Package 'MexBrewer'

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Title Color Palettes Inspired by Works of Mexican Painters and Muralists

Version 0.0.2

Description Color palettes inspired by the works of Mexican painters and muralists. The package includes functions that return vectors of colors and also functions to use color and fill scales in 'ggplot2' visualizations.

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Encoding UTF-8

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URL https://github.com/paezha/MexBrewer, https://paezha.github.io/MexBrewer/

BugReports https://github.com/paezha/MexBrewer/issues

Depends R (>= 2.10)

LazyData true

Imports ggplot2

NeedsCompilation no

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Repository CRAN

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Contents

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df_mxstate_2020   *Mexican 2020 states dataset*

Description

A data.frame containing population estimates for all the Mexican states in 2020

Usage

```
df_mxstate_2020
```

Format

An object of class `data.frame` with 32 rows and 11 columns.

Details

region INEGI code of the state

state_name short state name (e.g. Coahuila)

state_name_official Official state name (e.g. Coahuila de Zaragoza)

state_abbr state abbreviation

state_abbr_official official state abbreviation (it can be awkward to use Chis for Chiapas) according to the INEGI.

year 2015, the year of the Conteo from which the data is sourced

pop total state population according to the Censo 2020

pop_male male population according to the Censo 2020

pop_female female population according to the Censo 2020

afromexican afromexican population according to the Censo 2020

indigenous_language Number of persons who speak an indigenous language according to the Censo 2020

Value

A data.frame

References

Population estimates taken from the Censo 2020.

Examples

```
data("df_mxstate_2020")
head(df_mxstate_2020)
```

```
ggplot2-scales-continuous
```
Continuous MexBrewer scales for use with ggplot2

Description

Functions [scale_color_mex_c](#) and [scale_fill_mex_c](#) for continuous scales enable the use of
MexBrewer colors with ggplot2 continuous scales.

Usage

```
scale_color_mex_c(palette_name, direction = 1, ...)

scale_colour_mex_c(palette_name, direction = 1, ...)

scale_fill_mex_c(palette_name, direction = 1, ...)
```

Arguments

palette_name	Name of Palette. Choices are: Alacena, Atentado, Aurora, Casita1, Casita2, Casita3, Concha, Frida, Huida, Maiz, Naturaleza,Ofrenda, Revolucion, Ronda, Taurus1, Taurus2,Tierra, Vendedora.
direction	Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed
...	Other arguments passed on to [scale_color_gradientn](#)

Value

A ScaleContinuous object that can be added to a ggplot object

See Also

Other color scales: [ggplot2-scales-discrete](#)

```
ggplot2-scales-discrete
```
Discrete MexBrewer scales for use with ggplot2

Description

Functions [scale_color_mex_d](#) and [scale_fill_mex_d](#) enable the use of MexBrewer colors with
ggplot2 discrete scales.

Usage

```
scale_color_mex_d(palette_name, direction = 1, override.order = FALSE, ...)

scale_colour_mex_d(palette_name, direction = 1, override.order = FALSE, ...)

scale_fill_mex_d(palette_name, direction = 1, override.order = FALSE, ...)
```

Arguments

palette_name   Name of Palette. Choices are: Alacena, Atentado, Aurora, Casita1, Casita2, Casita3, Concha, Frida, Huida, Maiz, Naturaleza,Ofrenda, Revolucion, Ronda, Taurus1, Taurus2,Tierra, Vendedora.

direction   Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed

override.order Colors are picked from palette to maximize readability and aesthetics. This means that colors are not always selected in sequential order from the full palette. If override.order is set to TRUE, colors are selected in sequential order from the full palette instead. Default is FALSE.

...   Other arguments passed on to discrete_scale

Value

A `ScaleDiscrete` object that can be added to a `ggplot` object

See Also

Other color scales: ggplot2-scales-continuous

Examples

```
library(ggplot2)
ggplot(data=iris, aes(x=Species, y=Sepal.Length, fill=Species)) +
geom_violin() +
scale_fill_mex_d("Aurora")
```

---

mex.brewer   *Mex Palette Generator*

Description

These are a handful of color palettes from Mexican muralists. Complete list of palette colors and the works that inspired them can be found here.

Usage

```
mex.brewer(
  palette_name,
  n,
  type = c("discrete", "continuous"),
  direction = c(1, -1),
  override.order = FALSE
)
```

Arguments

palette_name   Name of Palette. Choices are: Alacena, Atentado, Aurora, Casita1, Casita2, Casita3, Concha, Frida, Huida, Maiz, Naturaleza,Ofrenda, Revolucion, Ronda, Taurus1, Taurus2,Tierra, Vendedora.

n   Number of desired colors. If number of requested colors is beyond the scope of the palette, colors are automatically interpolated. If n is not provided, the length of the palette is used.

type   Either "continuous" or "discrete". Use continuous if you want to automatically interpolate between colors.

direction   Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed

override.order   Colors are picked from palette to maximize readability and aesthetics. This means that colors are not always selected in sequential order from the full palette. If override.order is set to TRUE, colors are selected in sequential order from the full palette instead. Default is FALSE.

Value

A vector of colors for use in visualization tasks

Examples

```
mex.brewer("Atentado")

mex.brewer("Concha", 6)

mex.brewer("Frida", 10, "continuous")
```

MexPalettes   *Complete list of palettes*

Description

Use names(MexPalettes) to return all possible palette names. Current choices are: Alacena, Atentado, Aurora, Casita1, Casita2, Casita3, Concha, Frida, Huida, Maiz, Naturaleza, Ofrenda, Revolucion, Ronda, Taurus1, Taurus2,Tierra, Vendedora. Use mex.brewer to construct palettes.

Usage

```
MexPalettes
```

Format

An object of class `list` of length 18.

---

mx_estados   *Mexican states.*

Description

A simple features object with the boundaries of states in Mexico (unprojected; CRS is WGS 84).

Usage

```
data(mx_estados)
```

Format

A simple features data frame with 32 rows and 4 variables:

ID Unique identifier of polygon

nombre Name of the state

region Geographical region of the state; there are five regions in the country

geometry Geometry information of the polygons

Value

A simple features data frame

Examples

```
data(mx_estados)
summary(mx_estados)
```

---

sequential.palette   *Sequential Palette Check*

Description

Checks whether a palette is Sequential.

Usage

```
sequential.palette(palette_name)
```

Arguments

palette_name   Name of Palette. Choices are: Alacena,Atentado, Aurora, Casita1, Casita2, Casita3, Concha, Frida, Huida, Maiz, Naturaleza,Ofrenda, Revolucion, Ronda, Taurus1, Taurus2,Tierra, Vendedora.

Value

TRUE/FALSE if palette is sequential

Examples

```
sequential.palette("Aurora")
```

---

sequential_palettes   *Names of sequential palettes*

Description

Use `mex.brewer` to construct palettes.

Usage

```
sequential_palettes
```

Format

An object of class `character` of length 7.

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