

{mmtable2}: 再谈三线表绘制

阎俊安 2022-01-12

目录

1 安装并加载 R 包	1
2 整合数据	1
3 案例一	2
4 案例二格式化表格	2
5 案例三通过 %>% 连接数据	3

之前介绍如何使用 `gt` 包来制作三线表，最近发现一个新的 R 包 `mmtable2`，它不仅整合了 `gt` 包而且语法风格与 `ggplot2` 高度一致采用图层叠加的方式来绘制表格，更加难得的是还支持通过 `%>%` 来绘制表格

1 安装并加载 R 包

```
devtools::install_github("ianmoran11/mmtable2")
```

```
library(gapminder)
library(tidyverse)
library(stringr)
library(gt)
library(mmtable2)
```

2 整合数据

```
gm_df <- gapminder_mm %>% filter(var != "Life expectancy")
style_list <- list(cell_borders(sides = "top", color = "grey"))
```

```
# A tibble: 6 x 5
  country    continent  year var      value
  <chr>      <fct>    <int> <chr>    <chr>
1 Australia Oceania    1992 Population 17.5
2 Australia Oceania    1997 Population 18.6
3 Australia Oceania    2002 Population 19.5
4 Australia Oceania    2007 Population 20.4
5 Botswana  Africa     1992 Population  1.3
6 Botswana  Africa     1997 Population  1.5
```

3 案例一

```
gm_df %>%
  mmtable(cells = value) +
  header_left(year) +
  header_top(country) +
  header_left_top(var) +
  header_top_left(continent) +
  header_format(var, scope = "table", style = style_list)
```

可以看到通过 + 来叠加图层绘制表格特别舒服

4 案例二格式化表格

```
gapminder_mm %>%
  filter(var != "Life expectancy") %>%
  mmtable(cells = value) +
  header_top(year) +
  header_left(country) +
  header_top_left(var) +
  header_left_top(continent) +
  cells_format(cell_predicate = T, style = list(cell_text(align = "right"))) +
  header_format(header = year, style = list(cell_text(align = "right"))) +
  header_format("all_cols", style = list(cell_text(weight = "bolder"))) +
  header_format("all_rows", style = list(cell_text(weight = "bolder"))) +
  header_format(continent, scope = "table",
    style = list(cell_borders(sides = "top", color = "grey")))
```

5 案例三通过%>% 连接数据

```
gapminder_mm %>%
  filter(var != "Life expectancy") %>%
  mmtable(cells = value, use_default_formats = T) %>%
  add_header_top(year) %>%
  add_header_left(country) %>%
  add_header_top_left(var) %>%
  add_header_left_top(continent) %>%
  add_cells_format(cell_predicate = T,
                    style = list(cell_text(align = "right", color = "white"),
                                cell_fill(color = "grey80"))) %>% # 定义文本填充颜色与字体
  add_header_format(header = year,
                    style = list(gt::cell_text(align = "right", color = "black"),
                                gt::cell_fill(color = "lightcyan"))) %>%
  # 定义标题行填充文本与颜色
  add_header_format("all_cols",
                    style = list(cell_text(weight = "bolder"))) %>%
  add_header_format("all_rows",
                    style = list(cell_text(weight = "bolder"))) %>%
  cols_align(align = "center", columns = 1:2) %>% # 设置列宽
  tab_options(table_body.hlines.color = "grey80",
              table_body.hlines.width = px(2)
              ) %>% # 定义标题线条宽度，颜色
  add_header_format(continent, scope = "table",
                    style = list(cell_borders(sides = c("top", "bottom"),
                                                color = "white", weight = px(2))
                                )) # 定义文本线条颜色，宽度
```

mmtable2 语法上兼容了 **gt** 包, 提供了一种新的方法但是部分功能作者可能还是在开发中, 但是绘制一个简单的三线表已经是绰绰有余了