

Package ‘RSSthemes’

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Title RSS Palettes and Themes

Version 1.0.0

Description Defines colour palettes and themes for Royal Statistical Society (RSS) publications, including Significance magazine. Palettes and themes are supported in both base R and 'ggplot2' graphics, and are intended to be used by authors submitting to RSS publications.

Encoding UTF-8

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Depends R (>= 3.6)

Imports ggplot2, graphics, grDevices, purrr, showtext, sysfonts

Suggests covr, knitr, markdown, rmarkdown, testthat (>= 3.0.0)

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URL <https://github.com/nrennie/RSSthemes>

BugReports <https://github.com/nrennie/RSSthemes/issues>

NeedsCompilation no

Author Nicola Rennie [aut, cre],
Royal Statistical Society [fnd, cph]

Maintainer Nicola Rennie <nrennie35@gmail.com>

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print.palette	<i>Function for printing palette</i>
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Description

Function for printing palette

Usage

```
## S3 method for class 'palette'
print(x, ...)
```

Arguments

x	the object to be printed.
...	further arguments to be passed to or from other methods. They are ignored in this function.

Value

A plot of the specified colour palette.

Examples

```
print(RSScols("signif_qual"))
```

RSScols	<i>Generates the colour palettes</i>
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Description

Generates the colour palettes

Usage

```
RSScols(palette, n, type = "discrete", direction = 1)
```

Arguments

palette	Name of Palette. Run names(RSSPalettes) to view options.
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. Default "discrete"
direction	Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed

Value

A character vector of hex colour codes.

Examples

```
RSScols("signif_seq")
```

RSSPalettes	<i>Complete list of palettes.</i>
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Description

Use names(RSSPalettes) to return all palette names.

Usage

```
RSSPalettes
```

Format

An object of class list of length 3.

scale_color_rss_c *Plotting with RSS palettes for colour ggplot2*

Description

Plotting with RSS palettes for colour ggplot2

Usage

```
scale_color_rss_c(palette, direction = 1, ...)
```

Arguments

palette	name of palette. Run names(RSSPalettes) to view options.
direction	Sets order of colors. Default palette_choice is 1. If direction is -1, palette_choice color order is reversed
...	Other arguments passed on to scale_color_gradientn

Value

A ggproto object defining a continuous colour scale for use with ggplot2.

Examples

```
library(ggplot2)
ggplot(data = mtcars, aes(x = mpg, y = disp, color = wt)) +
  geom_point() +
  scale_color_rss_c(palette = "signif_seq")
```

scale_color_rss_d *Plotting with RSS palettes for colour ggplot2*

Description

Plotting with RSS palettes for colour ggplot2

Usage

```
scale_color_rss_d(palette, direction = 1, ...)
```

Arguments

palette	Name of Palette. Run palettes(RSSPalettes) to view options.
direction	Sets order of colors. Default direction is 1. If direction is -1, palette color order is reversed
...	Other arguments passed on to discrete_scale

Value

A ggproto object defining a discrete colour scale for use with ggplot2.

Examples

```
library(ggplot2)
ggplot(data = mtcars, aes(x = mpg, y = disp, color = factor(cyl))) +
  geom_point() +
  scale_color_rss_d(palette = "signif_qual")
```

scale_colour_rss_c *Plotting with RSS palettes for colour ggplot2*

Description

Plotting with RSS palettes for colour ggplot2

Usage

```
scale_colour_rss_c(palette, direction = 1, ...)
```

Arguments

palette	name of palette. Run names(RSSPalettes) to view options.
direction	Sets order of colors. Default palette_choice is 1. If direction is -1, palette_choice color order is reversed
...	Other arguments passed on to scale_color_gradientn

Value

A ggproto object defining a continuous colour scale for use with ggplot2.

Examples

```
library(ggplot2)
ggplot(data = mtcars, aes(x = mpg, y = disp, color = wt)) +
  geom_point() +
  scale_colour_rss_c(palette = "signif_seq")
```

scale_colour_rss_d *Plotting with RSS palettes for colour ggplot2*

Description

Plotting with RSS palettes for colour ggplot2

Usage

```
scale_colour_rss_d(palette, direction = 1, ...)
```

Arguments

palette	Name of Palette. Run names(RSSPalettes) to view options.
direction	Sets order of colors. Default direction is 1. If direction is -1, palette color order is reversed
...	Other arguments passed on to discrete_scale

Value

A ggproto object defining a discrete colour scale for use with ggplot2.

Examples

```
library(ggplot2)
ggplot(data = mtcars, aes(x = mpg, y = disp, color = factor(cyl))) +
  geom_point() +
  scale_colour_rss_d(palette = "signif_qual")
```

scale_fill_rss_c *Plotting with RSS palettes for fill with ggplot2*

Description

Plotting with RSS palettes for fill with ggplot2

Usage

```
scale_fill_rss_c(palette, direction = 1, ...)
```

Arguments

palette	name of palette. Run names(RSSPalettes) to view options.
direction	Sets order of colors. Default palette_choice is 1. If direction is -1, palette_choice color order is reversed
...	Other arguments passed on to scale_fill_gradientn

Value

A ggproto object defining a continuous colour scale for use with ggplot2.

Examples

```
library(ggplot2)
ggplot(data = mtcars, aes(x = cyl, y = disp, fill = cyl)) +
  geom_col() +
  scale_fill_rss_c(palette = "signif_seq")
```

scale_fill_rss_d *Plotting with RSS palettes for fill colour ggplot2*

Description

Plotting with RSS palettes for fill colour ggplot2

Usage

```
scale_fill_rss_d(palette, direction = 1, ...)
```

Arguments

palette	name of palette. Run names(RSSPalettes) to view options.
direction	Sets order of colors. Default direction is 1. If direction is -1, palette_choice color order is reversed
...	Other arguments passed on to discrete_scale

Value

A ggproto object defining a discrete fill scale for use with ggplot2.

Examples

```
library(ggplot2)
ggplot(data = mtcars, aes(x = cyl, y = disp, fill = factor(cyl))) +
  geom_col() +
  scale_fill_rss_d(palette = "signif_qual")
```

set_rss_palette	<i>Set RSS base R plotting palette</i>
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Description

Set RSS base R plotting palette

Usage

```
set_rss_palette(palette)
```

Arguments

palette Name of palette. See names(RSSthemes::RSSPalettes).

Value

Returns a character vector giving the colors from the palette which was in effect. This is invisible unless the argument is omitted.

Examples

```
set_rss_palette("signif_qual")
```

set_signif_par	<i>Set Significance base R graphical parameters</i>
----------------	---

Description

Set Significance base R graphical parameters

Usage

```
set_signif_par(  
  family = "Source Sans Pro",  
  adj = 0,  
  mar = c(5, 3, 3, 2.5),  
  bty = "n",  
  ...  
)
```


Arguments

family	Font used for all text elements. Default "Source Sans Pro".
adj	Alignment of text for title. Default 0.
mar	Margins. Default c(5, 3, 3, 2.5).
bty	Axis lines. Default "n".
...	Additional arguments passed to par

Value

Returns an invisible named list.

Examples

```
# save user's current par values that this function will change
oldpar <- par("family", "adj", "mar", "bty")
set_signif_par()
plot(1:4, 1:4, col=1:4, main = "Title")
par(oldpar)
```

signif_blue	<i>Significance blue hex colour</i>
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Description

Significance blue hex colour

Usage

```
signif_blue
```

Format

An object of class character of length 1.

signif_green	<i>Significance green hex colour</i>
--------------	--------------------------------------

Description

Significance green hex colour

Usage

```
signif_green
```

Format

An object of class character of length 1.

signif_orange	<i>Significance orange hex colour</i>
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Description

Significance orange hex colour

Usage

signif_orange

Format

An object of class character of length 1.

signif_red	<i>Significance red hex colour</i>
------------	------------------------------------

Description

Significance red hex colour

Usage

signif_red

Format

An object of class character of length 1.

signif_yellow	<i>Significance yellow hex colour</i>
---------------	---------------------------------------

Description

Significance yellow hex colour

Usage

signif_yellow

Format

An object of class character of length 1.

theme_significance	<i>Significance theme</i>
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Description

Custom ggplot theme

Usage

```
theme_significance(  
  family = "Source Sans Pro",  
  base_size = 13,  
  hjust = 0,  
  text_col = "black",  
  bg_col = "white"  
)
```

Arguments

family	Font used for all text elements. Default "Source Sans Pro".
base_size	Base font size for text elements. Default 12.
hjust	Horizontal alignment of title, subtitle, and caption. Default 0.
text_col	Text colour. Default "black".
bg_col	Background colour. Default "white".

Value

A ggplot2 theme

Examples

```
library(ggplot2)  
ggplot(data = mtcars, aes(x = mpg, y = disp, color = wt)) +  
  geom_point() +  
  theme_significance()
```

view_all_palettes *Prints all available colour palettes*

Description

Prints all available colour palettes

Usage

```
view_all_palettes()
```

Value

A plot of all colour palettes available in the package.

Examples

```
view_all_palettes()
```

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