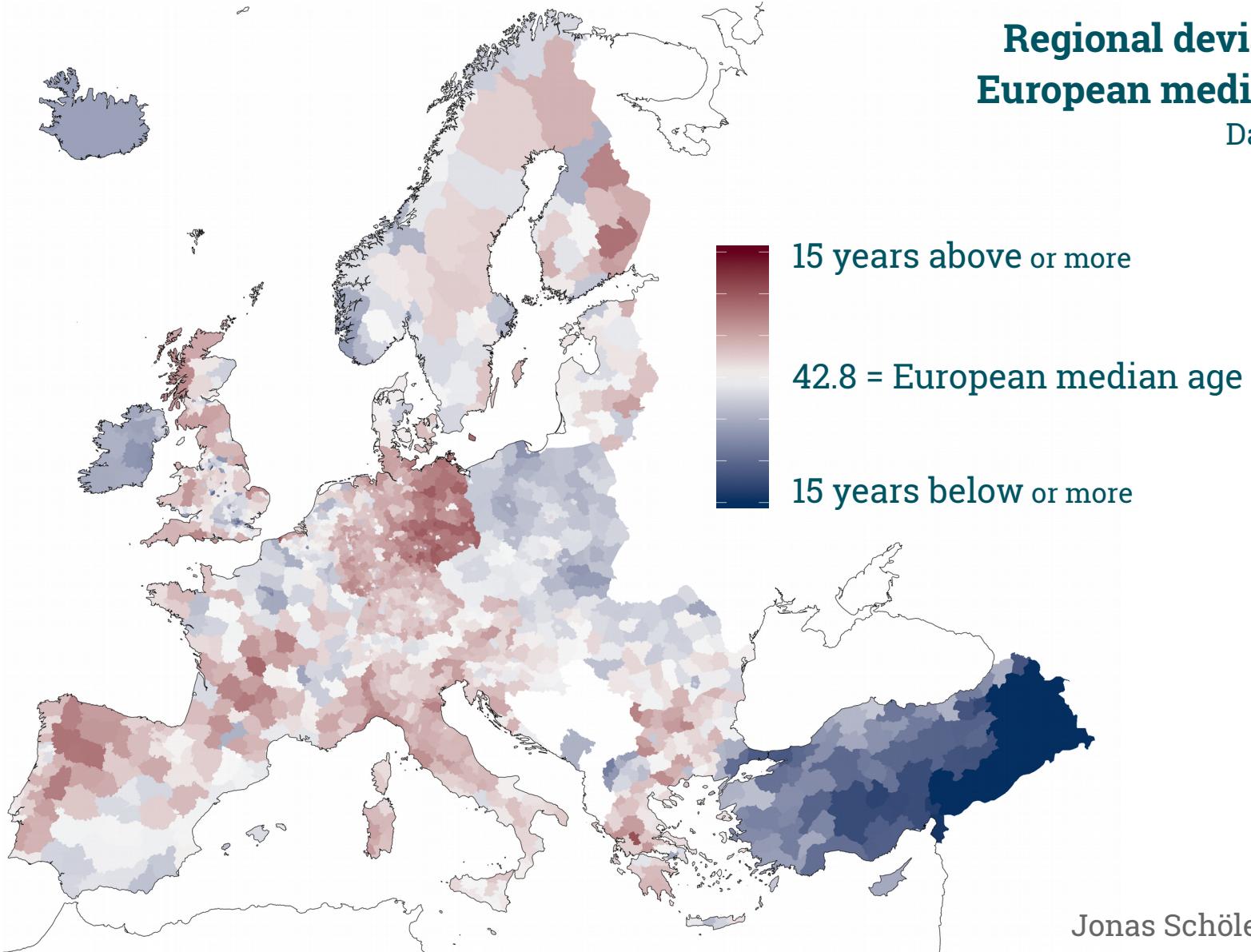
Regional deviations from European median age 2015

Data by Eurostat



Regional deviations from European median age 2015

Data by Eurostat



Regional deviations from European age composition 2015

Data by Eurostat

Dimension 1 = Hue

- █ Above average young population
- █ Above average working age population
- █ Above average retirement age population

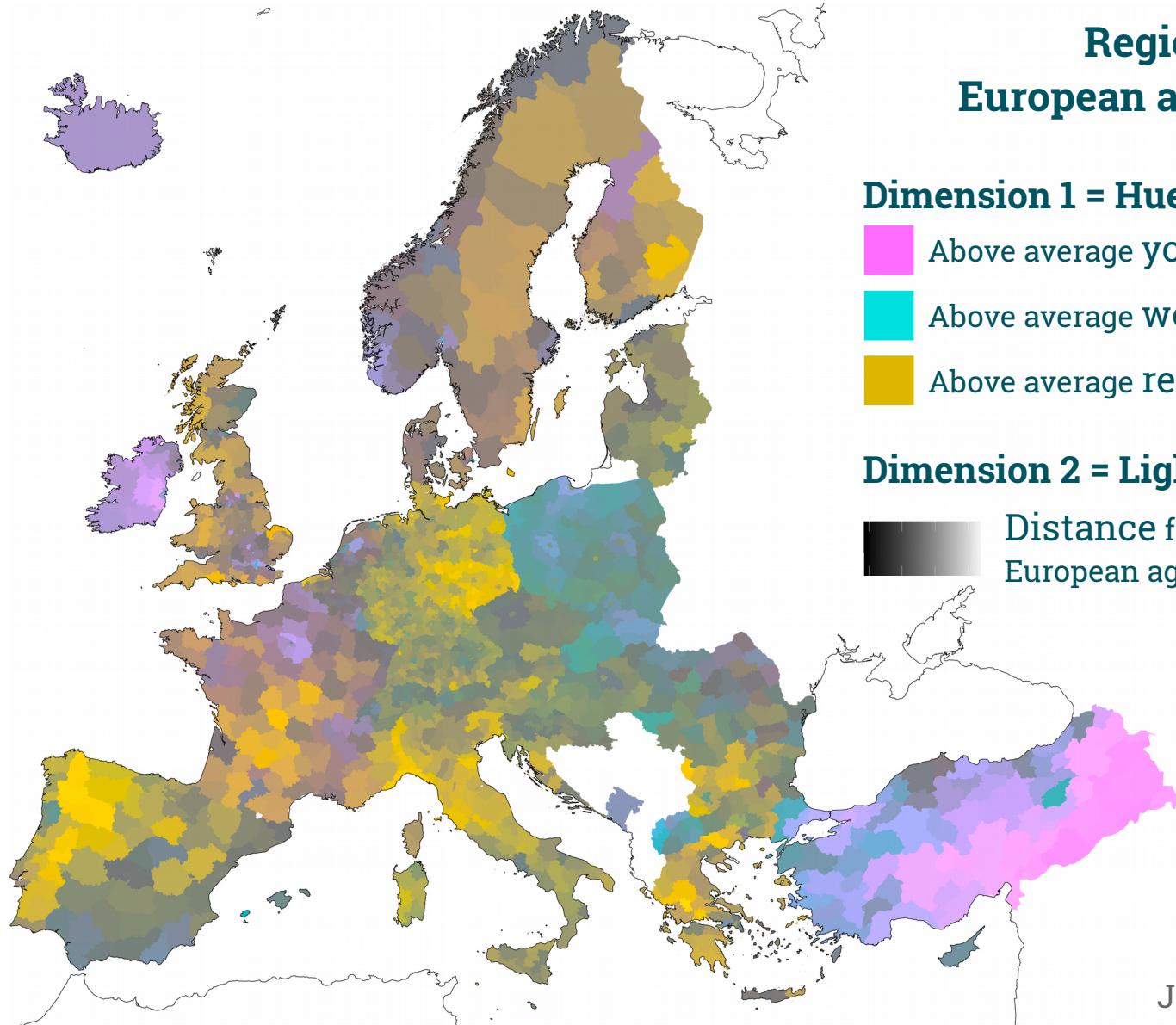
Dimension 2 = Lightness

- Distance from average European age structure



Regional deviations from European age composition 2015

Data by Eurostat



Dimension 1 = Hue

- Above average young population
- Above average working age population
- Above average retirement age population

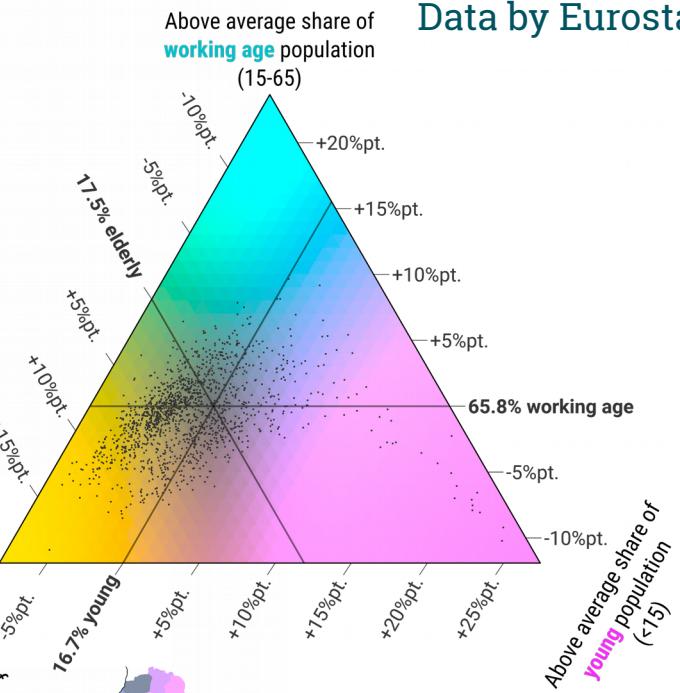
Dimension 2 = Lightness

- Distance from average European age structure



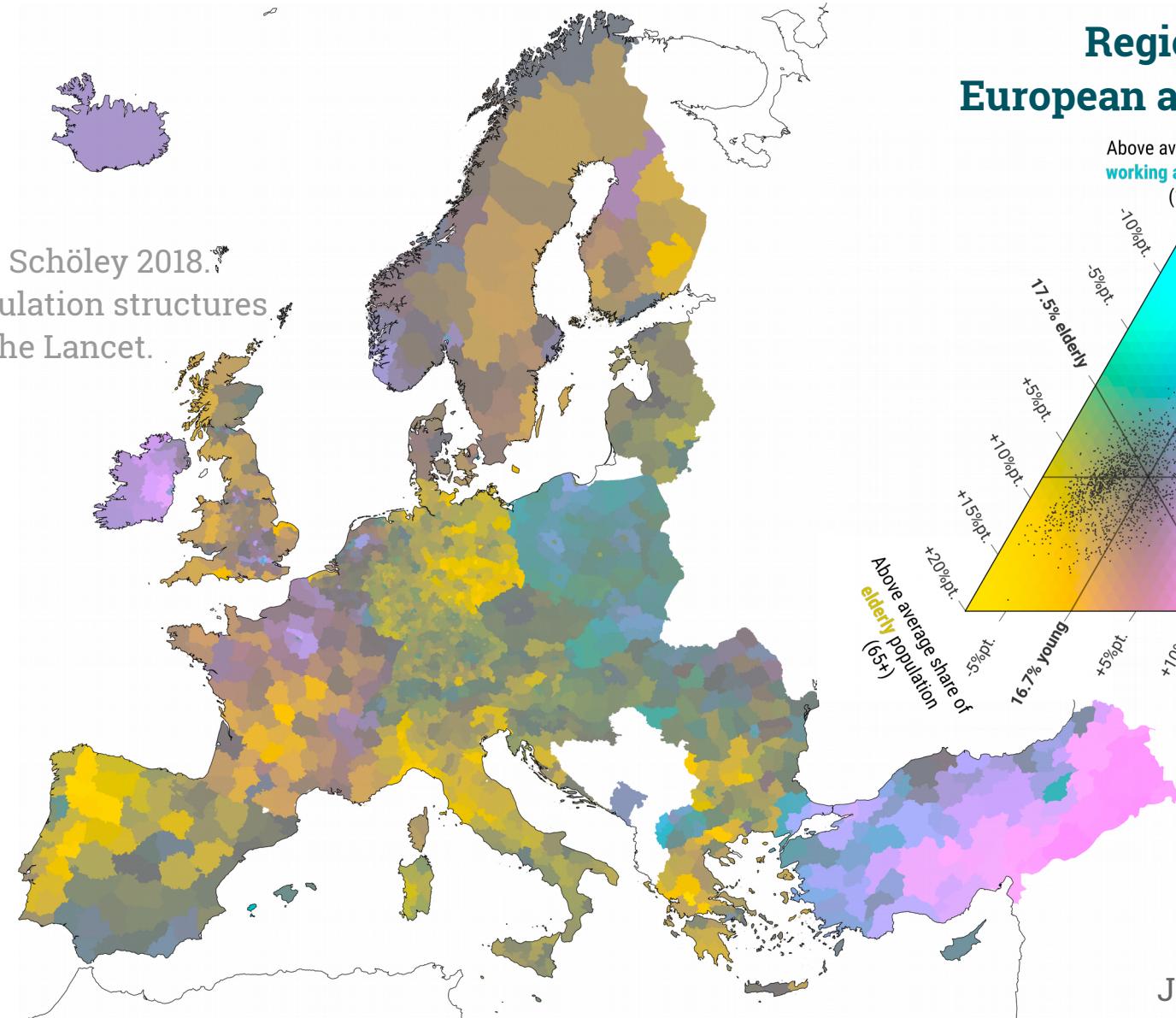
Regional deviations from European age composition 2015

Data by Eurostat

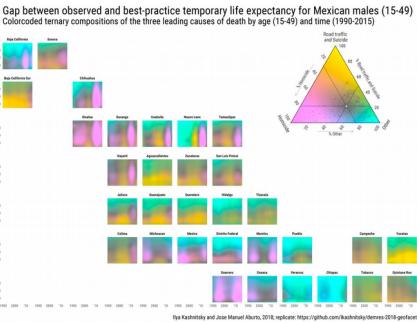


Kashnitsky & Schöley 2018.

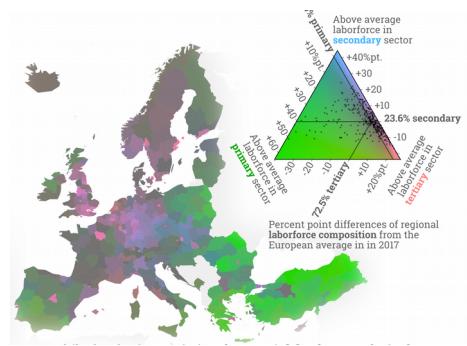
Regional population structures
at a glance. The Lancet.



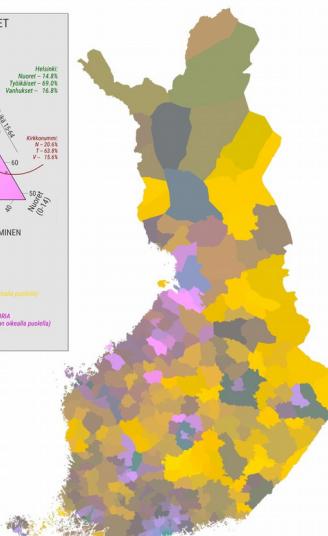
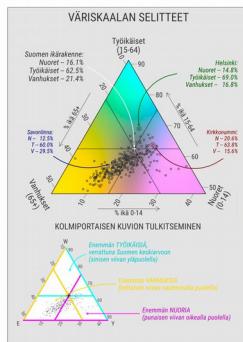
Causes of death in Mexico



Labor-force composition



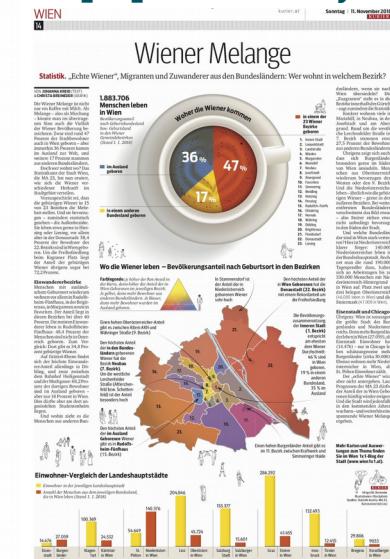
Finland's age structure Vienna's population by origin



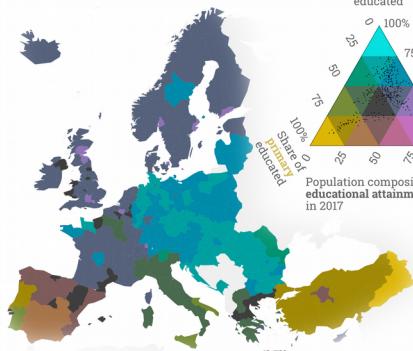
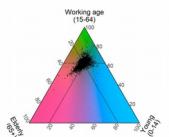
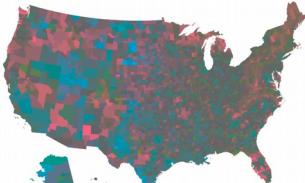
Tricolore – a flexible color scale for ternary compositions.

```
> install.packages('tricolore')
```

```
> install.packages('tricolore')
```



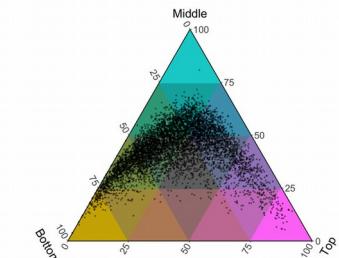
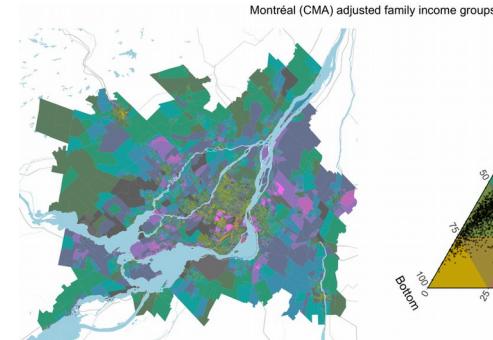
Forecasts of US age distribution



Educational attainment in Europe



Income distribution in Canadian cities



tricolore. A flexible color scale for ternary compositions



Jonas Schöley & Ilya Kashnitsky

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What is *tricolore*?

tricolore is an R library providing a flexible color scale for the visualization of three-part (ternary) compositions. Its main functionality is to color-code any ternary composition as a mixture of three primary colours and to draw a suitable color-key.

tricolore flexibly adapts to different visualization challenges via

- discrete and continuous color support,
- support for unbalanced compositional data via *centering*,
- support for data with very narrow range via *scaling*,
- hue, chroma and lightness options.

