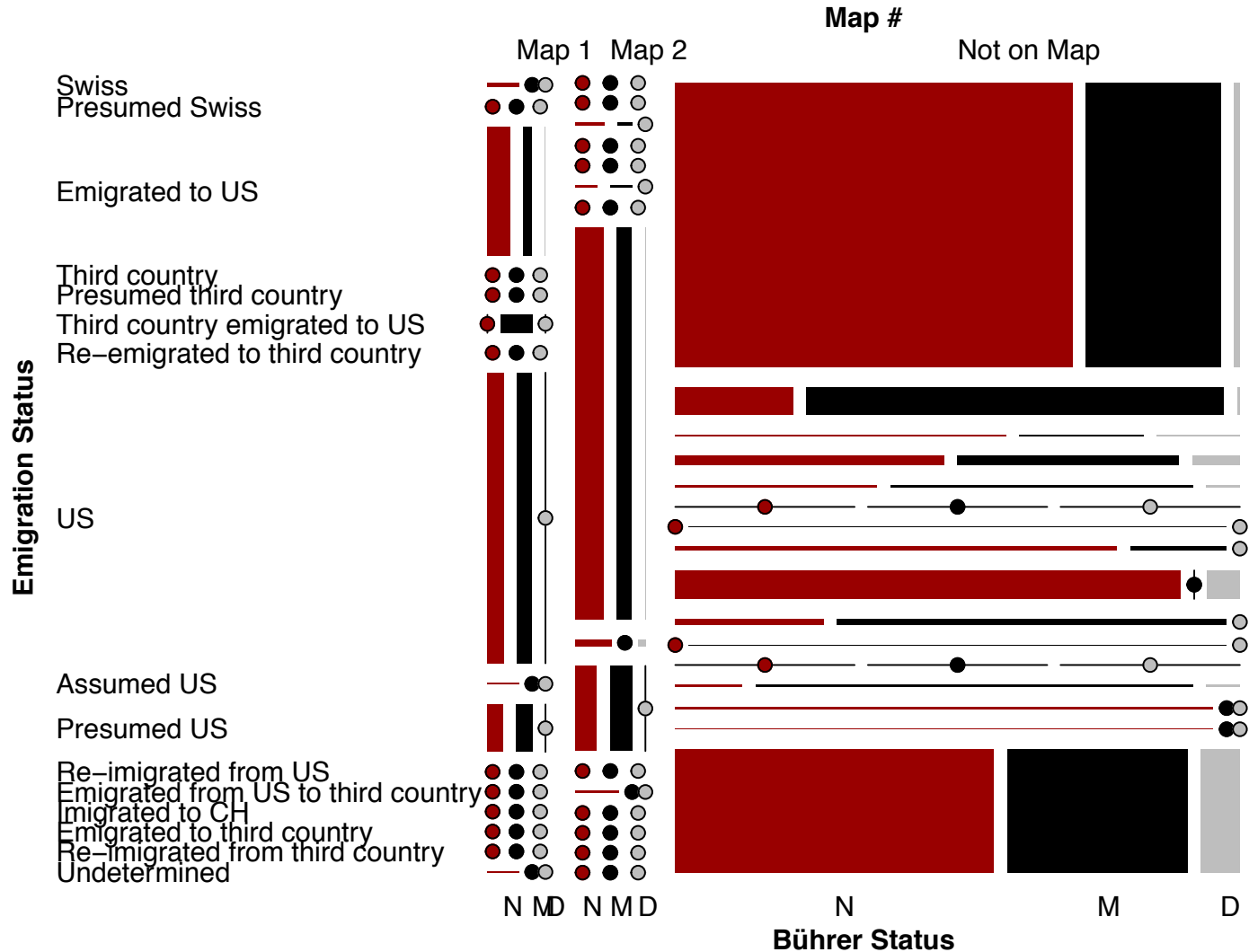# Analyzing the Bührer family data set using an advanced mosaic plot

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Mosaic plot: Who's on the map?

Mosaic plot code (*vcd* package)

```
library(vcd)

# Read data (source: SQL group by statement including all factors and count) and create contingency table
data <- read.csv("[..] Data.csv")
art <- xtabs(count ~ map + emigrationstatus + buehrerstatus, data = data)

# Reorder factors and define color convention (visual tweaking)
art <- art[ c("Map 1", "Map 2", "No Map"), c("Swiss", [..]), c("Named","Married","Descendant")]
color = c("#990000", "black", "grey")

# Create mosaic plot
mosaic(art, direction = c("v", "h", "v"),
    zero_size = 0.5, zero_split = TRUE,
    margins = c(left = 12, right = 2, top = 2, bottom = 2),
    shade = TRUE, gp = gpar(fill = color, col = 0),
    abbreviate = c(buehrerstatus = 1),
    labeling_args = list(set_varnames =
                c(map = "Map #", emigrationstatus = "Emigration Status", buehrerstatus = "Bührer Status"),
        set_labels = list(map = c("Map 1", "Map 2", "Not on Map")),
        rot_labels = c(left = 0, bottom = 0, right = 0),
        offset_varnames = c(left = 12, right = 1), offset_labels = c(left = 12, right = 0),
        pos_labels = "center", just_labels = "left", rep = TRUE),
    legend = FALSE )
```

More information

Visit the project's microblog for more information on the data, methodology, tools and visualisations used for *Mapping the emigration of the Bührers from Switzerland to the United States*

https://familytreemeetsgis.nogi.ch