Geofaceting – allign small-multiples for regions in a spatially meaningful way

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Abstract

In this paper we present a handy visualization technique of geofaceting. The idea is to align small-multiples for territorial units, most often regions, according to approximate geographical location. Compared to other ways of small-multiples' arrangement, geofacetting improves the speed of regions' identification and introduces a broad spatial pattern. We illustrate the technique using data on young adult mortality in the 32 Mexcian states.

Keywords*: small-multiples; geofacet; ternary colorcoding; external mortality; homicide.*

Data visualization is quite often a struggle to represent multiple relevant dimensions preserving readability of a plot.

The spailial logic of small-mulitples allignment helps to sidentify the units of analysis faster and reveils the macro-level spatial pattern.

One interesting technique is to maximize the amount of information conveyed by colors – *ternary colorcoding*, when the position of an element in a three-dimensional array of compositional data is represented with a single color. Here we draw attention to this underutilized approach of ternary colorcoding and provide the tools that we developed to streamline its use with R.

(see Figure 1)

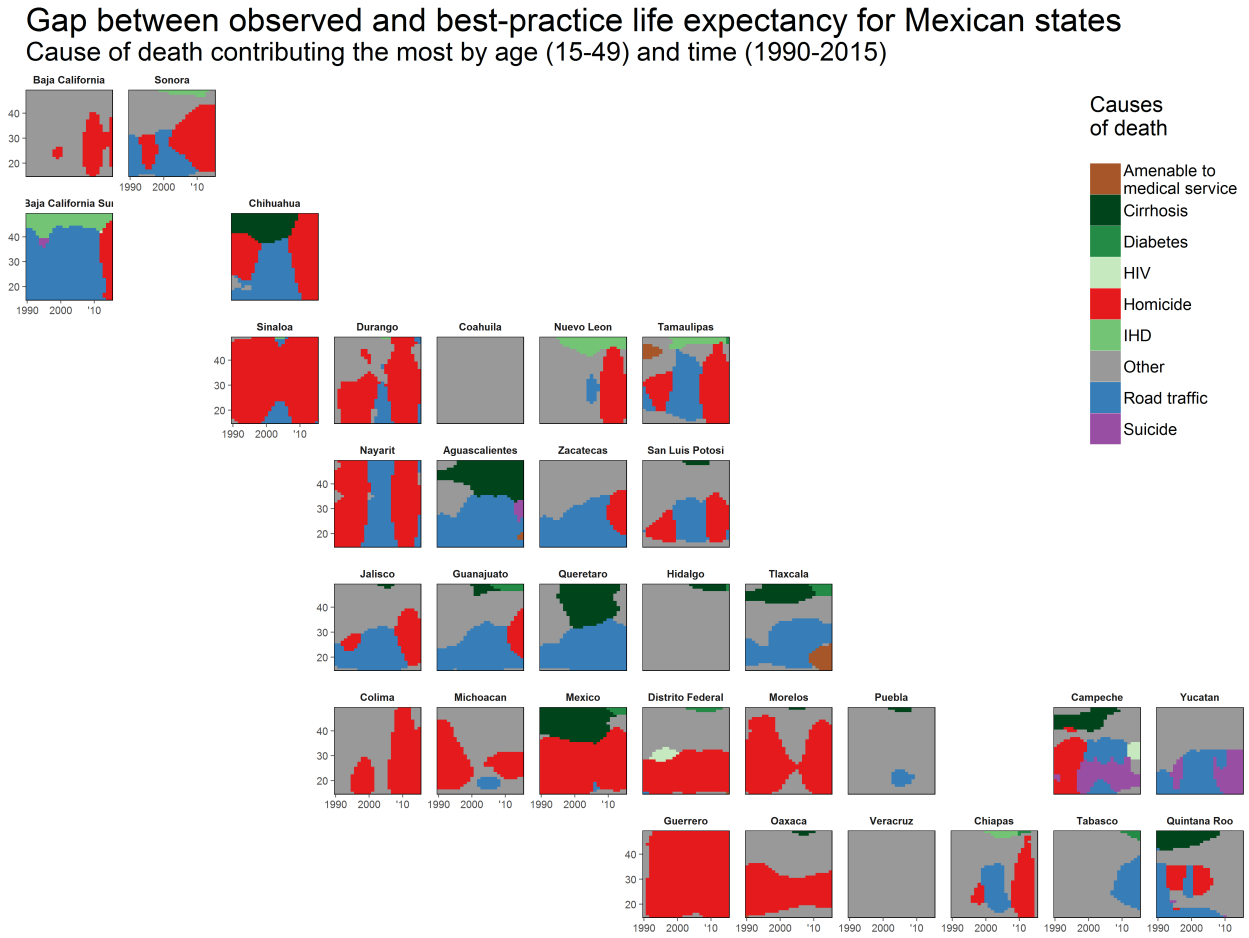

Figure 1: Per capita age profiles of consumption, labor income, and public and private transfers for the United States (2009).

1 References